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Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on establishing a framework of measures for strengthening Union's biotechnology and biomanufacturing sectors particularly in the area of health and amending Regulations (EC) No 178/2002, (EC) No 1394/2007, (EU) No 536/2014, (EU) 2019/6, (EU) 2024/795 and (EU) 2024/1938 (European Biotech Act)**

{SWD(2025) 1055 final}

(Text with EEA relevance)

## EXPLANATORY MEMORANDUM

### 1. CONTEXT OF THE PROPOSAL

#### • Reasons for and objectives of the proposal

Biotechnology and biomanufacturing are essential to the EU's competitiveness, strategic autonomy and economic security. They are a pillar of the Union's societal wellbeing in key areas such as health and food.

This strategic importance is underscored by the sector's rapid expansion. Over the last decade, **the EU biotechnology industry has grown more than twice as fast as the overall EU economy** and is one of the most economically productive industries. The spillover effect is also significant, each job in industrial biotechnology generates 3.4 additional jobs in the broader economy. In 2022, it accounted for EUR 38.1 billion of Union GDP and contributed to 913 160 jobs, with more than 75% of those jobs (685 000) coming from the health biotechnology sector <sup>1</sup>.

However, **the EU lags behind other global regions when it comes to translating its world-class science and innovation into commercially viable products**, and even more so in manufacturing such products at scale. Despite world-leading biotechnology science, reflected by a publication record comparable to that of the US and China (Figure 1), the EU faces structural barriers in clinical development, regulation and manufacturing. As a result, too often Union start-ups end up investing, growing, employing, creating value and placing their products on the market abroad rather than in the EU. This is especially true for health biotechnology, where it is at times challenging for the legislative frameworks to keep pace with the speed of scientific developments.

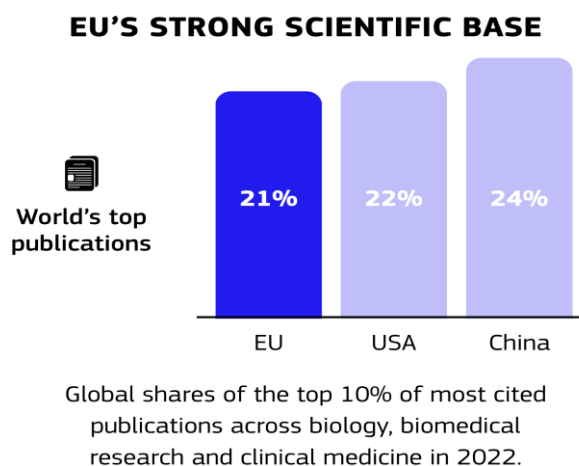


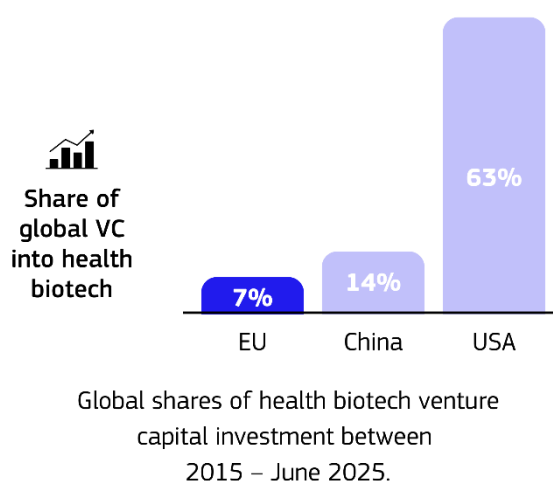
Figure 1: Top tier life science publications of the EU compared to the USA and China

<sup>1</sup> [https://www.europabio.org/wp-content/uploads/2025/03/WifOR\\_EuropaBio2025.pdf](https://www.europabio.org/wp-content/uploads/2025/03/WifOR_EuropaBio2025.pdf)

To remain a biotechnology powerhouse, the EU must make the most of its scale. Fragmented governance and suboptimal coordination across Member States weaken the EU's ability to deploy industrial facilities at scale, resulting in underused **biomanufacturing potential** - including in strategic areas such as **biosimilars**, where the EU has strong expertise but insufficiently exploited capacity. It should also ensure a strong alignment between the available labour supply and the specialised skills that the biotechnology and biomanufacturing sectors will require in the future. Current skill shortages across key areas including R&D, regulatory affairs, AI, and data analytics further hinder Europe's competitiveness. At the same time, the widening gender gap and the untapped potential of a diverse workforce represent missed opportunities for innovation and resilience.

**Access to finance** for scale-up funding in the EU remains limited compared to other regions. US biopharma start-ups received around nine times more late-stage funding than EU biopharma start-ups, with around EUR 219 billion of venture capital focused on health biotechnology invested in the US compared to EUR 25 billion in the EU between 2015 and June 2025 (Figure 2). EU public equity markets for biotechnology also remain comparatively underdeveloped, with stock exchanges still largely fragmented across EU Member States <sup>2</sup>. As a result, many EU scale-ups choose to list abroad: over the last six years, 66 out of 67 EU biotechnology companies that went public chose to list on non-EU stock exchanges, illustrating the persistent structural disadvantages faced by EU-based innovators <sup>3</sup>.

#### EU LAGGING IN BIOTECH VC INVESTMENT



Source: Technopolis Group (2025) based on Crunchbase.

Figure 2: Health Biotechnology investment in the EU compared to the US and China

Aligned with the objectives of the AI Continent Action Plan and the Apply AI Strategy, the EU must also tap into the massive **potential of AI for biotechnologies**, addressing obstacles like limited testing environments, fragmented data, and exploiting the full potential of AI across the lifecycle of biotechnology products, in particular for medicines. Further,

<sup>2</sup> Joint Research Centre (2024), Exploring the global landscape of biotechnology Innovation: preliminary insights from patent analysis, <https://publications.jrc.ec.europa.eu/repository/handle/JRC137266>.

<sup>3</sup> From discovery to economic impact: Biotechnology Competitiveness for Europe, Vlaams Instituut voor Biotechnologie, 2024

Regulation (EU) 2024/1689 (AI Act)<sup>4</sup>, which entered into force in August 2024, lays down a uniform legal framework in particular for the development, the placing on the market, the putting into service and the use of AI systems and models in the Union, in accordance with Union values, to promote the uptake of human centric and trustworthy AI. At the same time, biotechnology introduces new **biosecurity risks** as the wider accessibility of these technologies increases their potential for misuse, posing significant health threats. However, divergent or absent national rules on screening biotechnology products with significant potential for misuse, such as the synthetic DNA of dangerous pathogens, raise compliance costs, fail to offer a level playing field to competitors, and weaken prevention.

**Fragmentation and the complexity of the EU regulatory framework** are factors that make the EU less attractive for translating cutting-edge research and innovation into marketable products. For instance, the global share of commercially sponsored clinical trials in the European Economic Area has declined from 22% in 2013 to 12% in 2023, while China's share of commercial clinical trials rose from 5% to 18% in the same period, with the US share remaining considerably more stable<sup>5</sup>. Importantly, the overall reported decline in small molecule trials suggests a strategic shift toward the development of biological medicines at the expense of small molecule programs. The drop in the number of small molecule trials was the most significant in Phase II trials from 62% in 2015 to 47% in 2024 and in Phase III trials from 65% to 53% during the same period<sup>6</sup>. In particular, the EU is losing ground to other regions with increasingly agile regulatory and financial systems. Most of these regions issue decisions on validated clinical trial applications within 60 days, whereas in the EU it takes on average 113 days for multinational trials.

**Highlight: the need to simplify and streamline the Clinical Trials Regulation (CTR)**

Clinical trials in the EU are crucial to provide patients with early and equal access to innovative treatments, uphold scientific excellence, and support the EU's long-term competitiveness and prosperity. By attracting investment in research and development (R&D), creating jobs, and reducing healthcare costs, these trials deliver substantial economic and societal benefits. They also significantly benefit patients by providing earlier access to new therapies, including personalised therapies (e.g. for rare diseases and cancers), improving quality of life, and strengthening the evidence base for clinical guidelines, marketing authorisation and health technology assessments. The share of clinical trials with biological medicines seems to be increasing at the expense of low molecule trials. Biological medicines sales are key drivers of growth. In 2024, the European Union spent €228 Bn on medicines at list prices, including €95 Bn on biological medicines, which now comprise 41% of total pharmaceutical spending. Increased clinical trials in the Union for biological medicines could potentially contribute to more manufacturing in the Union, higher number and earlier regulatory submission of biological medicines for marketing authorisation applications and a higher percentage of EU clinical data in marketing authorisation applications. A conducive environment for clinical trials is essential to speed-up market access for novel medicines,

<sup>4</sup> Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Text with EEA relevance), OJ L, 2024/1689, 12.7.2024, ELI: <http://data.europa.eu/eli/reg/2024/1689/oj>

<sup>5</sup> European Federation of Pharmaceutical Industries and Association, Assessing the clinical trial ecosystem in Europe (2024) [assessing-the-clinical-trial-ecosystem-in-europe.pdf](#)

<sup>6</sup> [Global Trends in R&D 2025 - IQVIA](#)

especially against global competition. There are still significant regulatory fragmentations across Member States that limit the system's efficiency. Against this background, further regulatory streamlining and simplification of the authorisation and conduct of clinical trials are imperative. This is a key point of the Draghi report on the future of European Competitiveness<sup>7</sup>, which highlights the need to address these inefficiencies, stressing the importance of reducing regulatory delays and administrative burdens. It calls for harmonised templates, stronger coordination between national ethics committees, and a greater emphasis on using artificial intelligence (AI) and digital tools to streamline the process. At a time when global competitors – particularly the US, China, and Japan – are rapidly improving their R&D incentives and regulatory agility, Europe risks losing its competitive edge in clinical research. The EU's position in the global clinical trial landscape has already weakened, and immediate action is needed to close this gap.

**This is why a European Biotech Act was announced by the President of the European Commission in the 2024 - 2029 Political Guidelines of the Commission<sup>8</sup>**, with the aim of creating an enabling environment to make it easier to bring biotechnology products from the laboratory to the factory and then onto the market, while maintaining the highest safety standards for the protection of the population and the environment. As previously acknowledged in the Communication on Biotechnology and Biomanufacturing (March 2024) and the reports by Enrico Letta<sup>9</sup> (April 2024) and Mario Draghi<sup>10</sup> (September 2024), it is necessary to address the challenges faced by EU companies, users and consumers to boost the EU's technological advancement, competitiveness and economic growth. In its resolution 'Future of the EU biotechnology and biomanufacturing sector'<sup>11</sup>, the European Parliament recommended 'facilitating a fast and efficient uptake of biotechnology and biomanufacturing through clear regulatory frameworks'. The European Parliament is now preparing an own-initiative report on 'Public health aspects of biotechnology and life sciences'<sup>12</sup>. More recently, EU Member States urged the Commission to unlock the potential of biotechnologies, by reducing fragmentation and simplifying the EU regulatory framework across policy areas<sup>13</sup>.

Given the importance of health biotechnology amongst the other applications of biotechnology as, it is appropriate that the European Biotech Act focusses on, and sets out specific measures for, the health dimension of biotechnology. To ensure the effectiveness of this proposal, its scope of application extends to health biotechnology in a comprehensive manner and cover health within the wide meaning of Article 168 of the Treaty of the Functioning of the European Union (TFEU) on the protection of public health. In this regard, Article 168(1) TFEU emphasises that a high level of human health protection is to be ensured

<sup>7</sup> Draghi, Mario. [The future of European competitiveness: A competitiveness strategy for Europe](#), European Commission, 9 September 2024.

<sup>8</sup> European Commission (2024), Political Guidelines for the Next European Commission 2024-2029, [e6cd4328-673c-4e7a-8683-f63ffb2cf648\\_en](#)

<sup>9</sup> Enrico Letta (2024), *Much more than a Market*. [Enrico Letta - Much more than a market \(April 2024\)](#)

<sup>10</sup> Draghi, Mario. [The future of European competitiveness: A competitiveness strategy for Europe](#), European Commission, 9 September 2024.

<sup>11</sup> European Parliament (2025). Future of the EU biotechnology and biomanufacturing sector: leveraging research, boosting innovation and enhancing competitiveness. [Texts adopted - Future of the EU biotechnology and biomanufacturing sector: leveraging research, boosting innovation and enhancing competitiveness - Thursday, 10 July 2025](#)

<sup>12</sup> European Parliament: [2025/2087\(INI\)](#)

<sup>13</sup> Council of the European Union, [A call for action on life sciences for the Union's competitiveness - Council conclusions](#) (approved on 30 September 2025) (13323/25).

when defining and implementing all Union policies and activities. Article 168(4) TFEU clarifies that this objective is, amongst others, to be pursued through measures setting high standards of quality and safety for medicinal products and devices for medical use and of organs and substances of human origin, blood and blood derivatives, measures in the veterinary and phytosanitary fields which have as their direct objective the protection of public health. Accordingly, and in line with the One Health approach, this Regulation should apply to health biotechnology, understood as the application of biotechnology in the human medical, veterinary, pharmaceutical and phytosanitary areas for the development of biotechnology products and services. The Regulation should apply to their entire lifecycle, including the related research, access to funding, development, innovation, testing, validation, manufacturing, placing on the market and use activities.

The proposal for a European Biotech Act acknowledges the EU's potential to be a global leader. The region combines a highly skilled workforce, world-class scientific institutes, innovative startups and scaleups, advanced infrastructure and large private capital pools that could be used to support the domestic scale-up of promising companies. The proposal therefore seeks to address the barriers hindering the development of the EU's health biotechnology sector, starting from early-stage research through to later-stage deployment and scale-up. It introduces facilitation measures in the health biotechnology areas, including a framework for the recognition of, and support for, health biotechnology strategic projects and high impact health biotechnology strategic projects, aimed at reducing time-to-market, with particular attention paid to the needs of small and medium-sized enterprises (SMEs), and includes future-proofing provisions to anticipate the needs of health biotechnologies. Acting decisively now will allow the EU to fully harness its fast-moving biotechnology sector, reinforce strategic autonomy and economic security, and lay the foundations for a competitive and forward-looking EU biotechnology sector.

With a view to ensure the effectiveness of the substantive provisions put forward in this proposal, amendments to Union legislation in the areas of health and food and feed safety are also established for regulatory simplification, that have an impact on innovation and the time to market for biotechnology products and services, including where such legislation also applies to products other than biotechnology products. In this regard, without an efficient, accelerated and streamlined legislative framework for clinical trials in the Union, the other measures in this Regulation, and in particular the framework for the recognition and support of health biotechnology strategic projects and high impact biotechnology strategic projects would be deprived of their effectiveness, as all health biotechnology medicinal products require state of the art clinical research and a globally competitive regulatory framework for clinical trials authorisation. Similarly, a timelier risk assessment process for products subject to pre-market authorisation in accordance with Union food and feed legislation, including for biotechnology innovations where pre-submission advice of the European Food Safety Authority for aspects such as study design is paramount, as well as accelerated procedures are needed for the effectiveness of the substantive facilitation measures put forward in this proposal.

In a second stage, following this health-focused initiative, the Commission will address in 2026 the wider biotech ecosystem beyond health to ensure a competitive internal market for all areas of biotechnology.

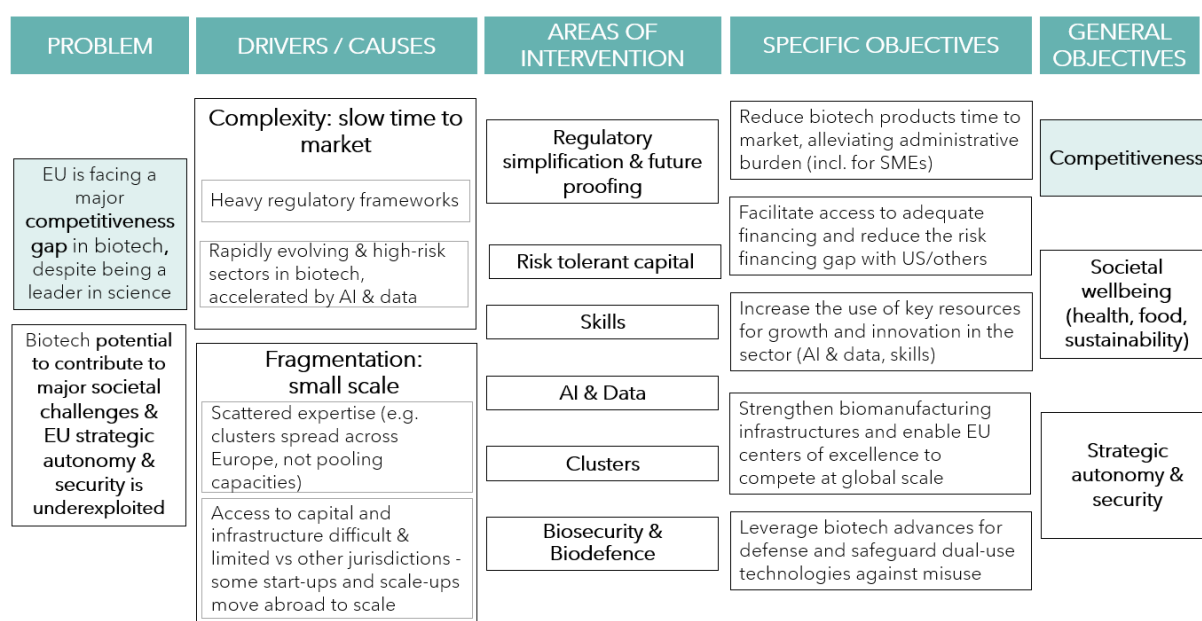


Figure 3: Biotechnology and biomanufacturing sector in Europe, problem tree

- ### Consistency with existing provisions in the policy area

The European Biotech Act will seek to streamline the relevant EU legislative frameworks to create an enabling environment for innovation and development in order to accelerate time to market. With its primary focus on health, the present proposal will amend the **Regulation on clinical trials (CTR)**<sup>14</sup>, the **Regulation on advanced therapy medicinal products (ATMPs)**<sup>15</sup>, the **Regulation on standards of quality and safety for substances of human origin intended for human application (SoHO)**<sup>16</sup> and the **Regulation on veterinary medicinal products (VMPs)**<sup>17</sup>. In the field of food safety, the proposed measures are built on the **General Food Law**<sup>18</sup>. The proposal will also amend the **legislation on the deliberate release of genetically modified organisms (GMO)**<sup>19</sup>.

<sup>14</sup> Regulation (EU) No 536/2014 of the European Parliament and of the Council of 16 April 2014 on clinical trials on medicinal products for human use, and repealing Directive 2001/20/EC Text with EEA relevance, OJ L 158, 27.5.2014, pp. 1–76. ELI: <http://data.europa.eu/eli/reg/2014/536/oj>.

<sup>15</sup> Regulation (EC) No 1394/2007 of the European Parliament and of the Council of 13 November 2007 on advanced therapy medicinal products and amending Directive 2001/83/EC and Regulation (EC) No 726/2004 (Text with EEA relevance), OJ L 324, 10.12.2007, pp. 121–137. ELI: <http://data.europa.eu/eli/reg/2007/1394/oj>.

<sup>16</sup> Regulation (EU) 2024/1938 of the European Parliament and of the Council of 13 June 2024 on standards of quality and safety for substances of human origin intended for human application and repealing Directives 2002/98/EC and 2004/23/EC (Text with EEA relevance), OJ L, 2024/1938, 17.7.2024. ELI: <http://data.europa.eu/eli/reg/2024/1938/oj>.

<sup>17</sup> Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC (Text with EEA relevance), OJ L 4, 7.1.2019, pp. 43–167. ELI: <http://data.europa.eu/eli/reg/2019/6/oj>.

<sup>18</sup> Regulation (EC) No 178/2002, of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food



The proposal also considers other existing legislation that is being revised to ensure the coherence of the overall EU regulatory system, in particular the **Regulation on medical devices (MDR)** and the **Regulation on *in vitro* diagnostic medical devices (IVDR)**<sup>20</sup>, as well as the **proposed simplification measures in food and feed safety legislation (*food and feed simplification package*)**.

The Biotech Act will also exploit synergies with other EU legislation. It will complement the **Critical Medicines Act (CMA)**<sup>21</sup> to strengthen EU-based biotechnology research and manufacturing. The Act is also in line with the **pharmaceutical strategy for Europe**<sup>22</sup> and complements the ongoing **revision of the EU pharmaceutical legislation**<sup>23</sup> to create the appropriate conditions for biotechnology from the innovation stage. Moreover, the proposed measures are complementary to the **proposed regulation on plants obtained by certain new genomic techniques** and their use in food and feed.

- **Consistency with other Union policies**

As one of the flagship initiatives of the **Competitiveness Compass**<sup>24</sup>, the proposed Biotech Act aligns with the EU's broader innovation and competitiveness agenda, translating the priorities of the Compass into concrete actions within the strategic sector of biotechnology.

In particular, the Biotech Act is part of the **Commission's life sciences strategy**<sup>25</sup>. It was presented as a central instrument to strengthen the Union's biotechnology ecosystem, streamline regulatory procedural pathways and boost Europe's competitiveness in life sciences, recognising biotechnology as a strategically critical and cross-sectoral technology.

Furthermore, the proposed Act is complementary to the other policy initiatives announced in the Compass. First, it aims to improve access to later-stage capital for biotechnology firms,

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Safety Authority and laying down procedures in matters of food safety, OJ L 31, 1.2.2002, pp. 1–24. ELI: <http://data.europa.eu/eli/reg/2002/178/oj>.

<sup>19</sup> Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC - Commission Declaration, OJ L 106, 17.4.2001, pp. 1–39. ELI: <http://data.europa.eu/eli/dir/2001/18/oj>.

<sup>20</sup> Regulations (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC (Text with EEA relevance), OJ L 117, 5.5.2017, pp. 1–175. ELI: <http://data.europa.eu/eli/reg/2017/745/oj> and (EU) 2017/746 of the European Parliament and of the Council of 5 April 2017 on *in vitro* diagnostic medical devices and repealing Directive 98/79/EC and Commission Decision 2010/227/EU (Text with EEA relevance), OJ L 117, 5.5.2017, pp. 176–332. ELI: <http://data.europa.eu/eli/reg/2017/746/oj>.

<sup>21</sup> [Critical medicines Act - Public Health - European Commission](#)

<sup>22</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Pharmaceutical Strategy for Europe*, COM/2020/761 final.

<sup>23</sup> European Commission website, [Reform of the EU pharmaceutical legislation](#)

<sup>24</sup> European Commission, European Competitiveness Outlook (Competitiveness Compass): [Competitiveness compass - European Commission](#)

<sup>25</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Choose Europe for life sciences A strategy to position the EU as the world's most attractive place for life sciences by 2030*, COM/2025/525 final.



aligning with the **start-up and scale-up strategy**<sup>26</sup> and complementing the Scaleup Europe Fund established under that strategy, as well as the **Savings and Investments Union**<sup>27</sup>, which seeks to mobilise larger pools of private capital, support investment within the EU, and reduce financing costs for Union businesses.

Second, the provisions on biosecurity also reflect the Compass's emphasis on talent as a cornerstone of innovation and on the interdependence between economic strength and security. In this context, the Act is consistent with the objectives put forward in the **Union of Skills**<sup>28</sup> and contributes to EU security by reinforcing safeguards for dual-use biotechnologies. It also complements the **EU Regulation (EU) 2022/2371 on serious cross-border threats to health**<sup>29</sup>, helping to ensure a coordinated Union-level response to health risks that may arise from the misuse of emerging biotechnologies and to the **strategic technologies for Europe platform (STEP)**<sup>30</sup> that also target biotechnologies.

Third, the emphasis on the use of AI in the proposed Act also aligns with the Competitiveness Compass, and echoes the recent **Apply AI strategy**<sup>31</sup>, the **AI continent action plan**<sup>32</sup>, the **European AI Act**<sup>33</sup> and the **Data Union strategy**<sup>34</sup>, which stress the need to strengthen Europe's innovation capacity, technological competitiveness and secure, data-driven ecosystems while supporting the biotechnology landscape.

Overall, the Biotech Act is also consistent with the **vision for agriculture and food**<sup>35</sup>, as it amends the General Food Law to broaden the scope of pre-submission advice provided by the European Food Safety Authority (EFSA) to study design, and reforms the EFSA Panel system to speed up risk assessment procedures.

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<sup>26</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *The EU Startup and Scaleup Strategy Choose Europe to start and scale*, COM/2025/270 final.

<sup>27</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Savings and Investments Union A Strategy to Foster Citizens' Wealth and Economic Competitiveness in the EU*, COM/2025/124 final.

<sup>28</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *The Union of Skills*, COM/2025/90 final.

<sup>29</sup> Regulation (EU) 2022/2371 of the European Parliament and of the Council of 23 November 2022 on serious cross-border threats to health and repealing Decision No 1082/2013/EU (Text with EEA relevance), OJ L 314, 6.12.2022, pp. 26–63. ELI: <http://data.europa.eu/eli/reg/2022/2371/oj>.

<sup>30</sup> [Strategic Technologies for Europe Platform](http://data.europa.eu/eli/reg/2022/2371/oj)

<sup>31</sup> Communication from the Commission to the European Parliament and the Council, *Apply AI Strategy*, COM/2025/723 final.

<sup>32</sup> <https://ec.europa.eu/newsroom/dae/redirection/document/114523>

<sup>33</sup> Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), OJ L, 2024/1689, 12.7.2024, ELI: <http://data.europa.eu/eli/reg/2024/1689/oj>.

<sup>34</sup> Communication from the Commission to the European Parliament and the Council, *Data Union Strategy Unlocking Data for AI*, COM(2025) 835 final.

<sup>35</sup> Communication from the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A Vision for Agriculture and Food Shaping together an attractive farming and agri-food sector for future generations*, COM/2025/75 final

Lastly, the proposed Act was informed by the preparation of upcoming and recent initiatives, such as the future **European Innovation Act**<sup>36</sup> and the recently adopted **bioeconomy strategy**<sup>37</sup>, in order to ensure synergies.

Furthermore, climate change has shown the need to also prioritise the resilience of the Union, including, for instance to focus on sustainable food systems, stronger health prevention and innovative health solutions. In this context, biotechnology has been identified in the **Farm to Fork Strategy**<sup>38</sup>, which is a key component of the **European Green Deal**<sup>39</sup>, as a technique that is safe for consumers and the environment. The proposed Act is also consistent with the European Commission's objectives to achieve climate neutrality set out in the **EU Climate Law**<sup>40</sup> and the **Union's Strategy on Adaptation to Climate Change**<sup>41</sup>.

In this context, the proposed European Biotech Act, including through its measures supporting innovation, will accelerate the placing on the market of biotechnology products that are adaptable to climate change, that contribute to health and food security through sustainable biomanufacturing and to the protection of biodiversity. Such biotechnology products have also the potential to replace products potentially more harmful for the environment while providing great benefits for consumers and users. Biotechnology and biomanufacturing will also need to comply with Union legislation in these areas, such as, the Regulation concerning the **Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)**<sup>42</sup> or applying without prejudice to the provisions of **Regulation (EU) 2024/1735 regarding sustainable biogas and biomethane technologies and biotechnology climate and energy solutions**<sup>43</sup>.

This also shows that the proposed Act is in line with the '**do no significant harm**' principle. The positive environmental impact of biotechnology and biomanufacturing was also recognized by stakeholders in their responses to the Public Consultation.

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<sup>36</sup> European Commission 'Have your say' website: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14593-European-Innovation-Act\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14593-European-Innovation-Act_en)

<sup>37</sup> European Commission 'Have your say' website: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14555-Towards-a-circular-regenerative-and-competitive-bioeconomy\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14555-Towards-a-circular-regenerative-and-competitive-bioeconomy_en)

<sup>38</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system*, COM/2020/381 final

<sup>39</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *The European Green Deal*, COM/2019/640 final.

<sup>40</sup> Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law'), OJ L 243, 9.7.2021, pp. 1–17. ELI: <http://data.europa.eu/eli/reg/2021/1119/oj>.

<sup>41</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change*, COM/2021/82 final

<sup>42</sup> Consolidated text: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance). ELI: <http://data.europa.eu/eli/reg/2006/1907/2025-09-01>

<sup>43</sup> Consolidated text: Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724 (Text with EEA relevance). ELI: <http://data.europa.eu/eli/reg/2024/1735/2025-08-17>

Finally, the proposed Biotech Act will support **digital transformation** in line with the ‘**digital by default**’ principle. One of its specific objectives is to “facilitate the application of AI into the Union’s biotechnology and health technology manufacturing ecosystems and frameworks, in line with Regulation (EU) 2024/1689”. The Act is expected, among others, to support the use of data, digital platforms and analytical methodologies (e.g. reducing the need for clinical data), in the development of biotechnology and in biomanufacturing. Digitalisation will also be reinforced in networking cooperation of biotechnology clusters (e.g. through the promotion of the development of infrastructure and digital platforms, and AI-enabled technologies). Overall, accelerated digitalisation, in particular through greater data use and AI integration, aims at contributing to the Union’s technological sovereignty.

Moreover, the proposed European Biotech Act will ensure coherence with relevant digital policies, such as the **Artificial Intelligence Act**<sup>44</sup>, on development and testing of AI enabled biotechnology solutions, as well as the **EU Cybersecurity framework**<sup>45</sup>, on access principles and security safeguards.

## 2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

### • Legal basis

The general objective of this Regulation is threefold: (i) to improve the functioning of the internal market by establishing a framework to strengthen the competitiveness of the health biotechnology sector, from research to production, (ii) to create the conditions for the development and timely placing on the EU market, of biotechnology innovations, products and services, (iii) while safeguarding high standards for the protection of human health, animal health, patients and consumers, the environment, ethics, quality, food and feed safety, and biosecurity.

This general objective translates into the establishment of measures to:

- (i) strengthen the biotechnology sector and reinforce the EU’s research, development and production capabilities, by establishing a framework for the recognition of, and support measures for, strategic health biotechnology projects and high impact strategic health biotechnology projects (pillar 1);
- (ii) support funding of, investments in, and access to capital for, biotechnology companies and projects, including through the setting up of an EU health biotechnology investment pilot to fill the gap in spending on biotechnology innovation (pillar 2);
- (iii) improve the EU manufacturing capacity of, and expertise in biosimilars, including through international cooperation (pillar 3);

<sup>44</sup> Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Text with EEA relevance), *OJ L*, 2024/1689, 12.7.2024. ELI: <http://data.europa.eu/eli/reg/2024/1689/oj>

<sup>45</sup> Regulation (EU) 2019/881 of the European Parliament and of the Council of 17 April 2019 on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology cybersecurity certification and repealing Regulation (EU) No 526/2013 (Cybersecurity Act) (Text with EEA relevance), *OJ L* 151, 7.6.2019, pp. 15–69. ELI: <http://data.europa.eu/eli/reg/2019/881/oj>

- (iv) facilitate the application of AI into the Union's biotechnology and health technology manufacturing ecosystems and frameworks, in line with the Regulation (EU) 2024/1689 (pillar 4);
- (v) ensure a legislative framework that encourages innovation and takes account of technological and scientific developments and progress, by establishing provisions for health biotechnology products (pillar 5);
- (vi) prevent the misuse of biotechnologies and strengthen biodefence capabilities (pillar 6).
- (vii) enable the effectiveness of the measures under the pillars 1 to 6 through a legislative framework conducive to the use of biotechnology innovations, by amending Union legislation in particular on clinical trials, veterinary medicinal products, food and feed safety and related legislation (pillar 7).

The appropriate legal basis is therefore as follows:

- Article 114 of the Treaty on the Functioning of the European Union ('TFEU') which allows the EU to take measures that increase harmonisation and remove fragmentation to create a level playing field within, and fully exploit the scale of, the EU single market, so that the health biotechnology and biomanufacturing sectors can thrive. In accordance with Article 114(3) TFEU, the proposal seeks to achieve the objective of a high level of health and safety protection.
- Article 168(4) TFEU, which mandates the Union to contribute to the achievement of a high level of human health protection through the adoption - in order to meet common safety concerns - of (i) measures setting high standards of quality and safety of organs and substances of human origin, blood and blood derivatives; (ii) measures in the veterinary and phytosanitary fields which have as their direct objective the protection of public health; and (iii) measures setting high standards of quality and safety for medicinal products and devices for medical use.
- Article 173(3) TFEU, which allows the Union to decide on specific measures in support of action taken in the Member States to ensure the conditions necessary for the competitiveness of the Union's industry, excluding any harmonisation of the laws and regulations of the Member States. This article provides a legal basis for the provisions in this Regulation regarding the EU health biotechnology investment pilot, establishing the basis for future Union financial support together with implementing partners, to support the financing of, and investments in, companies and projects falling within the scope of the European Biotech Act.

- **Subsidiarity (for non-exclusive competence)**

The objectives of the proposal cannot be achieved by Member States acting alone, as the issues tackled are of a cross-border nature and are not limited to single Member States or to several Member States. The proposed actions focus on areas where there is a demonstrable value added in acting at EU level due to the scale, speed, and scope of the efforts needed.

Furthermore, the market drivers identified are shared across the Member States, affecting the functioning of the single market and the global competitiveness of EU companies. Access to finance is scattered across the EU and EU companies lack the capacity to access private finance at a competitive scale, including at later stages of development. Similarly, European biotechnology clusters are scattered across the EU, without sufficient continental scale to compete globally. The development and deployment of AI solutions for biotechnology

remains limited, also due to the low level of storage, access and sharing of data relevant for biotechnology in the EU, including across borders. There is also a clear need across the EU to attract, reskill and upskill the workforce.

Moreover, while several Member States have taken action to boost innovation in biotechnology, the above-mentioned bottlenecks persist; improvements are expected to take considerably more time and without achieving the levels needed to compete at global level. For example, access to finance would remain scattered at EU level. The growth of clusters in the EU would also remain limited, without sufficient benefits from cross-border connections.

Lastly, important regulatory barriers faced by European biotechnology companies stem from EU legislation. Therefore, with a view to enable the effectiveness of the substantive measures put forward in this proposal, it is proposed to simplify EU legislation in the area of health and of food and feed safety to make it easier to innovate and place biotechnology products and services on the Union market and to enhance legal clarity.

- **Proportionality**

The selected measures under the industrial policy and substantive part of the proposal are targeted at the specific areas of interventions listed below.

- The provisions on strategic health biotechnology projects and high-impact strategic health biotechnology projects are proportionate to the aims pursued, including by recognising the first category of projects at Member State level, and the second category at EU level on the basis of an assessment at Member State level. Moreover, the recognition of such projects is based on clear criteria tailored to ensure that projects that contribute substantially to the Union's competitiveness, resilience, and security fall within the enhanced support regime. Moreover, the recognition of such projects does not restrict Member States' ability to support additional projects through other instruments. Member States benefit from flexibility as regards the authorities that they intend to designate to recognise strategic health biotechnology projects and assess applications for high-impact strategic health biotechnology projects. This flexibility also applies to the single points of contact and the provision of administrative, technical, and financial support, in line with Union law and the national systems. Accelerated permitting timelines apply only to recognised projects and are designed to streamline procedures without lowering any environmental, health or safety standards.

Similarly, measures aimed at supporting networking among health biotechnology clusters are limited to what is necessary to foster synergies in the internal market, while the EU Health Biotechnology Support Network is aiming to build on and complement existing national and EU structures, avoiding any duplication.

- On access to funding, the interventions focus on measures mobilising public funding and private capital; public funding needs to be in line with State aid rules.
- The proposed interaction modalities with Member States in the context of a European Health Biotechnology Steering Group allows for priorities to be adjusted, including by ensuring that the support measures for strategic health biotechnology project and high-impact strategic health biotechnology projects remain closely aligned with the Regulation's general objective.

The proposed amending provision aimed at reducing the time-to-market of biotechnology products and services focus on certain sectoral Union legislation where room for simplification of regulatory and administrative complexities has been identified. Simplification relates to changes that are necessary with a view to secure the effectiveness of the substantive provisions put forward in this proposal and will improve the legal clarity, certainty, and overall efficiency of the concerned EU legislative frameworks.

- **Choice of the instrument**

The proposal takes the form of a regulation of the European Parliament and of the Council.

A regulation is the most suitable legal instrument for Pillars 1 to 4, given the need for a uniform application of the new rules, in particular the conditions and procedure for recognising health biotechnology strategic projects and high impact health biotechnology strategic projects, and for their administrative, technical and financial support, and also more broadly for companies and non-profit organisations active in the relevant biotechnology sectors across the internal market. This is also the case for Pillar 5, regarding the provisions on biotechnology health products, given that they aim to ensure a dialogue and more flexibility across the Union legislative frameworks in the area of health. The choice of a regulation as a legal instrument is also appropriate for Pillar 6 because only a regulation, with its directly applicable legal provisions, can provide the necessary degree of uniformity needed to boost EU biodefence and biosecurity and prevent biotechnology misuse.

In all cases, the choice of the instrument is justified considering that the Pillar 7 establishes provisions amending several existing Union regulations in the area of health and food and feed safety.

Lastly, a regulation is appropriate for the provisions regarding on evaluating this Regulation which do not need to be transposed through national measures and are directly applicable.

### **3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS**

- **Ex-post evaluations/fitness checks of existing legislation**

The proposed measures amend several pieces of EU legislation in a targeted manner, without modifying their objectives, the overall regulatory framework put in place or their functioning. When relevant, these measures were informed by several studies or ongoing evaluations, such as the ongoing evaluation of the EFSA. Regarding the Clinical Trials Regulation, an ongoing study will contribute to the Commission's report, which will be presented five years after the application date of the legislation (1 January 2022).

The extensive consultation process and a comprehensive supporting study identifying over 200 regulatory challenges stemming from EU legislation have gathered evidence on the challenges and problems, the relevant provisions of the legislation, and issues for which there is no legislation.

- **Stakeholder consultations**

Extensive stakeholder consultations were carried out to prepare for the proposal. A **call for evidence**<sup>46</sup>, opened for feedback from 14 May to 11 June 2025, gathered 222 valid individual contributions<sup>47</sup> from a wide range of stakeholders: business associations<sup>48</sup> (63), companies (50), non-governmental organisations (NGOs) (44), academic and research institutions (20), public authorities in the EU (14), EU citizens (14) and other categories (17)<sup>49</sup>.

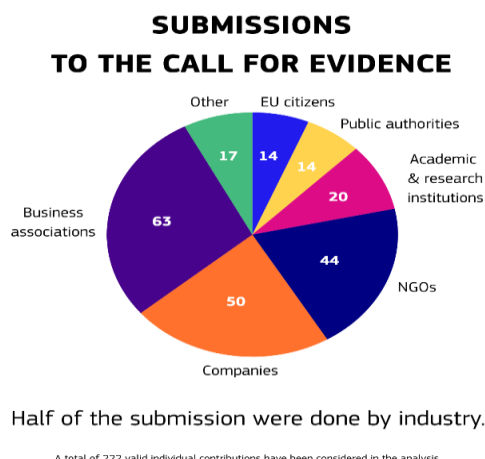


Figure 4: submissions to the call for evidence

The respondents were largely based in the EU (197 responses from 15 Member States). Among these, most of the contributions came from Belgium (74), followed by Germany, (29), France (20), the Netherlands (16), Denmark (12) and Spain (11). 25 contributions were received from 7 non-EU countries (the United States, Switzerland, the United Kingdom, Norway, Canada, Australia and Argentina).

With regard to current biotechnology related regulation, various stakeholder groups such as academic/research institutions, NGOs, representatives of companies (including SMEs), and public authorities underlined **slow and complex regulatory frameworks** that lead to long authorisation/approval processes, thereby hindering innovation and delaying market access. Representatives from businesses (both associations and large companies) referred to the **unpredictability of some authorisation procedures**. Representatives from academic/research institutions and business associations also expressed concerns regarding **outdated regulatory frameworks**, while business associations mentioned in particular the **limited flexibility** of the EU regulatory frameworks. In addition, NGOs/others, large companies and SMEs, business associations and trade unions agreed that **divergent national rules and interpretation/implementation of EU rules** create fragmented market entry

<sup>46</sup> European Commission ‘Have your say’ website: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14627-Biotech-Act\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14627-Biotech-Act_en)

<sup>47</sup> Three submissions were received from a single respondent and have been counted as one response. Two submissions were received from another respondent and have been counted as one response.

<sup>48</sup> Three respondents that selected trade unions are analysed together with business associations as representing the industry.

<sup>49</sup> In the analysis, they are grouped together with feedback from NGOs.



conditions. Feedback from small companies indicated **high regulatory costs** as a result of the regulatory fragmentation, while public authorities also acknowledged high **compliance costs**. Lastly, some feedback pointed to **inconsistencies between EU legislative frameworks**, in particular the CTR, ATMPs Regulation, MDR/IVDR, REACH Regulation and the General Data Protection Regulation (GDPR).

Most stakeholders also indicated a **shortage of risk-tolerant capital**. Stakeholders highlight **fragmented funding schemes, limited early-stage financing, and low EU venture capital share** compared to the US and China. For instance, representatives from academic/research institutes indicated that the EU's venture capital accounted for only about 5% of global venture capital. Representatives of large companies particularly underlined **public R&D under-investment**, indicating poor alignment across policies and programmes. Some contributions from NGOs/others also indicated the risk of dependence on foreign capital, particularly in health and defense-related biotechnologies.

Stakeholders stressed the fundamental role of **education and skills** for the biotechnology and biomanufacturing workforce. Stakeholders expressed concerns about **talent drain and global competition**. This is exacerbated by existing **regulatory and mobility barriers** that hamper cross-border and cross-sector mobility, as indicated in feedback from academic/research institutions. In addition, stakeholders underlined the limited **entrepreneurial pathways** from academia to company building. Moreover, many stakeholders experienced **shortages in the specialised and interdisciplinary competences** needed for the biotechnology and biomanufacturing workforce. Other limitations mentioned were an insufficient number of STEM graduates, the lack of funding or low investment in life-long learning (e.g. digital, AI competencies), and unequal access to upskilling programmes.

Stakeholders across all groups (including academic/research institutions, business associations/trade unions, large companies, citizens, as well as NGOs/others and public authorities) stressed the limited **manufacturing capabilities** in the Union. Some of the underlying factors mentioned were, among others, the high costs, infrastructure and investment gaps, limited digitalisation, supply chain vulnerabilities, and the fragmented regulatory frameworks. SMEs underscored this statement, also pointing to the challenges related to lack of recognition for quality control technologies.

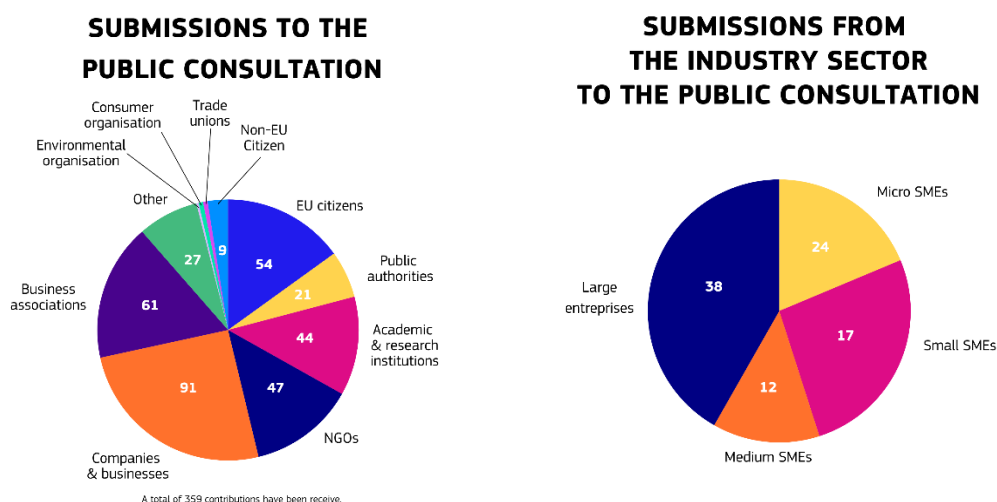
Furthermore, **incubation and acceleration limitations** in the EU were mentioned. Many stakeholder groups, such as academic/research institutions, large companies, NGOs/others and public authorities, highlighted the need to bridge the gap between research and industry in Europe's biotechnology ecosystem. They expressed concerns on the barriers faced in incubation and acceleration, such as funding gaps in early stages, a fragmented support landscape, regulatory burdens, hindrances in public-private collaboration and cultural/skill barriers. Business associations' and public authorities' feedback was in line with this statement, underlining that the EU lacks **cohesive pathways to commercialisation**. Large companies specifically pointed out the lack of financial and administrative capacity of SMEs and start-ups to **access EU-level funding** or to protect their intellectual property.

Stakeholders overall recognised the pivotal role of **AI and data** to advance biotechnology. As part of the challenges faced however, academic/research institutions and large companies indicated a **lack of access to data and secure data sharing**, fragmented data ecosystems including limited data interoperability, unclarity on data governance and insufficient coordination. Business associations and public authorities also mentioned **fragmented computing power and uneven access to testing infrastructures**. Furthermore, SMEs

referred to a lack of information and knowledge among companies about AI implementation and compliance. Feedback from NGOs/others overall echoed these statements, while also advocating to take into consideration the environmental impact of AI infrastructures. Most stakeholders additionally pointed out **regulatory fragmentation**, technical and legal barriers, innovation barriers, and governance gaps. AI skills shortages were also mentioned by several stakeholder groups, as well as ethical uncertainties.

Finally, on biosecurity, stakeholders mentioned that while biotechnology and biomanufacturing offer transformative opportunities across multiple application areas, these must be governed by policies that balance innovation with safety, equity, and environmental protection. Various challenges were pointed out by different stakeholder groups in relation to biosecurity. For instance, academic/research institutions, NGOs and public authorities mentioned a **fragmented biosecurity governance and regulatory complexity** as major issues. Specifically, disjointed EU and national regulations that hinder coherent biosecurity frameworks were highlighted. Public authorities furthermore indicated limited collaboration as a key challenge – for instance gaps in cooperation between national authorities and limited cross-border collaboration. Regarding nucleic acid screening, academic/research institutions, and NGOs mentioned inconsistent compliance in screening due to current voluntary systems as a threat to biosecurity. Finally, dual-use risks were mentioned by SMEs and NGOs.

A **public consultation**<sup>50</sup> was carried out from 4 August to 10 November 2025. A total of 359 contributions were received. No duplicates or campaigns were identified. The contributions considered for the analysis<sup>51</sup> were submitted by 91 companies/businesses and 61 business associations, 47 NGOs, 44 academic/research institutions, 54 EU citizens and 9 non-EU citizens, and 21 public authorities. A further 2 contributions were submitted by 2 trade unions, 2 consumer associations, and 1 by an environmental organisation<sup>52</sup>, while 27 additional respondents identified themselves as ‘Other’.



<sup>50</sup> European Commission ‘Have your say’ website: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14627-Biotech-Act/public-consultation\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14627-Biotech-Act/public-consultation_en)

<sup>51</sup> Four trade unions were analysed under business associations.

<sup>52</sup> In the statistics, the 2 trade unions, 2 consumer organisations and the environmental organisation are reflected with the respondents who identified themselves as ‘other’.

Figures 5 and 6: submissions to the public consultations and industry submissions per company size

Concerning the industry sector, **most of the contributions came from SMEs** (53 in total out of which 12 medium-, 17 small-, and 24 micro-sized SMEs) and 38 contributions came from large enterprises. Of the contributing **public authorities**, 8 had a national remit and 8 had a regional scope, 2 of them were local authorities and 3 were international organisations.

As part of all contributions received, **16 respondents identified as private investors**, including 13 from the EU and 3 from outside of the EU (Switzerland and the UK). Most of them identified as company/business. When asked about the type of investment they provided, 8 stated that they provided 'Venture capital', 5 chose 'Business Angel', 4 'Private equity', 3 'Corporate Venture Capital (CVC)', and 1 'Other'.

Lastly, **43 respondents** of all contributions received indicated **being part of a cluster or of a cluster organisation**. These represented 26 companies/businesses, 15 business associations, 1 NGO and 1 'Other'.

**There is a strong overall interest from stakeholders to the biotechnology sector and acknowledgment of its great potential, in line with the EU's economic, social and environmental policy goals.** More precisely, a strong majority of respondents agreed that biotechnology and biomanufacturing products could positively impact the EU's economy and the society, also recognizing its contribution to the environment<sup>53</sup>. Respondents considered biotechnology and biomanufacturing products that reached the EU market to be safe and secure<sup>54</sup>. However, they did not consider that information to users and consumers<sup>55</sup> on biotechnology and biomanufacturing products in the EU was sufficiently accessible and broadly communicated. Moreover, only a minority of respondents were willing to pay a price premium for such products<sup>56</sup>.

Answers to the public consultation on the **EU regulatory framework** were in line with the **focus of the proposed Act**. The main regulatory barriers<sup>57</sup> identified by stakeholders concerned the **assessment and obtaining authorisation to market products**, followed by the **pre-commercial testing or clinical trials stage, in commercialising products** as well as in the **scaling-up production or manufacturing and product development**.

Another finding of the public consultation relates to the **perception of the EU regulatory environment compared to that of some countries outside the EU**. The EU regulatory environment is perceived by some stakeholders to have a **lower level of predictability**<sup>58</sup> and it is also seen as more **complex and unclear**<sup>59</sup>, leading to **more compliance costs**<sup>60</sup> and

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<sup>53</sup> Positive economic impact: 90.3% strongly agreed/agreed (324/359); Positive social impact: 89.7% strongly agreed/agreed (322/359); Positive environmental impact: 80.2% strongly agreed/agreed (288/359)

<sup>54</sup> 76.3%: 175 strongly agreed, 99 agreed (out of 359).

<sup>55</sup> 28.1%: 30 strongly agreed, 71 agreed (out of 359).

<sup>56</sup> 15.6%: 13 strongly agreed, 43 agreed (out of 359).

<sup>57</sup> Agreement/strong agreement on these barriers ranged from 63% to 76%.

<sup>58</sup> More predictable: 40.8%: 45 strongly disagreed/92 disagreed (out of 336).

<sup>59</sup> Less complex and clearer: 64.6%: 99 strongly disagreed/116 disagreed (out of 333).

**slower access to the market**<sup>61</sup>. Views on whether the EU regulatory environment ensures a higher **level of safety and security** were rather mixed<sup>62</sup>. Public authorities (57,9%, 11/19), NGOs (46,5%, 20/43), other stakeholders (48,5%, 15/31) and academic/research institutions (42,9%, 18/42) had a positive stance.

These findings underscore the urgent need to take action to simplify and streamline the regulatory environment, making it flexible and innovation-friendly so that biotechnology products and services can reach the EU market more quickly.

Furthermore, respondents reported **low level of access to private investments** in the EU, in particular in accessing to publicly listing, private equity, debt financing, venture capital (VC) across series B (expansion stage) and C (growth stage) and capital markets/shareholders<sup>63</sup>. It should be noted that stakeholders also expressed **low level of accessibility to some public funding**, especially for support for capacity expansion, debt/equity instruments, and commercialisation support<sup>64</sup>. Stakeholders indicated less difficulties in accessing strategic research or sales partnerships/collaborations, angels, venture capital at start-up/early-stage (series A) and corporate funding<sup>65</sup> and public grants and subsidies<sup>66</sup>.

When asked about the **factors driving forward investments** in a biotechnology company, there were no major differences in the answers. Some factors scored highly, which are (i) groundbreaking technology; (ii) regulatory certainty; (iii) innovative science; (iv) scientific evidence; (v) experienced management team; and (vi) sufficient protection of intellectual property rights<sup>67</sup>.

On **clusters**, the five main barriers faced by EU biotechnology clusters and/or cluster organisations preventing them from reaching their full potential were identified as: (i) insufficient financial support; (ii) insufficient public support; (iii) incapacity to reach a critical mass of stakeholders; (iv) insufficient start-up incubators or business support infrastructure; and (v) insufficient collaboration among existing clusters<sup>68</sup>.

Stakeholders identified the main challenges impacting the EU biomanufacturing sector as: (i) **global competition**; (ii) length and/or complexity of **permitting processes for new facilities**; (iii) difficulty of **scaling up from pilot to industrial production**; (iv) high energy costs; and (v) the high cost of raw material and/or of the operations<sup>69</sup>. A majority of respondents also agreed that major challenges are also posed by the inconsistent environmental and sustainability policies, vulnerabilities in the supply chains and other operational costs<sup>70</sup>.

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<sup>60</sup> Leads to lower costs for complying with the regulation: 62%: 98 strongly disagreed/109 disagreed (out of 334).

<sup>61</sup> Enables biotechnology and biomanufacturing products to reach the market faster: 65.7%: 126 strongly disagreed/92 disagreed (out of 332)

<sup>62</sup> Ensures a higher level of safety and security: 21.4% disagreed/strongly disagreed. (72/337) 36.8% agreed/strongly agreed (124/337). 41.8% were neutral or Not applicable/I don't know (141/337).

<sup>63</sup> Agreement/strong agreement that there is easy access to these options ranged from 3.9% to 6.7%.

<sup>64</sup> Agreement/strong agreement that there is easy access to these options ranged from 4.2% to 5.6%.

<sup>65</sup> Agreement/strong agreement that there is easy access to these options ranged from 11.4% to 21.2%.

<sup>66</sup> Agreement/strong agreement that there is easy access was 19.2% (69/359).

<sup>67</sup> Agreement/strong agreement on these factors ranged from 72.4% to 79.9%.

<sup>68</sup> Agreement/strong agreement on these barriers ranged from 46.2% to 58.5%.

<sup>69</sup> Agreement/strong agreement on these challenges ranged from 58.2% to 66.9%.

<sup>70</sup> Agreement/strong agreement on these challenges ranged from 50.1% to 51.5%.

The public consultation also confirmed the challenges faced by the **EU workforce**. Stakeholders' views were aligned on three main challenges: (i) the limited financial, entrepreneurial skills and mindsets; (ii) the insufficient regulatory and quality assurance expertise; and (iii) the shortage of vocational skills<sup>71</sup>.

Some stakeholders indicated having difficulties **accessing or using data** for the development of biotechnology or biomanufacturing products<sup>72</sup>. Stakeholders also emphasised that technological challenges and challenges in the implementation of regulatory frameworks were the main barriers to both the **use of AI in R&D**<sup>73</sup> and to the **deployment of AI-based biotechnology products**<sup>74</sup>. When asked about the types of **support needed for biotechnology companies, in particular for SMEs**, stakeholders stressed (i) skills development and AI training; (ii) access to annotated datasets; (iii) partnerships with public research institutions or AI hubs/factories; (iv), dedicated funding instruments; and (v) regulatory sandboxes for testing biotech-related AI models<sup>75</sup>.

When it comes to the application of biotechnology in defence and security, the main challenges identified by stakeholders were: (i) the **risks to strategic autonomy** in biomanufacturing (and availability of medical and non-medical countermeasures); (ii) **cybersecurity risks** to biotechnology infrastructure and AI tools used in biotechnology; (iii) vulnerabilities in the **resilience of biotechnology supply chains**; and (iv) threats related to biosecurity and biosafety including **misuse of biotechnology**<sup>76</sup>. The four main **opportunities** that biotechnology for defence and security were creating were: (i) to develop **new innovative medical countermeasures**; (ii) to facilitate **detecting biological and chemical threats**, (iii) to increase **food security**; and (iv) to develop **materials with new functions and / or improved characteristics**<sup>77</sup>.

In addition, **targeted consultation activities** were carried out, as detailed below, including in the context of an external study announced in the Commission Communication 'Building the future with nature: Boosting Biotechnology and Biomanufacturing in the EU' (Action 1)<sup>78</sup>.

First, the following consultation activities took place on the analysis of regulatory problems and challenges faced by the biotechnology sector and on the mapping of applicable EU and national legislations to biotechnologies:

- **survey for public authorities;**
- **survey for other stakeholders**, including industry representatives and patient organisations;

<sup>71</sup> Agreement/strong agreement on these challenges ranged from 51.8% to 58.5%.

<sup>72</sup> 21.4% replied partially (77/359) and 18.4% replied Yes (66/359) totalling 39.8%. However 44% replied Not applicable/I don't know (158/359 answers) and 16.2% replied No (58/359).

<sup>73</sup> Technological challenges: 61.3%: 65 strongly agreed/155 agreed (out of 359); challenges in the implementation of regulatory frameworks: 59.1%: 81 strongly agreed/ 131 agreed (out of 359).

<sup>74</sup> Technological challenges: 51.5%: 63 strongly agreed/122 agreed (out of 359); challenges in the implementation of regulatory frameworks: 52.1%: 81 strongly agreed/106 agreed (out of 359).

<sup>75</sup> Agreement/strong agreement on the needed types of support ranged from 59.1% to 65.5%

<sup>76</sup> Agreement/strong agreement on the four main challenges ranged from 42.3% to 51.5%

<sup>77</sup> Agreement/strong agreement on the three main opportunities ranged from 43.7% 48.2%.

<sup>78</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Building the future with nature: Boosting Biotechnology and Biomanufacturing in the EU*, COM(2024) 137 final.

- **interviews** with representatives of SMEs and large enterprises, and representatives of the spin-off, alliance/platform, scale-up and EU association sectors;
- **five thematic workshops** covering (i) health/pharma; (ii) agriculture/environment; (iii) food and feed; (iv) bio-based chemicals and plastics; and (v) bio-based materials.

Second, to analyse the impacts of identified policy provisions, evidence was collected on the impacts of these provisions.

On **clinical trials**, evidence has been collected (by November 2025) through:

- **three workshops organised by the European Commission** in June, September, and November 2025<sup>79</sup>, with representatives of national competent authorities and ethics committee members from across the EU to exchange views with experts to inform how policy options would be defined;
- **targeted interviews**;
- **targeted survey** to various stakeholder groups:
  - **a survey targeted to sponsors and clinical research organisations** received 48 responses<sup>80</sup>.
  - another **targeted survey collected views from 44 public authorities** representing 25 EU/EEA countries<sup>81</sup>.
  - **a survey tailored to patient representatives** received 1 response from a disease-specific patient representing an organisation at national level.

Evidence on the impacts of options on **genetically modified microorganisms** was collected through **25 interviews** (by November 2025).

Finally, targeted consultation activities were also conducted as part of the **supporting study for the evaluation of EFSA**.

#### • **Collection and use of expertise**

The major competitiveness gap in biotechnology and the market and regulatory barriers faced by European companies were identified in the Commission Communication ‘Building the future with nature: Boosting Biotechnology and Biomanufacturing in the EU’<sup>82</sup> and in the Draghi<sup>83</sup> and Letta<sup>84</sup> reports.

<sup>79</sup> CTAG: Clinical Trials Advisory Group; MedEthics-EU, the Clinical Trials Coordination Group of the Heads of Medicines Agencies (HMA) was also invited to the workshop. The EMA is an observer to the CTAG.

<sup>80</sup> 32 from commercial sponsors, 6 from non-commercial sponsors, 3 from Clinical Research Organisations (CROs), and 7 from other stakeholders such as non-profits, hospital owners, advocacy groups, research infrastructures, trade associations and life sciences providers

<sup>81</sup> 20 responses from ethics committees, 20 from national competent authorities, 3 from ministries or government bodies, and 1 from a respondent identified as both a ministry and an ethics committee

<sup>82</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Building the future with nature: Boosting Biotechnology and Biomanufacturing in the EU*, COM(2024) 137 final.

<sup>83</sup> Draghi, Mario. [The future of European competitiveness: A competitiveness strategy for Europe](#), European Commission, 9 September 2024.

In addition, the above-mentioned external study commissioned by the European Commission (**‘Analysis of the Regulatory Framework for Biotechnology and Biomanufacturing in the EU’**) provides an extensive mapping of the main pieces of EU and national legislation that apply to biotechnology and biomanufacturing products and processes – whether they are horizontal or sector-specific – and identifies the challenges, their causes and the consequences for stakeholders. The study also assesses the impacts of policy options related to the EU regulatory framework.

- **Impact assessments**

Considering the politically urgent need to address the policy challenges identified, an impact assessment could not have been delivered in the timeframe available before the proposal’s adoption. Instead, an analytical staff working document (SWD) will be prepared. The analytical SWD will explain the proposal and will present the underlying evidence and impact analysis, including cost-benefit analysis. A large number of provisions of the proposal concern simplification measures which typically do not offer viable alternatives and do not modify the objectives of the amended legislation. Nevertheless, the proposed measures are based on extensive stakeholder consultations, complemented with an analysis of the current situation to ensure a transparent, proportionate, and evidence-based approach.

- **Regulatory fitness and simplification**

The proposal lays down measures to strength the EU biotechnology and biomanufacturing ecosystem and reduce time-to-market for biotechnology products in the EU.

The proposed Act aims to **simplify the existing regulatory framework and remove regulatory burdens hampering the innovation and competitiveness of EU operators**. In particular, the measures seek to clarify and reduce procedural timelines across the full development cycle (e.g. by alleviating complex and disproportionate requirements) and provide a flexible regulatory environment for a fast-growing innovative sector (e.g. through regulatory sandboxes and by enabling an increasing use of data and AI). As such, all actors, in particular **companies**, will benefit from a more predictable EU regulatory framework, i.e. increased legal certainty, reduced procedural timelines, and a flexible and collaborative regulatory environment. Overall, these measures are expected to enable companies to bring innovation to the market. SMEs in particular are expected to benefit from these measures through reduced entry barriers in the field of biotechnology. The supporting measures also target the needs of SMEs, start-ups and scale-ups.

**National and regional authorities** will benefit from streamlined, more coherent procedures and improved coordination, reducing duplication of work, and supporting more consistent regulatory decisions across the Union.

The proposed measures are targeted amendments that preserve the objectives of the existing regulations to maintain and safeguard a high level of **protection of health and the environment**. Similarly, measures to prevent the misuse of biotechnologies and strengthen EU biodefence capabilities, including monitoring AI-enabled biological risks, will ensure that innovation is accompanied by robust safeguards for public health and security.

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<sup>84</sup> Enrico Letta (2024), *Much more than a Market*. [Enrico Letta - Much more than a market \(April 2024\)  
https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf](https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf)



Furthermore, **EU biotechnology businesses**, and in particular those with the potential to be transformative for the biotechnology ecosystem are expected to have improved access to capital throughout the different stages of their development and better access to the infrastructure needed to assess the industrial potential of their innovation, thus contributing to a thriving biotechnology and biomanufacturing ecosystem in the EU. Strategic biotechnology projects, which the proposal aims to foster, may also include activities addressing the growing skills gap in biotechnology and biomanufacturing and are expected to contribute to a workforce capable of supporting innovation, industrial scale-up and long-term competitiveness. **Investors and financial** intermediaries will benefit from a more predictable pipeline of projects and clearer regulatory certainty, supporting greater availability of risk-tolerant capital in the EU.

The initiative will foster, in line with the Union policy and legislation on AI, the use of AI across the biotechnology ecosystem, giving **companies – and more particularly SMEs** – more guidance and opportunities to integrate trustworthy, high-quality AI solutions into research, testing and production processes.

End-users, including **patients and citizens** will benefit from biotechnology products that meet their needs. Faster time-to-market and, improved clinical-trial performance are expected to result in earlier access to safe, effective, high-quality and affordable biotechnology products, including advanced therapies, diagnostics, biosimilars and innovative biomanufactured products which will also benefit **healthcare systems**.

Overall, these targeted measures combined are expected to (i) facilitate the growth of the EU biotechnology and biomanufacturing industry in the EU; (ii) improve the global competitiveness and innovation capacity of the EU's biotechnology companies; and (iii) increase the EU's strategic autonomy in critical technological areas.

- **Fundamental rights**

The Act respects the fundamental rights and principles laid down in the Charter of Fundamental Rights of the European Union<sup>85</sup>.

The proposed measures simplifying EU legislation and the new initiatives on EU industrial policy are expected to contribute to the smooth functioning of the internal market and, in particular, support the freedom to conduct a business (Article 16 of the Charter). The measures under this proposal seek to enable innovation, expand the EU's manufacturing capacity and clarify procedures for biotechnologies to reach the market. The proposed measures will also ensure a high level of human health protection and will enhance the right of access to preventive healthcare and the right to benefit from medical treatment under the conditions laid down by national laws and practices, as provided in Article 35 of the Charter. Similarly, the proposal will help ensure a high level of environmental protection and improve the quality of the environment, in line with Article 37 of the Charter.

#### **4. BUDGETARY IMPLICATIONS**

Without prejudice to the outcome of the negotiations on the next Multiannual financial framework (MFF) proposal, strategic health biotechnology projects and high-impact strategic

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<sup>85</sup> Charter of Fundamental Rights of the European Union, ELI: [http://data.europa.eu/eli/treaty/char\\_2012/oj](http://data.europa.eu/eli/treaty/char_2012/oj)

biotechnology projects may be supported by Union programmes, funds and instruments, in accordance with the objectives set out in the regulations establishing those funds and programmes. A contribution is expected to come from the “health, biotechnology, agriculture and bioeconomy” window under the European Competitiveness Fund which, according to the proposal of the Commission, would receive a total allocation of EUR 20.4 billion over the MFF 2028-2034. Two agencies, EMA and EFSA are proposed to be reinforced in staff and financially to conduct tasks related to these projects. The necessary financial resources will be compensated from applicable programmes under the agencies' headings in the 2028-2034 MFF and where possible by additional income to be generated from third parties. The Legislative Financial and Digital Statement (LFDS) also presents estimated budgetary impact under Heading 4 including related human and administrative resources.

## **5. OTHER ELEMENTS**

### **• Implementation plans and monitoring, evaluation and reporting arrangements**

In the short term, implementation will focus on completing the strategic mapping of the Union’s biotechnology ecosystem within six months of the Regulation’s entry into force, and on setting up the new governance and support structures, including the EU Health Biotechnology Support Network, the Foresight Panel for Emerging Health Innovation and the European Health Biotechnology Steering Group. To support Member States in implementing the Regulation, to promote a uniform application of the Regulation and to clarify technical or operational elements where needed, the Commission may issue guidance on specific matters, including the criteria and procedures for recognising strategic health biotechnology projects and high-impact health biotechnology strategic projects, and the coordination between the EU Health Biotechnology Support Network and other relevant networks. Member States will be required to designate national single points of contact and begin applying the streamlined regulatory procedures.

Monitoring will rely on the strategic mapping as a continuous evidence base, complemented by regularly updated information on the list of strategic health biotechnology projects and high-impact health biotechnology projects.

In the medium term, the strategic mapping of the biotechnology ecosystem will be updated periodically and used to inform project selection and guide the deployment of Union support. Five years after the Regulation’s entry into application, and every five years thereafter, the Commission will evaluate the Regulation’s effectiveness and impact, and report its findings to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.

### **• Detailed explanation of the specific provisions of the proposal**

#### **Chapter I – Subject Matter, Scope and Definitions**

This Chapter sets out the subject matter of this proposal, which consists of measures that articulate its overall objective (i) to improve the functioning of the internal market by establishing a framework to strengthen the competitiveness of the biotechnology sector, from research to production, (ii) to create the conditions for the development and timely placing on the Union market, of biotechnology innovations, products and services, (iii) while safeguarding high standards for the protection of human health, animal health, patients and consumers, the environment, ethics, quality, food and feed safety, and biosecurity. This Chapter also specifies the scope of the proposal, which applies to health biotechnology

products and services during their entire lifecycle, including related activities on research, funding, development, innovation, testing, validation, manufacturing, placing on the market and use. Lastly, this Chapter establishes definitions for key terms used throughout the proposal, including ‘biotechnology’, ‘health biotechnology’, ‘biotechnology product’, ‘biotechnology service’ and ‘biomanufacturing’.

## **Chapter II – Union health biotechnology and biomanufacturing**

This Chapter introduces the concepts of health biotechnology strategic projects and high impact health biotechnology strategic projects and establishes a framework for the recognition and the support of such projects aimed at strengthening the EU’s industrial biomanufacturing capacity and value chains. Strategic projects should mobilise and focus action at Union and Member State level, including on public and private investments and accelerated permitting and other support measures, to boost Europe’s competitiveness and resilience in biotechnology. To build a strong EU biotechnology ecosystem, provisions are included to encourage pro-competitive collaboration between projects, networks and clusters. These measures are to be underpinned by a strategic mapping of the Union’s biotechnology ecosystem to identify capacities, gaps, dependencies and investment needs, thereby guiding the prioritisation of strategic and high-impact projects and informing Union policy and funding decisions. This Chapter also sets up an EU health biotechnology support network of national and regional antennas to support biotechnology projects and innovators in navigating regulatory procedural pathways relevant to health biotechnologies and identifying opportunities for funding, scaling up and networking, leveraging and complementing the activities of existing national and European networks that support SMEs, start-ups and scale-ups, and innovators.

Finally, this Chapter establishes the European Health Biotechnology Steering Group, composed of representatives of Member States and the Commission and its tasks, which include facilitating communication among Member States, the Commission, and various stakeholders to ensure biotechnology projects are recognised and implemented effectively.

## **Chapter III – Access to funding**

This Chapter establishes an EU health biotechnology investment pilot in partnership with the European Investment Bank Group and other implementing partners, which brings together equity instruments and venture-style debt tailored to biotechnology-specific risk profiles, in order to mobilise private investment into the sector. Projects contributing to an EU late-stage Capital Booster Pilot will be recognised by the Commission as high-impact strategic health biotechnology projects. Companies, projects and initiatives falling within the scope of this Regulation may be considered for Union and Member State financial support, in line with applicable State aid rules.

## **Chapter IV – Extension of the supplementary protection certificate**

This chapter introduces an extension of 12 months of the Supplementary Protection Certificate (SPC) for medicinal products developed by means of biotechnology processes and for Advanced Therapy Medicinal Products. This provision aims at incentivising the development of products developed with innovative biotechnology technologies which will bring a therapeutic advantage to patients. This incentive will also support the clinical

development and the manufacturing of these products in the Union, subject to compliance with applicable competition rules.

## **Chapter V - Enhancing competitiveness in biosimilars**

This Chapter supports EU competitiveness in the field of biosimilars by encouraging the development of EMA guidelines on facilitating the authorisation of biosimilar medicinal products. This Chapter also includes measures supporting strategic health biotechnology projects focused on biosimilar research, development, manufacturing and marketing authorisation and promotes international cooperation between economic operators and biotechnology clusters in this area, subject to compliance with applicable competition rules. Any funding from Member States should be in line with applicable State aid rules.

## **Chapter VI – Artificial intelligence and data as biotechnology enablers**

This Chapter aligns with the AI-first policy introduced in the Apply AI Strategy and encourages the adoption and integration of AI in actions supporting biotechnology, in order to foster innovation, efficiency and technological sovereignty in biotechnology and biomanufacturing. It also provides for guidance to be issued by the EMA on the use of AI across the medicinal-product lifecycle and creates trusted AI testing environments and data-quality accelerators as high-impact strategic health biotechnology projects to advance safe AI-enabled biotechnology.

## **Chapter VII – Regulatory tools for novel health biotechnology products**

This Chapter sets out a flexible, collaborative and anticipatory approach to regulate novel health biotechnology products by reinforcing and complementing existing mechanisms in Union law, notably (i) those introduced in the revised Directive 2001/83/EC on the interaction and combinations between medicinal products and medical devices, and on regulatory sandboxes; and (ii) the mechanisms provided under the [revised] MDR, IVDR, the revised Pharmaceutical Regulation and the SoHO Regulation, which allow for the provision of opinions, recommendations or binding decisions on the regulatory status of products. This Chapter lays down a Union-wide, cross-framework regulatory status repository, which will compile relevant opinions, recommendations, decisions and guidance, thus fostering transparency, consistency and mutual learning across Union and national authorities. Recognising the need for anticipatory governance, this Chapter also sets up a foresight panel for emerging health innovation to advice the Commission and conduct structured horizon-scanning and cross-framework dialogue on forthcoming scientific and technological developments. Lastly, this Chapter provides for the establishment of a Union level regulatory sandbox for health biotechnology products at an early stage of development that fall outside existing health legal frameworks.

## **Chapter VIII – Biodefence and preventing biotechnology misuse**

This Chapter establishes a framework for preventing the misuse of biotechnology products of concern. It includes provisions for screening, reporting, and tracking suspicious transactions of biotechnology products of concern, and enforcement mechanisms to ensure compliance. This Chapter sets out specific conditions for the Commission to recognise high-impact strategic health biotechnology projects in the form of EU biodefence capability projects, that may be given particular consideration for funding under Union basic acts, subject to compliance with applicable State aid rules. Ultimately, the Regulation seeks to promote a high level of protection against biotechnological threats, while fostering innovation and

competitiveness in the biotechnology sector. **Chapter IX – Amendments to Regulations (EC) No 178/2002, (EC) No 1394/2007, (EU) No 536/2014, (EU) 2019/6, (EU) 2024/795 and (EU) 2024/1938**

This Chapter introduces amendments to EU legislative frameworks in the areas of health and food and feed safety with the aim of simplifying procedures and accelerating time to market that are necessary to ensure the effectiveness of the substantive provisions established in this proposal by creating legislative frameworks conducive to innovation. Further, it establishes amendments to Regulation (EU) 2024/795 (STEP Regulation)<sup>86</sup> regarding the status of health biotechnology strategic projects and of high impact health biotechnology strategic projects under that Regulation.

#### *Amendments to Regulation (EC) No 178/2002 (General Food Law)*

This Regulation proposes amendments to Regulation (EC) No 178/2002<sup>87</sup> laying down the general principles and requirements of food law, in order to streamline risk assessment processes. Key changes include (i) broadening pre-submission advice to include scientific matters, such as study design and testing strategies, while merging it with the renewal-related advice into a single, unified procedure to simplify application procedures; (ii) shortening the procedural delay for non-compliance with the study notification requirements at pre-submission phase from six to three months to reduce time-to-market; (iii) requiring EFSA staff to chair panels and serve as vice-chairs of the Scientific Committee (without voting rights) to improve efficiency and coherence across Panels; and (iv) introducing provisions for regulatory sandboxes, allowing Member States to test innovative technologies under harmonised conditions that foster innovation while safeguarding consumer health and safety. Such amendments should contribute, amongst others, to accelerating the risk assessment process carried out by EFSA for products that are subject to pre-market authorisation in accordance with Union food and feed law and foster innovation in the sector. As such, those are necessary amendments with a view to ensure the effectiveness of the substantive measures put forward in this proposal towards the strengthening of an innovative biotechnology sector in food and feed safety.

#### *Amendments to Regulation (EC) No 1394/2007 (Advanced Therapy Medicinal Products Regulation)*

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<sup>86</sup> Regulation (EU) 2024/795 of the European Parliament and of the Council of 29 February 2024 establishing the Strategic Technologies for Europe Platform (STEP), and amending Directive 2003/87/EC and Regulations (EU) 2021/1058, (EU) 2021/1056, (EU) 2021/1057, (EU) No 1303/2013, (EU) No 223/2014, (EU) 2021/1060, (EU) 2021/523, (EU) 2021/695, (EU) 2021/697 and (EU) 2021/241, ELI: <http://data.europa.eu/eli/reg/2024/795/oj>

<sup>87</sup> Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, OJ L 31, 1.2.2002, pp. 1–24. ELI: <http://data.europa.eu/eli/reg/2002/178/oj>

**on establishing a framework of measures for strengthening Union's biotechnology and biomanufacturing sectors particularly in the area of health and amending Regulations (EC) No 178/2002, (EC) No 1394/2007, (EU) No 536/2014, (EU) 2019/6, (EU) 2024/795 and (EU) 2024/1938 (European Biotech Act)**

(Text with EEA relevance)

To speed up access to advanced investigational therapy medicinal products that consist or contain GMOs that are complex innovative products, this Regulation proposes special provisions for facilitating related clinical trials. In this regard, it is proposed to amend Regulation (EC) No 1394/2007 to provide that when controlling under Regulation (EU) No 536/2014 for risks from the deliberate release into the environment of GMOs, sponsors are to be exempted from the requirement to submit an environmental risk assessment in respect of certain clearly delineated categories of advanced investigational therapy medicinal products that consist or contain GMOs which present no or negligible risks to human health and the environment. Sponsors of clinical trials are, however, to submit a declaration as part of the clinical trial application that explains why the advanced investigational therapy medicinal products concerned fall into one or more of the specific categories of products presenting no or negligible risks to human health and the environment. The Committee for Medicinal Products for Human Use (CHMP) referred to in Article [148] of Regulation [...] [revised Regulation No (EC) 726/2004] is to verify this declaration. For the same considerations of a risk-proportionate approach, this Regulation also proposes that the above-mentioned categories of advanced investigational therapy medicinal products be exempted from the GMO related requirements of Regulation (EU) No 536/2014 regarding manufacturing and import.

Scientific and technological advances are driving forward the development of ATMPs. To future-proof the ATMP regulatory framework and ensure that it can encompass certain innovative products that could benefit from the ATMP framework, without them falling under other EU legal frameworks, the [revised Directive 2001/83/EC] empowers the Commission to adopt delegated acts to amend the definitions laid down in the ATMP Regulation of a gene therapy medicinal product and a somatic cell therapy medicinal product, without extending the scope of these definitions. It should be also possible to amend the definition of a tissue engineered product in the light of technical and scientific advancements.

*Amendments to Regulation (EU) No 536/2014 (Clinical Trials Regulation)*

This Chapter, critical to improving Europe's clinical-trial framework, aims to cut approval timelines, foster greater collaboration across borders, and improve regulatory efficiency, without compromising safety, quality, or ethical standards. Simplification and acceleration of procedures are necessary for ensuring the effectiveness of the enabling substantive measures put forward in this proposal. Authorisation timelines will be shortened for multinational clinical trials from 106 days to 75 days, including validation and ethical review. When there is no request for information to the sponsor, timelines for initial clinical trial authorisations will be reduced from 75 days to 47 days from submission to decision. Given the growing scientific and regulatory expertise in ATMPs, the additional 50 days for assessing these products will be eliminated. The assessment period for substantial modifications will be reduced from 96 days to 47 days, with options for parallel substantial modifications. If there is no request for information to sponsor, the timelines for the assessment of substantial modifications will be reduced from 64 days to 33 days from submission till decision. The reporting Member State's role will be strengthened so that it can lead the scientific, ethical, and regulatory assessment harnessing mutual trust between Member States and reliance on the assessment of the

reporting Member State. Communication between sponsors and Member States will be improved during assessments. A single, core dossier for investigational products will simplify clinical trials using the same investigational medicine and help the conduct of registration trials and the preparation of marketing authorisation applications in Europe. Simplifications for low-intervention clinical trials will be further supported by introducing a new category of ‘minimal-intervention’ clinical trials. Mandatory EU harmonised templates will enable harmonisation. A single assessment process will be defined for combined studies involving the investigation of a medicine together with a medical device or an in-vitro diagnostic. The legal basis for processing personal data in clinical trials in accordance with Regulation (EU) 2016/679 requirements will be harmonised. Accelerated and simplified procedures will enable multinational clinical trials to be carried out on in relation to public health emergencies. The uptake of the use of AI systems and digitalisation in clinical trials will be fostered. Clinical trial sandboxes will be created to test innovative approaches. Annex I to Regulation (EU) No 536/2014 is also amended to ensure consistency with the amendments to Regulation (EC) No 1394/2007 proposed in this Regulation, regarding certain categories of advanced investigational therapy medicinal products containing or consisting of GMOs.

#### *Amendments to Regulation (EU) 2019/6 (Veterinary Medicine Products Regulation)*

Biological veterinary medicinal products, derived from living sources, have more complex lifecycle and variation handling than chemically synthesised medicines. Regulation (EU) 2019/6<sup>88</sup> introduced variations not requiring assessment to reduce administrative burden, which will be further optimised in this section without affecting quality, safety, or efficacy. To cut administrative burden for innovations, this section foresees that the assessment of human health and environmental impacts of veterinary medicinal products containing genetically modified organisms should be made solely under the Environmental Risk Assessment (ERA) pursuant to Regulation (EU) 2019/6, removing the need for assessment under the Union GMO legislation, while reinforcing obligations under Regulation 2019/6. The section also clarifies that administering veterinary medicinal products does not place treated animals or their products under the Union GMO legislation. Also, the Commission is empowered to adapt technical requirements in Annex II to Regulation 2019/6 to scientific and technical progress. Veterinary medicinal products developed by means of biotechnology processes to diagnose, treat or prevent zoonotic diseases are entitled to an extra year of SPC. Finally, the introduction of regulatory sandboxes for animal health innovation will allow new technologies, methods, or products to be tested, marketed, or used under proportionate oversight where no specific EU legislation exists, fostering responsible innovation in veterinary medicine

#### *Amendments to Regulation (EU) 2024/795 (STEP Regulation)*

This provision introduce amendments to Regulation (EU) 2024/795 to establish that health biotechnology strategic projects, including high-impact health biotechnology strategic projects recognised in accordance with this Regulation are to be deemed to contribute to the STEP objectives referred to in Article 2 paragraph 1, point (a)(iii) or point (b) of the STEP Regulation, as appropriate.

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<sup>88</sup> Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC (Text with EEA relevance), OJ L 4, 7.1.2019, pp. 43–167. ELI: <http://data.europa.eu/eli/reg/2019/6/oj>



Substances of human origin (SoHO) are a key pillar of biotechnology as they can become starting materials for innovative medicinal products. This section introduces a regulatory sandbox in the SoHO framework. It enables access to very innovative but regulatory challenging therapies and products while generating insights that can inform updates to regulatory frameworks, ensuring that they remain flexible, adaptive and fit for purpose in the face of evolving scientific and technological advancements.

## **Chapter X – Final provisions**

This Chapter contains provisions on (i) monitoring; (ii) delegation of power; (iii) committee procedure, (iv) an obligation for the Commission to prepare regular reports to the European Parliament and to the Council for the evaluation of this Regulation; (v) handling of confidential information, and entry into force and application.

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(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Articles 114, 168(4) and 173(3) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee,

Having regard to the opinion of the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) Biotechnology is a strategic technology central for the Union's competitiveness, strategic autonomy and innovation leadership. It has applications across several sectors, with prominence in the health area. In 2021, the Union was the second largest contributor to the global value of biotechnologies. Between 2008 and 2018, the biotechnology industry in the Union grew more than twice as fast as the overall economy, making it one of the fastest growing innovative industries in the Union. Health biotechnology specifically contributes over 80% to the value of the overall biotechnology market and it is a key driver of today's innovative medical industry. Biological medicines, including biosimilars count for 40% of overall pharmaceutical sales in the Union.
- (2) While recognised globally for its scientific excellence, the Union continues to face structural challenges in translating cutting-edge research and innovation into large-scale development, testing, manufacturing and deployment of biotechnology. As a result, the significant potential of biotechnology applications across several sectors to contribute to major societal challenges, modernise the Union economy and strengthen Union strategic autonomy and security remains largely underexploited.
- (3) This is due in particular to limited access to risk capital and other sources of funding, skills shortages within the internal market, slow permitting processes that hinder the timely deployment of projects and initiatives aiming to bring biotechnology innovations to the market, as well as fragmented and at times complex regulatory frameworks.

- (4) To address this competitiveness gap, this Regulation should aim to improve the functioning of the internal market by establishing a framework to strengthen the competitiveness of the health biotechnology sector from research and innovation to production, to create the conditions for research, development, timely placing on the Union market and production of health biotechnology innovations, products and services, including by simplifying and streamlining the Union legislative frameworks, while safeguarding high standards for the protection of human and animal health, patients, the environment, ethics, quality, food and feed safety and biosecurity.
- (5) Given the importance of health biotechnology amongst the other applications of biotechnology as referred to in recital (1), it is appropriate that this Regulation focusses on, and sets out specific measures for, the health dimension of biotechnology. To ensure the effectiveness of this Regulation, its scope of application should extend to health biotechnology in a comprehensive manner and cover health within the wide meaning of Article 168 TFEU on the protection of public health.
- (6) Article 168(1) TFEU emphasises that a high level of human health protection is to be ensured when defining and implementing all Union policies and activities. Article 168(4) TFEU clarifies that this objective is, amongst others, to be pursued through measures setting high standards of quality and safety for medicinal products and devices for medical use and of organs and substances of human origin, blood and blood derivatives, measures in the veterinary and phytosanitary fields which have as their direct objective the protection of public health.
- (7) Accordingly, and in line with the One Health approach, that aims to comprehensively and sustainably balance and optimise the health of people, animals, and ecosystems<sup>1</sup>, this Regulation should apply to health biotechnology, understood as the application of biotechnology in the human medical, veterinary, pharmaceutical and phytosanitary areas for the development of biotechnology products and services. This Regulation should apply to their entire lifecycle, including the related research, access to funding, development, innovation, testing, validation, manufacturing, placing on the market and use activities.
- (8) With a view to ensuring the effectiveness, consistence and unity of some of the legal acts that this Regulation should amend to foster the Union's competitiveness in biotechnology, this Regulation should in certain cases also apply to products and activities other than biotechnology products and activities, so as to avoid the creation of different sets of rules for biotechnology and non-biotechnology products and activities. This is in particular the case in the area of health for Union legislation regarding clinical trials, and in the food and feed safety area, for Regulation (EC) No 178/2002 of the European Parliament and of the Council<sup>2</sup>.
- (9) This Regulation should apply without prejudice to the harmonised legal framework for the development, the placing on the market, the putting into service and the use of

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<sup>1</sup> European Commission: Group of Chief Scientific Advisors and Directorate-General for Research and Innovation, One Health governance in the European Union, Publications Office of the European Union, 2024, <https://data.europa.eu/doi/10.2777/8697309>.

<sup>2</sup> Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, OJ L 31, 1.2.2002, p. 1. ELI: <http://data.europa.eu/eli/reg/2002/178/oj>.

artificial intelligence (AI), laid down by Regulation (EU) 2024/1689<sup>3</sup> of the European Parliament and of the Council<sup>3</sup>.

- (10) This Regulation should not affect to the application of the Directive 2010/63/EU of the European Parliament and of the Council<sup>4</sup> on the protection of animals used for scientific purposes and of Regulation (EC) 2006/1907 of the European Parliament and of the Council<sup>5</sup>.
- (11) The Union has adopted other initiatives to strengthen the competitiveness of particular sectors of the Union economy. In this regard, Regulation (EU) 2024/1735 of the European Parliament and of the Council<sup>6</sup> focuses on clean and resource-efficient technologies which include, in particular, net-zero technologies. That Regulation establishes a framework to ensure the Union's access to a secure and sustainable supply of net-zero technologies listed in Article 4 thereof. Such technologies include sustainable biogas and biomethane technologies and biotechnology climate and energy solutions. However, as acknowledged by Regulation (EU) 2024/795 of the European Parliament and of the Council<sup>7</sup>, biotechnologies have applications beyond the clean and resource-efficient technologies. It is therefore appropriate that this Regulation applies without prejudice to the provisions of Regulation (EU) 2024/1735 regarding sustainable biogas and biomethane technologies and biotechnology climate and energy solutions.
- (12) Health biotechnology strategic projects should serve as targeted instruments to mobilise public and private investments through coordinated action among the Union, the Member States, the industry, the research community and other relevant actors. They should contribute to the Union's biotechnology objectives, by strengthening industrial capacity and value chains, scaling up critical research and technology infrastructures, accelerating innovation and technology deployment such as New Approach Methodologies (NAMs), or advanced data and digital platforms. Accordingly, this Regulation should lay down provisions for the recognition and support of such projects by the Member States and should establish criteria for such

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<sup>3</sup> Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (OJ L, 2024/1689, 12.7.2024, ELI: <http://data.europa.eu/eli/reg/2024/1689/oj>).

<sup>4</sup> Consolidated text: Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the protection of animals used for scientific purposes (Text with EEA relevance). ELI: <http://data.europa.eu/eli/dir/2010/63/2019-06-26>

<sup>5</sup> Consolidated text: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance). ELI: <http://data.europa.eu/eli/reg/2006/1907/2025-09-01>.

<sup>6</sup> Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724 (Text with EEA relevance), OJ L 1735 28.6.2024, p. 1. ELI: <http://data.europa.eu/eli/reg/2024/1735/oj>.

<sup>7</sup> Regulation (EU) 2024/795 of the European Parliament and of the Council of 29 February 2024 establishing the Strategic Technologies for Europe Platform (STEP), and amending Directive 2003/87/EC and Regulations (EU) 2021/1058, (EU) 2021/1056, (EU) 2021/1057, (EU) No 1303/2013, (EU) No 223/2014, (EU) 2021/1060, (EU) 2021/523, (EU) 2021/695, (EU) 2021/697 and (EU) 2021/241 (OJ L, 2024/795, 29.2.2024. ELI: <http://data.europa.eu/eli/reg/2024/795/oj>).

recognition. With a view to facilitate the implementation and ensure a consistent approach across the Union, the Commission could issue guidance on the application of those criteria. Recognition of health biotechnology strategic projects would deliver clear benefits for the most innovative businesses by accelerating permitting, reducing administrative burden, improving legal certainty and facilitating access to financial support. It would thus strengthen their capacity to scale biotechnology innovations faster. For authorities, the framework streamlines coordination, avoids duplication of assessments, and supports consistent, efficient decision-making.

- (13) NAMs applied in biological research, early discovery, preclinical development, and the regulatory and quality testing of medicinal products and medical technologies, have the potential to generate scientific and technological data that are comparable to, or in some cases more informative and generated more rapidly than, those obtained through current standard methods. The resulting advantage will contribute to strengthen the innovation ecosystem and enhanced European competitiveness in biotechnology.
- (14) Certain health biotechnology strategic projects have the potential to contribute to the Union's objectives in biotechnology in a manner that is systemic and can produce a multiplier effect. Such projects act as catalysts for cooperation between academia, industry and public authorities, and can serve as anchors for regional biotechnology clusters and innovation ecosystems across Member States. Experience in several Member States has shown that such projects can quickly raise industrial capability, attract investment and strengthen the Union's position in global value chains. Accordingly, such projects should be recognised as high impact health biotechnology strategic projects by the Commission and could be given particular consideration for Union funding, priority access to administrative support and fast-tracked procedures at Member State level. As regards national funding of such projects, Regulation (EU) 2024/795<sup>8</sup> provides measures for the support of critical and emerging strategic technologies and their respective value chains within programmes implemented under shared management. That Regulation amends the basic acts of several shared-management funds, namely Regulations (EU) 2021/1056<sup>9</sup>, (EU) 2021/1057<sup>10</sup> and (EU) 2021/1058 of the European Parliament and of the Council<sup>11</sup>, in order to enable Member States to steer their national and regional programmes towards investments in critical technologies, including biotechnologies. Without prejudice to the applicable rules governing each such funding instrument, and in line with applicable State aid rules, this approach may therefore be applied to high-impact health biotechnology strategic projects, which are deemed in accordance with this Regulation as to contribute to the STEP objectives.

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<sup>8</sup> Regulation (EU) 2024/795 of the European Parliament and of the Council of 29 February 2024 establishing the Strategic Technologies for Europe Platform (STEP), and amending Directive 2003/87/EC and Regulations (EU) 2021/1058, (EU) 2021/1056, (EU) 2021/1057, (EU) No 1303/2013, (EU) No 223/2014, (EU) 2021/1060, (EU) 2021/523, (EU) 2021/695, (EU) 2021/697 and (EU) 2021/241, ELI: <https://eur-lex.europa.eu/eli/reg/2024/795/oj>.

<sup>9</sup> Regulation (EU) 2021/1056 of the European Parliament and of the Council of 24 June 2021 establishing the Just Transition Fund (OJ L 231, 30.6.2021, p. 1, ELI: [http://data.europa.eu/eli/reg/2021/1056/oj](https://data.europa.eu/eli/reg/2021/1056/oj)).

<sup>10</sup> Regulation (EU) 2021/1057 of the European Parliament and of the Council of 24 June 2021 establishing the European Social Fund Plus (ESF+) and repealing Regulation (EU) No 1296/2013 (OJ L 231, 30.6.2021, p. 21, ELI: [http://data.europa.eu/eli/reg/2021/1057/oj](https://data.europa.eu/eli/reg/2021/1057/oj)).

<sup>11</sup> Regulation (EU) 2021/1058 of the European Parliament and of the Council of 24 June 2021 on the European Regional Development Fund and on the Cohesion Fund (OJ L 231, 30.6.2021, p. 60, ELI: [http://data.europa.eu/eli/reg/2021/1058/oj](https://data.europa.eu/eli/reg/2021/1058/oj)).

- (15) The strategic importance of biotechnology for European competitiveness has already been established, including through the proposed a European Competitiveness Fund (ECF) for the Multiannual Financial Framework (MFF) period 2028-2034, which includes a dedicated ‘Health, Biotech, Agriculture and Bioeconomy’ window. The Draghi Report on the Future of European Competitiveness<sup>12</sup> recommends that the Union should focus resources on a limited number of world-class centres of excellence in life sciences and biotechnology. High impact biotechnology health strategic projects have the potential to contribute to this focus of efforts and be a tool for an impactful use of resources in the MFF period 2028-2034, to help position the Union among the leading regions for biotechnology. Examples of categories of such high impact projects and specific criteria should be established for their recognition by the Commission. Amongst those categories, high impact health biotechnology strategic projects in the form of biotechnology development accelerators providing, amongst others, trusted testing or demonstration facilities replicating real-world biomanufacturing processes, should play a key role in translating Europe’s scientific excellence into productive industrial capacity. By pooling advanced equipment and expertise and offering criteria-based access, including for small and medium-sized enterprises, start-ups and scale-ups, such projects should reduce duplication of efforts, lower entry barriers, and foster the specialised skills required for advanced biomanufacturing. Similarly, high impact health biotechnology strategic projects in the form of centres of excellence for advanced therapies, including for advanced therapy medicinal products, should combine research, regulatory science and manufacturing capabilities, enabling faster, safer and more efficient development of innovative therapies. When connected to digital and data infrastructures, they should have the potential to accelerate clinical translation, improve quality control and facilitate patient access across the Union.
- (16) To maximise the Union-wide benefits of investments made in projects or entities operating infrastructures, facilities and services supported and established or recognised in accordance with this Regulation, such projects or entities should provide open, non-discriminatory, transparent and criteria-based access to users from all Member States, including academic institutions, industrial undertakings, with particular attention to SMEs, start-ups and scale-ups, and public research bodies. Access conditions should be proportionate and ensure fair treatment among users, taking into account the objectives and capacity of each infrastructure, the need to guarantee equitable opportunities for SMEs, start-ups and scale-ups, and research actors, and appropriate safeguards to protect security, confidentiality, intellectual property and economic-security interests.
- (17) Effective implementation of objectives pursued in this Regulation relies on good governance and partnership between all actors at the relevant territorial levels and socio-economic actors. In particular, biotechnology strategic projects aimed at targeting talent and skills shortages vital to supporting biotechnology and biomanufacturing industries and to ensuring a workforce capable to supporting innovation, industrial scale-up and long-term competitiveness should be designed and developed with the full involvement of the relevant social partners. Such active engagement is essential to ensure that social implications are addressed from the outset and to foster responsible innovation.

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<sup>12</sup> Draghi, Mario. [\*The future of European competitiveness: A competitiveness strategy for Europe\*](#), European Commission, 9 September 2024.



- (18) Directive (EU) 2022/2555 of the European Parliament and of the Council<sup>13</sup> lays down obligations for essential and important entities to ensure a high common level of cybersecurity throughout the Union, including requirements on risk management, incident reporting and the protection of network and information systems. Therefore, entities established or supported under this Regulation and falling within the scope of the Directive (EU) 2022/2555 should comply with the requirements set out in that Directive.
- (19) In order to safeguard the Union's security, public order and strategic interests, access to biotechnology infrastructures and datasets of health biotechnology strategic projects and of high impact health biotechnology strategic projects recognised in accordance with this Regulation and that receive funding in accordance with Union programmes, in relation to such infrastructures or datasets, should be governed by the rules established in those programmes. This addresses risks linked to unlawful technology transfer, hostile interference or strategic dependency.
- (20) To provide an evidence base for future Union action to further strengthen the biotechnology and biomanufacturing sectors, the Commission should carry out a strategic mapping of the Union's biotechnology ecosystem. That mapping should analyse industrial capacities, infrastructures and facilities relevant to biotechnology research, development, testing and manufacturing, and assess factors affecting the Union's ability to attract and retain investment in biomanufacturing, including access to public and private risk-tolerant capital across all stages of the innovation cycle, the development and coordination of biotechnology clusters and biomanufacturing ecosystems across the Union, and assess challenges and needs in terms of the workforce.
- (21) Recognising the transformative role of data and AI in the area of biotechnology and biomanufacturing, that mapping should also assess access to data, computing capacity and digital infrastructure for the health biotechnology sector and identify measures to foster responsible AI-enabled biotechnology innovation and possible measures to mitigate related risks, building on analyses done in the context of existing Union initiatives such as the European Health Data Space<sup>14</sup>, the Apply AI Strategy<sup>15</sup>, the Data Union Strategy<sup>16</sup>, the AI Continent Action Plan<sup>17</sup> and the European Strategy for AI in Science<sup>18</sup>. With a view to ensuring appropriate cooperation with the Member States and optimising the use of relevant knowledge and expertise available at Union

<sup>13</sup> Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive), OJ L 333, 27.12.2022, pp. 80. ELI: <http://data.europa.eu/eli/dir/2022/2555/oj>.

<sup>14</sup> Regulation (EU) 2025/327 of the European Parliament and of the Council of 11 February 2025 on the European Health Data Space and amending Directive 2011/24/EU and Regulation (EU) 2024/2847 (OJ L, 2025/327, 5.3.2025, ELI: <http://data.europa.eu/eli/reg/2025/327/oj>).

<sup>15</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *Apply AI Strategy*, COM(2025)723 final of 8 October 2025.

<sup>16</sup> Communication from the Commission to the European Parliament and the Council, Data Union Strategy, Unlocking Data For AI, COM(2025) 835 final, 19 November 2025.

<sup>17</sup> <https://ec.europa.eu/newsroom/dae/redirection/document/114523>

<sup>18</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: *European Strategy for Artificial Intelligence in Science – Harnessing AI for research, innovation and excellence in the Union*, COM(2025)724 final of, 8 October 2025.

level, such mapping should be conducted by the Commission in cooperation with relevant Union agencies and bodies, including, where relevant, the AI Board established under the Regulation (EU) 2024/1689, and with the European Health Biotechnology Steering Group ('the Steering Group') established in accordance with this Regulation, to facilitate its implementation, provide advice to the Commission and to the Member States, and ensure coordinated action in particular with regard to health biotechnology strategic projects and high impact health biotechnology strategic projects.

- (22) In order to ensure a transparent, coherent and efficient process for the identification of health biotechnology strategic projects, each Member State should designate a competent authority responsible for assessing and verifying whether a project fulfils the conditions set out in this Regulation for its recognition as a health biotechnology strategic project. The designated authority should carry out the assessment through a fair, transparent and time-bound process. Where a project is found to fulfil the conditions for recognition as a biotechnology strategic project, the designated authority should issue a formal recognition decision.
- (23) Considering their systemic and cross-border relevance and the benefits associated with their status as high impact health biotechnology strategic project, the recognition of such projects should take place through a two-tier process, involving authorities designated by the Member States for that purpose and the Commission. Such authorities should assess and transmit the applications and their assessment to the Commission in view of the adoption of a Commission decision. This two-tier process should ensure that such projects are subject to an additional Union-level verification and benefit from consistent recognition standards across the Union. With a view to ensure peer review, cooperation with the Member States and coherent implementation across the Union, in adopting its decision the Commission should take into account the views of the European Health Biotechnology Steering Group established by this Regulation.
- (24) With a view to enabling the efficient alignment between the Union funding procedures and the objectives of this Regulation regarding the support to high impact strategic health biotechnology projects, and to ensure that projects with the highest Union added value can rapidly benefit from priority support, in addition to the recognition of such projects through a Commission decision, the Commission could have the possibility to recognise such projects also in the context of calls for proposals launched under the relevant Union funding programmes.
- (25) To achieve critical mass and ensure that strategic investments deliver wider benefits, creating positive spill-over effects that reinforce the Union's competitiveness, networking and cooperation among health biotechnology strategic projects, high impact health biotechnology strategic projects, research organisations, industrial clusters and other relevant actors across borders, should be promoted and facilitated by the Commission and the Member States, with a view to help pooling national and Union resources and facilities, promote the development of interoperable infrastructures and digital platforms and facilitate knowledge transfer. This cooperation should be in compliance with Union competition law.
- (26) Such networking and cooperation should integrate, collaborate with, or build upon, existing networks emerging from other Union initiatives relevant for biotechnology, including those operating under the European Cluster Collaboration Platform, the European Cluster Alliance, networks supported under Horizon Europe, the Smart



Specialisation Partnerships, and the European Network of Centres of Excellence for Advanced Therapy Medicinal Products (ATMPs) announced by the Commission in the European Strategy for Life Sciences<sup>19</sup>, the European Reference Networks as defined in Directive 2011/24/EU of the European Parliament and of the Council<sup>20</sup> and the EU Network of Comprehensive Cancer Centres announced by Europe's Beating Cancer Plan<sup>21</sup>. Such cooperation should aim to reinforce synergies, facilitate access to regional and Union level funding, and enhance the coordination of biotechnology-related innovation ecosystems across the Union.

- (27) In order to reduce complexity and increase efficiency, transparency and consistency in the permit-granting process for health biotechnology strategic projects and high impact health biotechnology strategic projects, there should be a single point of contact at national level that is responsible for facilitating and coordinating the entire permit-granting process. The single point of contact should be the interface between the promoters of health biotechnology strategic projects or of high impact health biotechnology strategic projects and the relevant permitting authorities. To that end, Member States should establish or designate one or more authorities as single points of contact. With a view to ensure streamlined processes, that single point of contact should be the same as the single point of contact referred to in Regulation (EU) ... [Regulation on speeding-up environmental impact assessments - permitting regulation], responsible for facilitating and coordinating all aspects of the environmental assessments. It should be for Member States to decide whether a single point of contact is also an authority that makes permitting decisions. To ensure the effective implementation of their responsibilities, Member States should provide their single points of contact, as well as any authority involved in the permit-granting process with sufficient personnel and resources.
- (28) The Union has progressively recognised health biotechnology as a strategic sector contributing to Union's overall resilience. Regulation (EU) 2024/795 identifies biotechnology among the strategic technologies essential for reducing the Union's strategic dependencies and strengthening its economic and industrial resilience. The Commission Communication Commission Communication 'Building the future with nature: Boosting Biotechnology and Biomanufacturing in the EU' further identifies biotechnology and biomanufacturing as strategic technologies for Europe's competitiveness, resilience and autonomy, and furthermore explicitly recognises that health biotechnology is essential for health-system resilience. In view of this consistent Union framework confirming biotechnology's systemic contribution to resilience, health biotechnology strategic projects and high impact health biotechnology strategic projects should therefore be deemed to contribute to the objectives referred to in Article 14 of Regulation [...] [Regulation on speeding-up environmental assessments – permitting regulation].

<sup>19</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A strategy for European life sciences: Choose Europe for life sciences – A strategy to position the EU as the world's most attractive place for life sciences by 2030*, COM(2025) 525 final of 2 July 2025.

<sup>20</sup> Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients' rights in cross-border healthcare, OJ L 88, 4.4.2011, pp. 45–65. ELI: <http://data.europa.eu/eli/dir/2011/24/oj>.

<sup>21</sup> Communication from the Commission to the European Parliament and the Council, *Europe's Beating Cancer Plan*, COM/2021/44 final of 3 February 2021.

- (29) In light of their contribution to the Union's competitiveness, resilience and preparedness, health biotechnology strategic projects recognised by the Member States in accordance with this Regulation should be considered to be in the public interest. Similarly, Member States should grant such projects the highest national significance available under their national law, meaning the strongest designation applicable to major strategic projects, and should apply the corresponding procedural advantages, including priority treatment and coordinated and accelerated permit-granting, and adopt facilitation measures in compliance with Union law.
- (30) In view of the potential for cross-border and systemic benefits of high impact health biotechnology strategic projects, on the basis of its case-by-case assessment, a permitting authority can conclude that the public interest served by the project overrides the public interests related to nature and environmental protection and that consequently the project can be authorised, provided that all relevant conditions set out in Directives 2000/60/EC<sup>22</sup>, 2009/147/EC<sup>23</sup> or 92/43/EEC<sup>24</sup> of the European Parliament and of the Council, or in Union legislative acts on nature restoration, are met.
- (31) To ensure predictability and administrative efficiency, the overall duration of the permit-granting process should be limited to ten months from the acknowledgement of a complete application, for biotechnology health strategic projects, and to eight months, for high impact health biotechnology strategic projects, given the need to prioritise the speed of their implementation over any other type of biotechnology project. In exceptional and duly justified circumstances an extension of up to three months should be permitted.
- (32) Member States whose territories are concerned by health biotechnology strategic projects or high impact health biotechnology strategic projects should take all appropriate measures to facilitate their timely and effective development and deployment. Such measures should include the provision of administrative support, upon the request of project promoters, as well as, without prejudice to Union competition law, of public financial and technical support, with a particular attention paid to SMEs, start-ups and scale-ups.
- (33) The Commission should complement the action of the Member States in support of health biotechnology strategic projects, closely cooperating with them, including through the European Health Biotechnology Steering Group established by this Regulation, to ensure synergy and optimal outcomes. In particular, the Commission should assist project promoters in identifying relevant funding opportunities available under existing Union funding programmes, including through actions of the EU Health Biotechnology Support Network established in this Regulation with the purpose of assisting biotechnology actors in navigating regulatory health biotechnology procedural pathways and identifying funding, scaling up and networking opportunities across the Union. Further, to strengthen the Union's biotechnology innovation ecosystem, the Commission should also promote measures that enhance access of

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<sup>22</sup> Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, OJ L 327, 22.12.2000, p. 1. ELI: <http://data.europa.eu/eli/dir/2000/60/oj>.

<sup>23</sup> Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, OJ L 20, 26.1.2010, pp. 7-25. ELI: <http://data.europa.eu/eli/dir/2009/147/oj>.

<sup>24</sup> Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, OJ L 206, 22.7.1992, p. 7. ELI: <http://data.europa.eu/eli/dir/1992/43/oj>

small and medium-sized enterprises, start-ups and scale-ups to research and technological infrastructures, including those funded through Union programmes.

- (34) High impact health biotechnology strategic projects should benefit from financial, technical and administrative support measures. In addition, in order to ensure that Union resources for biotechnology are channelled towards the actions that have the potential to deliver the most benefits at Union level, high impact health biotechnology strategic projects could be given particular consideration for financial support, in the context of the preparation, adoption and implementation by the Commission of work programmes for the relevant Union programmes, funds and instruments.
- (35) The scale and nature of the Union support for high impact health biotechnology strategic projects might require long-term coordination and large-scale public and private investment. In this context, public-private partnerships play a key role in pooling expertise, sharing risks and accelerating the uptake of innovation. Consequently, the Commission could envisage to propose in the future the establishment of appropriate legal entities to mobilise investments, coordinate research and innovation activities and support for the industrial deployment of biotechnology and biomanufacturing capacities across Member States, while ensuring close alignment with Union policy objectives. Those legal arrangements could take the form of European Partnerships where the Union together with private and/or public partners, acting in full compliance with competition rules, commit to jointly supporting the development and implementation of a programme of activities, including those related to market, regulatory or policy uptake.
- (36) With a view to ensuring that the most favourable provisions apply cross-frameworks, the provisions of this Regulation regarding the permit granting process, the priority status of health biotechnology strategic projects and of high impact health biotechnology strategic projects and the administrative, technical or financial support for such projects should apply without prejudice to more favourable provisions laid down in other Union legislation.
- (37) Biotechnology undertakings, especially SMEs, start-ups and scale-ups, and non-profits face challenges in navigating the regulatory processes, financing, scaling up and networking opportunities in the Union. To address those challenges, the Commission should manage, coordinate and support an EU Health Biotechnology Support Network, composed of national and regional antennas, leveraging and complementing existing structures such as the European Enterprise Network. The Network should assist developers and project promoters, in particular SMEs, start-ups, and scale-ups, in navigating more efficiently the legislative framework, health biotechnologies regulatory pathways and funding opportunities at Union and national level. Moreover, the EU Health Biotechnology Support Network should provide support for health biotechnology strategic projects and enhanced assistance for high impact health biotechnology strategic projects. The Commission should make available to the Network an AI powered interactive tool to assist developers and project promoters, in particular SMEs, start-ups, and scale-ups, in navigating more efficiently the regulatory framework and pathways and funding opportunities at EU and national level.
- (38) The European Health Biotechnology Steering Group ('the Steering Group') should be established to provide advice to the Commission and to the Member States with a view to facilitate the implementation of this Regulation, foster cooperation with the Commission and among the Member States, and the exchange of best practice. The

Steering Group should be composed of representatives from all Member States and the Commission.

- (39) Member States should provide to the Steering Group, on an annual basis, an overview of the health biotechnology strategic projects and of the high impact health biotechnology strategic projects that they recognise, as well as of the existing and emerging cooperation initiatives and networks among such projects. Such overview is aimed at informing monitoring of progress in the implementation of this Regulation, supporting coordination and proposals of measures to enhance the Union's biotechnology and biomanufacturing ecosystem and facilitate exchange of best practices. In such overview, Member States should identify progress, obstacles and best practices.
- (40) To ensure effective governance and learning across the Union, the Steering Group should periodically review systemic challenges in the financing and deployment in particular for high impact health biotechnology strategic projects and recommend corrective measures to the Commission and to Member States.
- (41) Given the capital-intensive nature of biotechnology and the high probability of non-commercialisation of individual projects, access to finance is a structural bottleneck for the sector. To boost the potential of biotechnology to contribute to the Union's competitiveness, resilience and the creation and maintenance of quality jobs, sufficient funding tailored to the sector's risk profile needs to be mobilised across the financing life cycle.
- (42) To address key challenges in the functioning of Union capital markets, the Commission is implementing the Savings and Investment Union (SIU) Strategy. The SIU will reduce market fragmentation, create better investment opportunities for citizens and help to expand funding options for businesses. In particular, it will seek to improve access to equity and debt financing for all companies, including startups and scaleups, strengthen the role of venture capital and institutional investors and better align Union public funding instruments with SIU objectives. Recent Commission guidance on legislative programmes<sup>25</sup> also clarifies that the biotechnology sector can be the target of Union, national and regional legislative programmes via reference to the Competitiveness Compass, supporting favourable prudential treatment of investments made under such programmes.
- (43) The Union's biotechnology sector faces a persistent financing gap compared with other leading regions, particularly for the scale-up and industrial deployment stages. The Union has been acting to address this, including through the flagship InvestEU programme established by Regulation (EU) 2021/523 of the European Parliament and of the Council<sup>26</sup>. InvestEU supports biotechnology investments in a transversal manner, enabling investment in biotechnology projects and enterprises targeting all stages of development, including start-up to scale-up stages as well as deployment. The recent agreement between the Council and the European Parliament on enhancing the InvestEU programme increases the Union guarantee by EUR 2.9 billion unlocking nearly EUR 55 billion in additional public and private investments, including investment into biotechnology. Overall, InvestEU has already mobilized EUR 7.5

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<sup>25</sup> C(2025) 7231 final

<sup>26</sup> Regulation (EU) 2021/523 of the European Parliament and of the Council of 24 March 2021 establishing the InvestEU Programme and amending Regulation (EU) 2015/1017, OJ L 107, 26.3.2021, pp. 30–89. ELI: <http://data.europa.eu/eli/reg/2021/523/oj>.

billion of biotechnology investments. During the 2026-2027 period, mobilization of at least EUR 4 billion of additional biotechnology investments is expected. InvestEU implementing partners play a key role in helping to stimulate investment in biotechnology projects and enterprises. Both the EIB as well as EIF support biotechnology – including health biotechnology – via several InvestEU financial products. HERA Invest further boosts investments in health biotechnology. The project pipeline is strengthened through InvestEU advisory, supporting initiatives such as the European Tech Championship Initiative of the European Investment Bank.

- (44) Complementing the European Innovation Council support for deep tech and disruptive innovators in the area of biotechnology, an EU Health Biotechnology Investment Pilot to mobilise public and private investment and strengthen the Union's competitiveness and resilience should be created in partnership with the European Investment Bank Group (EIBG) or other implementing partners, for implementation in indirect management, linking equity and guarantee instruments with venture debt tailored to biotech-specific risk profiles.
- (45) The Health Biotechnology Investment Pilot would aim to mobilise a substantial amount of capital, from the EIBG, Union budget, public national schemes and private sector investors (including institutional investors), to narrow the sector investment gap, currently estimated at EUR 40 billion annually, amounting to EUR 400 billion for the next 10 years, and ensure the sector's long term competitiveness and strategic autonomy.
- (46) The Health Biotechnology Investment Pilot should be tailored to biotechnology risk profiles and lifecycle needs on the Union market. It should be possible to include newly created and established instruments, encompassing advisory services, direct and indirect individual investments, direct and indirect intermediated financing or portfolio financing. The detailed instruments, eligibility and risk parameters, and indicative allocations should be specified in the operational design of the Pilot.
- (47) The Pilot may receive Union financial support through Union programmes. Pending the establishment of the Pilot, a scheme, also covering ongoing investment activities, launched with the support of the EIBG under the current Multiannual Financial Framework 2021-2027 and supported under the InvestEU programme, will mobilise up to 10 billion in investments in the biotechnology sector in 2026 and 2027 .
- (48) Union public equity markets for biotechnology remain shallow relative to global peers, which constrains late-stage financing and exit options for European start-ups and scale-ups. Stock exchanges are still largely fragmented across Member States, with limited specialised research coverage and dedicated market-making, prompting European scale-ups to list abroad. To address this bottleneck for a competitive Union biotechnology sector and complement the SIU strategy, which seeks to promote integration and increase the depth of Union capital markets, projects contributing to a Union late-stage capital booster pilot should be recognised by the Commission as high-impact health biotechnology strategic projects in accordance with the conditions laid down in this Regulation.
- (49) Biotechnology is central for the Union's sovereignty, strategic autonomy and innovation leadership. In this regard, the Union is taking action to pursue its policy objectives in biotechnology, including through the Framework Programme for Research and Innovation established by Regulation (EU) 2021/695 of the European

Parliament and of the Council<sup>27</sup> which is supporting the implementation of the Life Sciences Strategy, and other relevant ‘Choose Europe’ initiatives.

- (50) The Commission has proposed a European Competitiveness Fund (ECF)<sup>28</sup> for the MFF period 2028-2034, aiming to increase European competitiveness, notably in strategic sectors and technologies along the investment journey. It is proposed to be structured along four policy windows reflecting strategic priorities crucial to Union competitiveness and resilience. It proposes funding to support the biotechnology sector through a ‘Health, Biotech, Agriculture and Bioeconomy’ window.
- (51) Companies, projects and initiatives falling within the scope of this Regulation could be given particular consideration for financial support from Union led initiatives, including those that aim to leverage private capital, and from Union funding programmes and instruments, as projects in a strategic technology and, where appropriate, in a strategic deep tech area. Such initiatives, programmes and instruments include the cohesion policy programmes, the InvestEU programme, the EIBG’s TechEU programme and the European Tech Champions Initiative, supported by InvestEU, and launched by the EIBG with several Member States, and the European Innovation Council established under the Horizon Europe Programme, as well instruments for the duration of the MFF 2028-2034.
- (52) Further, high-impact health biotechnology strategic projects are projects with a high European added value, including cross-border projects, expected to bring structural economic transformation, productivity, long-term growth and quality jobs in the biotechnology sector, and benefiting the Single Market. Considering the necessity to align Union, public and private spending with Union competitiveness priorities<sup>29</sup>, such projects could be given particular consideration for Union financial support including in the form of blended financing, under Union programmes, funds and financial instruments.
- (53) Regulation (EU) 2024/795 establishes that the development and manufacturing in the Union of biotechnologies, together with digital technologies and deep tech innovation, clean and resource-efficient technologies are essential for the purpose of reducing the Union’s strategic dependencies, and for the green and digital transitions, thus ensuring the sovereignty and strategic autonomy of the Union and promoting the competitiveness and sustainability of the Union’s industry. Accordingly, that Regulation establishes a Strategic Technologies for Europe Platform (STEP) to better channel and mobilise resources within the existing Union programmes towards critical investment, including in Union-wide and cross-border projects, that have the aim of supporting the development or manufacturing of critical and emerging technologies and their respective value chains, in strategic sectors, including in biotechnology.

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<sup>27</sup> Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013, OJ L 170, 12.5.2021, pp. 1. ELI: <http://data.europa.eu/eli/reg/2021/695/oj>.

<sup>28</sup> As per Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on establishing the European Competitiveness Fund (‘ECF’), including the specific programme for defence research and innovation activities, repealing Regulations (EU) 2021/522, (EU) 2021/694, (EU) 2021/697, (EU) 2021/783, repealing provisions of Regulations (EU) 2021/696, (EU) 2023/588, and amending Regulation (EU) [EDIP].

<sup>29</sup> Commission Staff Working Document, Impact Assessment Report on the European Competitiveness Fund, SWD(2025) 555 final.



- (54) Union-level funding may be leveraged to facilitate investments in health biotechnology strategic projects and high impact health biotechnology strategic projects recognised in accordance with this Regulation. Such projects may benefit from access to existing Union funding instruments, where they fulfil the criteria established in those instruments. Authorities in charge of the Union programmes covered by Regulation (EU) 2024/795 should consider supporting biotechnology health strategic projects and high impact health biotechnology strategic projects recognised in accordance with this Regulation. Therefore, Regulation (EU) 2024/795 should be amended to provide that health biotechnology strategic projects and high-impact health biotechnology strategic projects recognised in accordance with this Regulation should be deemed to contribute to the STEP objectives of supporting the development or manufacturing of critical technologies in biotechnologies throughout the Union, or safeguarding and strengthening their respective value chains and also in addressing shortages of labour and skills critical to all kinds of quality jobs in support of that objective, as appropriate.
- (55) Member States may provide financial support to biotechnology as a strategic technology for the Union's innovation capacity, sovereignty, resilience and leadership, including in the implementation of the relevant Union programmes. In this regard, Member States should act in compliance with Union competition law and make use as appropriate of the relevant frameworks. This includes the criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest<sup>30</sup> (IPCEIs), the guidance on the basis of a compatibility assessment conducted by the Commission regarding aid to promote research, development and innovation<sup>31</sup>, the Commission Regulation (EU) No 651/2014<sup>32</sup> and the Clean Industrial Deal State Aid Framework<sup>33</sup>.
- (56) Strategic projects in health biotechnology may require blended financing from private, national and Union sources. National funding should be in full compliance with State Aid rules. The Commission, including through the European Biotechnology Support Network, should support project promoters in liaising with potential investors. Similarly, the European Health Biotechnology Steering Group established by this Regulation should coordinate financing for biotechnology health strategic projects and high-impact health biotechnology strategic projects.
- (57) Medicinal products developed with innovative biotechnology technologies which will bring a therapeutic advantage to patients should be incentivised with an extension of the Supplementary Protection Certificate.
- (58) The significant advances in analytical methodologies and biocompatibility assessment tools enable more precise demonstration of comparability between biosimilar medicines ('biosimilars') and their reference biological medicinal products. Building

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<sup>30</sup> Communication from the Commission Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest 2021/C 528/02, C/2021/8481, OJ C 528, 30.12.2021, pp. 10.

<sup>31</sup> Communication from the Commission Framework for State aid for research and development and innovation 2022/C 414/01, C/2022/7388, OJ C 414, 28.10.2022, pp. 1.

<sup>32</sup> Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty Text with EEA relevance, OJ L 187, 26.6.2014, pp. 1. ELI: <http://data.europa.eu/eli/reg/2014/651/2023-07-01>.

<sup>33</sup> COMMUNICATION FROM THE COMMISSION – Framework for State Aid measures to support the Clean Industrial Deal (Clean Industrial Deal State Aid Framework), C/2025/7600, OJ C, C/2025/3602, 4.7.2025.

on its ongoing work on a Reflection paper on a tailored clinical approach in biosimilar development<sup>34</sup>, the European Medicines Agency<sup>35</sup> ('the Agency') should develop non-binding guidance giving consideration to a potential reduction of the clinical data required for the development and marketing authorisation procedures for biosimilars, based on robust analytical and other non-clinical evidence.

- (59) The manufacturing capacity and expertise for biosimilars in the Union can greatly contribute to ensure Union competitiveness, strategic autonomy and resilience, both from a health and sustainability perspective. Therefore, Member States should recognise, and support projects that fulfil the conditions laid down in this Regulation for strategic projects for biosimilars manufacturing.
- (60) Biosimilars can play an important role in diversifying and strengthening supply chains, promoting competition and fostering economic growth in the Union and for its global partners. Accordingly, the promoters of strategic projects for biosimilars and the companies active in this area should be encouraged to establish or strengthen cooperation with international biotechnology clusters.
- (61) AI can enhance the development, safety, efficiency and scale-up of biotechnology and biomanufacturing, provided that its use is responsible and aligned with Union legislation. To pursue this, the Commission and the Member States should promote an AI-first policy approach as introduced in the Apply AI Strategy when implementing this Regulation and the exchange of knowledge, standards and best practices relevant to the responsible application of the AI-First Policy Approach<sup>36</sup>. The responsible and effective integration of AI can enhance research, development and regulatory processes and thereby support the competitiveness of Union innovators in biotechnology. The Commission and the Member States should therefore encourage the uptake of such approaches and facilitate the exchange of knowledge, standards and best practices relevant to their application. That cooperation should remain fully compliant with Union competition rules.
- (62) The rapid expansion and increasing complexity of AI applications throughout the medicinal-product lifecycle requires structured and coherent guidance to ensure their safe, effective and trustworthy use. The Agency is developing expertise in this area through initiatives such as the Good Manufacturing Practice (GMP) Annex 22 – Artificial Intelligence, Q&A in AI in Pharmacovigilance, the GCP Annex to the Guideline on computerised systems and electronic data in clinical trials and AI in Clinical Development. It is therefore appropriate for the Agency to develop non-binding guidance on the deployment and use of systems based on advanced technologies, including of AI systems and of general-purpose AI models across development, manufacturing, clinical trials, and post-authorisation activities for compliance with applicable Union legislation in the health area. To ensure consistency

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<sup>34</sup> EMA [Reflection paper on a tailored clinical approach in biosimilar development](https://www.ema.europa.eu/en/documents/other/reflection-paper-tailored-clinical-approach-biosimilar-development_en.pdf), 17 March 2025, draft accessible at: [https://www.ema.europa.eu/en/documents/other/reflection-paper-tailored-clinical-approach-biosimilar-development\\_en.pdf](https://www.ema.europa.eu/en/documents/other/reflection-paper-tailored-clinical-approach-biosimilar-development_en.pdf)

<sup>35</sup> [Revised REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL laying down Union procedures for the authorisation and supervision of medicinal products for human use and establishing rules governing the European Medicines Agency, amending Regulation (EC) No 1394/2007 and Regulation (EU) No 536/2014 and repealing Regulation (EC) No 726/2004, Regulation (EC) No 141/2000 and Regulation (EC) No 1901/2006]

<sup>36</sup> Communication from the Commission to the European Parliament and the Council, *Apply AI Strategy*, COM/2025/723 final.



across the health and digital domains, when developing or updating such guidance, the Agency should cooperate with the Commission, including the AI office and should consult relevant national competent authorities and stakeholders, and relevant expert coordination groups established under Union legislation in the health and digital areas, as appropriate.

- (63) Moreover, the Agency should develop non-binding guidance on the deployment and use of AI systems and of general-purpose AI models also in the procedures for the authorisation of medicinal products, with a view to optimising processes and increasing efficiency of regulatory activities. Such guidance should be developed and published in agreement with the Commission, the AI Board and the competent authorities.
- (64) In order to accelerate the development and scale-up of biotechnology innovations that are enabled, enhanced or significantly supported by AI and advanced computational methods, the Union requires dedicated testing environments that combine experimental, computational and data-driven capabilities. Given their essential role for supporting AI-enabled biotechnology innovations, it is appropriate to establish requirements in this Regulation for the recognition by the Commission and the support for high-impact health biotechnology strategic projects in the form of biotechnology testing environments, under certain conditions.
- (65) Such environments could provide the wet-lab, bioprocess, pilot-line and translational validation capacities necessary for AI-enabled biotechnology development, and should complement, without duplicating, the functions of regulatory sandboxes established under Union or national law as well as the testing and experimentation facilities established in accordance with Regulation (EU) 2024/1689. Where relevant, they should also leverage health data and the European Health Data Space in accordance with Union legislation. These infrastructures should support the development of biotechnology applications where the use of AI has the potential to accelerate progress, in particular in health-related areas such as advanced therapies, where AI can improve efficacy and safety — for example through optimised CRISPR site prediction, tumour antigen identification, sequence engineering, delivery-vehicle design, or the matching of diverse patient cancer-cell variants with CAR-T cell types.
- (66) Having high-quality, interoperable, provenance-verified and well-annotated datasets is essential for the development, testing and validation of trustworthy and competitive AI systems and models used in biotechnology applications. For example, datasets generated in the course of provision of healthcare are usually recorded in a way that supports their initial purpose, such as diagnosis or treatment. Often, they are technically not easily usable and fit for training, testing and validation of AI systems, for example due to the use of different data standards or lacking annotations. Given the potential of AI systems and models to support research and innovation in biotechnology applications, it is important to ensure that high-quality data are available for training, testing and validating AI systems and models used in health biotechnology applications. To make such data more easily usable for those purposes, it is appropriate to facilitate the enhancement of the quality of that data. Therefore, this Regulation should lay down provisions for the recognition by the Commission of high impact health biotechnology strategic projects in the form of biotechnology data quality accelerators, to provide assistance to entities that lawfully hold relevant data to improve data quality, standardize such data and make further improvements.

- (67) Such biotechnology data quality accelerator projects should complement Union initiatives such as data labs<sup>37</sup> and by addressing the specific data-quality requirements of biotechnology, ensuring that biological and health datasets are reliable, interoperable and usable for the development of advanced AI models.
- (68) The processing of personal data by the entities that lawfully hold the relevant data and by the biotechnology data quality accelerators, in the context of biotechnology data quality accelerators projects, takes place in the public interest. The Commission should specify in the decision recognising the project as a high impact health biotechnology strategic project, the specific provisions concerning the processing of personal data necessary in order to achieve the objectives of the project. Such provision may in particular include the categories of data, the specific roles of the parties engaged in the processing, and the entities to which the personal data may be disclosed. Where biotechnology data quality accelerators are recognised by the Commission through calls for proposals, the Commission should be empowered to adopt, by means of an implementing act, specific provisions concerning the processing of personal data, through a decision prior to the launch of the call and the beneficiaries of the call should be subject to the obligations laid down in that decision.
- (69) Electronic health data referred to in Article 51 of Regulation (EU) 2025/327 of the European Parliament and of the Council<sup>38</sup>, enhanced by biotechnology data quality accelerators should be made available in accordance with that Regulation. The biotechnology data quality accelerators support the objectives of the European Health Data Space by contributing to improving the quality of data that is to be made available under that space.
- (70) To enable innovation and competitiveness in biotechnology, it is necessary to ensure that SMEs, start-ups and scale-ups, and research organisations can access the high computing capacity and AI resources required for advanced research, development and biomanufacturing. Those actions may be supported through Union funding programmes, funds and financial instruments, in accordance with the regulations governing them. The Commission should ensure effective coordination with other Union initiatives offering computing capacities to maximise efficiency and avoid duplication. The Commission, including through the European Biotechnology Support Network, should provide information and support, in particular to SMEs, start-ups and scale-ups, for accessing high computing capacity and AI resources relevant to biotechnology and biomanufacturing activities.
- (71) Very innovative health biotechnology products or services vary significantly in the degree to which they align or can align with existing Union legislative frameworks and procedures. These products, despite their complexity, should however be efficiently and adequately assessed within a single regulatory pathway, possibly through a combination pathway. This is notwithstanding the fact that such health biotechnology products or services, in the form of preparations, devices, diagnostics, or other, for human use, exhibit characteristics that challenge the Union legislative

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<sup>37</sup> Proposed in the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A European Strategy for Artificial Intelligence in Science – Paving the way for the Resource for AI Science in Europe (RAISE)*, COM(2025) 724 final of 8 October 2025.

<sup>38</sup> Regulation (EU) 2025/327 of the European Parliament and of the Council of 11 February 2025 on the European Health Data Space and amending Directive 2011/24/EU and Regulation (EU) 2024/2847, OJ L, 2025/327, 5.3.2025, ELI: <http://data.europa.eu/eli/reg/2025/327/oj> .

frameworks in the area of health ('health biotechnology products'), for example because they are under development and could potentially fall under the scope of an Union legislative framework but there are questions related to the relevance of other Union legislative frameworks; and/or because they combine different products, technologies, processes, or components regulated under different Union legislative frameworks; and/or because they require targeted adaptations of certain requirements of the applicable Union legislative frameworks, ideally at an early stage of development. These characteristics are not mutually exclusive and may overlap.

- (72) Developers of such health biotechnology products can consequently face regulatory uncertainty, potentially delaying or preventing patient access to beneficial technologies and creating barriers to innovation and access to finance, hampering competitiveness. To offer developers efficient and predictable regulatory procedural pathways, the Union legislative frameworks in the health area should be equipped with the right tools and should integrate consultative and collaborative approaches, to be able to assess these health biotechnology products efficiently and timely. In addition, developers of health biotechnology products should be supported in navigating regulatory procedural pathways for their products in the best possible way. This Regulation should therefore provide for measures and facilitators to ensure efficient pathways to developers with reduced time-to-market, while safeguarding all existing provisions to protect public health.
- (73) At the same time, the Union has the strong experience and expertise to handle regulatory complexity, and important measures to deal with health biotechnology products have already been proposed. Directive 2001/83/EC of the European Parliament and of the Council<sup>39</sup> clarifies which legislative frameworks apply to combinations of medicinal products and other products and establishes a single authorisation pathway for them. In addition, existing Union legislative frameworks in the area of health such as [revised Regulation (EU) 2017/745 of the European Parliament and of the Council, [revised Regulation (EU) 2017/746], [revised Regulation No (EC) 726/2004], Regulation (EU) 2024/1938 of the European Parliament and of the Council<sup>40</sup> contain specific mechanisms to manage the determination of the regulatory status of products that do not fall clearly within a Union legislative framework in the area of health. These mechanisms include the possibility of requesting a recommendation or opinion from the respective advisory bodies or the Agency, as applicable, at Union level, and eventually the possibility for binding decisions of the Commission on the regulatory status. These mechanisms should ensure predictability and conclusive opinions for products of which the status is being debated, avoiding cases where it remains unclear which framework applies, and the assessment of the product is consequently halted or delayed.
- (74) Developers of health biotechnology products, in particular SMEs, start-ups and scale-ups, often lack the regulatory expertise and capacity needed to identify, anticipate and plan their entry into the appropriate regulatory procedural pathways. In order to

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<sup>39</sup> Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use, OJ L 311, 28.11.2001, p. 67, ELI: <http://data.europa.eu/eli/dir/2001/83/oj>.

<sup>40</sup> Regulation (EU) 2024/1938 of the European Parliament and of the Council of 13 June 2024 on standards of quality and safety for substances of human origin intended for human application and repealing Directives 2002/98/EC and 2004/23/EC (OJ L, 2024/1938, 17.07.2024, ELI: <http://data.europa.eu/eli/reg/2024/1938/oj>).

address this challenge, the EU Health Biotechnology Support Network, acting as a service provider, should provide preliminary support to such developers by facilitating information on, and access to, applicable legislative frameworks, and should point to relevant opinions, recommendations, guidance and decisions.

- (75) To allow developers to anticipate and navigate procedures to determine the regulatory status, a Union-wide and cross-framework Regulatory Status Repository should be established. That Repository should compile relevant opinions, recommendations, decisions and guidance developed under the mechanisms established in the Union legislative frameworks in the area of health with a view to determine the regulatory status of a product. That Repository should also include the recommendations on the classifications of products as advanced therapy medicinal products (ATMPs) issued by the Committee for Advanced Therapies, established in accordance with Regulation (EC) No 1394/2007 of the European Parliament and of the Council<sup>41</sup> prior to the date of application of Regulation (EC) No 726/2004. Such repository should be accessible for developers and authorities to enable them to understand how similar health biotechnology products are evaluated in terms of status, and what considerations are put forward. This will guide developers and authorities, to improve efficiency, foster transparency, and ensure consistency and mutual learning across Union and national authorities. This Regulatory Status Repository should not include opinions, recommendations, decisions and guidance on the regulatory status of AI systems and models within the scope of the Regulation (EU) 2024/1689.
- (76) Existing mechanisms for addressing health biotechnology products, including those for determining their regulatory status as described above, provide for consultation among various advisory bodies and the Agency. However, such procedures are typically focused on individual products on a case-by-case basis. There is, therefore, a need for more systematic coordination across Union legislative frameworks to better identify and prepare for emerging innovations driving the development of health biotechnology products that may challenge existing Union legislative frameworks in the area of health. With an expected increase in health biotechnology products entering the regulatory system, there is a growing need for horizontal foresight anticipating technological developments through structured horizon-scanning activities which will enable the regulators to adopt regulatory approaches proactively, rather than reactively addressing each new difficult case.
- (77) To that end, this Regulation should establish a Foresight Panel for Emerging Health Innovation to complement existing mechanisms by providing a platform for horizontal coordination and forward-looking analysis. The Panel should conduct horizon scanning to identify emerging technologies at an early stage and discuss cross-cutting regulatory issues, thereby informing and anticipating discussions on health biotechnology products that may subsequently arise within individual frameworks. It should provide expertise on emerging science and technology in the field of health underpinning the development of health biotechnology products to the Commission, the Agency and to relevant Union-level advisory bodies and competent authorities and other entities in the Member States in the area of health.

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<sup>41</sup> Regulation (EC) No 1394/2007 of the European Parliament and of the Council of 13 November 2007 on advanced therapy medicinal products and amending Directive 2001/83/EC and Regulation (EC) No 726/2004, OJ L 324, 10.12.2007, p. 121. ELI: <http://data.europa.eu/eli/reg/2007/1394/oj>.

- (78) This Panel should complement, without replacing, existing classification mechanisms established under the respective Union legislative frameworks, which remain exclusively competent to provide opinions, recommendations or binding determinations on the regulatory status of specific products. Member States, as authorities primarily responsible for decisions on regulatory status, should be closely involved in the Panel's work, sharing practical expertise and experience to inform cross-framework dialogue, support harmonisation efforts, and designate experts that bring the Member State perspective.
- (79) Health biotechnology products increasingly challenge Union legislation in the area of health and necessitate further flexibility of that legislation, in particular regarding health biotechnology products that could be candidates for regulatory sandboxes under such frameworks. The development and implementation of those sandboxes can clearly benefit from effective consultation across the authorities responsible for regulatory sandboxes falling within the scope of Union legislative acts other than this Regulation. By facilitating the exchange of information and experiences between sandboxes, including on regulatory approaches, technological challenges, and emerging scientific understanding, the Union can develop more coherent and responsive regulatory responses to health biotechnology products. The activities of sandboxes should be carried out in full compliance of antitrust information exchanges provisions under Union competition law. The Foresight Panel for Emerging Health Innovation could play a role in promoting such coherence and knowledge sharing.
- (80) The Commission should be able to establish regulatory sandboxes for health biotechnology products which are at a very early stage of development and do not fall within the scope of existing Union legislative acts in the area of health, thus not being in a position to benefit from the regulatory sandboxes established in accordance with those other acts. Those sandboxes should provide a controlled environment in which to explore and assess innovative technologies. The sandboxes should operate according to a specific sandbox plan that specifies the duration of the sandbox, risk mitigation measures and supervision arrangements. For the development and implementation of the sandbox plan for such products, the Commission may consult advisory bodies and Agencies established under the Union legislative acts in the area of health for example to determine which requirements or rules laid down in those acts could, or could not, be applied to the products concerned. The outcome of the sandbox would be a recommendation by the Commission on an existing appropriate regulatory procedural pathway for authorising the product in question. The lessons learned from those sandboxes should lead to reflections on possible regulatory actions to be taken at Union level for the products or categories of products concerned. Accordingly, this approach would provide a flexible Union response to emerging innovations while building an evidence base for potential future legislative developments.
- (81) Biotechnologies are critical for the Union's defence and security. Closer coordination between civil and defence research, development and manufacturing can accelerate safe innovation and reduce fragmentation. Therefore, this Regulation should make provisions for the recognition by the Commission and support of projects contributing to an EU Biothreat Radar as high impact health biotechnology strategic projects, subject to conditions established in this Regulation.
- (82) Furthermore, this Regulation should make provisions for the recognition by the Commission and support of high impact biodefence capability projects, as part of the category of high impact health biotechnology strategic projects, subject to conditions

laid down in this Regulation. Such projects should make a significant contribution to objectives such as the prevention or mitigation of the misuse of biotechnologies. As such, those projects should benefit from priority status in administrative procedures in accordance with this Regulation and could be given particular consideration for support under national and Union funding programmes and instruments, including from those budgets allocated to defence.

- (83) Without prejudice to Member States' competences and in accordance with the Union funding programmes and instruments, biotechnology activities relevant to defence, security, safety, preparedness, and resilience, including dual-use technologies could be given particular consideration, where appropriate, for support under the European Defence Fund, the Union Research Framework Programmes and other Union funding instruments.
- (84) Moreover, where national authorities so decide, expenditure on such dual-use infrastructures and related biodefence activities may be counted toward relevant defence spending targets.
- (85) The biotechnology landscape is evolving at an unprecedented speed, driven by advances in synthetic biology and genome editing, which, coupled with AI, make biotechnology stand at the forefront of innovation, offering unprecedented opportunities for advancing health and protecting against biological threats. These advances also make biotechnological misuse faster, cheaper, and more accessible. Biotechnologies can pose serious and distinctive risks that call for continuous assessment and anticipatory safeguards. Therefore, a limited set of biotechnology products with significant potential for misuse ('biotechnology products of concern') require a specific framework to prevent and protect against their misuse.
- (86) Union and international rules address certain aspects related to biological threats, biological incidents or biological risks, in particular in relation to serious cross-border threats to health<sup>42</sup>, the control of exports, brokering, technical assistance, transit and transfer of dual-use items<sup>43</sup>, resilience in biosafety and biosecurity through the Biological and Toxin Weapons Convention (BTWC)<sup>44</sup>, the Chemical Weapons Convention (CWC), the contained use of genetically modified micro-organisms<sup>45</sup>, workers' protection from risks related to exposure to biological agents at work<sup>46</sup>, in relation to AI systems and models through Regulation (EU) 2024/1689. However, the

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<sup>42</sup> Regulation (EU) 2022/2371 of the European Parliament and of the Council of 23 November 2022 on serious cross-border threats to health and repealing Decision No 1082/2013/, p. 26. ELI: <http://data.europa.eu/eli/reg/2022/2371/oj>.

<sup>43</sup> Regulation (EU) 2021/821 of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items, OJ L 206, 11.6.2021, pp. 1. ELI: <http://data.europa.eu/eli/reg/2021/821/oj>.

<sup>44</sup> Council Decision (CFSP) 2023/2636 of 20 November 2023 amending Decision (CFSP) 2021/2072 in support of building resilience in biosafety and biosecurity through the Biological and Toxin Weapons Convention, no longer in force. OJ L, 2023/2636, 22.11.2023, ELI: <http://data.europa.eu/eli/dec/2023/2636/oj>

<sup>45</sup> Directive 2009/41/EC of the European Parliament and of the Council of 6 May 2009 on the contained use of genetically modified micro-organisms (Recast) (Text with EEA relevance), OJ L 125, 21.5.2009, p. 75. ELI: <http://data.europa.eu/eli/dir/2009/41/oj>.

<sup>46</sup> Directive 2000/54/EC of the European Parliament and of the Council of 18 September 2000 on the protection of workers from risks related to exposure to biological agents at work (seventh individual directive within the meaning of Article 16(1) of Directive 89/391/EEC), OJ L 262, 17.10.2000, p. 21. ELI: <http://data.europa.eu/eli/dir/2000/54/oj>.

approach remains fragmented and does not sufficiently address all aspects related to the misuse related to biotechnologies. A consistent and high level of protection throughout the Union should therefore be ensured in order to guarantee biotechnology remains trustworthy and provides legal certainty for economic operators in the biotechnology sector.

- (87) There are divergent requirements in Member States for screening, verification, reporting and tracking of suspicious transactions for biotechnology products of concern, which includes benchtop equipment and sequences of concern. This lack of harmonisation creates additional costs for economic operators, especially for those with strong security systems in place, and might distort competition within the internal market as well as potentially create barriers to trade and innovation.
- (88) A Union framework for strengthening monitoring of the potential misuse of biotechnology products of concern is therefore needed and requested by industry actors, including SMEs, to safeguard the free movement of goods and ensure a level playing field in the internal market. This framework needs to take into account recent international developments and good practices in other jurisdictions and relevant industry consortia and standard-setting fora, including to promote interoperability for Union operators active globally and providing for a level playing field in the internal market.
- (89) To ensure that oversight remains proportionate and appropriately calibrated to the risks, and in line with existing Union harmonisation legislation, the complementary harmonisation measures established in this Regulation to prevent misuse should only apply to a limited subset of biotechnology products of concern which pose the highest risk of misuse, and whose misuse has the highest consequences, such as certain sequences of concern or benchtop nucleic synthesis equipment able to create such sequences of concern. For the purposes of legal clarity and certainty, such products should be listed in Annex I to this Regulation. As biotechnology will continue to rapidly evolve, the Union framework should remain flexible and capable of responding to emerging biotechnology products, materials, and scientific evidence regarding potential risks. Therefore, the Commission should be empowered to adopt delegated acts to amend Annex I to respond swiftly to scientific and security developments and in consultation with relevant experts including the Advisory Group on Biosecurity established under this Regulation, while following the existing international and other relevant regulatory frameworks
- (90) The Union framework should be comprehensive to apply to the making available to, introduction, or use of, biotechnology products of concern, by any natural or legal person in the Union as well as to the making available to any natural or legal person outside the Union.
- (91) To reduce risks at the point of sale within the Union, economic operators should verify the legitimate need and peaceful purposes of prospective customers before making available the biotechnology products of concern included in Annex I to this Regulation.
- (92) Apart from economic operators, other natural and legal persons that are not economic operators, including researchers, laboratories, universities, or research institutes, may also make available and use biotechnology products of concern. Such persons should be subject to the same screening obligations as economic operators, while preserving freedom of research and academic freedom in accordance with Article 13 of the Charter of Fundamental Rights of the European Union and Article 179 of the Treaty



on the Functioning of the European Union, except where knowledge and material are shared with persons employed within the same legal entity. Biotechnology products of concern should not be made available to members of the general public.

- (93) Benchtop nucleic acid synthesis equipment poses a particular challenge to the verification of legitimate need and the tracking and monitoring of sequences of concern. Such equipment should therefore contain an automatic mechanism to screen for sequences of concern.
- (94) This Regulation should lay down provisions requiring economic operators to report suspicious transactions throughout the supply chain, regardless of whether the prospective customer is a member of the general public or an economic operator, private or public, and should apply in relation to biotechnology products that are considered of concern provided the risk or threat they may pose, which includes certain sequences of concern and biotechnology products. Reporting and recording for three years the suspicious transactions would allow other operators to be aware of the risks of the concerned product, while avoiding duplicate reporting, and allowing authorities to monitor and assess the risks and verify compliance with the obligations laid down in this Regulation.
- (95) Suspicious transactions should be detected and reported rapidly through harmonised procedures, with Member States designating national contact points that provide clear reporting channels, as well as record data and ensure compliance, with a view to contributing to safeguarding national and Union's safety.
- (96) Where a biotechnology product of concern falls also under categories regulated under other Union legislation, to avoid duplication of reporting, where a suspicious transaction of that biotechnology product of concern has already been reported under one legal framework, it should not be reported again.
- (97) Licensed biotechnology products containing nucleic acid sequences, including authorised medicinal products for human and veterinary use, should not be subject to verification of legitimate need, as they have undergone regulatory assessment and do not constitute independent biological threats. However, the stand-alone nucleic acid sequences in synthetic form should fall within the scope of legitimate-need screening, as they may be misused and be relevant to biosecurity oversight.
- (98) Certain tools with a potential to be misused without further modification and to cause serious harm to public health and safety, agricultural crops and other plants, to animals, the environment, material or government security (dual-use research of concern - 'DURC') are increasingly affordable and accessible, also through progress in AI capabilities, which elevates the risk of misuse by actors lacking appropriate competence, oversight, legitimate or peaceful intent. A proportionate and risk-based framework is therefore necessary to minimise opportunities for misuse of DURC, including on AI models in biological applications, while preserving legitimate research and innovation.
- (99) Supervision by the public authorities is needed to ensure that research, innovation and commercial operations are conducted responsibly and securely. This in turn can build public trust in biotechnology. Effective supervision requires adequately resourced and trained national inspection authorities with adequate investigative powers, complemented by risk-based audits to verify the effectiveness of the screening obligations laid down in this Regulation, as well as training and awareness-raising for the staff of the designated inspection authorities and stakeholders, and regular



exchanges among inspection authorities and economic operators, including operators involved in online marketplaces. Moreover, Member States should lay down rules on penalties applicable to infringements of the provisions laid down in this Regulation regarding the prevention of biotechnology misuse. Such penalties should be effective, proportionate and dissuasive.

- (100) The Commission should monitor Member States in the enforcement of this legislation, including by requesting information and records to check the screening and suspicious transaction reporting frameworks of economic operators.
- (101) Considering the evolving biosecurity landscape and the misuse risks of biotechnology products of concern, this Regulation should establish an Advisory Group on Biosecurity ('the Advisory Group') to monitor the landscape of biological risks and alert the Commission when it identifies new biotechnology products of concern. The Advisory Group should complement the work of existing expert groups in health security. It should be composed of globally leading independent scientists. Its members should be selected and operate in accordance with the Commission Decision of 30 May 2016 establishing horizontal rules on the creation and operation of Commission expert groups. The members of the Advisory Group should be appointed by the Commission based on up-to-date scientific or technical expertise in the area of biosecurity, biodefence and AI.
- (102) AI offers significant potential to enhance the Union's competitiveness and innovation capacity, including in the area of biotechnology. This potential should be realised in a safe and responsible manner. In this regard, Regulation (EU) 2024/1689 lays down harmonised rules for placing on the market putting into service and use of AI systems and models in the Union, prohibitions of certain AI practices, harmonised transparency rules for certain AI systems, rules on market monitoring, market surveillance, governance and enforcement as well as measures to support innovation. AI systems and general-purpose AI models can lower the barrier for actors to misuse biotechnology. The provisions of Regulation (EU) 2024/1689 governing AI systems and general-purpose AI models aim to mitigate this. Further, AI models, as described in Regulation (EU) 2024/1689, used in biological applications, that are not covered by Regulation (EU) 2024/1689 ('AI models in biological applications') can also pose risks, including different types of systemic biological risks.
- (103) AI models in biological applications encompass both specialised tools and more general models trained on large datasets of biological sequences that can be adapted for a variety of downstream tasks. Such models in biological applications can aid in the development of novel, more dangerous biological threats, increasing the ceiling of harm of biotechnology misuse. Capabilities of such AI models in biological applications therefore need to be monitored, investigating and assessing risks to identify any models posing biological systemic risks and ensuring necessary risk mitigation measures are taken. In addition, systemic resilience would need to improve to prevent, detect and respond to any misuse incidents.
- (104) The Advisory Group should therefore monitor the capabilities of AI models in biological applications, working closely with scientists and companies developing such models and should be tasked to issue a qualified alert to the Commission if it identifies that an AI model in biological applications not covered by Regulation (EU) 2024/1689 poses biological systemic risk. The Advisory Group should inform the Scientific Panel of independent experts established under Article 68 of Regulation (EU) 2024/1689, if it has reasonable grounds to suspect that an AI model covered by

that Regulation poses biological systemic risks. That panel could in turn issue a qualified alert to the AI Office in accordance with Regulation (EU) 2024/1689. Considering that the AI Office established by Commission Decision C(2024) 390<sup>47</sup> has as its mission to develop Union expertise and capabilities in the field of AI and to contribute to the implementation of Union law on AI, that office should participate in the establishment of the Advisory Group.

- (105) The European Health Biotechnology Steering Group established by this Regulation should also ensure proper coordination and information exchanges among Member States on the enforcement of the biosecurity provisions in this Regulation, consulting the Advisory Group, other relevant existing bodies and external experts where appropriate.
- (106) This Regulation should establish a framework of measures, in particular for health biotechnology strategic projects and high impact health biotechnology strategic projects, to ensure the growth of the health biotechnology sector. This Regulation and, in particular, the measures in Chapters II to VIII, should serve the aim of creating and reinforcing favourable conditions for health biotechnology, from research and development to the timely placing on the Union market and production of biotechnology innovations and products. The pathway to placing on the the market of health biotechnology innovations and products are governed by important and comprehensive sets of regulatory rules and procedures. Reviewing and streamlining these rules and procedures is an inherent part to achieve the aim of facilitating and accelerating the development, placing on the market and production of health biotechnology innovations and products. The practical effectiveness of the measures of this Regulation, in particular those in Chapters II to VIII, depends to a large extent on a review and streamlining of certain rules and procedures applicable to health biotechnology innovations and products so as to facilitate timely access to the market. As set out in recitals [5 to 7], health biotechnology must be understood broadly and encompasses also the veterinary and phytosanitary fields which have as their direct objective the protection of public health.
- (107) For instance, a timelier and facilitated risk assessment process for products subject to pre-market authorisation in accordance with Union food law, accelerated procedures and measures facilitating innovation, such as measures on regulatory sandboxes are needed for the efficiency of the facilitation measures laid down in this Regulation.
- (108) Regulation (EC) No 178/2002 lays down the general principles and requirements of food law, so as to form a common basis for measures governing food law at both Union and national level. For the purposes of risk assessment at Union level, it establishes the European Food Safety Authority ('the Authority'), as the responsible Union risk assessment body in matters primarily relating to food and feed safety.
- (109) Considering the increasing prevalence of diet-related health issues, it is essential to expand the Authority's mandate to encompass all aspects of nutrition and to enable it to provide advice concerning the nutritional properties of food products and practices, including those derived from advanced biotechnological processes.
- (110) It has been observed that a significant number of application and notification dossiers submitted to the Authority are either incomplete or do not meet the applicable

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<sup>47</sup> Commission Decision of 24.1.2024 establishing the European Artificial Intelligence Office C(2024) 390.

regulatory and scientific specifications requirements to enable the best quality scientific assessment by the Authority, resulting in the need for requests for additional information during the risk assessment process and, consequently, leading to sometimes significant delays. This is also the case where biotechnology innovations and products are concerned, as such products would benefit strongly from pre-submission scientific advice on study design and testing strategies. Applicants or notifiers of such products, in particular small and medium-sized enterprises do not always have a clear understanding of the applicable regulatory and scientific requirements when compiling application dossiers, in particular as regards the types and details of studies to conduct. It is thus appropriate to enlarge the scope of the general pre-submission advice provided by the Authority at the request of a potential applicant or notifier to encompass non-committal advice on regulatory aspects including applicable rules and guidance documents, as well as scientific advice on study design and testing strategies. This advice should be provided by the staff and experts of the Authority to ensure the most updated scientific advice. Given the broadening of the scope of the general pre-submission advice which is already available for both new and renewals of approvals/authorisations, it is no longer necessary to provide for a specific pre-submission advice for renewals.

- (111) Practice has shown that the existing procedural consequences in the event of non-compliance with the notification requirement of commissioned studies at pre-submission phase appear to be too severe, particularly for small and medium-sized enterprises, and could impede competitiveness and innovation in the food chain. It is therefore necessary to shorten the existing procedural consequence in the event of non-compliance from six months to three months following the re-submission of the relevant application or notification.
- (112) In order to strengthen the coherence of risk assessments carried out by different Scientific Panels within the Authority, foster stronger synergies and promote greater harmonisation across guidance documents and scientific opinions, for the benefit of applicants while enhancing the effectiveness and efficiency of the Authority's risk assessment processes, it is appropriate that the staff of the Authority chairs the Scientific Committee and the Scientific Panels, without voting rights. The Scientific Committee should continue to be composed by experts.
- (113) The food and feed sector is experiencing rapid technological advancements, including biotechnology, AI, smart farming techniques, development of new approach methodologies, that could contribute to reduction of animal testing and circular economy practices promoting resource efficiency and waste reduction. It is therefore appropriate to provide Member States with the possibility of setting up regulatory sandboxes that can provide an environment for the testing of those innovations in a controlled manner, incentivising research and development, whilst allowing for adaptive regulatory practices that can be modified based on feedback and results from live trials. Regulation (EC) No 178/2002 should therefore be amended accordingly.
- (114) Given the diversity of sectors covered by Union food law, and the fact that Member States have diverse food systems, cultural preferences, local market conditions, and research and risk assessment bodies, regulatory sandboxes should be established a national level in order to ensure the necessary flexibility to allow for experimentation specifically tailored to address local needs, preferences, and consumer behaviours. For the same reasons, and in order to support innovation along the whole food chain, regulatory sandboxes should be allowed also at retail level and, thus, making available products under the regulatory sandboxes to food business operators or consumers

should not be considered as placing on the market. However, in order to ensure that the establishment of regulatory sandboxes does not jeopardise food safety or consumers' information and that they are established and function in such a way as to enable the collection of sound and useful information to inform future regulatory changes, rules should be laid down concerning the objectives pursued within regulatory sandboxes, the modalities for their adoption, amendment and revocation, the control of the activities carried out under the regulatory sandbox, monitoring and reporting as well as rules ensuring the protection of human and animal health and of the environment.

- (115) Regulatory sandboxes should not be allowed for some products. Experience has shown that certain types of novel foods trigger ethical or cultural concerns among various consumer segments regarding their acceptability. Since those aspects are best addressed within the applicable rigorous regulatory framework established by Regulation (EU) 2015/2283 of the European Parliament and of the Council<sup>48</sup>, it is appropriate to exclude novel foods from the scope of regulatory sandboxes. For GMOs legal pathways exist to allow testing of innovations, such as under Part B of Directive 2001/18/EC on the deliberate release of genetically modified organisms (GMOs) for purposes other than placing on the market, and there should not be a duplication of paths in order to maintain legal certainty. For this reason, regulatory sandboxes should be restricted to products containing or consisting of GMOs subject to authorisation under Part C of Directive 2001/18/EC. As regards innovations concerning novel plastic recycling technologies for plastics intended to come into contact with food, chapter IV of Commission Regulation (EU) 2022/1616<sup>49</sup> already establishes a framework that is meant to encourage the development of such novel technologies without prior authorisation. To ensure uniform rules on the development of novel recycling technologies that safeguard the health of the consumers, it is appropriate to exclude the development of recycling technologies from the possible use of regulatory sandboxes and rely instead on the procedure established in chapter IV of Regulation (EU) 2022/1616.
- (116) To ensure uniform conditions and principles for the setting up, operation and supervision of Regulatory sandboxes, implementing powers should be conferred on the Commission in the context of Regulation (EC) No 178/2002. Those implementing powers should be exercised in accordance with Regulation (EU) 182/2011 of the European Parliament and of the Council<sup>50</sup>. In case of emergencies, the Commission may provisionally adopt an measures in accordance with an urgency procedure requesting the suspension of the regulatory sandbox concerned.

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<sup>48</sup> Regulation (EU) 2015/2283 of the European Parliament and of the Council of 25 November 2015 on novel foods, amending Regulation (EU) No 1169/2011 of the European Parliament and of the Council and repealing Regulation (EC) No 258/97 of the European Parliament and of the Council and Commission Regulation (EC) No 1852/2001 (OJ L 327, 11.12.2015, p. 1, ELI: <http://data.europa.eu/eli/reg/2015/2283/oj>).

<sup>49</sup> Commission Regulation (EU) 2022/1616 of 15 September 2022 on recycled plastic materials and articles intended to come into contact with foods, and repealing Regulation (EC) No 282/2008 (OJ L 243, 20.9.2022, p. 3, ELI: <http://data.europa.eu/eli/reg/2022/1616/oj>).

<sup>50</sup> Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13, ELI: <http://data.europa.eu/eli/reg/2011/182/oj>).

- (117) Considering the additional financial burden established on the Authority with the expansion of its mandate following the amendments set out in this Regulation, the possibility of establishing fees in order to fully or partially fund EFSA's new tasks could be considered.
- (118) Clinical trials with advanced investigational therapy medicinal products (ATMPs), including those consisting or containing genetically modified organisms (GMOs) within the meaning of Article 2 of Directive 2001/18/EC of the European Parliament and of the Council<sup>51</sup>, can provide early access to transformative treatments for patients with rare or otherwise untreatable conditions and are important to prepare for the marketing authorisation of the medicinal products for such treatments. The nature and design of certain advanced investigational therapy medicinal products is such that the risks to human health and the environment resulting from a deliberate release of a GMO into the environment are, in practice, either excluded or negligible. For example, in viral vectors, which are genetically modified viruses used to deliver genetic material into cells, the wild-type virus genome is largely removed resulting in replication-defective recombined particles. As these particles cannot reproduce themselves, they present at most a negligible risk to human health and the environment.
- (119) Consequently, when controlling under Regulation (EU) No 536/2014 for risks from the deliberate release into the environment of GMOs, a risk-proportionate approach should be applied and Regulation (EC) No 1394/2007 should be amended with respect to certain, clearly delineated categories of advanced investigational therapy medicinal products that consist or contain GMOs, which present no or negligible risks to human health and the environment. Whilst it is appropriate to exempt such clearly delineated categories of advanced investigational therapy medicinal products from the requirement to submit an environmental risk assessment, sponsors of clinical trials should, however, submit a declaration as part of the clinical trial application that explains why the advanced investigational therapy medicinal products concerned falls into one or more of the specific categories of products presenting no or negligible risks to human health and the environment. The Committee for Medicinal Products for Human Use (CHMP) referred to in Article [148] of Regulation [...] [revised Regulation No (EC) 726/2004] should verify this declaration. For the same considerations of a risk-proportionate approach, the above-mentioned categories of advanced investigational therapy medicinal products should also be exempted from the requirements of Regulation (EU) No 536/2014 regarding manufacturing and import. Annex I to the Regulation (EU) No 536/2014 should also be amended to ensure consistency with the aforementioned amendments to the Regulation (EC) No 1394/2007.
- (120) Scientific and technological advances are driving the development of advance therapy medicinal products (ATMPs). To future proof the ATMPs legislative framework, the power to adopt delegated acts should be delegated to the Commission to amend Regulation (EC) No 1394/2007, by clarifying the definition, without extending its scope, of what constitutes a tissue engineered product, in light of technical and scientific advancements in the field of ATMPs. To that effect, the Commission should carry out appropriate consultations of the Agency and of the Substances of Human Origin Coordination Board ('the SCB').

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<sup>51</sup> Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC, OJ L 106, 17.4.2001, p. 1, ELI: <http://data.europa.eu/eli/dir/2001/18/oj>.

- (121) The measures established in this Regulation, including regarding health biotechnology strategic projects and high impact health biotechnology strategic projects, access to funding, biosimilars and the application of artificial intelligence in the health biotechnology sector aim to strengthen the health biotechnology sector. Those measures aim to foster research, development, testing, and preparing for market entry of health biotechnology products and services. This is the case for the centres of excellence for advanced therapies, the overall aim of which is to accelerate the placing on the market of advanced therapies, accelerate clinical translation, improve quality control and facilitate patient access across the Union. Similarly, the biotechnology development accelerators aim to provide trusted testing or demonstration facilities for process testing, validation, and small batch manufacturing, including for the initial phases of clinical trials. Similarly, time to market for biotechnology products is one key factor that impacts investments in the sector and accordingly access to funding for developers and start-ups in the biotechnology sector. Many of the products subject to those measures are expected to be biological medicinal products ('biologicals'), for which clinical research and trials are an essential step on their way to the market. Therefore, the measures established in this Regulation, in particular on biotechnology health strategic projects and high impact health biotechnology strategic projects, are intrinsically intertwined with, and depend on, the strengthening of clinical research in Europe. This is because all biotechnology products expected to be developed or supported through the health biotechnology strategic projects and high impact health biotechnology strategic projects are depending to a very large extent on an efficient and vibrant ecosystem of clinical research in the Union.
- (122) Amending Regulation (EU) No 536/2014 of the European Parliament and of the Council<sup>52</sup> to bring simplification and shorten the time for biotechnology innovations to reach the Union market is crucial to streamline and accelerate clinical trials processes in the Union and to make the legislative framework competitive globally so as to attract more clinical research to the Union. Without an efficient, accelerated and streamlined legislative framework for clinical trials authorisation in the Union, the other measures in this Regulation, and in particular the framework for the recognition and support of health biotechnology strategic projects and high impact health biotechnology strategic projects would be deprived of their effectiveness, as all health biotechnology medicinal products require state of the art clinical research and a globally competitive regulatory framework for clinical trials authorisation.
- (123) The clinical trials offer early access to the most innovative therapies, contribute to a sustainable healthcare system, maintain scientific excellence and specialised skills and they also support prosperity in the Union. Enabling the development of innovative biological medicines through clinical trials is particularly important, since those medicines often provide life-saving therapeutic options, including in cancer care or against rare genetic conditions, and, due to their complexity, they are often more difficult and expensive to develop. Increased clinical trials in the Union for biological medicines could potentially contribute to more manufacturing in the Union, higher number and earlier regulatory submission of biological medicines for marketing authorisation applications and higher percentage of EU clinical data in marketing authorisation applications. In relation to this, biological medicines sales are key

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<sup>52</sup> Regulation (EU) No 536/2014 of the European Parliament and of the Council of 16 April 2014 on clinical trials on medicinal products for human use, and repealing Directive 2001/20/EC (OJ L 158, 27.5.2014, p. 1, ELI: <http://data.europa.eu/eli/reg/2014/536/oj>).

drivers of growth. In 2024, the European Union spent €228 billion on medicines at list prices, including €95 billion on biological medicines, which now comprise 41% of total pharmaceutical spending. Spending on biological medicines continues to outpace that of small molecules (~5%) by 3x and the total prescription market, at a rate of 14.7% in the most recent period<sup>53</sup>. In this context, simplifying Regulation (EU) No 536/2014 and accelerating multinational clinical trials appears necessary with a view to accelerate time to market of health biotechnology innovations and thus secure the effectiveness of the substantive provisions laid down in this Regulation.

- (124) At the same time, Regulation (EU) No 536/2014 applies to all clinical trials irrespective of the type of investigational medicinal product, whether it be biological or chemical molecules. However, the amendments to Regulation (EU) No 536/2014 through this Regulation, for streamlining and simplifying that Regulation, are particularly relevant for biologicals. This is because the development of biologicals relies heavily on multinational clinical trials to be able to recruit the necessary number of patients.
- (125) Moreover, the limitation of the scope of the envisaged amendments to biologicals would be against the core principle of Regulation (EU) No 536/2014 to create a harmonised EU-level system for clinical trials authorisations. It would create two authorisation pathways for chemical medicines and biologicals and it would not be appropriate to distinguish these procedurally, considering the coordinated assessment procedure established in Regulation (EU) No 536/2014 and the single EU Portal and database as IT system provided for in that Regulation for the electronic submissions and assessment of all applications. In addition, providing for different timelines for biological and chemical medicines could create uncertainty for developers and could be perceived as creating double standards for clinical research on medicines, where the biotechnology products, often more complex, would benefit from shorter and more streamlined timelines. Such fragmented approach could potentially also increase the burden on regulators and could lead to different national interpretations regarding the implementation of the respective authorisation procedures. This in turn would risk putting multinational clinical trials at disadvantage with more associated negative effects for biological development. Further, such an approach could have a particularly negative impact on combination trials testing combination medicinal products, where biological and chemical active substances are combined within a single pharmaceutical form, to treat debilitating medical conditions for example but not limited to breast, lung, colorectal cancers or autoimmune diseases, as well as on trials comparing a biological and a chemical medicinal products or on trials using a chemical medicine as a standard of care treatment in the control arm . Consequently, the amendments to Regulation (EU) No 536/2014 should apply to both biologicals and chemicals.
- (126) The Union has unique advantages as a place for multinational clinical trials due to its large population, rich genetic diversity, scientific excellence and robust research infrastructures, and high ethical, quality and safety standards. To fully leverage these strengths and considering the key and increasing role of research and clinical trials for a thriving health biotechnology sector, it is necessary to amend the Regulation (EU) No 536/2014 to further streamline and speed up the authorisation processes especially for multinational clinical trials.

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<sup>53</sup> See figure 2, EU spending growth at list price levels by segment and leading therapy area, in Annex to this document.



- (127) To accelerate and streamline the approval processes in multinational clinical trials it is necessary to give a stronger leading role to the reporting Member State and further strengthen the principles of mutual trust and reliance. The assessment by the reporting Member State, including of the ethical aspects of the trial, should serve as a reference for the other Member States concerned. Member States concerned should complement the assessment by the reporting Member State only when necessary, and be entitled to raise considerations from ethical, relevant national law or national standard of care perspectives. Strengthening reliance on the reporting Member State's assessment would reduce duplication of work and allow Member States and sponsors to allocate resources more effectively, while ensuring high level of protection of subjects and the robustness of data.
- (128) Defined timelines in the context of clinical trials approval are necessary to guarantee speed and enhance predictability of the authorisation process, especially for multinational clinical trials. Defined maximum timelines should allow the Member State authorities with efficient planning to reduce periods of inactivity and thus regulatory delays between the assessment phases and enable short procedure for clinical trial approval overall. Stronger reliance on the reporting Member State would also result in efficiency gains, improve resource allocation and would enable the shortening of the consecutive assessment steps without compromising the quality of the assessments. It would benefit the sponsors as well, as it will result in a quicker start of a clinical trial, as well as in increased transparency and predictability for more effective planning. To reduce regulatory bottlenecks by allowing coordinated interaction between Part I and Part II assessments in multinational clinical trials, their respective assessment timelines should be aligned.
- (129) Recognising the importance of advanced therapeutic medicinal products (ATMPs) as drivers of innovation in biotechnology and regenerative medicine, it is appropriate to introduce a series of regulatory provisions to simplify and shorten the timelines for authorisation of clinical trials in the Union. In particular, to accelerate the conduct of clinical trials investigating the ATMPs, the authorisation procedure should be shortened by removing the additional 50 days of assessment period which is currently applicable
- (130) Furthermore, to leverage the mutual trust and foster the high ethical standards, the ethics committees should be involved in the assessment of ethical aspects of Part I of the application dossier. This ethical perspective should be integrated in the assessment report by the reporting Member State. Member States concerned should be able to raise, where relevant, consolidated considerations integrating inputs from their responsible ethics committees. The mandatory integration of ethical review in Part I assessment by the reporting Member State would ensure that the ethical review is conducted in a more harmonised and transparent manner. Such integration should also result in fewer and more consistent considerations and therefore support overall robustness of the evaluation with decreased burden for sponsors and national regulatory bodies.
- (131) It is appropriate that an enhanced EU portal provides technical means for a clear and timely communication between the involved Member States and the sponsor during the assessment, when requests for information are issued.
- (132) To increase further the efficiency and speed of Part I assessments in multinational clinical trials, when translations of Part I documents are required by national law, these should be assessed with the Part II. Considerations regarding the accuracy of

these translations will be raised by the Member States concerned with the sponsor in the Part II assessment process. Moving the assessment of translation quality into Part II of the application will allow the reporting Member State to focus on the technical and scientific assessment of the trial, while Member States concerned would retain their ability to verify the linguistic accuracy and suitability for their territories.

- (133) To ensure that the sponsor of clinical trials can adapt them dynamically through their life cycle to changed circumstances or to consider the scientific developments and ensure smooth conduct of the clinical trial, a submission of parallel substantial modification should be allowed. Such submissions should be allowed when the substantial modification, despite an ongoing approval of another one, concerns distinct and independent aspects of the dossier. Allowing parallel substantial modifications would support increased flexibility and responsiveness of the regulatory system. It would facilitate updates related to subjects' safety and enable timely response to emerging scientific knowledge or allow operational adaptations to improve patients access and trial efficiency.
- (134) To further support the efficiency and consistency of clinical trial submissions across the Member States, it is appropriate to develop and oblige the use of harmonised templates for the submission of Part II documents of clinical trial applications. The use of harmonised templates is expected to simplify the application and assessment processes reducing administrative burden both for sponsors and Member States. Harmonised templates may be updated in the light of technical and scientific evolution. Member States concerned may choose to rely also on the assessment of the reporting Member State of common aspects and elements in Part II application further streamlining initial authorisation and for additional efficiency gains.
- (135) Innovative and personalised therapies often combine the use of medicinal products with medical devices, including in vitro diagnostic medical devices. During the development of such therapies, clinical trials of one or more medicinal products may need to be combined with clinical investigation of one or more medical devices or performance studies of one or more in-vitro diagnostic medical devices. The authorisation and conduct of such combined studies are complex due to the application of requirements of two or three Union legislative frameworks in the area of health and the fact that these are typically conducted across several Member States. In order to support innovation and make efficient use of sponsors' and Member States' resources, it is necessary to put in place a dedicated pathway for the authorisation and conduct of such combined studies, involving coordinated assessment across Member States.
- (136) The experience gained during the Covid-19 pandemic has shown the need for the Union to swiftly take up measures to strengthen the development and access to crisis-relevant medicines, including to accelerate, simplify, and streamline the authorisation of multinational clinical trials relevant to prevent, treat or diagnose the disease caused by an emerging serious cross-border threat to health. Regulatory flexibility, including an accelerated authorisation procedure for clinical trials, is necessary to address and possibly contain an emerging health threat in a timely, efficient and coordinated manner. Therefore, it is appropriate to allow for an accelerated procedure for the authorisation of multinational clinical trials in situations where a public health emergency at Union level has been recognised in accordance with Article 23(1) of

Regulation (EU) 2022/2371 of the European Parliament and of the Council<sup>54</sup>, or in situations of an emerging serious cross-border threat to health that is likely to lead to the recognition of a public health emergency at Union level. This should also complement measures from the Regulation (EU) 2022/2372 of the Council<sup>55</sup> on a framework of measures for ensuring the supply of crisis-relevant medical countermeasures in the event of a public health emergency at Union level.

- (137) Based on the experiences gained from the application of Regulation (EU) No 536/2014, it is appropriate to further tailor the requirements for the authorisation and oversight of clinical trials according to the risks they pose to the subjects. In this context, the risk categorisation scheme should be further refined by differentiating between minimal-intervention clinical trials that present post-marketing authorisation trials and low-intervention clinical trials that use authorised medicinal products with proven scientific evidence on the efficacy and safety but are used outside their initial marketing authorisation.
- (138) Clinical trials that meet the criteria for minimal-intervention clinical trials should only require an ethical review before the clinical trial can begin. An enhanced application of a risk-proportionate approach will contribute to fostering a regulatory framework that is conducive to research and innovation. Sponsors, particularly non-commercial ones who conduct the majority of minimal-intervention and low-intervention clinical trials in the Union, will greatly benefit from simplified and risk-proportionate regulatory requirements through a reduced administrative burden, while not compromising subjects' safety, well-being, and rights. A reinforced application of a risk-proportionate regulatory framework further allows Member States to concentrate on their assessment on clinical trials associated with greater risk to the subjects.
- (139) To ensure that clinical trials accurately represent the target population in all its diversity, and to enhance the treatments available for vulnerable populations, medicinal products which are likely to offer significant clinical benefit should be fully and appropriately studied for their effects in these specific groups, including as regards requirements related to their specific characteristics and the protection of the health and well-being of subjects belonging to these groups. The protection of vulnerable populations, in this context, such as incapacitated subjects, minors and pregnant or breastfeeding women, requires a proper consideration of the risks of exclusion against risks of inclusion in clinical trials. This is in accordance with the 2024 version of the World Medical Association's Declaration of Helsinki.
- (140) Electronic health data accessed under Chapter IV of Regulation (EU) 2025/327 can offer valuable insights for clinical trials, particularly regarding the protocol or the investigational medicinal products dossier design. Therefore, sponsors should be able to utilize this data when applying for clinical trial authorisation or modifications. Additionally, competent authorities should consider this data during the assessment of such applications.

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<sup>54</sup> Regulation (EU) 2022/2371 of the European Parliament and of the Council of 23 November 2022 on serious cross-border threats to health and repealing Decision No 1082/2013/EU (*OJ L 314*, 6.12.2022, ELI: <http://data.europa.eu/eli/reg/2022/2371/oj>)

<sup>55</sup> Council Regulation (EU) 2022/2372 of 24 October 2022 on a framework of measures for ensuring the supply of crisis-relevant medical countermeasures in the event of a public health emergency at Union level.

- (141) The development of a medicinal product may require various clinical trials until robust data regarding its safety and efficacy are available to support the submission of a marketing authorisation application. The knowledge of the products is built gradually during this development. Using the same dossier for an investigational medicinal product in different clinical trials helps to ensure the collection of consistent and complete information, streamlines product development, supports efficient assessment, management and oversight, and can speed up the time to the market. For this reason, a sponsor should be able to request the establishment of an investigational medicinal product core dossier and rely on this dossier by referencing it in all clinical trials related to the investigational product concerned. In order to keep the core dossier updated, sponsors should be able to request its modification. One of the Member States concerned by the trials with investigational medicinal product should assume the role of core dossier depositary Member State and take responsibility for verifying completeness and suitability of the core dossier and managing the requests for its updates. Member States concerned in the core dossier should rely on the assessment by the depositary Member State. The depositary Member State may consult the Member States concerned as appropriate.
- (142) In the development of biosimilar medicinal products, the rapid evolution of analytical and functional characterisation methods for complex biological and biotechnological active substances calls for tailored clinical approach in biosimilar development with reduced need for confirmatory comparative clinical efficacy trials. Submission of a simplified investigational medicinal product dossier (IMPD) for biosimilar medicines to replace, as appropriate quality and quality control data, with a reference to the relevant additional quality substance master file or corresponding certificates would complement the shift in more risk proportionate clinical data requirements. This dual simplification and streamlining should focus on the regulatory scrutiny of key comparability data rather than require duplicative submission and assessment of the full IMPD quality dossier. Combining streamlined and robust quality data assessment with targeted clinical data generation should support an integrated and efficient development pathway for biosimilars with reduced administrative burden and development costs for biosimilar manufacturers, in particular in the Union. Accelerated access to biosimilar medicines to the market should support patients' access to more affordable biological therapies.
- (143) To further optimise the use of resources for both the sponsors and Member States, the possibility to refer, in a clinical trial application, to an active substance master file or a corresponding certificate, or a certificate confirming that the quality of the substance is suitably controlled by the relevant monograph of the European Pharmacopeia, or a certified platform technology master file should be available as appropriate for any investigational medicinal product, including for ATMPs. In these cases, the simplified IMPD must contain all relevant data to the active substance or its manufacturing, which is not covered in the referenced master file or certificate.
- (144) To address the increased significance of delivery of investigational medicinal products and auxiliary medicinal products to subjects, Regulation (EU) No 536/2014 should be amended to provide a framework for the controlled transport within a Member State, where the clinical trials have been authorised, of such products directly to subjects' residences or through a dispensing pharmacy or by an authorised person, under the investigator's oversight. This ensures responsible and transparent delivery practices and adapts to the real world necessities, as demonstrated during the COVID 19

pandemic. Distribution through a dispensing pharmacy or by an authorised person could be considered in particular in cluster trials.

- (145) To enhance regulatory efficiency, to ensure consistency in the implementation of Regulation (EU) No 536/2014 across the Union, and to facilitate predictability of requirements for the developers of medicinal products, it is necessary to provide a framework for the harmonisation of national requirements regarding the distribution of investigational and auxiliary medicinal products, notably for decentralised and multinational clinical trials. To achieve such harmonisation, the inspection working groups, which provide input and recommendations on all matters relating, directly or indirectly, to good clinical practice, good manufacturing practice, and good distribution practice should draw up guidelines, in collaboration with the Commission, and revise them as necessary to reflect technical and scientific progress in the field of clinical trials. In consideration of the specialised knowledge and experience of its members, who represent the Member States, the inspection working groups are particularly well-suited to facilitate the coordination of national requirements, eliminate unnecessary administrative obstacles, and promote a more efficient and harmonised approach to the conduct of clinical trials within the Union.
- (146) To facilitate the implementation of Regulation (EU) No 536/2014, while at the same time preserving the protection of quality of investigational medicinal products and ensuring greater predictability for sponsors, it is also appropriate to provide the general principles on how to ensure quality in the processes not subject to a manufacturing and import authorisation, such as re-packaging and re-labelling.
- (147) Verification of compliance with the legal requirements of manufacturing of investigational medicinal products by relevant entities through a system of supervision, is of fundamental importance to ensure that the objectives of this Regulation are effectively achieved. The provisions of Directive (EU) .../... [*reference to be added after adoption cf. COM(2023) 192 final*] regarding the supervision system and the cooperation on inspections, and provisions of [Regulation (EU) .../... of the European Parliament and the Council [*reference to be added after adoption cf. COM(2023) 193 final*] regarding the cooperation between national competent authorities and the Agency for inspections in third countries should apply to the supervisions of manufacturing of investigational medicinal products.
- (148) Verification of compliance with the provisions of Regulation (EU) No 536/2014, including for verification of compliance with good clinical practices, through a system of supervision, is of fundamental importance to ensure that the objectives of this Regulation are effectively achieved. Therefore, the competent authorities of the Member States should have the power to perform on site or remote inspections, including unannounced inspections, where necessary. Where needed, the competent authority of a Member State should also be able to request support from another Member State or the Agency to carry out a joint inspection, or to request a Member State or the Agency to carry out the inspection on their behalf.
- (149) The disruptive and innovative approaches to clinical trials may require adaptations to the rules governing clinical trial approvals and conduct. To harness the benefits of this innovation while providing necessary safeguards, it is essential to create a safe space for testing new regulatory approaches and technologies. This includes, where appropriate, the use of AI in trial design, data collection, analysis, and participant interaction. For that reason, it is necessary to provide for a possibility of setting up a controlled experimental environment in the form of a regulatory sandbox, allowing

regulators to test new methods for authorising and conducting clinical trials, for example, when some requirements of the dossier cannot be fully complied with, while ensuring strong safeguards for participant protection and data robustness. Insights gained from sandbox activities should inform future guidance and, where appropriate, legislative amendments.

- (150) The processing of personal data under Regulation (EU) No 536/2014 should comply with the requirements for the protection of personal data, including genetic data and data concerning health, laid down in Regulations (EU) 2016/679<sup>56</sup> and (EU) 2018/1725<sup>57</sup> of the European Parliament and of the Council. It is appropriate to clarify that the basis for the processing of personal data in the context of clinical trials is laid down in Regulation (EU) No 536/2014, pursuant to Article 6(1), point (c), of Regulation (EU) 2016/679. The Agency should have access to personal data necessary to perform its tasks in the public interest or complying with legal obligations in accordance with Articles 40, 80 and 81 of Regulation (EU) No 536/2014. The Commission should have access to personal data necessary for it to perform its task in accordance with Articles 78, 79, 80, 81, of Regulation (EU) No 536/2014.
- (151) In particular, Regulation (EU) No 536/2014 should be amended to require the processing of personal data by the sponsors and investigators where this is necessary to comply with the legal obligations imposed on them to ensure the safety and efficacy of medicinal products, when they request authorisation for and conduct clinical trials. This includes obligations to perform research activities in accordance with an authorised protocol, to perform safety reporting, and to perform archiving in accordance with Regulation (EU) No 536/2014. The relevant information to be collected according to the authorised protocol will contain personal data of the subjects, including genetic data or data concerning health. The processing of such special categories of personal data in the context of clinical trials takes place for reasons of public interest in the area of public health, in particular for ensuring high standards of medicinal products in compliance with Article 9(2), point (i), of Regulation (EU) 2016/679. Additionally, personal data may encompass identification details, such as sex and age, social insurance numbers and contact information. Moreover, sponsors may collect and process other data necessary for implementing the authorised protocol, such as the personal data of investigators. The categories of personal data to be collected and processed in the context of a specific clinical trial should be specified in the authorised protocol. Regulation (EU) No 536/2014 should be amended to establish specific safeguards for the processing of personal data, including genetic data or data concerning health, in compliance with Article 9(2), points (i) and (j), of Regulation (EU) 2016/679. For instance, it should require informed consent to participate in the clinical trial, as well as to maintain confidentiality of records and personal data of participants. The protocol should specify further appropriate safeguards such as specific technical and organisational

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<sup>56</sup> Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1, ELI: <http://data.europa.eu/eli/reg/2016/679/oj>).

<sup>57</sup> Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39, ELI: <http://data.europa.eu/eli/reg/2018/1725/oj>).

measures that should be employed, including pseudonymisation, integrity and confidentiality controls, encryption and access restrictions. In addition, any clinical trial should be subject to ethical review.

- (152) Since this Regulation amends Regulation (EU) No 536/2014 to establish a harmonised framework for the processing of personal data in the context of clinical trials, Member States should not be able to maintain or introduce under Article 9(4) of Regulation (EU) 2016/679 further conditions, including limitations and specific provisions such as requesting the consent of natural persons in the sense of that Regulation, with regard to the processing of personal data, including genetic data or data concerning health under Regulation (EU) No 536/2014 as amended by this Regulation.
- (153) Personal data which is collected and processed under each authorised protocol in accordance with Regulation (EU) No 536/2014 as amended by this Regulation may be further processed by the same controller for the purposes of other clinical trials, conducted in accordance with Regulation (EU) No 536/2014. Such data may include names, contact details, health and genetic data of subjects. It should also be possible to further process such personal data by the same controller for scientific research purposes.
- (154) To further address the issue of fragmentation within and across Member States on the application of the measures applicable to the conduct of clinical trials and, as regards certain aspect that remain national, and drive further harmonisation, it is necessary to enable closer cooperation between and across Member States' competent authorities and ethics committees. For that purpose, the role and tasks of the Clinical Trials Coordination and Advisory Group (CTAG) should be extended. The CTAG should in particular be empowered to issue or endorse guidance documents related to clinical trials conduct and supervision, to ensure uniform interpretation and harmonised implementation of Regulation (EU) No 536/2014 across the Member States.
- (155) Ethics committees involved in the assessment of clinical trials application should collaborate in a dedicated forum with the objective to strengthen cooperation in the area of ethical aspects of clinical trials which are of national competence.
- (156) Regulation (EU) No 536/2014 outlines the responsibilities of Member States in designating competent authorities and ethics committees for regulatory activities, including oversight. To perform their roles as required by the provisions of this Regulation amending Regulation (EU) No 536/2014, these competent authorities and responsible ethics committees should be vested in the necessary powers, have at their disposal qualified personnel and sufficient resources to perform their duties effectively. Regulation (EU) 536/2014 emphasizes the importance of communication and coordination to ensure consistent and efficient regulatory actions within Member States. It is also essential to define how the Commission will verify the correct implementation of the law by the competent authorities. Regulation (EU) No 536/2014 should be amended accordingly.
- (157) The integration of AI in clinical trials presents opportunities to enhance the clinical trials' design, execution, and oversight. This technological advancement offers substantial benefits to clinical trial sponsors, regulators, and ultimately patients. Among the possible enhancements are improved endpoint determination, advanced statistical analysis, optimized patient selection, enhanced data handling and analysis. While AI tools aim to accelerate the development of medicinal products, it is imperative that their use in clinical trials adheres to applicable legislation. This



includes, when applicable, compliance with Regulation (EU) 2024/1689, Regulation (EU) 2017/746, Regulation (EU) 2017/745 and Regulation (EU) 2016/679.

- (158) Sponsors hold the responsibility to evaluate the potential impact and risk of AI tools on patient safety based on guidelines. Untested systems may introduce gender and other biases and errors, risking unreliable outcomes or failures in interpreting medical data accurately. Such risks could lead to misdiagnosis, incorrect treatment, or inaccurate patient selection, especially hazardous in extensive clinical trials with numerous participants. The guidelines on the developments and deployment of AI tools developed by the Agency, in cooperation with the Clinical Trials Coordination and Advisory Group, and as appropriate, with other expert groups established under Union law, should assist the sponsors, national competent authorities and ethics committees in assessment of AI tools benefits and risks in the context of the lifecycle of clinical trials.
- (159) To further strengthen the competitiveness of the European Union in clinical research and ensure timely access of patients to innovative medicines, it is necessary to monitor the effectiveness of the provisions in this Regulation amending Regulation (EU) No 536/2014 to streamline and simplify the authorisation and conduct of multinational clinical trials. Such monitoring should be based on key performance indicators such as the increase in the number of clinical trials in the Union over the period of five years, as this indicator reflects both the attractiveness of the Union and the capacity of the European regulatory system to support clinical research with maintained high data quality and patients' safety standards. Regulation (EU) No 536/2014 should be amended accordingly.
- (160) The management of changes through the lifecycle of veterinary medicinal products is subject to regulatory approvals. The handling of variations for biological products is particularly critical because of the impact that changes in the source materials or the manufacturing process can have on the safety and efficacy attributes of the finished product. It is necessary to continue ensuring that changes introduced during the lifecycle of a veterinary medicinal do not alter the positive benefit-risk balance while avoiding unnecessary administrative burden. To this end, the process for implementation of variations not requiring assessment laid down in Article 61 of Regulation (EU) 2019/6 of the European Parliament and of the Council<sup>58</sup> should be further optimised.
- (161) Advances in biotechnology bring new opportunities for the development of veterinary medicinal products, including the possibility to develop vaccines with improved safety and efficacy profiles in a much shorter timeframe. The possibility to deploy and use vaccines quickly is essential to react to outbreaks of certain animal diseases thereby reducing the risks for human health, contributing to animal welfare and reducing economic losses for farmers.
- (162) Safety for veterinary medicinal products is assessed during marketing authorisation procedures in accordance with Regulation (EU) 2019/6. The competent authorities responsible for the granting of marketing authorisations are required to verify the safety for the target species, for the user, for consumers and for the environment. Likewise, the conduct of clinical trials is subject to the approval and supervision by

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<sup>58</sup> Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC (OJ L 4, 7.1.2019, p. 2, ELI: <http://data.europa.eu/eli/reg/2019/6/oj>).

competent authorities responsible for veterinary medicinal products. Regulation (EU) 2019/6 further requires that such trials are conducted in accordance with Good Clinical Practice, which includes the obligation for sponsors to ensure that there are no environmental grounds precluding the conduct of the trial.

- (163) Regulation (EU) 2019/6 and the Union GMO legislation (Directives 2001/18/EC<sup>59</sup> and 2009/41/EC<sup>60</sup>, Regulations (EC) 1829/2003<sup>61</sup>, 1830/2003<sup>62</sup> and 1946/2003<sup>63</sup> of the European Parliament and of the Council share the same protection goals as regards the protection of human and animal health and the environment from genetically modified organisms. Since parallel assessments and documentation and increased administrative burden is not conducive to increased protection of human health or the environment and has negative effects on the use of biotechnology in veterinary medicine, the risks for human and animal health and to the environment from veterinary medicinal products containing or consisting of genetically modified organisms should be solely assessed in accordance with Regulation (EU) 2019/6. This simplification should be coupled with a reinforcement of existing obligations as regards the conduct of clinical trials with veterinary medicinal products that contain or consists of GMOs.
- (164) To remove any legal uncertainty for developers, marketing authorisation holders and users, it should also be clarified that given the purpose of veterinary medicinal products to treat animals, their administration does not bring the treated animals or their products under the scope of the Union GMO legislation.
- (165) The Commission should be empowered to adopt delegated acts to amend Annex II to Regulation (EU) 2019/6 in order to adapt it to scientific and technical progress.
- (166) Veterinary medicinal products developed by means of biotechnology processes to diagnose, treat or prevent zoonotic diseases should be entitled to an extra year of supplementary protection certificate ('SPC') in order to support their development.
- (167) Scientific and technical progress in biotechnology enables the development of new technologies, methods or products that may not fit into existing Union legislation. The lack of harmonised requirements is an impediment to the development, marketing and use of new concepts that may, however, bring benefit to animal healthcare. Regulatory sandboxes may be established to facilitate the development, placing on the market or use of innovative technologies, methods or products related to animal health which are directly or indirectly related to the development, manufacturing or use of veterinary medicinal products under conditions that ensure protection of animal and public health as well as the environment. A regulatory sandbox should only be established if there is no Union legislation governing the marketing and use of the relevant technology, method or product.

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<sup>59</sup> Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC (OJ L 106, 17.4.2001, p. 1).

<sup>60</sup> Directive 2009/41/EC of the European Parliament and of the Council of 6 May 2009 on the contained use of genetically modified micro-organisms (OJ L 125, 21.5.2009, p. 75.).

<sup>61</sup> Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed (OJ L 268, 18.10.2003, p. 1).

<sup>62</sup> [Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed (OJ L 268, 18.10.2003, p. 1).

<sup>63</sup> Regulation (EC) No 1946/2003 of the European Parliament and of the Council of 15 July 2003 on transboundary movements of genetically modified organisms (OJ L 287, 5.11.2003, p.1).

- (168) A regulatory sandbox may be established by the Commission, by way of an implementing act following a recommendation of the Agency which should analyse expected potential benefits and risks as well as existing regulatory challenges. Technical and scientific requirements for the technologies, methods or products under the regulatory sandbox and procedures should be developed and published by the Agency. The Agency should ensure that the requirements and procedures it develops are proportionate and are adapted to the specific risks. A regulatory sandbox may be terminated at any time where, following the identification of negative impacts on animal or public health or the environment, the benefit-risk balance becomes negative and there are no satisfactory risk mitigation measures that could be implemented.
- (169) Technologies, methods or products developed under a regulatory sandbox should only be placed on the market or used on the basis of an authorisation granted by the Commission. Depending on the specific characteristics of the products concerned, a class authorisation to market or use technologies, methods or products may be possible. Member States should be empowered to take interim measures where serious risks to animal or public health or the environment are identified. In such cases, Member States should swiftly inform the Agency.
- (170) To ensure legal certainty, the termination of a regulatory sandbox should not affect the validity of the authorisations to place on the market or use technologies, methods or products already granted, unless the regulatory sandbox has been terminated on grounds related to the protection of public or animal health or the environment.
- (171) To provide legal certainty to developers and competent authorities alike, time limits should be established also in the Regulation (EU) 2024/1938 and for all actors involved in the consultation process, at national and Union level, including the SoHO competent authorities, the Substances of Human Origin Coordination Board ('the SCB'), established in that Regulation and advisory bodies established under other relevant Union legislation. Consequently, Regulation (EU) 2024/1938 should be amended to provide the power for the Commission to adopt implementing acts to establish such time limits, that should be ambitious and determined based on experience gathered with the consultation process as of the entry into application of that Regulation.
- (172) The field of substances of human origin is characterised by rapid scientific and technological innovation, giving rise to health biotechnology approaches that may present scientific or regulatory challenges under existing legal requirements. To support the development of such innovations at early stages while maintaining public health protection, Member States should be able to establish regulatory sandboxes for substances of human origin that cannot yet be developed in full compliance with the requirements of Regulation (EU) 2024/1938, provided that the innovative characteristics or methods are expected to contribute distinctively to quality, safety, effectiveness, or patient access to treatment. The sandbox activities should enable a discussion on the development of common approaches and the potential adaptation of legislative frameworks based on accumulated experience. Any substances of human origin developed through regulatory sandboxes should only be distributed for human application when properly authorised, with initial authorisations limited to the regulatory sandbox duration. This framework should enable controlled experimentation with innovative regulatory approaches while preserving the essential safeguards for public health and safety. Regulation (EU) 2024/1938 should be amended accordingly.

- (173) The regulatory sandboxes in the field of substances of human origin should be conducted under the supervision of the concerned SoHO competent authorities, and, where relevant, competent authorities under other Union and Member State legislation concerned. The latter authorities should be in particular involved where the preparation of the SoHO requires steps using products regulated under another Union legislative framework, or where SoHO is presented as a therapy together with products regulated under another such Union framework.
- (174) In order to ensure uniform conditions for the implementation of this Regulation regarding the recognition by the Commission of high impact biotechnology strategic projects, the modalities for the processing of personal data necessary to achieve the purpose of such projects in the form of biotechnology data quality accelerators and the rules for the selection, composition, number of members, and functioning of the Foresight Panel for Emerging Health Innovation, implementing powers should be conferred on the Commission.
- (175) In order to ensure uniform conditions for the implementation of this Regulation, implementing power should be conferred on the Commission to detail the criteria to clarify in what cases a project is to be deemed to have a strong systemic and catalytic potential within the Union's biotechnology ecosystem and accelerate innovation, detail the criteria for the recognition of centres of excellence for advanced therapies, including advanced therapy medicinal product, establish procedural rules for the recognition of high impact health biotechnology strategic projects and the format of the assessment report to be submitted by the designated authorities in relation to applications for recognition of high impact health biotechnology strategic projects, establish regulatory sandboxes for health biotechnology products and common principles, criteria and practical arrangements for the assessment of applications received from developers and for the establishment and supervision of the regulatory sandboxes and related sandbox plans. Those powers should be exercised in accordance with Regulation (EU) No 182/2011.
- (176) The power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of modifying Annex I to this Regulation listing the biotechnology products of concern. It is of particular importance that the Commission carries out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.
- (177) The European Data Protection Supervisor and the European Data Protection Board were consulted in accordance with Article 42 of Regulation (EU) 2018/1725<sup>64</sup> and delivered an opinion [date].

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<sup>64</sup> Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC, OJ L 295, 21.11.2018, pp. 39–98, ELI: <http://data.europa.eu/eli/reg/2018/1725/oj>

- (178) Since the objectives of this Regulation cannot be sufficiently achieved by the Member States but can rather, by reason of the scale or effects of the action, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives.

HAVE ADOPTED THIS REGULATION:

## **CHAPTER I**

### **SUBJECT MATTER, SCOPE AND DEFINITIONS**

#### *Article 1*

#### **Subject matter and scope**

1. This Regulation establishes a framework to strengthen the competitiveness of the health biotechnology sector in the Union. It creates and reinforces favourable conditions for health biotechnology as defined in Article 2(1), point (2), from research and development to the timely placing on the Union market and production of biotechnology innovations and products, while safeguarding high standards of protection of human health, patient safety and animal health, the environment, ethics, quality of products, food and feed safety and biosecurity.
2. This Regulation lays down measures regarding:
  - (a) the establishment of a framework for the recognition of, and support measures for, health biotechnology strategic projects and high impact health biotechnology strategic projects;
  - (b) novel health biotechnology products and regulatory sandboxes to support innovation and take into account technological and scientific developments and progress;
  - (c) the support to promoters of biotechnology projects, SMEs, start-ups and scale-ups and non-profit developers of biotechnology products, by establishing an EU Health Biotechnology Support Network;
  - (d) the support for funding of, investments in, and access to capital for biotechnology companies and projects;
  - (e) the enhancement of the manufacturing capacity of, and expertise for biosimilars in the Union, including through international cooperation;
  - (f) the application in a facilitated manner of advanced technologies, including AI in biological applications, into the Union's health biotechnology ecosystems, while monitoring and mitigating, in line with the Union harmonisation legislation on AI, biological risks arising from the use of such technologies;
  - (g) the placing on the market in particular of health biotechnology products and biotechnology services in accelerated and streamlined procedures;
  - (h) the prevention of the misuse of biotechnologies and the strengthening of biodefence capabilities, without prejudice to, and in complementarity with, activities financed under any defence related Union funding programmes and instruments.

3. This Regulation applies to health biotechnology innovations and products and their ecosystem during their entire lifecycle, including related research, funding, development, innovation, testing, validation, manufacturing, placing on the market, and use activities.
4. The amendments to the Union legislation laid down in Articles 56 to 61 are not limited to health biotechnology products and activities, but also relate to the other products, services and activities that fall in the scope of that legislation.
5. This Regulation does not affect the application of Directive 2010/63/EU on the protection of animals used for scientific purposes and of Regulation (EU) 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
6. This Regulation shall apply without prejudice to Regulation (EU) 2024/1689 laying down harmonised rules on artificial intelligence.
7. This Regulation shall apply without prejudice to Regulation [...] [Regulation on speeding-up environmental impact assessments -permitting regulation].

## *Article 2*

### **Definitions**

1. For the purposes of this Regulation, the following definitions apply:
  - (1) ‘biotechnology’ means the application of science and technology to living organisms, as well as parts, products and models thereof, to alter living or non-living materials for the production of knowledge, products and services;
  - (2) ‘health biotechnology’ means the application of biotechnology for the promotion, protection, or restoration of human health and biotechnological applications relevant to animal health, plant health, veterinary public health, and food safety, insofar as these areas contribute directly or indirectly to the protection of human health and align with the Union’s public health objectives, as set out under Article 168 of the Treaty on the Functioning of the European Union;
  - (3) ‘biotechnology product’ means any good, technology or activity resulting from the application of biotechnology, including any process, action, technique, tool or knowledge involving biotechnology;
  - (4) ‘advanced biotechnology innovation’ means a biotechnology product, process, service or enabling technology that demonstrates, on the basis of preliminary scientific or technical evidence, the potential to achieve a substantial improvement over existing solutions in terms of efficacy, safety, sustainability, accessibility, and/or cost-effectiveness, and that, by reason of its novelty, technical complexity and/or market-creating potential, entails a high level of technological or commercial risk and it is likely to create new markets or significantly disrupt existing ones;
  - (5) ‘biomanufacturing’ means the production of biotechnology products at a commercial scale;
  - (6) ‘biotechnology cluster’ means a geographic concentration of interconnected companies, research institutions and organisations focused on biotechnology and life sciences, fostering collaboration and innovation;

- (7) ‘project promoter’ means any undertaking or consortium of undertakings developing a health biotechnology strategic project referred to in Article 3 or a high impact health biotechnology strategic project referred to in Article 4;
- (8) ‘permit-granting process’ means a process that covers all relevant permits to build, expand, convert and operate health biotechnology strategic projects and high impact health biotechnology strategic projects, including building permits and environmental assessments and authorisations where required, and encompassing all applications and procedures from the acknowledgement that the application for such permits is complete to the notification of the decision on the outcome of the procedure by the single point of contact concerned;
- (9) ‘deep tech’ means an innovation with the potential to deliver transformative solutions and that is based on cutting-edge advances in science, technology and engineering;
- (10) ‘SME’ means a micro, small or medium-sized enterprise within the meaning of the Annex to Commission Recommendation 2003/361/EC<sup>65</sup>;
- (11) ‘European Investment Bank Group (EIBG)’ means the European Investment Bank, the European Investment Fund or any subsidiary of the European Investment Bank;
- (12) ‘national promotion bank or institution’ means a legal entity as defined in Article 2, point (21), of Regulation (EU) 2021/523 of the European Parliament and of the Council<sup>66</sup>;
- (13) ‘implementing partner’ means an entity implementing, in indirect management, support under the EU health biotechnology investment pilot;
- (14) ‘AI system’ means an AI system as defined in Article 3(1) of Regulation (EU) 2024/1689;
- (15) ‘general-purpose AI model’ means an AI model as defined in Article 3point (63) of Regulation (EU) 2024/1689;
- (16) ‘general-purpose AI system’ means a general-purpose AI system as defined in Article 3point (66) of Regulation (EU) 2024/1689;
- (17) ‘clinical trial’ means a clinical trial as defined in Article 2(2), point (2) of Regulation (EU) No 536/2014;
- (18) ‘advanced therapy medicinal product’ means an advanced therapy medicinal product as defined in Article 2(1) of Regulation (EC) No 1394/2007;
- (19) ‘New Approach Methodologies (NAMs)’ means innovative methods that do not involve live animals, such as in vitro (cell or tissue-based), in chemico (chemical-based), or in silico (computer-based) approaches, as well as combinations of these;
- (20) ‘biological threats’ means risks posed by harmful biological agents such as pathogens or toxins that can cause disease or significant societal consequences, whether arising naturally, through accidental release, or via deliberate misuse;

<sup>65</sup> Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (Text with EEA relevance) (notified under document number C(2003) 1422), OJ L 124, 20.5.2003, pp. 36–41. ELI: <http://data.europa.eu/eli/reco/2003/361/oj>.

<sup>66</sup> Regulation (EU) 2021/523 of the European Parliament and of the Council of 24 March 2021 establishing the InvestEU Programme and amending Regulation (EU) 2015/1017, OJ L 107, 26.3.2021, pp. 30–89. ELI: <http://data.europa.eu/eli/reg/2021/523/oj>.

- (21) ‘biodefence’ means actions, policies, and measures that are designed, in particular by state actors, for preventive, protective or peaceful purposes, to counter biological threats, reduce risks, and prepare for, detect, assess, respond to, and recover from biological threats;
  - (22) ‘biosecurity’ means the protection, control and accountability of high-consequence biological agents, technologies, materials and toxins of concern, as well as of critical relevant information against unauthorised access, loss, theft, misuse, diversion or intentional release by those who intend to misuse them;
  - (23) ‘biotechnology product of concern’ means any good, service or technology, including software resulting from the application of science and technology to living organisms, their parts, products or models with significant potential for biological misuse that are listed in Annex I, including any thresholds or exclusions;
  - (24) ‘benchtop nucleic acid synthesis equipment’ means any equipment that allows a user to synthesise nucleic acids individually or in a core research facility.
2. For the purpose of the provisions regarding biosecurity and the prevention of biotechnology misuse laid down in Chapter VIII, Section 2, the following definitions apply:
- (a) ‘making available’ means any supply, whether in return for payment or free of charge;
  - (b) “legitimate” means in good faith, in the ordinary course of recognised professional, research or commercial activities, and in accordance with applicable Union and national law;
  - (c) ‘legitimate need’ in a biotechnology product of concern means the need for such biotechnology for legitimate and peaceful purposes, including handling, production, cultivation, experimentation, preservation, destruction, internal transport, by a legitimate member of the scientific community or a legitimate enterprise, consistent with applicable international treaties, laws, standards and oversight;
  - (d) ‘suspicious transaction’ means any transaction concerning biotechnology products of concern for which there are reasonable grounds, taking into account all relevant factors, to doubt the legitimacy of the prospective customer’s intentions.



## CHAPTER II

### UNION HEALTH BIOTECHNOLOGY AND BIOMANUFACTURING

#### SECTION 1

##### RECOGNITION OF HEALTH BIOTECHNOLOGY STRATEGIC PROJECTS IN THE UNION

###### *Article 3*

###### **Health biotechnology strategic projects**

1. To enable access to the support measures laid down in Section 2 of Chapter II, Member States shall recognise projects located in the Union, by means of a reasoned decision, as health biotechnology strategic projects if they make a substantial contribution to at least one of the following specific objectives:
  - (a) strengthening the industrial capacity and value chains in the health biotechnology sector, through one or more of the following activities:
    - (i) pooling resources and expertise among research organisations, biotechnology industry actors and/or public authorities within the Union;
    - (ii) creating new, or significantly expanding, production facilities for biotechnology products, in particular in biotechnology sectors where such facilities do not exist or where they are limited, including for biosimilars;
    - (iii) creating or upgrading industrial scale biomanufacturing sites with innovative, sustainable, safe and digitally enabled processes and technologies;
    - (iv) reducing dependencies on third-country suppliers for key biotechnology inputs and intermediates;
    - (v) integrating advanced digital and AI-driven manufacturing and supply-chain management systems to enhance productivity, traceability and sustainability across biotechnology value chains;
  - (b) scaling-up or upgrading critical research and technology infrastructures underpinning the development, testing and validation of health biotechnology products, including but not limited to pilot or testing infrastructures for biomanufacturing, data and digital platforms, through one or more of the following activities:
    - (i) establishing, expanding or upgrading pilot, testing and demonstration infrastructures linking research, development, validation and industrial deployment capacities for biotechnology products and processes; or
    - (ii) integrating advanced digital, data and AI capabilities to enhance modelling, simulation and process optimisation; or
    - (iii) establishing interoperable infrastructures connecting research organisations, industry and public authorities across the Union; or

- (iv) promoting and integrating the use of NAMs in areas such as biological research, discovery and preclinical development, regulatory and quality testing and production of medicinal products and medical technologies.
  - (c) accelerating innovation and technology deployment in health biotechnology through one or more of the following activities:
    - (i) introducing or scaling up breakthrough innovations in biotechnology that have the potential to strengthen the Union's industrial competitiveness, including AI-enabled technologies and tools;
    - (ii) supporting SMEs, start-ups and scale-ups, universities and research centres in accessing advanced biomanufacturing and laboratory capacities;
    - (iii) promoting technology transfer and collaboration with corresponding facilities in third countries, where Union-led partnerships are established under Union law.
  - (d) addressing talent and skills needs or preventing shortages of talent and skills critical to all kinds of jobs in support of the strengthening of the health biotechnology and biomanufacturing sectors, and supporting the creation and maintenance of quality jobs in the EU through one or more of the following activities:
    - (i) attracting and retaining talent in the Union and aiming to provide adequate upskilling or reskilling opportunities covering the broad range of skills required for biotechnology and biomanufacturing, including technical skills, data science, AI, intellectual property and project management, and entrepreneurial skills, through activities including apprenticeships, traineeships, continuing education and training, in close cooperation with regional and local authorities, education and training institutions, businesses and social partners;
    - (ii) establishing public-private partnerships between universities, vocational education and training providers, businesses, in particular SMEs, start-ups and scale-ups, social partners and applied research institutes;
    - (iii) establishing university alliances, also in cooperation with employers, to improve their delivery on innovation and the development of skills and talent.
  - (e) contributing to strengthening the EU's preparedness and response capacity to priority health threats by supporting the development, manufacturing and supply of medical countermeasures.
2. The projects referred to in paragraph 1 may be located on the territory of two or more Member States.

#### *Article 4*

#### **High impact health biotechnology strategic projects**

1. To enable access to the support measures laid down in Section 2 of Chapter II, projects located in the Union fulfilling the criteria to be recognised as health biotechnology strategic projects, which demonstrate by virtue of their scale, scope or cross-border relevance, a strong systemic and catalytic potential within the Union's

biotechnology ecosystem to accelerate innovation and enhance the translation of research into market applications shall be recognised by the Commission as high impact health biotechnology strategic projects, including in the following cases:

- (a) the project is a biotechnology development accelerator that fulfils the conditions laid down in Article 5;
  - (b) the project is a centre of excellence for advanced therapies, including for advanced therapy medicinal products that fulfils the conditions laid down in Article 6;
  - (c) the project contributes to an EU biotechnology late-stage capital booster pilot, fulfilling the conditions laid down in Article 23;
  - (d) the project contributes to the development of trusted testing environments for advanced biotechnology innovations, fulfilling the conditions laid down in Article 32(1) or is a health biotechnology data quality accelerator, fulfilling the conditions laid down in Article 33.
  - (e) the project contributes to the EU Biothreat Radar fulfilling the conditions laid down in Article 41(1) or it is a biodefence capability high impact strategic project fulfilling the conditions laid down in Article 42(1).
2. The Commission may adopt implementing acts to detail the conditions set out in paragraph 1, to clarify in which cases a project is to be deemed to have a strong systemic and catalytic potential within the Union's biotechnology ecosystem to accelerate innovation and enhance the translation of research into market applications. These implementing acts shall be adopted in accordance with the examination procedure referred to in Article 65(2).

## *Article 5*

### **Biotechnology development accelerators**

1. To enable access to the support measures laid down in Section 2 of Chapter II, the Commission shall recognise projects located in the Union as high impact health biotechnology strategic projects in the form of biotechnology development accelerators, only where they comply with the conditions laid down in Article 4(1), and they fulfil at least three of the following conditions:
- (a) provide trusted testing or demonstration facilities replicating real-world biomanufacturing processes, including good manufacturing practices (GMPs) compliant processes, or their enabling technologies, for process testing, validation, and small batch manufacturing, including for the investigational medicinal products for early stages of clinical trials; such enabling technologies may include digital technologies, with specific applicability in biotechnology and biomanufacturing;
  - (b) aim to operate state-of-the-art equipment, laboratories and technical expertise to support biotechnology and biomanufacturing processes and provide access thereof;
  - (c) aim to support hands-on and work-based training programmes aligned with the Union's skills and workforce development objectives in the biotechnology and biomanufacturing sectors or in relation to enabling technologies, such as digital

technologies, with specific applicability in biotechnology and biomanufacturing;

- (d) conduct applied research in biotechnology or biomanufacturing, or in relation to enabling technologies, with specific applicability in biotechnology and biomanufacturing;
- (e) seek to engage in partnerships among industry, academia, and public authorities to ensure the integration of research, innovation, and training in biotechnology and biomanufacturing or their enabling technologies.

#### *Article 6*

##### **Centres of excellence for advanced therapies**

1. To enable access to the support measures laid down in Section 2 of Chapter II, the Commission shall recognise projects located in the Union as high impact health biotechnology strategic projects in the form of centres of excellence for advanced therapies, including for advanced therapy medicinal products (ATMPs), only where they comply with the conditions laid down in Article 4[(1) and reinforce the Union's capability in the area of advanced therapies, by fulfilling all of the conditions set out in paragraph 2 of this Article.
2. The centres referred to in paragraph 1 shall fulfil all of the following conditions:
  - (a) specialise in at least one advanced therapy, such as cell and gene therapies;
  - (b) provide or coordinate advanced infrastructures including downstream processing, delivery models and the manufacturing of therapies referred to in point (a);
  - (c) integrate quality, regulatory science, and safety testing functions supporting Union-wide development of advanced therapies;
  - (d) establish structured cooperation among clinical centres, research organisations, industrial developers of biotechnology products, investors and regulators;
  - (e) provide multiple services enabling the transition of advanced therapies from laboratory research to commercial manufacturing, including:
    - (i) provide acceleration programmes to transform innovative ideas into viable business propositions;
    - (ii) provide incubation programmes assisting early-stage companies requiring GMP infrastructure, technical and regulatory expertise;
    - (iii) carry out networking and partnership facilitation to foster alliances;
    - (iv) ensure access to clinical and hospital settings, including for paediatric patients, for testing, clinical validation, and feedback;
    - (v) provide education and training for researchers, clinicians, and developers; and
    - (vi) ensure the possibility of cross-border access to users from any Member State.
3. The Commission may adopt implementing acts to detail the conditions listed in paragraph 2 of this Article, with a view to ensure a consistent approach in their

implementation across the Member States. These implementing acts shall be adopted in accordance with the examination procedure referred to in Article 65(2).

#### *Article 7*

##### **Designation of the competent authority responsible for assessing applications for recognition of health biotechnology strategic projects and high-impact health biotechnology strategic projects**

1. Member States shall designate an authority ('the designated authority') responsible for assessing applications for recognition of health biotechnology strategic projects and high impact health biotechnology strategic projects.
2. Member States shall inform the Commission within six months from the entry into force of this Regulation of the authority designated pursuant to paragraph 1.

#### *Article 8*

##### **Application for recognition of a health biotechnology strategic projects or a high impact health biotechnology strategic project**

1. An application for the recognition of a project as a health biotechnology strategic project or as a high impact health biotechnology strategic project shall be submitted by the project promoter to the designated authority referred to in Article 7 of a Member State on whose territory the project is located.
2. The application referred to in paragraph 1 of this Article shall contain the relevant evidence related to the fulfilment of the conditions laid down in Article 3 as regards health biotechnology strategic projects or in Article 4, as regards high impact health biotechnology strategic projects.

#### *Article 9*

##### **Recognition by Member States of health biotechnology strategic projects**

1. The designated authority shall assess the application for the recognition of a project as a health biotechnology strategic project within one month of the receipt of the complete application and communicate a reasoned decision to the project promoter. The assessment process shall be fair and transparent.
2. Where the designated authority concludes that the project fulfils the conditions of Article 3, it shall recognise the project as a health biotechnology strategic project.
3. Member States shall ensure that applicants have easy access to information on procedures for the settlement of disputes concerning the recognition process, including, where applicable, alternative dispute resolution mechanisms provided for by national law.
4. Where a project is located on the territory of two or more Member States, the decision recognising the project as a biotechnology strategic project issued by the designated authority of a Member State shall be recognised by the designated authorities of other Member States.

## *Article 10*

### **Recognition by the Commission of high impact health biotechnology strategic projects**

1. The designated authority shall assess the application for the recognition of a project as a high impact health biotechnology strategic project within one month of the receipt of the complete application and shall communicate its assessment report to the Commission. The assessment process shall be fair and transparent.
2. Where the designated authority concludes that the project fulfils the conditions of Article 4, the Commission shall, by means of implementing acts, adopt a decision approving or rejecting the application for recognition referred to in paragraph 1 of this Article, based on the assessment referred to in that paragraph and taking into account the views of the Steering Group referred to in Article 20.
3. By way of derogation from Article 8 and to paragraphs 1 and 2 of this Article, a project may also be recognised as a high impact health biotechnology strategic project in the framework of calls for proposals launched under Union programmes for the purpose of identifying, selecting and funding such projects, in line with the basic acts setting up those programmes.

The Commission shall recognise a project as a high impact health biotechnology strategic project in the context of a call for proposals where it fulfils the conditions set out in Article 4(1) and the specific criteria set out in those calls, based on the evidence submitted by the applicant.

4. The Commission shall adopt implementing acts laying down the format of the assessment report referred to in paragraph 1 of this Article and the procedural rules for the recognition of high impact health biotechnology strategic projects. These implementing acts shall be adopted in accordance with the examination procedure referred to in Article 65(2).

## **SECTION [2]**

### **SUPPORT OF HEALTH BIOTECHNOLOGY STRATEGIC PROJECTS AND HIGH IMPACT HEALTH BIOTECHNOLOGY STRATEGIC PROJECTS**

## *Article 11*

### **Single points of contact**

1. Each Member State shall designate one or more authorities as single points of contact at the relevant administrative level to facilitate and coordinate the permit-granting process for health biotechnology strategic projects and high impact health biotechnology strategic projects and shall provide information on the general administrative support and the technical and financial support set out in this [Section] through a dedicated webpage.
2. This single point of contact shall be the same as the single point of contact referred to in Article 3(2) of the Regulation (EU) ../.. [Regulation on speeding-up environmental impact assessments -permitting regulation], responsible for facilitating and coordinating all aspects of the environmental assessments, pursuant to applicable Union and Member States rules.

3. The single point of contact shall be the sole point of contact for the project promoter during the permit-granting process and shall assist the project promoter in handling any administrative matter relevant to the permit-granting process.
4. It shall coordinate the exchange of documents and information between the project promoters and the competent authorities and shall notify the promoter of the outcome of the decision-making process related to permit-granting, in accordance with national administrative arrangements. The authorities involved in the permit-granting process and other authorities concerned shall specify and make available to the single point of contact concerned the requirements and the scope of information requested of a project promoter.
5. The single point of contact shall direct project promoters to the relevant national and regional antennas of the EU Health Biotechnology Support Network referred to in Article 19.
6. Project promoters shall be allowed to submit to the single points of contact any documents relevant to the permit-granting process in electronic form.
7. Member States shall promote the reuse of existing data, studies and authorisations in order to avoid duplication of procedures, reduce administrative burden and ensure consistency of decision-making. For that purpose, they shall ensure that, when assessing an application, competent authorities duly take into account all relevant studies, assessments and valid permits or authorisations already carried out or issued for the same project or its components, provided that they remain applicable and up to date.
8. Member States shall ensure that the single points of contact and all authorities involved in the permit-granting process have a sufficient number of qualified staff and adequate resources.
9. Member States shall ensure that applicants have easy access to information on procedures for the settlement of disputes concerning the permit-granting process, including, where applicable, alternative dispute resolution mechanisms provided for by national law.

## *Article 12*

### **Priority status of health biotechnology strategic projects**

1. Health biotechnology strategic projects shall be considered as contributing to the strengthening of the biomanufacturing capacity and to the supply resilience of biotechnology products in the Union and, therefore, shall be considered to be of public interest.  
  
Health biotechnology strategic projects shall be deemed to contribute to the resilience objectives referred to in Article 14 of Regulation [Regulation on speeding-up environmental impact assessments – permitting regulation].
2. For the purposes of this Article, health biotechnology strategic projects shall be understood to cover also high impact health biotechnology strategic projects.
3. High impact health biotechnology strategic projects shall be considered to be of public interest and may be considered to have an overriding public interest with specific consideration given to the high impact strategic nature of such projects in accordance with Article 14 of Regulation [Regulation on speeding-up environmental

impact assessments – permitting regulation ] and point I of the Annex to that Regulation.

4. Where a project is recognised as a health biotechnology strategic project, Member States shall grant that project the status of project with the highest national significance possible, where such a status exists in national law and shall ensure that the relevant process for permit-granting and the licensing procedures, including environmental assessments and spatial planning, are treated in the most rapid way possible in accordance with Union and national law and shall benefit from any accelerated procedures provided for in applicable Union and national law.
5. Health biotechnology strategic projects shall also benefit, where applicable, from the tacit-approval in accordance with Article 14 and point II of the Annex to [COM Proposal 2025(984) for a Regulation on speeding-up environmental impact assessments – permitting regulation].
6. The permit-granting process shall not exceed ten months for health biotechnology strategic projects, and eight months for high impact health biotechnology strategic projects, from the date of acknowledgement of the completeness of the permit application. In duly justified cases requiring complex procedures under Union or national legislation, such as in the case of multi-site or multi-purpose projects, the competent authority may extend the period by up to three additional months, provided that the reasons for such extension are communicated in writing to the project promoter.
7. Where an environmental impact assessment is required pursuant to Directive 2011/92/EU, the step of the preparation of the environmental impact assessment report referred to in Article 1(2), point (g)(i), of that Directive shall not be included in the maximum duration of the permit-granting process referred to in paragraph [5] of this Article.
8. No later than 45 days from the receipt of the permit-granting application, the single point of contact shall acknowledge that the application is complete or, if the project promoter has not sent all the information required to process the application, request the project promoter to submit a complete application without undue delay, specifying which information is missing. In the event that the submitted application is deemed to be incomplete for a second time, the single point of contact may, within 30 days of the second submission, make a second request for information. The single point of contact shall not request information in areas not covered in the first request for additional information and shall be entitled only to request further evidence to complete the identified missing information. The date of the acknowledgement of the completeness of the application from the single point of contact shall serve as the start of the permit-granting process for that particular application.
9. All dispute resolution procedures, litigation, appeals and judicial remedies relating to health biotechnology strategic projects before any national court, tribunal or panel — including mediation or arbitration — shall be treated as urgent, to the extent that national law allows such urgency, and without prejudice to the normal rights of defence of individuals or local communities. Project promoters of health biotechnology strategic projects shall be able to avail themselves of such urgency procedures, where applicable. This shall include the dispute-settlement provision in accordance with Article 14 and point III of the Annex to the Regulation [...][Regulation on speeding-up environmental impact assessments].



## *Article [13]*

### **Administrative support**

1. Upon request of a project promoter, Member States shall provide administrative support to biotechnology projects located on their territory, including health biotechnology strategic projects and high impact health biotechnology strategic projects and shall take all appropriate measures to facilitate their timely and effective implementation, including:
  - (a) assistance to project promoters to ensure compliance with applicable administrative, regulatory, and reporting obligations;
  - (b) support and facilitation of permitting and authorisation procedures; and
  - (c) assistance to inform the public and those in the vicinity of the project with the aim of increasing public acceptance of the project;
2. High impact health biotechnology strategic projects shall benefit from priority access to the administrative support measures referred to in paragraph 1,
3. The administrative support referred to in paragraphs 1 and 2 shall be provided including through the single points of contact and the national and regional antennas of the EU Health Biotechnology Support Network referred to in Article 19.
4. Member States shall provide online and in a centralised and easily accessible manner, information relevant to promoters of biotechnology projects, including health biotechnology strategic projects and high impact health biotechnology strategic projects covering at least the following elements:
  - (a) the designated authority referred to in Article 7(1);
  - (b) the single points of contact referred to in Article 11;
  - (c) the national and regional antennas of the EU Health Biotechnology Support Network referred to in Article 19;
  - (d) the permit-granting process, including information on dispute settlement;
  - (e) advice on financing and investment services;
  - (f) business support services, including corporate tax declaration, local tax rules and labour law.
5. When providing the administrative support referred to in paragraph 1 of this Article, Member States shall pay particular attention to SMEs, start-ups and scale-ups. Where appropriate, Member States shall ensure that a dedicated channel for communication with SMEs, start-ups and scale-ups is available within the single points of contact to provide guidance and respond to queries related to the implementation of this Regulation.

## *Article 14*

### **Financial and technical support**

1. Without prejudice to Articles 107 and 108 TFEU, Member States may make use, where applicable, of the relevant frameworks for providing public support to health biotechnology strategic projects and high impact health biotechnology strategic projects, including national promotional banks and other relevant public support instruments, as provided for in Article 24, paragraphs (4), (5) and (6). Where public

support is granted, Member States shall ensure that such support is coordinated with other support measures at Union or national level and is in line with applicable State aid rules.

2. Projects recognised as high impact health biotechnology strategic projects:
  - (a) may be given particular consideration for Union financial support including in the form of blended financing, under Union programmes, funds and financial instruments and for national support as provided for in Article 25, if the basic regulations setting up such Union programmes allow it;
  - (b) shall benefit from priority status in administrative procedures, including in the permit-granting process, as provided for in Article 12]and of priority access to administrative support referred to in Article 13.
3. The Commission, in cooperation with the Member States and, where appropriate, with the Steering Group referred to in Article 20, shall take the following measures to support the implementation of health biotechnology strategic projects and of high impact health biotechnology strategic projects, including through the EU Health Biotechnology Support Network referred to in Article 19:
  - (a) support project promoters in identifying funding opportunities at Union level, and facilitate the liaison between project promoters and investors;
  - (b) promote actions that strengthen the biotechnology innovation ecosystem;
  - (c) facilitating access, in particular for SMEs, to relevant research and technological infrastructures, including where such infrastructures are funded through Union funding programmes, funds and financial instruments.

#### *Article 15*

#### **Networks of health biotechnology clusters**

1. The Commission and the Member States shall promote and facilitate the cooperation and the establishment of networks among promoters of health biotechnology strategic projects, of high impact health biotechnology strategic projects and other relevant actors. A particular focus shall be placed on fostering cross-border synergies between regional and national health biotechnology clusters, and on supporting the networks constituted under the EU Competitiveness Coordination Tool pilot, in full compliance with EU competition law.
2. Such networks shall fulfil one or more of the following activities:
  - (a) facilitate synergies between innovation ecosystems at local, regional and Union levels;
  - (b) support the establishing of EU-wide interregional biotechnology value chains;
  - (c) pool national and Union resources and facilities across several Member States, bridging and upscaling research, pilot and industrial-scale biomanufacturing, including through cooperation between regional biotechnology clusters;
  - (d) provide transparent, open, and non-discriminatory cross-border access at market prices to research organisations, SMEs, start-ups and scale-ups, healthcare providers, and industrial actors from across the Union;

- (e) facilitate knowledge transfer, standardisation and inter-cluster collaboration, in line with competition rules, and the dissemination of best practices;
  - (f) promote the development of infrastructure and digital platforms, and AI-enabled technologies supporting biotechnology and biomanufacturing.
3. The networks referred to in this Article may establish governance arrangements appropriate to their objectives and may, where necessary, constitute themselves as legal entities under Union law, as appropriate for the implementation of specific actions and investments.
  4. The Steering Group referred to in Article 20 shall provide advice for the support of the federation and networking of biotechnology clusters.

## SECTION 3

### ACCESS PRINCIPLES AND STRATEGIC MAPPING

#### *Article 16*

##### **Access principles and security safeguards**

1. Health biotechnology strategic projects and high impact health biotechnology strategic projects recognised in accordance with this Regulation that receive financial support in accordance with Union programmes shall offer open, non-discriminatory, transparent, and criteria-based access at market prices to their facilities, equipment, services and training programmes for users, including SMEs, start-ups and scale-ups and other industrial actors, research organisations or training institutions.  
  
The projects referred to in the first subparagraph shall ensure that access to, and the operation of their infrastructures, facilities and services comply, where applicable, with the requirements of Directive (EU) 2022/2555 of the European Parliament and of the Council<sup>67</sup>, including with the relevant cybersecurity risk-management and reporting obligations.
2. The access criteria referred to in paragraph 1 of this Article shall ensure proportionality and fair treatment among users, while taking into account all of the following:
  - (a) the objectives and capacity of the infrastructure concerned;
  - (b) the need to ensure equitable opportunities in particular for SMEs, start-ups and scale-ups and research actors;
  - (c) any safeguards necessary for the protection of security, confidentiality or economic-security interests, in particular those referred to in paragraph [3].
3. In order to safeguard the Union's security, public order and strategic interests, access to biotechnology infrastructures and biotechnology datasets of projects referred to in

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<sup>67</sup> Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive) (Text with EEA relevance), OJ L 333, 27.12.2022, pp. 80–152. ELI: <http://data.europa.eu/eli/dir/2022/2555/oj>

paragraph 1 of this Article shall be governed by the rules laid down in the relevant Union funding programmes under which those projects are funded.

#### *Article 17*

#### **Strategic mapping of the Union's biotechnology ecosystem**

1. The Commission, in close cooperation with the Steering Group referred to in Article 20 and where appropriate the AI Board established under the Regulation (EU) 2024/1689, shall conduct, no later than six months after the entry into force of this Regulation, and maintain thereafter a strategic mapping of the biotechnology ecosystem in the Union.
2. The strategic mapping shall provide a comprehensive overview of the Union's biotechnology and biomanufacturing landscape, to assess existing capacities and infrastructures, detect gaps, unused capacities, dependencies, and systemic challenges across the value chains. It shall cover in particular the following areas:
  - (a) industrial capacity and infrastructures, including on critical intermediates and key input, relevant to biotechnology research, development, testing, and manufacturing, and assessment of their distribution, interconnections and potential gaps;
  - (b) access to risk-tolerant capital, by analysing public and private funding sources supporting biotechnology across all stages of development and identifying gaps in risk-tolerant financing and market incentives;
  - (c) biotechnology clusters and biomanufacturing ecosystems, by mapping existing and planned clusters across the Union and assessing opportunities for coordination, investment, and both cross-border and interregional collaboration;
  - (d) skills, upskilling and reskilling, by analysing current and projected workforce needs, identifying gaps in education and training, and assessing measures to attract, retain, and upskill talent;
  - (e) use of data and AI, by assessing access to data, computing and digital infrastructures for biotechnology and identifying opportunities to foster responsible AI-enabled innovation and mitigate related risks.
3. The strategic mapping shall be based on information from relevant Union bodies and agencies, and, where appropriate, industry stakeholders and research organisations. The Commission may request Member States to submit data necessary for this purpose, while ensuring the protection of confidential and commercially sensitive information. The Member States shall submit such data within 30 days from the request of the Commission.
4. The Commission shall present the findings of the strategic mapping to the Steering Group.
5. The results of the strategic mapping shall be used for the following purposes:
  - (a) supporting the identification and prioritisation by the Member States and the Commission, as appropriate, of potential health biotechnology strategic projects and high impact health biotechnology strategic projects;

- (b) informing Union policy and funding priorities in biotechnology and biomanufacturing, including actions in accordance with this Regulation, as well as initiatives under Union programmes supporting research, innovation, skills development and industrial competitiveness;
- (c) informing the advice of the Steering Group on health biotechnology strategic projects and high-impact health biotechnology strategic projects and on initiatives supporting research, innovation, skills and industrial competitiveness in the biotechnology sector.

#### *Article 18*

#### **More favourable treatment**

The provisions of this Regulation regarding the permit granting process, the priority status of health biotechnology strategic projects and of high impact health biotechnology strategic projects and support for such projects shall apply without prejudice to more favourable provisions laid down in other Union rules.

### **SECTION 4**

#### **EU HEALTH BIOTECHNOLOGY SUPPORT NETWORK**

#### *Article 19*

#### **EU Health Biotechnology Support Network**

1. The Commission shall set up, coordinate and support an EU Health Biotechnology Support Network ('the Network'), consisting of national and regional antennas in the Member States ('the antennas').
2. The Network shall assist and support the developers of health biotechnology products, in particular SMEs, start-ups and scale-ups, the promoters of biotechnology projects, including health biotechnology strategic projects and high impact health biotechnology strategic projects ('project promoters') in identifying the relevant applicable rules and funding, scaling-up and networking opportunities.
3. The Network shall fulfil in particular the following missions:
  - (a) provide information on the national and Union rules applicable to the development and placing on the market of health biotechnology products, including on the applicable authorisation procedures for health biotechnology products;
  - (b) information for the identification and use of the applicable regulatory frameworks and regulatory support mechanisms with regard to innovative health biotechnology products, as provided for in Article 34;
  - (c) facilitate the interactions of project promoters with potential public and private investors including venture-capital funds, corporate partners and national promotional banks and relevant funding structures and existing networks of investors, including with the European Innovation Council Trusted Investors

Network<sup>68</sup> through matchmaking initiatives, including host pitch sessions, demo days and investor forums, in cooperation with the Steering Group referred to in Article 20, the European Innovation Council and other relevant Union initiatives;

- (d) provide information and support to project promoters for intellectual property procedures and technology transfer and promote investors' awareness of Union regulatory frameworks and responsible-innovation principles;
  - (e) support project promoters in the identification of scaling up resources, including business support networks providing advice on commercial readiness of health biotechnology projects and testing and training facilities, state-of-the-art pilot plant facilities that simulate a real production environment, and relevant research and technology infrastructures across the Union, including technology centres, cutting-edge facilities, and data-sharing platforms to support the development and testing of health biotechnologies;
  - (f) support biotechnology actors in the responsible and effective integration of AI, by providing sector-specific guidance and promoting best practices and standards for trustworthy AI, in coordination with the bodies established under Regulation (EU) 2024/1689, and by providing information and support, in particular to SMEs, start-ups and scale-ups;
  - (g) facilitate liaison and exchanges among project promoters with a view to fostering networking and cooperation, including to support networks of health biotechnology clusters referred to in Article 15;
  - (h) provide incubation, acceleration and mentorship programmes for biotechnology start-ups and scale-ups and connect project promoters with projects and initiatives that address skills and expertise needs in health biotechnology and biomanufacturing, including with testing, training and technical support facilities, and regional skills partnerships;
  - (i) support Member States and the single points of contact in facilitating projects promoters' access to administrative support provided in accordance with Article 13.
4. The Network shall complement and, to the extent possible, rely on existing relevant organisations and networks at Union and Member State and regional level, including the European Enterprise Network.
5. The Commission shall select the members of the Network based on criteria made public pertaining to the expertise and capabilities required to fulfil the missions referred to in paragraph 3 of this Article, including to the ability to leverage, complement and strengthen existing national and European networks that support SMEs, start-ups and scale-ups, and innovators.

The Commission shall organise the management, coordination and support of the Network.

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<sup>68</sup> The European Innovation Council (EIC) Trusted Investor Network brings together investors from across Europe, including venture capital funds, public investment banks, foundations, and corporate venture arms with experience and commitment to co-invest in promising deep tech start-ups in Europe, alongside the European Innovation Council Fund. List of members accessible at: [https://eic.ec.europa.eu/eic-fund/trusted-investor-network\\_en](https://eic.ec.europa.eu/eic-fund/trusted-investor-network_en)

6. The Commission may support the Network through Union funds, programmes, and instruments, in accordance with the objectives established in their respective basic acts.
7. Member States shall take all necessary measures to facilitate the fulfilment of the tasks of the Network.

## **SECTION 5**

### **EUROPEAN HEALTH BIOTECHNOLOGY STEERING GROUP**

#### *Article 20*

##### **European Health Biotechnology Steering Group**

1. The European Health Biotechnology Steering Group (the “Steering Group”) is hereby established.
2. The Steering Group shall provide advice to the Commission and to the Member States to facilitate the implementation of this Regulation and shall carry out the tasks provided for in this Regulation.

#### *Article 21*

##### **Composition and functioning of the Steering Group**

1. The Steering Group shall be composed of representatives from all Member States and the Commission. It shall be chaired by a representative of the Commission (the ‘Chair’).
2. Each Member State shall nominate a member and an alternate member as its representatives to the Steering Group. Where relevant as regards function and expertise, a Member State may nominate different representatives in relation to the different subgroups of the Steering Group, while not exceeding a representative per subgroup. Nominated permanent representatives shall ensure the necessary coordination within their respective Member State. The Commission and the Member States shall have voting rights.
3. The Steering Group shall, upon a proposal by the Commission, adopt its rules of procedure by a simple majority of its members. Where appropriate, the Chair may invite external experts to attend meetings of the Steering Group.
4. The Steering Group shall meet as needed in order to allow the effective performance of its tasks provided for in this Regulation. Where necessary, the Steering Group shall meet on the basis of a reasoned request by the Commission or by a Member State. The Commission shall coordinate the work of the Steering Group by means of a secretariat that provides technical and logistical support.
5. The Steering Group shall carry out the following tasks:
  - (a) facilitate the exchange of information and best practices among Member States, the Commission, and relevant stakeholders in relation to the recognition and the implementation of health biotechnology strategic projects and high impact health biotechnology strategic projects;

- (b) discuss, at least once a year, the progress in the recognition of health biotechnology strategic projects and high impact health biotechnology strategic projects and provide advice including to overcome systemic challenges faced by such projects;
  - (c) provide advice for supporting the federation and networking of biotechnology clusters, as provided for in Article [15](4);
  - (d) discuss and coordinate funding for health biotechnology strategic projects, including high-impact health biotechnology strategic projects, without prejudice to the basic acts of the relevant Union programmes; this may include facilitating the liaison between project promoters and potential private and public investors, such as the European Investment Bank Group, national promotional banks and institutions and export credit agencies, to mobilise additional financing, including from private or venture capital sources;
  - (e) provide its views regarding the recognition of a project as a high impact health biotechnology strategic project, in accordance with Article [10](2);
  - (f) facilitate the coordination and information exchange among the Member States on enforcement of the biosecurity provisions in this Regulation and other emerging biosecurity topics.
6. The Steering Group may establish subgroups for the purpose of this Regulation.
  7. The Steering Group shall take the necessary measures to ensure the safe handling and processing of confidential and commercially sensitive information.
  8. The Steering Group shall use its best endeavours to reach consensus, where possible. Members with diverging positions may request that their positions and the grounds on which they are based be recorded in the Steering Group's position.

## **CHAPTER III**

### **ACCESS TO FUNDING**

#### *Article 22*

##### **EU health biotechnology investment pilot**

1. To support the financing of, and investments in, companies and projects falling within the scope of this Regulation, the Commission, together with the European Investment Bank Group (EIBG) or other implementing partners, shall develop an EU Health Biotechnology investment pilot ('the pilot'). The pilot is established for an initial period of two years, after which it shall be reviewed.
2. The pilot shall support the full lifecycle of companies and projects in the area of health biotechnology, including SMEs, start-ups and scale-ups through direct and indirect financing, other than direct equity operations, without prejudice to the basic acts to be agreed under the next Multiannual Financial Frameworks. It shall complement and be developed in a coordinated manner with other EU financing instruments.
3. The pilot shall be designed as a mechanism that may use and leverage different funding streams and instruments to accelerate and catalyse investments into the health



biotechnology sector. It may be used to provide Union support through Union programmes.

4. The pilot shall pursue the following objectives:

- (a) support early-stage applied research and innovation, technology transfer and spin-offs, with appropriate financing mechanisms, including equity;
- (b) provide support to projects, SMEs, including start-ups and scale-ups, and mid-caps across the Union, which are providing solutions and developments that contribute to the objectives of this Regulation;
- (c) finance late-stage development initiatives, industrial scale-up and production capacity build-up for companies that contribute to the objectives of this Regulation, through venture loans and other suitable debt or quasi-equity instruments;
- (d) anchor growth and manufacturing activities in the Union in order to gain or maintain strategic autonomy and resilience, as well as boost competitiveness of the sector;
- (e) mobilise private investments, including from institutional investors such as pension funds, and strengthen the availability of long-term risk finance for biotechnology companies established in the Union. Financial actors, including private institutional investors, shall be targeted by leveraging expertise in catalysing private capital and use appropriate risk-sharing mechanisms to achieve this objective;
- (f) assist early and growth-stage companies through blended and concessional finance, encompassing equity or debt operations, complementing the direct equity support provided by the European Innovation Council Fund and the Scale-Up Europe Fund under the Horizon Europe, including via the development of new products;
- (g) provide advisory support throughout the investment cycle, encompassing concrete capacity-building measures. These interventions shall be aimed at reinforcing the competencies and institutional preparedness of developers and promoters of projects and financial intermediaries to successfully develop and implement their initiatives.

*Article 23*

**EU biotechnology late-stage capital booster pilot**

1. To enable access to the support measures laid down in Section 2 of Chapter II, the Commission shall recognise projects located in the Union contributing to an EU biotechnology late-stage capital booster as high-impact health biotechnology strategic projects, only where in addition to the conditions laid down in Article [4][(1)], the projects facilitate access to capital markets in accordance with applicable law, and are led by private-sector operators or consortia, with the potential participation of market-infrastructure providers and investors.

2. The projects referred in paragraph 1 of this Article shall pursue at least one of the following objectives or activities:
  - (a) facilitating cross-border investment in accordance with Union law;
  - (b) mobilising long-term capital and attracting private investment, including institutional investors, and through private markets, with credible commitments or structures that support liquidity and follow-on financing;
  - (c) improving cross-border investors' access and issuers' visibility through practical steps and deliverables and demonstrating a credible issuance and investor pipeline with target numbers and timelines;
  - (d) enhancing biotechnology sector-specific investment expertise through exchange of best practices on these topics ;
  - (e) mobilising private capital through biotechnology accelerators and venture builders, including potential use of risk-sharing mechanisms.
3. The projects referred in paragraph 1 shall:
  - (a) ensure non-discriminatory, transparent and criteria-based access for eligible issuers;
  - (b) ensure the possibility of cross-border participation from any Member State;
  - (c) include proportionate risk-management, governance and reporting arrangements and operate without prejudice to applicable Union financial services legislation and the mandates of competent authorities.
4. The provisions of this Regulation regarding the application for, and the recognition of, high-impact health biotechnology strategic projects laid down in Articles 8 and [10], respectively, apply to projects referred to in this Article.

#### *Article 24*

##### **Biotechnology as a strategic technology eligible for Union and national financial support**

1. Union programmes may support biotechnology as a strategic technology for the Union's innovation capacity, sovereignty, resilience and leadership in line with the objectives set out in the Regulations establishing those Union programmes.
2. The Commission may adopt calls, windows or compartments for biotechnology and may establish instruments in the implementation of those programmes, funds and instruments, that support biotechnology companies, projects and initiatives falling within the scope of this Regulation, in line with the objectives and rules set out in the regulations establishing those programmes, funds and instruments.
3. Companies, projects and initiatives falling within the scope of this Regulation may be targeted for financial support from Union-led funding initiatives and from Union funding programmes and instruments, as projects in a strategic technology and, as appropriate, in a strategic deep tech area.
4. Member States may, in line with applicable State aid rules, provide financial support to biotechnology as a strategic technology for the Union's innovation capacity, sovereignty, resilience and leadership.

5. Member States shall pursue the support as referred to in paragraph 4, including for health biotechnology strategic projects and high impact health biotechnology strategic projects, in the implementation at national level of the relevant Union programmes that are shared-management basic acts.
6. Where State aid instruments, designed in compliance with Union competition law and making use of related EU guidance, are used by Member States for the purpose of supporting the health biotechnology sector or parts thereof, Member States shall give particular consideration to high-impact health biotechnology strategic projects for support under such instruments.

#### *Article 25*

##### **Funding for high impact health biotechnology strategic projects**

1. High impact health biotechnology strategic projects may be given particular consideration for financial support under Union funds, programmes and instruments in accordance with the objectives set out in the regulations establishing those funds, programmes and instruments.
2. Where high impact health biotechnology strategic projects benefit from financial support under Union funds, programmes and instruments, in accordance with the respective legal bases and eligibility criteria of those funds, programmes and instruments, such support may be used in combination with financing from the European Investment Bank Group, from national promotional banks and institutions or from other development or public financial institutions, as well as in combination with financing from private-sector finance institutions and from public-sector or private-sector investors, including through public–public or public–private partnerships.
3. When preparing and implementing the annual and multiannual work programmes of the relevant Union funds, programmes and instruments referred to in paragraph 1, the Commission may give particular consideration to actions supporting high-impact health biotechnology strategic projects.
4. The Commission shall ensure the coordination and the complementarity among the relevant Union funds, programmes and instruments that support actions under this Regulation, and shall provide strategic guidance for the implementation of such funds, programmes and instruments with regard in particular to the high impact health biotechnology strategic projects, including in cooperation with the Steering Group, referred to in Article 20, where appropriate.

#### *Article 26*

##### **Coordination of financing for health biotechnology strategic projects**

The Steering Group referred to in Article 20 may coordinate investments into health biotechnology strategic projects, including high impact health biotechnology strategic projects, with the project promoters and other relevant interested parties, in compliance with Union competition law.

## CHAPTER IV

### EXTENSION OF THE SUPPLEMENTARY PROTECTION CERTIFICATE

#### *Article 27*

#### **Extension of the supplementary protection certificate concerning best-in-class biotechnology medicines developed in the Union**

1. Where a marketing authorisation is granted by the Union to a medicinal product for human use developed by means of biotechnological processes referred to in paragraph 1 of Annex I to Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 193 final] or to an advanced therapy medicinal product referred to in paragraph 2 of that Annex, and that is protected either by a supplementary protection certificate in accordance with Regulation (EC) No 469/2009 of the European Parliament and of the Council<sup>69</sup>, or by a patent which qualifies for the granting of such supplementary protection certificate, the holder of a patent or of such certificate shall be entitled to a 12-month extension of the periods referred to in Article 13, paragraphs (1) and (2), of Regulation (EC) No 469/2009, provided that the marketing authorisation applicant demonstrates that all of the following conditions are met:
  - (a) the medicinal product contains a new active substance distinctly different from that of any authorised medicinal product in the Union;
  - (b) the medicinal product has a mechanism of action distinctly different and shows a level of safety and efficacy which is at least equivalent to that of any authorised medicinal product in the Union for the same disease;
  - (c) the clinical trials evaluating the efficacy of the medicinal product and supporting its marketing authorisation were conducted in more than two Member States;
  - (d) at least a manufacturing step, excluding packaging, quality testing and certification is performed in the Union.
2. The European Medicines Agency ('the Agency') shall assess compliance with the conditions referred to in paragraph 1 as part of the marketing authorisation procedure concerned.
3. Where compliance is confirmed, the Agency shall issue a statement to that effect.
4. A copy of the statement referred to in paragraph 3 of this Article shall be included in the application for a certificate lodged under article 7 of Regulation (EC) No 469/2009.

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<sup>69</sup> Regulation (EC) No 469/2009 of the European Parliament and of the Council of 6 May 2009 concerning the supplementary protection certificate for medicinal products, OJ L 152, 16.6.2009, pp. 1.

## CHAPTER V

### ENHANCING COMPETITIVENESS IN BIOSIMILARS

#### *Article 28*

##### **Guidance by the Agency on biosimilars**

The Agency, in consultation with the Commission, shall develop and update non-binding guidance on a tailored regulatory approach for the development of biosimilars, reflecting advances in manufacturing and analytical testing. The guidance shall consider a potential reduction of the clinical data required for the development and approval of biosimilars, without affecting their quality, safety and efficacy.

#### *Article 29*

##### **Biotechnology health strategic projects for biosimilars**

To enable access to the support measures laid down in Section II of Chapter II, Member States shall recognise projects located in the Union as biotechnology health strategic projects in the form of biotechnology health strategic projects for biosimilars only where they make a substantial contribution to at least one the specific objectives referred to in Article [3][(1)] and fulfil either of the following conditions:

- (a) they contribute to the setting up and extension of innovative biomanufacturing capacity, and infrastructures for analytical testing procedures;
- (b) they contribute to the research, development and marketing authorisation of biosimilars, and where appropriate to strengthening the use of platform technologies; this includes analytical methodologies that would reduce the need for clinical data for biosimilars, without affecting their quality, safety and efficacy.

#### *Article 30*

##### **International partnerships**

Where appropriate, promoters of projects related to biosimilars and other companies working in this area, shall explore opportunities to establish or strengthen cooperation with international biotechnology clusters, including with a view to fulfilling the conditions referred to in Article [29] for the recognition of biotechnology health strategic projects for biosimilars.

## CHAPTER VI

### ARTIFICIAL INTELLIGENCE AND DATA AS BIOTECHNOLOGY ENABLERS

#### *Article 31*

##### **Guidance on the deployment and use of systems based on advanced technologies, including AI, in the lifecycle of medicinal products**

1. The Agency shall publish and regularly update, as appropriate, non-binding guidance on the deployment and use of systems based on advanced technologies, including AI, in the lifecycle of medicinal products development, including during pre-clinical research, clinical development and trials, manufacturing and post-authorisation monitoring.

Such guidance shall be developed, updated and published in agreement with the Commission, including with the AI Office.

Such guidance shall ensure full coherence with the requirements laid down in Regulation (EU) 2024/1689 and with any guidance issued under that Regulation regarding general-purpose AI models or AI systems.

2. In developing and updating the guidance referred to in paragraph 1, the Agency shall consult the relevant authorities, at national and European level, and stakeholders as appropriate.

To the extent that the guidance concerns the deployment and use of systems based on advanced technologies, including AI, across the clinical trials lifecycle, the Agency shall further cooperate with the Clinical Trials Coordination [and Advisory] Group ('CTAG') referred to in Article [85] of Regulation (EU) No 536/2014, with the Medical Device Coordination Group ('MDCG') referred to in Article 103 of Regulation (EU) 2017/745 and with the Artificial Intelligence Board referred to in Article 65 of Regulation (EU) 2024/1689, as appropriate and shall publish that guidance in agreement with the consulted entities referred to in this subparagraph.

3. The Agency shall develop and publish in agreement with the Commission, including the AI Office where appropriate, and in cooperation with the national competent authorities, non-binding guidance on the deployment and use of advanced technologies, including AI, in the procedures for the authorisation of medicinal products.

#### *Article 32*

##### **Biotechnology testing environments for advanced biotechnology innovations**

1. To enable access to the support measures laid down in Section 2 of Chapter II, the Commission shall recognise projects located in the Union as high impact health biotechnology strategic projects in the form of trusted testing environments for advanced health biotechnology innovations, where such innovations are enabled, enhanced or significantly supported by AI or advanced computational methods, only where they comply with the criteria laid down in Article 4(1) and substantially strengthens the Union's capacity for responsible experimentation, development, testing and validation of such innovations and they fulfil all of the following conditions:

- (a) operate under trusted conditions ensuring compliance and alignment with relevant Union and national legislation and complements where appropriate testing and experimentation facilities and AI regulatory sandboxes established in accordance with Regulation (EU) 2024/1689, while ensuring consistency and synergies in their implementation;
  - (b) seek, where appropriate, to leverage AI systems or other advanced computational tools, alongside advanced technologies and analytics, to optimise workflows and increase efficiency;
  - (c) aim to enable innovation in biotechnology areas where the use of AI-enabled or computationally enhanced methods can be particularly impactful, such as enhancing efficacy and safety of immunology treatments and of ATMP gene therapies, or developing NAMs that combine advanced experimental and computational approaches;
  - (d) make available, under fair and transparent conditions, evidence, results and lessons learned generated within such testing environments, to inform Union guidance, standardisation and best-practice frameworks, and, where appropriate, the design or implementation of regulatory sandboxes in accordance with Union or national law.
2. The Commission, in cooperation with the Member States, shall promote and facilitate, including through existing networks such as the European Digital Innovation Hubs and testing and experimentation facilities and relevant expert groups established under Union legislations, networking, knowledge-sharing and capacity-building among projects and initiatives providing such testing environments.
  3. The provisions of this Regulation regarding the application for, and the recognition of, high-impact health biotechnology strategic projects laid down in Articles 8 and 10, respectively, apply to projects referred to in this Article.

### *Article 33*

#### **Biotechnology data quality accelerator**

1. To enable access to the support measures laid down in Section 2 of Chapter II, the Commission shall recognise projects located in the Union as high impact health biotechnology strategic projects in the form of biotechnology data quality accelerators, only where they comply with the criteria laid down in Article 4(1) and fulfil the conditions laid down in paragraph 2 of this Article and they make a significant contribution to the curation, maintenance and responsible use of high-quality, appropriately annotated and provenance-verified datasets that are essential for the training, validation and testing of AI systems and models used in health biotechnology applications.
2. The projects referred to in paragraph 1 shall:
  - (a) aim to foster the development and deployment of trustworthy and competitive AI systems in health biotechnologies, including large-scale and general-purpose models relevant for biological, biomedical or biomanufacturing use cases;
  - (b) assist entities that lawfully hold relevant data and, as regards health data, holders as defined in Article 2(2), point (t), of Regulation (EU) 2025/327

(‘health data holders’) to improve data quality, standardize and make other improvements to such data as referred to in paragraph 1 of this Article;

- (c) contribute to the development of Union standards and quality frameworks for data representativeness, provenance, interoperability and annotation in biotechnology;
  - (c) give due consideration to the interoperability with platforms deployed pursuant to the European Health Data Space (EHDS) and other relevant data spaces;
  - (d) be aligned with and complement Union initiatives such as the Data Union Strategy, including data labs and AI factories, while addressing the specific requirements of biotechnology datasets, including biological metadata, scientific taxonomies, experimental traceability and regulatory-grade data quality.
3. The provisions of this Regulation regarding the application for, and the recognition of, high-impact health biotechnology strategic projects laid down in Articles 8 and 10, respectively, apply to projects referred to in this Article.
  4. The processing of personal data by the entities that lawfully hold the relevant datasets enhanced as provided for in paragraph 2, point (b) of this Article, and by the biotechnology data quality accelerator projects takes place in the public interest.
  5. Entities that lawfully hold relevant datasets enhanced as provided for in paragraph 2, point (b) of this Article, shall make available such datasets under fair, reasonable and non-discriminatory conditions, ensuring equitable access for users including research organisations, SMEs and public institutions, under the conditions referred to in Article 16 of this Regulation.

Electronic health data referred to in Article 51 of Regulation (EU) 2025/327 shall be made available in accordance with that Regulation.

6. Entities that lawfully hold relevant datasets enhanced as provided for in paragraph 2, point (b) of the Article, shall support, where appropriate, the integration of such datasets into Union infrastructures, including the European Research Area data spaces, data labs, AI factories and the infrastructures operated by high impact health biotechnology strategic projects.
7. The decision of the Commission regarding the recognition of a high impact health biotechnology strategic project in the form of a biotechnology data quality accelerators, referred to in Article 10(2), shall specify the modalities of processing of personal data necessary to achieve the purpose of the project. In particular the Commission shall specify the categories of data to be processed, the roles of the entities participating in the project, the categories of the entities which may use the curated data and the safeguards.
8. With regard to biotechnology data quality accelerators recognised in the context of a call for proposals as provided for in Article 10(3), the Commission shall, by means of implementing acts, adopt, before the launch of the related call, a decision establishing the modalities of processing of personal data necessary to achieve the purpose of the project. That decision shall specify the categories of data to be processed, the roles of the entities participating in the project, the categories of the entities which may use the curated data and the safeguards. The selected beneficiaries shall comply with the conditions laid down in that decision.



## CHAPTER VII

### REGULATORY TOOLS FOR NOVEL HEALTH BIOTECHNOLOGY PRODUCTS

#### SECTION 1

##### SUPPORT IN DETERMINING THE REGULATORY STATUS OF NOVEL HEALTH BIOTECHNOLOGY PRODUCTS

###### *Article 34*

###### **Assistance on regulatory procedural pathways**

1. The EU Health Biotechnology Support Network referred to in Article 19 shall, upon request, assist developers, in particular SMEs, start-ups and scale-ups, with identifying and using the appropriate regulatory procedural pathway and regulatory support mechanisms with regard to innovative health biotechnology products or biotechnology services for human use that exhibit characteristics that raise questions on the application or applicability of the Regulation (EU) 2017/745, Regulation (EU) 2017/746, Regulation (EU) 2024/1938, Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 193 final] and Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 192 final] Regulation (EC) 1394/2007 and Directive 2010/45/EU.
2. The support provided pursuant to this Article shall not duplicate procedures pertaining to recommendations or opinions on regulatory status set out in with Regulation (EU) 2017/745, Regulation (EU) 2017/746, Regulation (EU) 2024/1938, Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 193 final] and Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 192 final] .
3. The support referred to in paragraph 1 shall be provided in particular on the following:
  - (a) procedures for seeking guidance on the regulatory status and on the nature and scope of such guidance;
  - (b) applicable rules for the authorisation of health biotechnology products that combine different products, technologies, processes, or components regulated under different regulatory frameworks;
  - (c) regulatory sandboxes established in Article 40 and under [revised Regulation (EU) 2017/745], [revised Regulation (EU) 2017/746], Regulation (EU) 2024/1938 and in Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 193 final].
4. In providing the support referred to in this Article, the EU Health Biotechnology Support Network referred to in Article 19 may request the assistance of the Foresight Panel for Emerging Health Innovation.

## *Article 35*

### **Union regulatory status repository**

1. The Commission shall compile, maintain, develop and make publicly available a regulatory status repository ('regulatory status repository').
2. The regulatory status repository shall contain:
  - (a) decisions, opinions, scientific recommendations regarding the regulatory status of a health innovations, issued pursuant to the mechanisms laid down in Article 4 of Regulation (EU) 2017/745, Articles 61 and 62 of Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 193 final], Article 13 of Regulation (EU) 2024/1938, and, where relevant, pursuant to similar mechanisms laid down in other legislative acts;
  - (b) the summaries of the scientific recommendations delivered by the Agency, prior to the application of Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 193 final], in accordance with Article 17 of Regulation (EC) No 1394/2007 on whether a product falls within the definition of an advanced therapy medicinal product or not;
  - (c) the discussion papers delivered by the Foresight Panel for Emerging Health Innovation.
3. Member States shall make publicly available, through the relevant national platforms or registries, decisions, opinions, scientific recommendations, and other outputs issued at national level concerning the regulatory status of health biotechnology products. Member States shall inform the Commission where such information is made available.

## *Article 36*

### **Time limits in the regulatory status process**

With a view to ensuring the timely assessment of the regulatory status of health biotechnology products, the advisory bodies and other relevant entities mandated under [revised Regulation (EU) 2017/745, [revised Regulation (EU) 2017/746], Regulation (EU) 2024/1938 Regulation], Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 193 final] and Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 192 final] to provide a recommendation or opinion, including preparatory consultations, on the regulatory status of a product, shall act swiftly, without prejudice to the time limits for the forming of such recommendations or opinions established in the above legal acts.

## **SECTION 2**

### **FORESIGHT ON EMERGING HEALTH INNOVATION**

## *Article 37*

### **Foresight Panel for Emerging Health Innovation**

1. A Foresight Panel for Emerging Health Innovation is hereby established ('the Foresight Panel').

2. The Foresight Panel shall provide regulatory, scientific and technical expertise on emerging science and technology in the field of health underpinning the development of health biotechnology products to the Commission, the Agency and to relevant Union-level advisory bodies and competent authorities and other entities in the Member States in the area of health. The Foresight Panel shall operate in accordance with the Commission's framework for expert groups.
3. The Foresight Panel shall carry out the following tasks:
  - (a) conduct horizon scanning by analysing, identifying and discussing emerging science and technology with the potential to drive the development of health biotechnology products, including upon request from the Commission, the Agency, Union-level advisory bodies or competent authorities in the Member States in the area of health, and develop and publish related considerations in the form of discussion papers
  - (b) engage with the Agency and relevant Union-level advisory bodies and competent authorities and other entities in the Member States in the area of health, to facilitate cross-framework dialogue and consistency;
  - (c) engage with existing relevant networks to contribute to enhancing regulatory expertise regarding health biotechnology products.
  - (d) accommodate exchanges among the authorities responsible for the setting up and the operation of regulatory sandboxes in accordance with article 39(5).
4. For the purpose of performing the tasks referred to in paragraph 2, point (a), of this Article, the Foresight Panel may engage in preliminary discussions with the Agency or relevant Union level advisory bodies in the area of health, networks and informal task forces, national competent authorities, developers, and other relevant actors and shall implement a collaborative approach with a view to ensuring an effective uptake of its discussion papers.
5. The Foresight Panel shall consist of scientific and regulatory experts from the SoHO Coordination Board ('the SCB'), the Medical Devices Coordination Group ('the MDCG'), the Coordination group on Health Technology Assessment ('the HTACG'), the Agency and the competent authorities of the Member States, appointed by the Commission in view of their regulatory, scientific or technical expertise in the relevant identified fields and frameworks. The panel may invite external experts selected to assist with specific tasks when such relevant external expertise is needed.
6. The Commission shall adopt an implementing act laying down detailed rules on the selection, composition, number of members, and functioning of the Foresight panel. The implementing act shall be adopted in accordance with the examination procedure referred to in Article 65(2).

#### *Article 38*

#### **Support to the Foresight Panel for Emerging Health Innovation**

1. The Commission shall chair and provide the secretariat for the Foresight Panel and shall provide the support necessary to ensure it can efficiently perform its tasks.
2. The Commission shall in particular have the following tasks:
  - (a) to provide administrative and technical support to the Foresight Panel;

- (b) to facilitate and manage remote and physical meetings of the Foresight Panel;
  - (c) to ensure that the work of the Foresight Panel is carried out in an independent manner;
  - (d) to facilitate the dissemination of the discussion papers produced by the Foresight Panel with relevant competent authorities and advisory bodies;
  - (e) to ensure that remuneration and expenses are provided to the experts composing the Foresight Panel;
  - (f) to monitor compliance with the rules of procedure of the Foresight Panel;
  - (g) to issue annual reports on the work of the Foresight Panel, including on the number of discussion papers delivered by the Panel.
3. The Foresight panel shall establish its own rules of procedure.

### **SECTION 3**

#### **REGULATORY SANDBOXES AS TOOLS FOR NOVEL HEALTH BIOTECHNOLOGY PRODUCTS**

##### *Article 39*

#### **Regulatory sandboxes provided for in the applicable frameworks and cross-framework communication**

1. Where a regulatory sandbox is established at Member State level for a health biotechnology product in accordance with [revised Regulation (EU) 2017/745], [revised Regulation (EU) 2017/746], Regulation (EU) 2024/1938, the authorities responsible for the operation of that sandbox shall, where appropriate and in accordance with the relevant legislative act referred to in this paragraph, conduct consultations with the competent authorities and the Commission, responsible for the operation of sandboxes under the other relevant Union legislative acts referred to in this paragraph and in paragraph 2 of this Article, and with the Foresight Panel referred to in Article 37, regarding the design and the implementation of the regulatory sandbox.
2. Where a regulatory sandbox is established at Union level for a health biotechnology product in accordance with Regulation (EU) .../... [reference to be added after adoption cf. COM(2023) 193 final] or with Article [40] of this Regulation, the Commission or the Agency shall consult, where appropriate and in accordance with the legislative acts referred to in this paragraph, the Agency, the SCB, the MDCG, and the Foresight Panel referred to in Article 37, regarding the design and the implementation of the regulatory sandbox.
3. The authorities responsible, pursuant to the applicable legislative act, for setting up a regulatory sandbox referred to in paragraphs 1 and 2 of this Article, shall ensure that due consideration is given to the regulatory challenges posed by combination products, and to consultations with the relevant authorities with expertise regarding the associated parts of such products.
4. For the purposes of the consultations referred to in paragraphs 1 and 2 of this Article, all authorities shall endeavour to provide their contribution swiftly, without prejudice

to time limits set out in the provisions of the Union legislative acts in the area of health governing the regulatory sandbox referred to in those paragraphs.

5. The Commission, the Agency, the MDCG and the SCB shall, through the Foresight Panel, facilitate the exchange of views and experiences among the authorities responsible for the setting up and the operation of regulatory sandboxes for health biotechnology products. Those exchanges shall include the following:
  - (a) promoting knowledge sharing, by facilitating the exchange of information, experiences and best practices, including on regulatory approaches, technological challenges, and emerging scientific insights and the appropriate regulatory responses (cross-framework knowledge sharing);
  - (b) identifying potential implications for the evolution or adaptation of the relevant Union legislative acts in the area of health (cross-framework regulatory learning).

#### *Article 40*

#### **Regulatory sandboxes for novel health biotechnology products not falling under other regulatory sandboxes in Union legislation in the area of health**

1. Upon a substantiated request from developers, the Commission may set up a regulatory sandbox that provides a controlled regulatory environment for the testing and development of a health biotechnology product, that:
  - (a) cannot be appropriately accommodated in any of the regulatory sandboxes available under the Union legislation in the area of health referred to in Article 39, paragraphs (1) and (2); and
  - (b) whose development is hindered by the challenge to identify a suitable regulatory procedure in the area of health.

A regulatory sandbox shall not be set up for health biotechnology products which are likely to fall under the scope of the Union legislation in the area of health referred to in Article 39, paragraphs (1) and (2).

The sandbox shall be set up in accordance with this Article.

2. Such regulatory sandbox shall set out a time limited framework to allow for the generation of evidence and data, in a real-world environment and under supervision of one or more competent authorities.
3. Developers wishing to participate in a regulatory sandbox referred to in paragraph 1 shall submit a substantiated application to the Commission. That application shall include the following:
  - (a) a justification for the establishment of a regulatory sandbox, including a description of the product in question, its level of development, and a justification with regard to the impossibility of appropriately accommodating the proposed sandbox in any of the regulatory sandboxes available under the Union legislation in the area of health referred to in Article 39, paragraphs (1) and (2).
  - (b) the identification of existing regulatory challenges;
  - (c) the assessment of potential benefits and potential risks of the health biotechnology product to be tested or developed.

4. Where the Commission concludes, on the basis of its assessment, that the application shall be accepted, it shall take a decision regarding the establishment of a regulatory sandbox, by means of an implementing act, in accordance with the examination procedure referred to in Article 65(2). That implementing act shall set out the duration of the regulatory sandbox and the principles for operating the regulatory sandbox.
5. The testing and development activities within the regulatory sandbox shall take place in accordance with a sandbox plan developed and updated as appropriate by the Commission based on the principles referred in paragraph 4 of this Article. The regulatory sandbox plan shall:
  - (a) set out the objectives, the specific innovations to be tested in the regulatory sandbox, the relevant activities to be carried out within the regulatory sandbox, the geographical and temporal scope of those activities, as well as the relevant conditions and requirements thereof;
  - (b) be informed by data provided by, and consultations with, the developer of the health biotechnology product concerned;
  - (c) identify the participants in the regulatory sandbox and their respective roles;
  - (d) include appropriate measures to mitigate potential risks, in particular to health and to the environment;
  - (e) include conditions regarding the suspension or the termination of the regulatory sandbox;
  - (f) set out the supervision measures and the related responsibilities.
6. When assessing the applications received in accordance with paragraph 3 of this Article and when developing and implementing the sandbox plan, the Commission may consult the Agency, the SCB, the MDCG, or the Foresight Panel, as appropriate.
7. Participants in the regulatory sandbox, in particular the developer, shall remain liable under applicable national legislation for any harm inflicted on third parties as a result of the testing taking place in the sandbox. They shall inform the Commission without undue delay of any information which might entail the amendment of the regulatory sandbox or concerns the quality, safety or efficacy of products developed as part of a regulatory sandbox.
8. The regulatory sandboxes shall not affect the supervisory and corrective powers of the competent authorities. In case of identification of risks to public health or safety concerns associated with the use of products covered by a sandbox, competent authorities shall take immediate and adequate temporary measures in order to suspend or restrict their use and inform the Commission. Where such mitigation is not possible or proves to be ineffective, the development and testing process shall be suspended without delay until an effective mitigation takes place.
9. When concluding the regulatory sandbox, the Commission shall, at the request of a developer and after having consulted the bodies referred to in paragraph [6] of this Article, deliver a recommendation on an existing appropriate regulatory procedural pathway for authorising the placing on the market and post-marketing surveillance and vigilance of the products concerned.
10. When a product is submitted for authorisation following a recommendation delivered in accordance with paragraph 9 of this Article, due consideration by the authorities

responsible for the assessment of the application for authorisation shall be given to data and evidence collected in the regulatory sandbox.

11. The Commission, after consulting competent authorities of the Member States, and after seeking the opinion of the bodies consulted in accordance with paragraph [6] of this Article, may publish a report on the lessons learned from the regulatory sandbox and, where appropriate, conclusions regarding possible measures at Union level for the regulation of the health biotechnology product or similar innovation categories concerned by the regulatory sandbox.
12. The Commission may, by means of implementing acts, lay down common principles, criteria and practical arrangements for the assessment of applications received from developers and for the establishment and supervision of the regulatory sandboxes and for sandbox plans referred to in this article. These implementing acts shall be adopted in accordance with the examination procedure referred to in Article 65(2).

## **CHAPTER VIII**

### **BIODEFENCE AND PREVENTING BIOTECHNOLOGY MISUSE**

#### **SECTION 1**

##### **UNION BIODEFENCE AND BIOSECURITY**

###### *Article 41*

###### **EU biothreat radar high impact health biotechnology strategic projects**

1. To enable access to the support measures laid down in Section 2 of Chapter II, the Commission shall recognise projects located in the Union as high-impact health biotechnology strategic projects contributing to the EU Biothreat Radar for the detection, characterisation, identification, analysis and assessment of biological threats, including novel, unknown and engineered pathogens to ensure pathogen-agnostic cross-border surveillance and early threat detection, as well as the generation and sharing of data required for this, only where they comply with the conditions laid down in Article 4[(1)] and make a substantial contribution to at least one of the following:
  - (a) detection, characterisation, identification, analysis and assessment of biological threats, including novel, unknown and engineered pathogens;
  - (b) interoperable and pathogen-agnostic cross-border surveillance, as well as the generation and sharing of data required for such surveillance;
  - (c) building sampling and detection infrastructure for early detection of novel pathogens and situational awareness across environmental and clinical sources, including basic logistics for collection and transport, and support for the deployment of advanced detection methods, such as metagenomic sequencing;
  - (d) ensuring the appropriate use of internationally recognised pathogen data standards;

- (e) ensuring that sequencing data generated through early detection activities is shared in a timely manner through the European Nucleotide Archive (ENA)<sup>70</sup>, to enable access and use by actors across the Union for the development, validation and deployment of advanced pathogen detection and characterisation methods, by engaging in partnerships among industry, academia, public authorities and defence actors to ensure data sharing and integration of warning systems.
- 2. The provisions of this Regulation regarding the application for, and the recognition of, high-impact health biotechnology strategic projects laid down in Articles 8 and 10, respectively, apply to projects referred to in this Article.

## *Article 42*

### **Biodefence capability high impact strategic project**

- 1. To enable access to the support measures laid down in Section 2 of Chapter II, the Commission shall recognise projects located in the Union as high impact health biotechnology strategic projects for biodefence capability only where they comply with the conditions laid down in Article 4(1) and make a substantial contribution to at least one of the following:
  - (a) preventing or mitigating misuse of biotechnologies;
  - (b) rapid surge capacity for safe sampling, testing sequencing and swift manufacturing of rapid diagnostics;
  - (c) analysis and assessment capacity of testing and sequencing data that can be mobilised across Member States;
  - (d) robust pathogen-agnostic pharmaceutical and non-pharmaceutical defences against biological threats;
  - (e) development, validation and benchmarking of methods for the detection and attribution of genetic engineering, including the creation of open genetic engineering detection tools;
  - (f) civilian and defence research, testing or demonstration infrastructures for biotechnology activities relevant to defence, security and resilience, provided that governance ensures clear separation of mandates and access regimes, with appropriate confidentiality and security safeguards, in line with relevant requirements arising from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction ('BTWC'), Union and national law.
- 2. The provisions of this Regulation regarding the application for, and the recognition of, high-impact health biotechnology strategic projects laid down in Articles 8 and 10, respectively, apply to projects referred to in this Article.

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<sup>70</sup> ENA, <https://www.ebi.ac.uk/ena>.



## SECTION 2

### PREVENTION OF BIOTECHNOLOGY MISUSE

#### *Article 43*

##### **Biotechnology products of concern**

1. Biotechnology products of concern in Annex I shall only be made available to, introduced, or used by any natural or legal person in the Union, as well as made available to any natural or legal person outside the Union, that has a legitimate need for those products, in accordance with this Section.
2. The Commission is empowered to adopt delegated acts in accordance with Article 64 (2) to amend Annex I by adding, removing or modifying categories of biotechnology products of concern, setting or adjusting thresholds or exclusions, and specifying technical parameters, in order to reflect developments in scientific evidence, biosecurity and biosafety risks or patterns of misuse, also considering the latest developments under relevant international fora and instruments.

#### *Article 44*

##### **Verification of legitimate need**

1. An economic operator that makes available on the Union market, including through online marketplaces, biotechnology products of concern, shall, for each transaction, verify proof of identity of the prospective customer, record the transaction, including the quantities ordered, and assess whether the customer has a legitimate need.
2. For the purposes of conducting the verification referred to in paragraph 1, the economic operator shall request the following information from the prospective customer prior to facilitating the exchange:
  - (a) proof of identity of the person;
  - (b) institutional or corporate affiliation;
  - (c) documentation establishing the legitimacy of the institution or corporation, such as address, any official registration number, evidence of legal personality and of a purpose, and, where applicable, evidence of authorisations, certifications or biosafety approvals appropriate to the intended use;
  - (d) information on the intended use of the product.

The first subparagraph, with the exception of transaction recording, shall not apply where the economic operator has conducted an equivalent verification for the same customer within the preceding five years and the new transaction does not significantly deviate in nature or scale from previous transactions.
3. When assessing legitimate need, the economic operator shall take into account all relevant circumstances, in particular, as applicable:
  - (a) the demonstrable need for the biotechnology product of concern and the legitimacy of its intended use;
  - (b) the background of the applicant;

- (c) the applicant's compliance history with the economic operator and, where available, with other operators, including past incidents or refused orders;
  - (d) credentials that demonstrate evidence of the legitimate need, including relevant academic publications, history or track record in a related domain;
  - (e) documentation establishing the existence of suitable facilities, competencies and biosafety arrangements appropriate to the intended use.
4. The economic operator shall refuse to make the biotechnology products of concern available in the case of a suspicious transaction.
  5. The economic operator shall report to the national contact point referred to in Article 46(3) any suspicious transaction, or attempted suspicious transaction, in accordance with Article 46(5).
  6. Economic operators shall keep and retain records of the transactions referred to in this Article for three years and shall make them available without undue delay to the competent authorities upon request.
  7. Paragraphs 1 to 7 shall also apply by analogy to persons that are not economic operators, except in the case where the biotechnology product of concern is supplied to a person that is employed by the same legal entity.

#### *Article 45*

### **Benchtop equipment**

Benchtop nucleic acid synthesis devices made available in the Union shall contain a mechanism to screen for sequences of concern as defined in Annex I, provided that databases of sequences of concern are not stored on the equipment itself, in an unencrypted manner or a manner that could allow users to extract the database.

#### *Article 46*

### **Prevention and reporting of biotechnology misuse**

1. For the purpose of preventing and detecting biotechnology misuse, economic operators and online marketplaces shall report suspicious transactions, having regard to all circumstances and in particular where the prospective customer:
  - (a) is not clear about their identity or affiliations, or provides information that cannot be confirmed or verified, including inconsistent addresses or unverifiable company details;
  - (b) would not be expected, in the normal course of business, to place such an order, including where there is no link to life science research or biotechnology, or no plausible requirement for biotechnology products of concern;
  - (c) proposes an intended use that does not match their reported job role or institutional affiliation;
  - (d) requests unusual labelling or shipping procedures, including misidentification of goods on packaging or changes to the recipient's name after the order has been placed but before shipment;

- (e) proposes unusual methods of payment, including cash for high-value items, personal credit cards for institutional purchases, or payment through non-bank third parties, or offers unusually favourable terms including above market prices;
  - (f) requests unusual confidentiality conditions regarding the order, including with respect to their identity, the final destination or the destruction of transaction records;
  - (g) requests delivery to an address without a legitimate biotechnology business or research justification, including a residential address.
2. Economic operators and online marketplaces shall have appropriate, reasonable and proportionate procedures in place to detect suspicious transactions, adapted to the specific environment in which biotechnology products of concern are made available.
  3. Each Member State shall set up at least one national contact point with clearly identified contact details, web form or other effective tool for the reporting of suspicious transactions of biotechnology products of concern. The contact point shall be part of or have direct links to law enforcement and national inspection authorities.
  4. Economic operators and online marketplaces shall refuse a suspicious transaction. They shall report any suspicious transaction or attempted suspicious transaction within 24 hours of determining that it is suspicious. Reports shall include, where possible, the identity of the prospective customer and the facts that led to the suspicion and shall be addressed to the national contact point of the Member State where the transaction was concluded or attempted.
  5. Where a biotechnology product of concern falls also under categories regulated under other EU legislation, to avoid duplication of reporting, where the transaction for that biotechnology product of concern has already been reported as a suspicious transaction under one legal framework, it shall not be reported again. Where in doubt, its intended use should be prioritised for reporting obligations, pursuant to Regulation (EU) 2021/821<sup>[71]</sup> and Regulation (EU) 2019/1148<sup>[72]</sup>.

## *Article 47*

### **Training and awareness-raising**

1. Member States shall ensure adequate resources for, and the provision of, training for law enforcement authorities, first responders and customs authorities to recognise biotechnology products of concern and to react in a timely and appropriate manner to suspicious activity.

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<sup>71</sup> Regulation (EU) 2021/821 of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items, OJ L 206, 11.6.2021, pp. 1–461. ELI: <http://data.europa.eu/eli/reg/2021/821/oj>.

<sup>72</sup> Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013 (Text with EEA relevance), OJ L 186, 11.7.2019, pp. 1–20. ELI: <http://data.europa.eu/eli/reg/2019/1148/oj>.

2. Member States shall organise awareness-raising actions, including on the issue of insider threats, adapted to the specificities of each sector that uses biotechnology products of concern.
3. To facilitate cooperation and effective implementation, and avoid duplicate reporting, Member States shall organise regular exchanges between law enforcement authorities, national supervisory authorities, economic operators, online marketplaces and representatives of sectors that use biotechnology products of concern.
4. Economic operators shall inform their personnel about the conditions under which biotechnology products of concern may be made available and shall raise personnel's awareness accordingly.

#### *Article 48*

##### **National inspection authorities**

1. Each Member State shall designate a competent authority responsible for the inspection and control of compliance with the obligations laid down in this Section.
2. Member States shall ensure that the national inspection authority has the resources and investigative powers necessary to perform their tasks, including the power to request information and records, to carry out on-site inspections and, where appropriate, to conduct test purchases, including online.
3. Member States shall ensure that the national inspection authorities regularly run simulation exercises to test the procedures in place and to ensure appropriate response to incidents.
4. Member States shall ensure the participation of national inspection authorities, as appropriate, in the relevant activities of the Steering Group, in particular for the exchange of information on implementation practices, inspection findings and emerging risks. Member States shall ensure risk-based audits of economic operators, verifying, in particular, the existence and effectiveness of screening mechanisms for legitimate need, record-keeping as provided for in Article [44]((6)) and detection of suspicious transactions and incidents, and response procedures.

#### *Article 49*

##### **Commission enforcement support and monitoring**

The Commission may support and monitor national competent authorities in the enforcement of this section, by taking actions such as requesting information and records and running training exercises.

#### *Article 50*

##### **Audits**

Member States shall ensure risk-based audits of economic operators, verifying, in particular, the existence and effectiveness of screening mechanisms for legitimate need, record-keeping as provided for in Article 44((6)) and detection of suspicious transactions and incidents, and response procedures.

## Article 51

### Penalties

1. Member States shall lay down the rules on penalties applicable to infringements of this Section and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive.
2. Member States may impose fines on economic operators not exceeding 5% of their annual total worldwide turnover in the preceding financial year when Member States finds that the provider intentionally or negligently infringed the relevant provisions of this Section.
3. In fixing the amount of the fine or periodic penalty payment, regard shall be had to the nature, gravity and duration of the infringement, taking due account of the principles of proportionality and appropriateness.

## Article 52

### Advisory group on biosecurity

1. An Advisory Group on Biosecurity ('the Advisory Group') is hereby established.
2. The Advisory Group shall provide independent scientific advice to the Commission on biosecurity risks arising from the rapid development of biotechnology, including from AI models as described in Regulation (EU) 2024/1689 in biological applications ('AI models in biological applications'). It shall be selected and operate in accordance with the Commission's framework for expert groups<sup>73</sup>.
3. The tasks of the Advisory Group shall include:
  - (a) monitoring advances in biotechnology to advise the Commission on emerging biosecurity challenges, including on any potentially necessary updates to the list of biotechnology products of concern laid down in Annex I and on risk-based audits of economic operators;
  - (b) monitoring the capabilities and risk profile of AI models in biological applications throughout their life cycle;
  - (c) contributing to the preparation of Union guidance and best practices for responsible innovation on AI models in biological applications;
  - (d) facilitate dialogue and coordination among scientific, industry, and security stakeholders and support, where appropriate, international cooperation on biosecurity.
4. Where the Advisory Group has reasonable grounds to suspect that an AI model in a biological application not covered by Regulation (EU) 2024/1689, poses biological systemic risk, it shall issue a qualified alert to the Commission and to the Member States. A qualified alert may be issued following a decision of the Advisory Group or at the initiative of at least 50% of its members. The alert shall be concise and duly

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<sup>73</sup> Commission Decision establishing horizontal rules on the creation and operation of Commission expert groups, C(2016)3301.

reasoned and shall indicate at least the point of contact of the developer of the model concerned and the factual basis for the alert.

5. Where the Advisory Group has reasonable grounds to suspect that an AI model covered by Regulation (EU) 2024/1689 poses biological systemic risk, it shall inform the scientific panel of independent experts referred to in Article 68 Regulation (EU) 2024/1689. That panel may issue a qualified alert to the AI Office in accordance with Regulation (EU) 2019/1689.
6. The Advisory Group shall be composed of up to 25 globally leading independent experts appointed by the Commission based on their recognized expertise in the areas of biotechnology, biosecurity, biodefence and AI.
7. The members of the Advisory Group shall perform their tasks with impartiality and objectivity. The Advisory Group shall liaise, where appropriate, with other Union and international expert structures addressing biotechnology, AI, or biosecurity to ensure coherence and efficiency, including the scientific panel referred to in Article 68 of Regulation (EU) 2024/1689.
8. The Advisory Group may adopt opinions, recommendations, or principles on matters within its mandate.

#### *Article 53*

##### **Biological systemic risk**

1. The Commission shall monitor biological systemic risk from AI models in biological applications and propose mitigating actions, based on advice provided by the Advisory Group and in line with the Union harmonisation legislation on AI, including boosting biodefence capabilities or regulation, including on assessment and mitigation of systemic risk from those AI models, as appropriate.
2. Where a qualified alert is issued by the Advisory Group as referred to in Article 52(3), point (d), the Commission and the Member States shall take appropriate measures to ensure a proper control of risks.

#### *Article 54*

##### **Monitoring and guidance**

The Commission, based on advice by the Advisory Group on Biosecurity, and where appropriate, in cooperation with the Steering Group, may issue and regularly update guidance, to assist actors in the supply chain and the competent authorities. The guidance may provide:

- (a) clarifications regarding the biotechnology products of concern listed in the Annex I;
- (b) clarification on the criteria for determining the sequences of concern referred to in Annex I;
- (c) information and methodologies for the assessment of legitimate need for the purposes of this Section;
- (d) information on how to exchange relevant information between competent authorities, national contact points and among Member States;
- (e) information on how to recognise, refuse, and report suspicious transactions;

- (f) obligations for natural or legal persons that are not economic operators that make available biotechnology products of concern;
- (g) requirements regarding benchtop nucleic acid synthesis equipment referred to in Article 45;
- (h) information on risk-based audits of economic operators referred to in Article 50;
- (i) any other information deemed useful for effective implementation, including on the investigative powers of national inspection authorities, test purchases, information requests from, and resources of, such authorities, or requested by relevant economic operators.

#### *Article 55*

#### **Coordination on biosecurity and biosafety**

The Steering Group referred to in Article 20 shall facilitate the coordination of and information exchange on the enforcement of the provisions in this section among Member States.

### **CHAPTER IX**

#### **AMENDMENTS TO REGULATIONS (EC) No 178/2002, (EC) No 1394/2007, (EU) No 536/2014, (EU) 2019/6, (EU) 2024/795 and (EU) 2024/1938**

#### *Article 56*

#### **Amendments to Regulation (EC) No 178/2002**

Regulation (EC) No 178/2002 is amended as follows:

- (1) in Article 3, the following points 19, 20 and 21 are added:
  - ‘19. ‘regulatory sandbox’ means a controlled environment where participants can test innovative products or substances and related processes as well as data and other regulatory requirements at a pre-market stage under a set of defined rules and monitoring and for a limited period of time;
  - 20. ‘regulatory sandbox plan’ means a plan setting out the scope, the requirements and the conditions governing the operation of a specific regulatory sandbox;
  - 21. ‘participants’ means any natural or legal person participating in a regulatory sandbox to whom specific tasks are assigned in the regulatory sandbox plan, such as business operators, Union and national agencies, final consumers, academia and research institutions.’;
- (2) in Article 22(5), point (a) is replaced by the following:
  - ‘(a) scientific advice and scientific and technical support on human nutrition;’
- (3) Article 28 is amended as follows:
  - (a) paragraph 3 is replaced by the following:

- ‘3. The Scientific Committee shall be composed of the first Vice-Chairs of the Scientific Panels and six independent scientific experts who do not belong to any of the Scientific Panels.’
- (b) paragraph 6 is replaced by the following:
  - ‘6. The Scientific Committee and the Scientific Panels shall be chaired by the staff of the Authority without the right to vote. The Scientific Committee and the Scientific Panels shall each choose two Vice-Chairs from among their members.’
- (c) in paragraph 9, the following point (h) is added:
  - ‘(h) the role of the Authority when chairing the Scientific Committee and the Scientific Panels.’
- (4) in Article 32a, paragraph 1 is replaced by the following:
  - ‘1. Where Union law contains provisions for the Authority to provide a scientific output, including a scientific opinion, the Authority shall, at the request of a potential applicant or notifier, provide advice on the content of the application or notification, prior to its submission, including the rules applicable to and the required content thereof as well as on the design of the studies and testing strategies to support such an application or notification. Such advice provided by the Authority shall be without prejudice and non-committal as to any subsequent assessment of applications or notifications by the Scientific Panels.’
- (5) Article 32b is amended as follows:
  - (a) in paragraph 4, the third subparagraph is replaced by the following:
    - ‘The assessment of the validity or the admissibility of such re-submitted application or notification shall commence three months after the date of re-submission of the application and provided that a notification of the studies pursuant to the second subparagraph has taken place.’
  - (b) in paragraph 5, the third subparagraph is replaced by the following:
    - ‘The assessment of the validity or admissibility of such re-submitted application or notification shall commence three months after the date of re-submission of the application and provided that all studies that had previously been notified in accordance with paragraph 2 or 3 are included in the resubmitted application or notification.’;
  - (c) paragraph 6 is replaced by the following:
    - ‘6. Where the Authority detects, during its risk assessment, that studies notified in accordance with paragraph 2 or 3 are not included in the corresponding application or notification in full, and in the absence of a valid justification of the applicant or notifier to that effect, the applicable time limits within which the Authority is required to deliver its scientific output shall be suspended. That suspension shall end three months after the submission of all data of those studies.’
- (6) in Article 32c, paragraph 1 is deleted.
- (7) the following Chapter IIIA is inserted:



*REGULATORY SANDBOXES*

*Article 49a*

**General provisions on regulatory sandboxes**

1. A Member State or several Member States jointly may establish regulatory sandboxes in accordance with this Article and the procedure set out in Article 49b.
2. Regulatory sandboxes may be established in relation to the following:
  - (a) all stages of the production, processing and distribution of food with the exception of novel foods, and also of the feed produced for, or fed to food-producing animals;
  - (b) food contact materials, with the exception of plastic recycled materials;
  - (c) products, other than food and feed, containing or consisting of genetically modified organisms as defined in Article 2, point (2), of Directive 2001/18/EC.

The making available of products within a regulatory sandbox shall not be regarded as placing on the market.

3. Regulatory sandboxes shall pursue one or more of the following objectives:
  - (a) facilitating the development, testing and validation of technologies, products and substances before they obtain authorisation or approval for placing on the market, where so required by Union law;
  - (b) testing data requirements, including the type and design of studies required for conducting a safety and/or efficacy assessment;
  - (c) testing alternative regulatory requirements and appraising their performance as regards the attainment of the objectives of the applicable Union sectoral law in comparison to the existing requirements; in the areas where Union law provides for an approval or authorisation, as well as in the area of food information to consumers.
4. Member States shall monitor and supervise the operation of regulatory sandboxes that they establish and ensure compliance with the regulatory sandbox plan.
5. A participant to an established regulatory sandbox shall immediately inform the competent authorities of the Member State(s) concerned if it considers or has reason to believe that the conditions of the regulatory sandbox plan have not been complied with and/or there are potential risks to public health, animal health or welfare, plant health or to the environment, which may require the revocation of the regulatory sandbox or the amendment of the regulatory sandbox plan to provide for mitigating measures. Participants shall also immediately inform the competent authorities of any other information that concerns the quality, safety or efficacy of the subject matter of the relevant regulatory sandbox.

6. Member States shall immediately notify to the Commission and, where relevant, to the Authority any violation of the conditions set out in the regulatory sandbox plan and/or the identification of any potential risks to public health, animal health or welfare, plant health or to the environment.
7. Member States shall suspend or revoke a regulatory sandbox at any time on their own motion, or at the request of the Commission in accordance with paragraph 9, in either of the following cases:
  - (a) the requirements and conditions governing the regulatory sandbox plan are not met;
  - (b) where necessary to protect public health, animal health or welfare, plant health or the environment and there is no possibility for effective mitigation measures.

Member States shall inform the Commission, the Authority and the other Member States without delay of the suspension or revocation of a regulatory sandbox and of the reasons.

8. Where after the setting up of a regulatory sandbox in their territory, a Member State identifies risks to public health, animal health and welfare, plant health and to the environment which can be fully mitigated by amendments to the regulatory sandbox plan, it shall communicate to the Commission, the Authority and the other Member States the draft amendments in accordance with the procedure laid down in Article 49b.
9. Where the Commission considers that one of the cases referred to in paragraph 7 is fulfilled, it shall immediately adopt implementing acts in accordance with the procedure referred to in Article 58(2) requesting the suspension or the revocation of the regulatory sandbox concerned.

However, in emergencies, the Commission may provisionally adopt an implementing act requesting the suspension of the regulatory sandbox concerned after consulting the Member State(s) concerned and informing the other Member States. As soon as possible, and at most within 10 working days, the measure taken shall be confirmed, amended or revoked in accordance with the procedure referred to in Article 58(2) and the reasons for the Commission's decision shall be made public without delay.

10. A Member State may prolong the duration once of a regulatory sandbox for a limited time where this is justified by the need to attain the objective of the specific regulatory sandbox at hand and shall inform the Commission, the Authority and the other Member States thereof.
11. The Commission may, by means of implementing acts, specify common principles or practical arrangements for the establishment and supervision of regulatory sandboxes, including the establishment of sandboxes involving several Member States pursuant to this Article, Article 49b and 49c. Those implementing acts shall be adopted in accordance with the procedure referred to in Article 58(2).

#### *Article 49b*

#### **Establishment of regulatory sandboxes**

1. Where a Member State deems it appropriate to establish a regulatory sandbox, it shall communicate to the Commission, the Authority and the other Member States a draft regulatory sandbox plan, which shall contain the following elements:
  - (a) the objectives of the regulatory sandbox;
  - (b) a description of the specific areas that the sandbox will cover, including the products or substances, processes, technologies and practices;
  - (c) a clearly defined geographical scope;
  - (d) a clearly defined and limited temporal scope;
  - (e) the regulatory or scientific justifications for setting up the regulatory sandbox;
  - (f) an identification of the relevant provisions of Union law that apply for the purposes of the regulatory sandbox and those that do not apply or are adapted;
  - (g) the procedure for the application and selection for participants, including clearly defined eligibility criteria, the modalities governing the provision of the explicit and prior consent from participating final consumers as well as the modalities by which the participants may end their participation;
  - (h) the possible involvement of the Authority, other Union agencies and national agencies, where relevant, provided that they have expressed interest to join the regulatory sandbox;
  - (i) the activities allowed to be carried out and the conditions and requirements that apply;
  - (j) an assessment that identifies how potential risks to public health, animal health or welfare, plant health or the environment are mitigated;
  - (k) details on how activities will be monitored, including responsibilities of the competent authorities entrusted with the supervision of the implementation of the sandbox plan.
2. Where several Member States deem it appropriate to jointly establish regulatory sandboxes, they shall collectively communicate a draft regulatory sandbox plan to the Commission, the Authority and the other Member States. The regulatory sandbox plan shall specify the activities to take place in each of the participating Member States in addition to the elements listed in paragraph 1.
3. Member States shall engage with relevant stakeholders during the preparation of a draft regulatory sandbox plan to gather diverse perspectives and foster collaboration.
4. The Member State(s) which deem it appropriate to set up a regulatory sandbox alone or jointly, shall communicate the draft regulatory sandbox plan to the Commission, the Authority and other Member States at least 60 days prior to the intended commencement of the sandbox activities. Member State(s) shall consider any feedback or recommendations from the Commission, the other

Member States and the Authority before deciding whether to establish the regulatory sandbox.

5. Member State(s) shall communicate to the Commission, the Authority and the other Member States any subsequent draft amendment to regulatory sandbox plans and the reasons thereof. Paragraphs 1 to 4 shall apply *mutatis mutandis*.

#### *Article 49c*

#### **Other responsibilities, monitoring and reporting obligations regarding regulatory sandboxes**

1. Regulatory sandboxes shall not affect the enforcement and monitoring responsibilities of the competent authorities set out in Article 17 and in other sectoral legislation.
2. Participants, with the exception of final consumers, in particular the operator that is the developer of the product or substance concerned, shall remain liable under applicable national legislation for any harm inflicted on third parties as a result from the testing taking place in the sandbox.
3. Member States shall submit annual reports to the Commission on the results from the implementation of regulatory sandboxes, including good practices developed, lessons learnt and recommendations on their setup and, where relevant, on the application of the relevant sectorial Union legislation. Those reports shall be made publicly available by the Commission.
4. The Authority shall also ensure the necessary revisions of its guidance where relevant and appropriate on the basis of those annual reports.

#### *Article 57*

#### **Amendments to Regulation (EC) No 1394/2007**

Regulation (EC) No 1394/2007 is amended as follows:

(1) Article 2 is amended as follows:

(i) in paragraph 1, the following point (e) is added:

‘(e) ‘viral vector’ means a genetically modified virus that is used to deliver genetic material into cells.’

(ii) the following paragraph 6 is added:

‘6. The Commission is empowered to adopt delegated acts in accordance with Article 25a to amend this Regulation in order to amend the definitions referred to in paragraph 1, regarding what constitutes a tissue engineered product, in light of technical and scientific advancements in the field of advance therapy medical products and taking into account definitions agreed at Union and international level without extending the scope of this definition. The delegated acts shall be adopted after consultations with the European Medicines Agency and the SoHO Coordination Board.’;

(2) The following Article 4a is inserted:

#### *‘Article 4a*

**Advanced therapy investigational medicinal products containing or consisting of  
genetically modified organisms presenting no or negligible risks**

1. By way of exemption from Article 5a of Regulation (EU) No 536/2014 [*as added by the revised Regulation No (EC) 726/2004*], sponsors of clinical trials that concern advanced therapy investigational medicinal products as defined in Article 2(7) of that Regulation, consisting or containing GMOs, are not required to submit an environmental risk assessment, if those products belong to at least one of the following categories:
  - (a) non-viable or replication deficient viral vector that is used to deliver a genetic sequence of human origin, and the vector does not carry an antimicrobial resistance gene;
  - (b) genetically modified somatic cells, that cannot secrete or produce infectious agents due to the genetic modification;
  - (c) genetically modified bacteria that do not carry an antimicrobial resistance gene;
  - (d) genetic material altered using genome editing techniques (ex vivo or in vivo), provided that it has generally negligible adverse effects on human health and the environment.
2. The exemption provided for in paragraph 1 of this Article is subject to the sponsor submitting, through the EU Portal and as part of the clinical trial application dossier, a reasoned-declaration confirming that the advanced investigational therapy medicinal product concerned falls into one or more of the categories referred to in points (a) to (d) of paragraph 1, of this Article. The Committee for Medicinal Products for Human Use (CHMP) referred to in Article [148] of Regulation [...] [*revised Regulation No (EC) 726/2004*] shall verify this declaration and the reasons provided, and the CHMP may, to this end, access the information on the clinical trial application in the EU portal. The CHMP shall communicate its opinion on the declaration to the sponsor and to the reporting Member State within 21 days after the submission date referred to in Article 5(1) of Regulation (EU) No 536/2014 [*as revised by European Biotech Act*].
3. The reporting Member State, giving due consideration to the opinion of the CHMP, shall assess if the conditions of paragraph 1 of this Article apply or if the sponsor is to be requested to submit an environmental risk assessment pursuant to Article 5a of Regulation (EU) No 536/2014 [*as introduced by the revised Regulation No (EC) 726/2004*].

4. Sponsors of clinical trials concerning advanced investigational therapy medicinal products that fall under paragraph 1 of this Article are also exempted from complying with the GMO related requirements of Article 61(2), point (a), of Regulation (EU) No 536/2014 [as introduced by the revised Regulation No (EC) 726/2004] regarding the authorisation of manufacturing and import of advanced investigational therapy medicinal products.
5. The exemptions provided for in this Article shall apply only for the duration of the clinical trial, limited to the activities within the clinical trial.’;

(3) Article 25a is replaced by the following:

*‘Article 25a*

**Exercise of the delegation**

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
2. The power to adopt delegated referred to in Article 2, paragraph 6, and in Article 24 shall be conferred on the Commission for a period of five years from [insert date xx, from the entry into force of this Regulation].

The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.

3. The delegation of power referred to in Article 2, paragraph 6, and in Article 24 may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted pursuant to Article 2, paragraph 6, and Article 24 shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

**Amendments to Regulation (EU) No 536/2014**

Regulation (EU) 536/2014 is amended as follows:

(1) Article 2 is amended as follows:

(a) point (3) is replaced by the following:

‘(3) ‘Low-intervention clinical trial’ means a clinical trial which fulfils all of the following conditions:

- (a) the investigational medicinal products, excluding placebos, are authorised;
- (b) according to the protocol of the clinical trial, the use of the investigational medicinal product is evidence-based and supported by published scientific evidence on the safety and efficacy of those investigational medicinal products concerned; and
- (c) the additional diagnostic or monitoring procedures do not pose more than minimal additional risk or burden to the safety of the subjects compared to normal clinical practice in any Member State concerned;’

(b) the following point (3a) is inserted:

‘(3a) ‘Minimal-intervention clinical trial’ means a clinical trial which fulfils all of the following conditions:

- (a) the investigational medicinal products are authorised;
- (b) according to the protocol of the clinical trial, the investigational medicinal products are used in accordance with the terms of marketing authorisation; and
- (c) the additional diagnostic or monitoring procedures do not pose more than minimal additional risk or burden to the safety of the subjects compared to normal clinical practice in any Member State concerned;’

(c) points 12 and 13 are replaced by the following:

‘(12) ‘Member State concerned’ means the Member State where an application for authorisation of a clinical trial or a combined study of a substantial modification has been submitted under Chapters II, IIa or III of this Regulation respectively;’

‘(13) ‘Substantial modification’ means any change to any aspect of the clinical trial which is made after the notification of a decision referred to in Article 8 in at least one Member State concerned and which is likely to have a substantial impact on the safety or rights of the subject or on the reliability and robustness of data generated in the clinical trial;’

(d) the following point (13a) is inserted:

‘(13a) ‘Parallel substantial modification’ means a substantial modification for which an application is submitted to a Member State concerned before a

decision on a previous application for a substantial modification to the same clinical trial is notified by that Member State to the sponsor;'

(e) point (21) is replaced by the following:

‘(21) ‘Informed consent’ means a subject’s free and voluntary expression of his or her willingness to participate in a particular clinical trial, after having been informed of all aspects of the clinical trial that are relevant to the subject’s decision to participate or, in case of minors and of incapacitated subjects, an authorisation or agreement from their legally designated representative to include them in a clinical trial, including consent given through the use of electronic systems, methods and processes, and signed electronically in accordance with Union law or equivalent standards;’

(f) the following points (36), to 47 are inserted:

(36) ‘Consideration’ means a justified concern or divergent view raised by a Member State concerned in the process of an assessment of an application for an authorisation of a clinical trial or for a substantial modification on the aspects that, if unresolved, will result in a negative decision on the clinical trial or substantial modification application;

(37) ‘Reporting Member State’ means the Member State concerned that:

- (a) is responsible for the assessment and authorisation of the clinical trial application in mono-national clinical trials, or
- (b) is leading the assessment for the authorisation of a multinational clinical trial or of a substantial modification regarding aspects covered by Part I of the application dossier, or
- (c) is leading the assessment for the authorisation of a multinational combined study;

(38) ‘Investigational medicinal product core dossier’ means a dossier, containing documents referred to in point (Ga), Part II of Annex I concerning the investigational medicinal product, established at the request of the sponsor in view of supporting the development of the investigational medicinal product.

(39) ‘Core dossier depositary Member State’ means a Member State responsible for assessing suitability and completeness of the investigational medicinal product core dossier to be established and for the regulatory oversight of an already established dossier;

(40) ‘Core dossier competent Member States’ means the Member States concerned for all corresponding clinical trials and the Member States indicated by a sponsor at the time of the initial request for the establishment of the investigational medicinal product core dossier;

(41) ‘Corresponding clinical trial’ means a clinical trial tested to the investigational medicinal product for which an establishment of an investigational medicinal product core dossier has been requested and any subsequent clinical trial tested to that investigational medicinal product;



- (42) ‘Distribution’ means all activities, consisting of procuring, holding, supplying, shipping across Member States or exporting investigational medicinal product or auxiliary medicinal products, , including delivery of investigational and auxiliary medicinal products to the clinical trial participants;
- (43) ‘Direct delivery to the subject’ means controlled and documented direct delivery of an investigational medicinal product or an auxiliary medicinal product to the subject’s place of residence in a Member State, where the clinical trial has been authorised;
- (44) ‘Combined study’ means a clinical trial concerning one or more medicinal products combined with a performance study of one or more in vitro diagnostic medical devices, as defined in Article 2 point (42) of Regulation (EU) 2017/746 of the European Parliament and of the Council \*and/or clinical investigation of one or more medical devices as defined in Article 2 point (45) of Regulation (EU) 2017/745 of the European Parliament and of the Council \*\*;
- (45) ‘Regulatory sandbox’ means a regulatory framework that allows for the development and testing of innovative or adapted regulatory approaches in a controlled environment pursuant to a specific plan, for a limited time and under regulatory supervision, that enables innovation driven approaches to an authorisation and conduct of clinical trials that otherwise would not be possible or appropriate given current legal framework;’
- (46) ‘AI system’ means AI system as defined in Article 3(1) of Regulation (EU) 2024/1689 of the European Parliament and of the Council\*\*\*;
- (47) ‘serious cross-border threat to health’ means serious cross-border threat to health as defined in Article 3(1) of Regulation (EU) 2022/2371 of the European Parliament and of the Council\*\*\*\*‘

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\* Regulation (EU) 2017/746 of the European Parliament and of the Council of 5 April 2017 on in vitro diagnostic medical devices and repealing Directive 98/79/EC and Commission Decision 2010/227/EU (JO 5.5.2017, L117/176., ELI: <http://data.europa.eu/eli/reg/2017/746/oj>).

\*\* Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC (JO 5.5.2017, L 117/1., ELI: <http://data.europa.eu/eli/reg/2017/745/oj>).

\*\*\* Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (OJ L, 2024/1689, 12.7.2024, ELI: <http://data.europa.eu/eli/reg/2024/1689/oj>)

\*\*\*\*\* Regulation (EU) 2022/2371 of the European Parliament and of the Council of 23 November 2022 on serious cross-border threats to health and repealing Decision No 1082/2013/EU (OJ L 314, 6.12.2022, p. 26, <http://data.europa.eu/eli/reg/2022/2371/oj>).

(2) Article 3 is replaced by the following:

*'Article 3*

*General principles*

1. A clinical trial may be conducted only if:
  - (a) the rights, safety, dignity and well-being of subjects are protected and prevail over all other interests; and
  - (b) it is designed to generate reliable and robust data.
2. Member States concerned shall cooperate closely and efficiently to ensure the effective and timely application of the provisions of this Regulation.
3. Member States shall take into account whether a clinical trial is a minimal-intervention or low-intervention clinical trial and, where this is the case, adapt the regulatory requirements throughout the lifecycle of such clinical trial, in particular with regard to the application dossier, the authorisation procedures, the safety reporting and oversight.'

(3) Articles 4 and 5 are replaced by the following:

*'Article 4*

*Prior authorisation*

A clinical trial shall be conducted only if it has been authorised by the Member State concerned in accordance with this Regulation. Applications for an authorisation shall be subject to scientific and ethical review.

In clinical trials concerning more than one Member States (multinational clinical trials) all the Member States concerned including the reporting Member State shall cooperate in good faith and in spirit of mutual trust and reliance. The reporting Member State shall have a leading role in the assessments.

The ethical review shall be performed by an ethics committee in accordance with the law of the Member State concerned. The reporting Member State shall involve its ethics committee in the assessment of ethical aspects of Part I of the application dossier referred to in Article 6.

Each Member State shall ensure that the organisation, timelines and procedures for the review by an ethics committee are compatible with the timelines and procedures set out in this Regulation for the assessment of the application for authorisation of a clinical trial and substantial modifications thereof.

*Article 5*

*Submission of an application*

1. In order to obtain an authorisation, the sponsor shall submit an application dossier to the intended Member States concerned throughout the Portal referred to in Article 80 ('the EU portal') referred to in Article 25. The date on which the sponsor submits the application for an authorisation of a clinical trial is referred to within this Chapter as the submission date.
  2. The authorisation procedure of a clinical trial consists of three steps:
    - (a) a validation of the application dossier, as set out in Article 5b;
    - (b) an assessment, that consists of:
      - an assessment of Part I, as set out in Article 6, of the elements of the application dossier listed in Part I of Annex I, that constitute Part I of the assessment dossier, and
      - an assessment of Part II, as set out Article 7 of the application dossier, of the elements listed in Part II of Annex I, that constitute Part II of the application dossier.
    - (c) a decision resulting either an authorisation, conditional authorisation or refusal of an authorisation, as set out in Article 8.'
- (4) the following Articles 5a and Article 5b are inserted:

*"Article 5a*

*Appointment of the reporting Member State*

1. In clinical trials concerning only one Member State, this Member State is the reporting Member State.
2. In clinical trials concerning more than one Member States, the sponsor shall propose one of the Member States concerned as the reporting Member State. All Member States concerned willing to become the reporting Member State shall declare their willingness through the EU portal.  
The sponsor shall, when applying for a low-intervention clinical trial propose one of the Member States concerned where the use of the investigational medicinal product is evidence-based as a reporting Member State.
3. If the proposed Member State accepts the proposal by expressing willingness to become the reporting Member State, it shall be the reporting Member State.
4. If the proposed Member State does not accept the proposal, the following rules shall apply, and their application shall be supported by the EU Portal:
  - (a) where there is only one other Member State concerned willing to become the reporting Member State, that Member State shall become the reporting Member State;
  - (b) where there is more than one Member State concerned willing to become the reporting Member State or none of the Member States concerned is willing to become the reporting Member State, the reporting Member State shall be designated automatically by the EU Portal in application of the recommendation referred to in article 85(2)(c).

5. Within three days from the submission date, all Member States concerned, the sponsor and the reporting Member State shall be notified by the EU Portal of the appointment of the reporting Member State.

#### *Article 5b*

##### *Validation of Part I of the application dossier*

1. Within seven days from the submission date, the reporting Member State shall validate Part I of application dossier referred to in Article 6 and notify the sponsor, through the EU portal, of the following:
  - (a) whether the clinical trial applied for falls within the scope of this Regulation;
  - (b) whether the application dossier is complete in accordance with Part I of Annex I;
  - (c) whether it confirms that the clinical trial is a minimal-intervention or a low-intervention clinical trial, respectively, if such a claim was made by the sponsor.
2. Where the reporting Member State has not notified the sponsor within the period referred to in paragraph 1, the clinical trial applied for shall be deemed to fall within the scope of this Regulation and the application dossier shall be considered complete and, if applicable, the clinical trial shall be considered a minimal-intervention or low-intervention clinical trial.
3. Where the reporting Member State finds that the application dossier is not complete, or that the clinical trial applied for does not fall within the scope of this Regulation, or, if applicable, has doubts whether the clinical trial is a minimal-intervention or low-intervention clinical trial, the reporting Member State shall:
  - (a) inform the sponsor thereof through the EU portal and shall set a deadline of maximum seven days for the sponsor to comment on the application or to complete the application dossier through the EU portal;
  - (b) within seven days from the submission of the comments or the completed application dossier referred to in point (a) notify the sponsor as to whether or not the application complies with the requirements set out in paragraph 1 points (a), (b) and (c).

In case the reporting Member State requests the sponsor to comment on the application pursuant to this paragraph, the period referred to in paragraph 1 may be extended by a maximum of 14 days.

4. Where the reporting Member State has not notified the sponsor within the period referred to in paragraph 3, point (b), the clinical trial applied for shall be deemed to fall within the scope of this Regulation, the application dossier shall be considered complete in accordance with Part I of Annex I and the clinical trials is deemed to be a minimal-intervention or a low-intervention clinical trial, if claimed by the sponsor.
5. Where the sponsor has not provided comments or completed the application dossier within the period referred to in paragraph 3, point (a), the application shall be deemed to have lapsed in all Member States concerned.

6. For the purpose of this Chapter, the date on which the sponsor is notified in accordance with paragraph 1 or paragraph 3, point (b) shall be the validation date of the application. Where the sponsor is not notified within these time periods, the validation date shall be the last day of respective periods referred to in paragraph 1 or paragraph 3, point (b).”

(5) Article 6 is replaced by the following:

*Article 6*

*Assessment report – Aspects covered by Part I of the assessment report*

1. The reporting Member State shall assess the application relying on the information and the documents listed in Part I of Annex I, with regard to the following aspects:
  - (a) compliance with Chapter V as with respect to the following:
    - (i) the anticipated therapeutic and public health benefits taking account of all of the following:
      - characteristic of and knowledge about the investigational medicinal products;
      - relevance of the clinical trial, including whether the groups of subjects participating in the clinical trial represent the population to be treated, or if not, the explanation and justification provided in accordance with point 17(y) of Part I of Annex I; the current state of scientific knowledge; whether the clinical trial has been recommended or imposed by regulatory authorities in charge of the assessment and authorisation of the placing on the market of medicinal products; where applicable, taking into account any opinion formulated by the Paediatric Committee on paediatric investigational plan in accordance with Chapter VII of Regulation (EU) .../...[reference to be added after adoption cf. COM(2023)196final];
      - reliability and robustness of the data generated in clinical trial, taking into account of statistical approaches, design of the clinical trial and methodology, including sample size and randomisation, comparator and endpoints;
    - (ii) risk and inconveniences for the subjects, taking into account all of the following:
      - characteristic of and knowledge about the investigational medicinal product and the auxiliary medicinal product;
      - characteristic of the investigational medicinal product;
      - safety measures, including provisions for risk minimisation measures, monitoring, safety reporting, and the safety plan;

- risk to subjects’ health posed by the medical condition for which the investigational medicinal product is being investigated;
  - aspects related to the protection of the subjects’ safety, well-being and fundamental rights as a clinical trial participant.
- (b) compliance with the requirements concerning the manufacturing and import of investigational medicinal product set out in Chapter IX;
  - (c) compliance with the labelling requirements set out in Chapter X;
  - (d) completeness and adequacy of the investigator’s brochure.

The adequacy of the translations of the documents, when translations are required pursuant to Article 26 and Article 69, submitted in Part I shall be assessed in Part II.

2. The reporting Member State shall draw up an assessment report. The assessment of the aspects referred to in paragraph 1 shall constitute Part I of the assessment report.

The ethics committee of the reporting Member State shall review, from the ethical perspective, aspects covered by Part I of the assessment report. That ethical review shall complement the scientific and regulatory assessment and shall cover Part I of the application dossier in order to evaluate whether the subjects’ rights, safety and well-being are being ensured in the clinical trial.”

- 2a. Notwithstanding paragraph 2, where the clinical trial is a minimal-intervention clinical trial, the assessment of the reporting Member State shall be limited to an ethical review by its ethics committee of the aspects referred to points (a) and (d) of paragraph 1.
3. The assessment report shall contain one of the following conclusions concerning the aspects addressed in Part I of the assessment report:
  - (a) the conduct of the clinical trial is acceptable in view of the requirements set out in this Regulation;
  - (b) the conduct of the clinical trial is acceptable in view of the requirements set out in this Regulation, but subject to compliance with specific conditions which shall be specifically listed in that conclusion; or
  - (c) the conduct of the clinical trial is not acceptable in view of the requirements set out in this Regulation.
4. The reporting Member state shall submit, through EU portal, the final Part I of the assessment report, including its conclusions, to the sponsors and to the other Member States concerned within 42 days from the submission date.
5. For clinical trials involving more than one Member State concerned, the assessment process shall include three phases:
  - (a) an initial assessment phase within 28 days from the submission date;
  - (b) a review phase within seven days from the end of the initial assessment;
  - (c) a consolidation phase within seven days from the end date of the review phase.

During the initial assessment phase, the reporting Member State shall assess Part I of the application dossier and draw up a draft Part I of the assessment report and circulate it to all other Member States concerned within 28 days from the submission date.

During the review phase, within seven days from the circulation of the draft assessment report all Member States concerned shall review the application based on the draft Part I of the assessment report and shall share considerations for their Member States relevant to the application. The consideration may be raised only on one of the following grounds:

- (a) one of the grounds referred to in Article 8(2);
- (b) issues that would lead to a negative opinion of the ethics committee of the Member State concerned.

During the consolidation phase, the reporting Member State shall take due account of the considerations of the other Member States concerned and finalise Part I of the assessment report and shall record how all considerations have been dealt with. The reporting Member State shall submit the final Part I of the assessment report to the sponsor and all other Member States concerned within seven days from the end of the review phase.”

- 5a. Where the clinical trial is a minimal-intervention clinical trial, other Member States concerned may only raise during the review phase considerations referred to in paragraph 5 related to ethical aspects of the draft assessment report.”
- 6. For the purpose of this Chapter, the date on which the final Part I of the assessment report is submitted by the reporting Member State to the sponsor and to the other Member States concerned through the EU portal shall be the reporting date.”
- 7. Between the validation date and the reporting date, only the reporting Member State may request additional information from the sponsor, taking into account the considerations referred to in paragraph 5.

For the purpose of obtaining and reviewing this additional information from the sponsor, the reporting Member State may extend the period referred to in paragraph 4 by maximum of 28 days.

The sponsor shall submit the requested information within the period set by the reporting Member State which shall not exceed 14 days from the receipt of the request.

Upon receipt of the requested additional information, the Member State concerned shall review additional information provided by the sponsor and shall identify and share with the reporting Member State any unaddressed considerations, relevant for the application. The coordinated review shall be performed within maximum 7 days of the receipt of the additional information and the further consolidation shall be performed within maximum seven days of the end of the coordinated review. When finalising Part I of the assessment report, the reporting Member State shall take due account of the considerations of the other Member States concerned and shall record how the considerations have been dealt with.

Where the sponsor does not provide additional information within the period set by the reporting Member State in accordance with the third subparagraph, the application shall be deemed to have lapsed in all Member States concerned.

The request for additional information and additional information shall be submitted through the EU Portal.’

- (6) Article 7 is replaced by the following:

*‘Article 7*

*Assessment report – Aspects covered by Part II of the application dossier*

1. Each Member State concerned shall assess, for its own territory, the application with respect to the following aspects. Such assessment shall constitute Part II of the assessment report:
  - (a) compliance with the requirements for informed consent set out in Chapter V;
  - (b) compliance of the arrangements for rewarding or compensating subjects with the requirements set out in Chapter V;
  - (c) compliance of the arrangements for recruitment of subjects with the requirements set out in Chapter V;
  - (d) compliance with Regulation (EU) 2016/679 of the European Parliament and of the Council\*;
  - (e) compliance with Article 49;
  - (f) compliance with Article 50;
  - (g) compliance with Article 76;
  - (h) compliance with applicable rules for the collection, storage and future use of biological samples of the subject;
  - (i) accuracy of the translations of the documents and information submitted in Part I of the application dossier, when such documents are required to be submitted in the national language in accordance with Article 26 and 69.
2. Each Member State concerned shall complete the assessment within 42 days from the submission date and submit, through the EU portal, Part II of the assessment report, including its conclusions, to the sponsor.

Each Member State concerned may within the period referred to in this paragraph, and through EU portal, request on duly justified grounds additional information , from the sponsor regarding the aspects covered in paragraph 1 or to request to complement the documentation, required pursuant to Part II of Annex I, if such documentation is missing or documentation provided is not adequate or is incomplete.

The Member State concerned may decide within 28 days of the submission date to rely on the ethical review of the ethics committee of the reporting Member State of the common elements of the application dossier of Part II and inform the sponsor accordingly.



3. Each Member State concerned may extend the assessment period referred to in paragraph 2 by a maximum of 28 days:
  - (a) to requests additional documentation or information, as referred in paragraph 2, from the sponsor regarding Part II of the assessment for its territory;
  - (b) to align with the timeline for the assessment referred to in Article 6, when it has been extended to allow for a request for information by the reporting Member State related to Part I assessment and its review.

The sponsor shall submit the requested additional information and documentation within the period set by the Member State concerned which shall not exceed 14 days from the receipt of the request.

Upon receipt of the additional information and documentation, the Member State concerned shall complete its assessment within maximum of 14 days from the submission of the requested information by the sponsor.

Where the sponsor does not provide additional information and documentation within the period set by the Member State concerned in accordance with this paragraph, the application shall be deemed to have lapsed in that Member State concerned.

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\* Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ L 119, 4.5.2016., ELI: <http://data.europa.eu/eli/reg/2016/679/oj>.’

(7) in Article 8, paragraphs 1 and 2 are replaced by the following:

- ‘1. Each Member State concerned shall notify the sponsor through the EU portal and by way of one single decision as to whether the clinical trial is authorised, authorised subject to conditions, or whether authorisation is refused.

The notification shall be made within five days from the reporting date or from the last day of the assessment referred to in Article 7, whichever is later.

2. Where the conclusion of the reporting Member State as regards Part I of the assessment report is that the conduct of the clinical trial is acceptable or acceptable subject to compliance with specific conditions, that conclusion shall be deemed to be the conclusion of the Member States concerned.

A clinical trial subject to conditions may start, unless the Member State concerned specified that the condition is suspensive. Unless otherwise specified, a fulfilment of the condition shall not require a submission of a request for a substantial modification.

Notwithstanding the first subparagraph of this paragraph, a Member State concerned may disagree with the conclusion of the reporting Member State as regards Part I of the assessment report only on the following grounds, provided that the corresponding consideration was raised during the process pursuant to Article 6(5) point (b) and the Member State concerned considers that it was not sufficiently addressed:

- (a) participation in the clinical trial would lead to a subject receiving an inferior treatment than in normal clinical practice in the Member State concerned; or
- (b) infringement of its national law as referred to in Article 90.

Where a Member State concerned disagrees with the conclusion, it shall communicate its disagreement, together with a detailed justification, through the EU portal, to the Commission, to all Member States, and to the sponsor.’

- (8) Article 9 is replaced by the following:

*‘Article 9*

*Persons assessing the application*

1. Member States shall ensure, including through the institutional safeguards, that persons validating and assessing the application do not have conflicts of interest, are independent of the sponsors, or the clinical trial site and the investigators involved and of persons financing the clinical trial, as well as free of any other undue influence and ensure their sufficient independence in performance of their tasks.

In order to guarantee independency and transparency, the Member States shall ensure that persons validating and assessing the application as regards the aspects covered in Parts I and II of the assessment report have no financial or personal interests which could affect their impartiality. These persons shall make an annual declaration of their financial interest.

2. Member States shall ensure that the assessment is done by persons who collectively have the necessary qualifications and experience.

These persons shall be sufficiently equipped and empowered to perform their tasks.

3. At least one layperson shall participate in the assessment.’

- (9) in Article 10, the following paragraph 6 is added:

- ’6. Where potential subjects of a clinical trial belong to vulnerable populations, Member States concerned and sponsors shall consider and weigh the harms and benefits of their inclusion as opposed to their exclusion from a clinical trial. The Member States concerned and sponsors shall assess in particular whether the exclusion of those subjects from a clinical trial could inadvertently perpetuate or exacerbate their vulnerabilities, particularly in relation to their specific health needs.’

- (10) Article 11 is replaced by the following:

*‘Article 11*

*Submission and assessment of applications limited to aspects covered by Part I of the assessment report*

1. Where the sponsor so requests, the application for authorisation of a clinical trial, its assessment and the conclusion shall be limited to the aspects covered by Part I of the assessment report.

After the notification of the conclusion on the aspects covered by Part I of the assessment report, the sponsor may, within two years, apply for an authorisation limited to aspects covered by Part II of the assessment report.

Where the sponsor submits only Part I of the application dossier to all of the Member States concerned, the sponsor shall declare at the time of the first submission of Part II of the application dossier to any of the Member States concerned that the sponsor is not aware of any new substantial scientific information that would change the validity of any item submitted in the application on the aspects covered by Part I of the assessment report. If an update of Part I of the application dossier is necessary, the sponsor shall submit a substantial modification of Part I of the application dossier, at the latest, at the same time as the submission of Part II of the application dossier to at least one of the Member States concerned.

The Part II of the application dossier shall be assessed in accordance with Article 7 and the Member State concerned shall notify the decision on clinical trial in accordance with Article 8.

In those Member States concerned where the sponsor does not apply for an authorisation limited to aspects covered by Part II of the assessment report within two years, the application on the aspects covered by Part I of the assessment report shall be deemed to have lapsed.

2. When the sponsor submits a substantial modification of Part I of the application dossier with regard to clinical trial that is subject to a request referred to in paragraph 1 and has been authorised or authorised subject to conditions by at least one Member State concerned, all Member States concerned that received the initial application shall participate in the assessment of that substantial modification in accordance with Article 18 or 22 as appropriate.’

(11) Article 14 is amended as follows:

- (a) paragraph 1 is replaced by the following:

‘1. Where the sponsor wishes to extend an authorised clinical trial to another Member State (additional Member State concerned), the sponsor shall submit an application dossier to that Member State through the EU portal.

The application dossier may be submitted only after the notification date of the first initial authorisation decision by at least one Member State concerned.’

- (b) paragraph 3 is replaced by the following:

‘3. The additional Member State concerned shall notify the sponsor, through the EU portal, within 47 days from the date of submission of the application dossier referred to in paragraph 1 of this Article, by way of one single decision as to whether the clinical trial is authorised, whether

it is authorised subject to conditions, or whether the authorisation is refused. Article 8(2), (3), (4) and (5) apply to the decision of the additional Member State concerned.'

- (c) paragraph 4 is deleted;
- (d) paragraph 5 to 8 are replaced by the following:
  - '5. Within 42 days following the submission date referred to in paragraph 1, the additional Member State concerned may communicate to the reporting Member State and the other Member States concerned any considerations through the EU portal.'

- (e) paragraphs 6, 7 and 8 are replaced by the following:

- '6. Between the submission date referred to in paragraph 1 and the expiry of the period referred to in paragraph 3, only the reporting Member State may request additional information from the sponsor concerning the aspects covered in Part I of the assessment report, taking into account the considerations referred to in paragraph 5.

For the purpose of obtaining and reviewing this additional information from the sponsor in accordance with the third and fourth subparagraphs, the reporting Member State may extend the period referred to in the first subparagraph of paragraph 3 by a maximum of 28 days.

The sponsor shall submit the requested additional information within the period set by the reporting Member State, which shall not exceed 14 days from receipt of the request.

Upon receipt of the additional information the reporting Member State, the additional Member State concerned and all other Member States concerned shall review any additional information provided by the sponsor together with the original application and shall share any unaddressed considerations relevant to the application. The coordinated review shall be performed within a maximum of seven days from the receipt of the additional information and the further consolidation shall be performed within a maximum of seven days from the end of the coordinated review. The reporting Member State shall take due account of the considerations of the Member States concerned and shall record how the considerations have been dealt with.

Where the sponsor does not provide additional information within the period set by the reporting Member State in accordance with the third subparagraph, the application shall be deemed to have lapsed in the additional Member State concerned.

The request for additional information and the additional information shall be submitted through the EU portal

- 7. The additional Member State concerned shall assess, for its territory, the aspects covered in Part II of the assessment report and submit Part II assessment report, including its conclusions, through the EU portal, to the sponsor.

Within period referred to in paragraph 3, additional Member State may request, through the EU portal, with justified reasons, additional

information from the sponsor regarding aspects covered in Part II of the assessment report as far as its territory is concerned.’

8. For the purpose of obtaining and reviewing the additional information referred to in paragraph 6 or 7 the additional Member State concerned may extend the period referred to in paragraph 5 by maximum of 28 days.

The sponsor shall submit the requested additional information within the period set by the additional Member State concerned, which shall not exceed 14 days from the receipt of the request.

Upon receipt of the additional information, the Member State concerned shall complete its assessment within a maximum of 14 days.

Where the sponsor does not provide additional information within the period set by the additional Member State concerned in accordance with second subparagraph, the application shall be deemed to have lapsed in the additional Member State concerned.’

- (f) paragraphs 9 and 10 are deleted;

- (g) paragraphs 11 and 12 are replaced by the following:

‘11. Where the additional Member State concerned has not notified the sponsor of its decision within the period referred to in paragraph 3, or in case that period has been extended in accordance with paragraph 6 or 8 and where that additional Member State concerned has not notified the sponsor of its decision within the extended period, the conclusion on Part I of the assessment report shall be deemed to be the decision of that additional Member State concerned on the application for authorisation of the clinical trial.’

12. A sponsor shall not submit an application dossier in accordance with this Article where a procedure for a substantial modification of Part I of the assessment report, set out in Chapter III, is pending as regards that clinical trial.’

- (12) the following Article 14a is inserted:

#### *Article 14a*

##### *Appointment of a new reporting Member State*

1. The reporting Member State may initiate the procedure for an appointment of a new reporting Member State if:
  - (a) the reporting Member State has notified its decision refusing the authorisation of the clinical trial; or
  - (b) the clinical trial is no longer taking place in the reporting Member State.
2. The procedure can only be launched after the clinical trial has been authorised in at least one Member State concerned.
3. The reporting Member State shall notify the sponsor and other Member States concerned of its intention to cease to be a reporting Member State.

4. The Member States concerned shall declare their willingness to become new reporting Member State. The selection of new reporting Member State shall follow the rules established Article 5a (4) and (5).
5. Following the initiation of the procedure for the appointment of a new reporting Member State, the initial reporting Member State shall continue to carry out its tasks until all of the ongoing assessments and records are completed and the respective final assessment reports are submitted to the EU portal.
6. The new reporting Member State shall become responsible for the assessment of any application related to Part I of the assessment report, including an application based on Article 14, that has been submitted after it has been notified as the reporting Member State to the sponsor and all Member States concerned by the EU portal.’

(13) the following Chapter IIa is inserted:

‘Chapter IIa

SPECIAL AUTHORISATION PROCEDURES

*Article 14b*

*Accelerated procedure for the authorisation of multinational clinical trials in the context of public health emergencies*

1. During a recognised public health emergency at Union level pursuant to Article 23 of Regulation (EU) 2022/2371 of the European Parliament and of the Council, Member States shall apply an accelerated procedure for the authorisation of multinational clinical trials for medicinal products intended for the treatment, prevention or medical diagnosis of the disease or condition which are directly related to the public health emergency.
2. To address an emergence or development of a serious cross-border threat to health as defined in Article 3(1) of Regulation 2022/2371 that is likely to lead to the recognition of a public health emergency at Union level in accordance with Article 23(1) of Regulation (EU) 2022/2371, Member States shall apply an accelerated procedure for the authorisation of multinational clinical trials when this procedure is declared applicable in accordance with the criteria in paragraph 3 of this Article. The application of the accelerated procedure shall ensure the availability of medicinal products in order to prevent or swiftly contain the emerging serious cross-border health threat, to provide timely treatment options grounded in scientifically robust evidence or to facilitate medical diagnosis of the disease or condition directly related to the specific serious cross-border health threat.
3. The Commission shall, by means of implementing acts, lay down the detailed criteria and the processes for declaring applicability of the accelerated authorisation procedure to address an emergence or development of serious cross-border threat to health that is likely to lead to the recognition of a public health emergency at Union level in accordance with Article 23 (1) of Regulation (EU) 2022/2371, .

The criteria for declaring applicability of an accelerated authorisation procedure shall at least include the epidemiological situation and its dynamics

as well as the availability of treatment, prevention and diagnostics options addressing the emerging serious cross-border threat to health. The process of declaring applicability of the accelerated authorisation procedure shall involve consultations with relevant Union agencies, expert groups and advisory bodies in the field of public health and clinical trials.

The implementing acts referred to in the first subparagraph shall be adopted in accordance with the examination procedure referred to in Article 88.

4. When submitting the application for the clinical trial authorisation during a public health emergency as referred to in paragraph 1 or when the accelerated procedure referred to in paragraph 2 is declared applicable to address an emerging serious cross-border health threat, pursuant to the procedure referred to in paragraph 3, the sponsor shall indicate whether the investigational medicinal products are intended for the treatment, prevention or medical diagnosis of a disease or a condition directly related to the specific serious cross-border threat to health. The reporting Member State shall confirm whether the accelerated procedure is applicable to the clinical trial application.
5. The Commission shall adopt delegated acts in accordance with Article 89 to supplement this Regulation by setting out the procedures for an accelerated authorisation of multinational clinical trials, including timelines, criteria for evaluating whether a clinical trial qualifies for an accelerated procedure and an integrated ethical review, and by laying down simplified requirements for the application dossier.

#### *Article 14c*

##### *Combined studies*

1. This Article applies to combined studies in which a clinical trial is combined with a performance study of an *in vitro* diagnostic medical device that is subject to authorisation pursuant to Article 58(1) of Regulation (EU) 2017/746, or is combined with a clinical investigation of a medical device that is subject to authorisation according to Article 62 of Regulation (EU) 2017/745.
2. By way of derogation from Article 5, the sponsor of a combined study referred to in paragraph 1, which is to be conducted in one or more Member States, may submit a single application for authorisation.
3. The single application referred to in paragraph 2 shall be submitted electronically through the EU Portal to all Member States in which the combined study is to be conducted ('Member States concerned'). Where a combined study has more than one sponsor, the sponsors shall designate one coordinating sponsor.
4. The Member States concerned shall assess the single application by means of a coordinated assessment procedure under the direction of a reporting Member State chosen from among the Member States concerned. If a combined study involves only one Member State, that Member State shall be the reporting Member State.
5. The coordinated assessment procedure shall include the assessment by the competent authorities and review by ethics committees. During the assessment

procedure, the Member States concerned may only raise considerations related to the following:

- (a) the grounds referred to in Article 14a(5) of this Regulation, Article 78(8) of Regulation (EU) 2017/746 or Article 74(8) of Regulation (EU) 2017/745; or
  - (b) issues that would lead to ethics committee of the Member State concerned issuing a negative opinion.
6. Where the conclusion of the reporting Member State as regards the area of coordinated assessment is that the conduct of the combined study is acceptable, or acceptable subject to compliance with specific conditions, that conclusion shall be deemed to be the conclusion of all Member States concerned.

Notwithstanding the first subparagraph of this paragraph, a Member State concerned may disagree with the conclusion of the reporting Member State concerning the area of coordinated assessment but only on one of the following grounds, provided that the corresponding consideration was raised during the assessment process and the Member State concerned has substantiated comments that were not sufficiently addressed:

- (a) participation in the combined study would lead to a subject receiving an inferior treatment than in normal clinical practice in the Member State concerned;
  - (b) infringement of its national law;
  - (c) with regard to the assessment of the medical device or in vitro medical device, grounds referred to in Article 78(8) of Regulation 2017/746 or Article 74(8) of Regulation (EU) 2017/745, respectively
7. Where a Member State concerned disagrees with the conclusion on the basis of paragraph 5, it shall communicate its disagreement, together with a detailed justification, through the EU Portal, to the Commission, to all other Member States concerned, and to the coordinating sponsor referred to in paragraph 2.
8. Each Member State concerned shall issue a single decision as to whether the combined study is authorised, whether it is authorised subject to conditions, or whether authorisation is refused and shall notify the coordinating sponsor referred to in paragraph 2.
9. The Commission shall, by means of a delegated act in accordance with Article 89, amend or supplement, as necessary, the provisions of Chapters II to V, VII, XIII, XIV and XVI and Articles 71 and 72 of this Regulation in order to:
- (a) enable a streamlined procedure for an authorisation of combined studies, including the coordinated assessment of initial applications, coordinated assessment of the request for substantial modifications and additions of Member State concerned;
  - (b) set the requirements applicable during the conduct of the combined studies, including as regards to the specific safety reporting requirements;
  - (a) clarify the responsibilities of the combined studies' sponsors and investigators;
  - (b) ensure supervision;



- (c) determine the functionalities of the EU portal and EU database necessary to support application of this Article.
10. When doing so, the Commission shall take into consideration, where relevant, provisions of Chapter VI and Annex XV of Regulation (EU) 2017/745 or Chapter VI and Annexes XIII and XIV of Regulation (EU) 2017/746 concerning the investigational device(s) or device(s) for performance study which are covered by the combined study, as applicable.

#### *Article 14d*

##### *Persons assessing the applications*

Article 9 applies to assessments made under this Chapter.’

- (14) Article 16 is replaced by the following:

#### *‘Article 16*

##### *Submission of application*

In order to obtain an authorisation, the sponsor shall submit an application dossier to the Member States concerned through the EU portal. The date on which the sponsor submitted the application for an authorisation of a substantial modification is referred to within this Chapter as the submission date.’;

- (15) the following Article 16a is inserted:

#### *‘Article 16a*

##### *Parallel substantial modification*

1. The sponsor may submit to the reporting Member State, through the EU portal, an application for a parallel substantial modification regarding aspects covered by Part I of the assessment report, prior to the notification of a decision on an ongoing assessment of a substantial modification in accordance with Article 19(1) or Article 23(1).
2. The sponsor may submit to the same Member State concerned, through the EU portal, an application for a parallel substantial modification of an aspect covered by Part II of the assessment report prior to the notification of a decision on an ongoing assessment of a substantial modification in accordance with Article 20(5) or Article 23(1) by the same Member State concerned.
3. The reporting Member State or Member state concerned, as applicable, shall accept the application for a parallel substantial modification if the parallel substantial modification concerns distinct and independent aspects of the application dossier and may be assessed concurrently by the same Member State concerned or reporting Member State.
4. When scope of the application for the parallel substantial modification covers both Part I and Part II of the assessment report, the sponsor shall seek the agreement of both, the reporting Member State and the relevant Member States concerned. The relevant Member State concerned may oppose the agreement if the substantial modification concerns aspects of Part II covered by an ongoing assessment.’

(16) Article 17 is amended as follows:

(a) paragraphs 1 and 2 are replaced by the following:

- ‘1. The reporting Member State for the authorisation of the substantial modification shall be the reporting Member State for the initial authorisation procedure.
2. Within four days from the submission date, the reporting Member State shall validate the application and notify the sponsor through the EU portal as to whether:
  - (a) the substantial modification concerns an aspect covered by Part I of the assessment report;
  - (b) the application dossier is complete in accordance with Annex II; and
  - (c) in case of parallel substantial modification to Part I, whether such a parallel substantial modification is acceptable taking into account the requirements of Article 16a.

When applicable, in the context of a substantial modification of Part I, the Member State concerned shall verify whether the translation or translations in the national language or languages in accordance with the requirements of Articles 26 and 69 has or have been submitted as a substantial modification of Part II. Article 21 applies to the assessment of the accuracy of translations.’

(b) paragraph 4 is replaced by the following:

- ‘4. Where the reporting Member State finds that the application does not concern an aspect covered by Part I of the assessment report or that the application dossier is not complete or, where applicable, that the parallel substantial modification is not acceptable, it shall inform the sponsor thereof through the EU portal and shall set a maximum of four days for the sponsor to comment on the application of to complete the application dossier through the EU portal.

The reporting Member State shall notify the sponsor within 14 days from the submission date, as to whether or not the application complies with the requirements set out in paragraph 2, points (a), (b), and when applicable point (c).

Where the reporting Member State has not notified the sponsor within the period referred to in the second subparagraph, the substantial modification applied for shall be deemed to concern an aspect covered by Part I of the assessment report, the application dossier shall be deemed to be complete and, when applicable, the parallel substantial modification shall be deemed to be acceptable taking into account the requirements of Article 16a.

Where the sponsor has not provided comments or completed the application dossier within the period referred to in the first subparagraph, the application shall be deemed to have lapsed in all the Member States concerned.’

(17) Article 18 is amended as follows:

(a) paragraphs 3 and 4 are replaced by the following:

‘3. The reporting Member State shall submit, through the EU portal, the final assessment report including its conclusions, to the sponsor and to the other Member States concerned within 28 days from the submission date.

For the purpose of this Article and of Articles 19 and 23, the reporting date shall be the date on which the final assessment report is submitted to the sponsor and the other Member States concerned.

4. For clinical trials involving more than one Member State the assessment process of substantial modification shall include three phases:

- (a) an assessment phase performed by the reporting Member State within 21 days from the submission date. The assessment phase shall end when the reporting Member State circulates the draft assessment report;
- (b) a review phase performed within three days from the end of the assessment phase, involving all the Member States concerned, and;
- (c) a coordination phase performed within four days from the end of the review phase.

During the assessment phase, the reporting Member State shall develop a draft assessment report and circulate it to all the Member States concerned.

During the review phase, all Member States concerned shall review the application on the basis of the draft assessment report and shall share considerations for their Member State that are relevant to the application.

Considerations may only be raised on:

- one or more grounds referred to in Article 19(2) of this Regulation.
- on matters that would lead the ethics committee issuing negative opinion.

During the consolidation phase, the reporting Member State shall take due account of the considerations of the other Member States concerned when finalizing the assessment report and shall record how the considerations have been addressed. The reporting Member State shall submit the final assessment report to the sponsor and all the other Member States concerned by the reporting date.’

(b) paragraph 5 is deleted;

(c) paragraph 6 is replaced by the following:

‘6. Between the validation date and the reporting date, only the reporting Member State may request additional information from the sponsor, taking into account the considerations referred to in paragraph 4.

For the purpose of obtaining and reviewing this additional information from the sponsor in accordance with the third and fourth subparagraph, the reporting Member State may extend the period referred to in the first subparagraph of paragraph 3 by a maximum of 14 days.

The sponsor shall submit the requested additional information within the period set by the reporting Member State. This period shall not extend beyond seven days from the receipt of the request.

Upon receipt of the additional information, the Member States concerned shall review any additional information provided by the sponsor and shall share any unaddressed considerations relevant to the application. The review shall be performed within a maximum of three days from the receipt of the additional information and further consolidation shall be performed within a maximum of seven days from the receipt of additional information from the sponsor. When finalising the assessment report, the reporting Member State shall take due account of the considerations of the other Member States concerned and shall record how the considerations have been dealt with.’;

(18) Article 19 is amended as follows:

(a) paragraphs 1 and 2 are replaced by the following:

- ‘1. Each Member State concerned shall notify the sponsor through the EU portal as to whether the substantial modification is authorised, whether it is authorised subject to conditions, or whether authorisation is refused.

Notification shall be done by way of a single decision within five days from the reporting date.

Where the conclusion of the reporting Member State is that the substantial modification is acceptable or acceptable subject to compliance with specific conditions, that conclusions shall be deemed to be the conclusions of the Member State concerned.

A substantial modification subject to condition may be implemented unless the Member State concerned specified that the condition is suspensive. Unless otherwise specified, the fulfilment of the condition does not require a submission of a request for another substantial modification.

Notwithstanding the first subparagraph, a Member State concerned may disagree with that conclusion of the reporting Member State only on the following grounds, provided that the consideration was raised during the process pursuant to Article 18(4) and it considers that it was not sufficiently addressed:

- (a) when it considers that participation in the clinical trial would lead to a subject receiving an inferior treatment than in normal clinical practice in the Member State concerned;
  - (b) infringement of its national law as referred to in article 90.
2. Where the Member State concerned disagrees with the conclusion on the basis of the second subparagraph, it shall communicate its disagreement, together with a detailed justification, through the EU portal, to the Commission, to all Member States and to the sponsor.

A Member State concerned shall refuse to authorise a substantial modification if it disagrees with the conclusion of the reporting Member State as regards Part I of the assessment report on any of the grounds

referred to in the second paragraph or where an ethics committee has issued a negative opinion which, in accordance with the law of that Member State concerned, is valid for the entire Member State. That Member State shall provide for an appeal procedure in respect of such refusal.’

(19) Article 20 is amended as follows:

(a) paragraphs 1 and 2 are replaced by the following:

‘1. Within four days from the submission of the application dossier, the Member State concerned shall notify the sponsor through the EU portal of the following:

- (a) whether the substantial modification concerns an aspect covered by Part II of the assessment report;
- (b) whether the application dossier is complete in accordance with Annex II;
- (c) in case of parallel modification to Part I, whether the submission is acceptable taking into account the requirements of Article 16a.

‘2. Where the Member State concerned has not notified the sponsor within the period referred to in paragraph 1, the substantial modification applied for shall be deemed to concern an aspect covered by Part II of the assessment report and the application dossier shall be deemed to be complete and, when applicable, the parallel substantial modification shall be deemed to be acceptable taking into account the requirements of Article 16a.’

(b) in paragraph 3, the two first subparagraphs are replaced by the following:

‘Where the Member State concerned finds that the substantial modification does not concern an aspect covered by Part II of the assessment report or that the application dossier is not complete, or, where applicable, that the parallel substantial modification is not acceptable, it shall inform the sponsor thereof through the EU portal and shall set a maximum of five days for the sponsor to comment on the application or to complete the application dossier through the EU portal.

Within 14 days from the submission date the reporting Member State shall notify the sponsor as to whether or not the application complies with the requirements set out in paragraph 1 points (a), (b), and if applicable, (c).’

(c) in paragraph 5, the second and third subparagraphs are replaced by the following:

‘Notification shall be done by way of a single decision within 28 days from the submission date.

A substantial modification subject to condition may be implemented unless the Member State concerned specified that the condition is suspensive. Unless otherwise specified, a fulfilment of the condition does not require a submission of a request for another substantial modification.’

(d) in paragraph 6, the second, third and fourth subparagraphs are replaced by the following:

‘For the purpose of obtaining and reviewing this additional information from the sponsor, the Member State concerned may extend the period referred to in the paragraph 5, second subparagraph, by a maximum of 14 days.

The sponsor shall submit the requested additional information within the period set by the Member State concerned, which shall not exceed seven days from the receipt of the request.

Upon receipt of the additional information, the Member State concerned shall complete its assessment within a maximum seven days.’;

(20) in Article 21, paragraph 1 is replaced by the following:

‘1. Where a substantial modification relates to aspects covered by Parts I and II of the assessment report, the application for an authorisation of that substantial modification shall be validated in accordance with Articles 17 and 20.’;

(21) Article 22 is amended as follows:

(a) paragraph 1 is replaced by the following:

‘1. Each Member State concerned shall assess, for its own territory, the aspects of the substantial modification which are covered by Part II of the assessment report and submit, through the EU portal, that report, including its conclusion, to the sponsor within 28 days from the submission date. If the reporting Member State requested additional information regarding aspects covered by Part I of the assessment report as per Article 21(2) in conjunction with Article 18(6), or when a Member State concerned requests additional information from the sponsor regarding Part II aspects of the application, Member States concerned may extend this period by 14 days.’

(b) paragraph 2 is deleted;

(c) paragraph 3 is replaced by the following:

‘3. The sponsor shall submit the requested additional information within the period set by the Member State concerned, which shall not exceed seven days from the receipt of the request.

Upon receipt of the additional information, the Member State concerned shall complete its assessment within a maximum of seven days from the submission of the requested information by the sponsor.

Where the sponsor does not provide the requested additional information within the period set by the Member State concerned the application shall be deemed to have lapsed in that Member State.

The request for additional information and the additional information shall be submitted through the EU portal.’

(22) Article 23 is amended as follows:

(a) in paragraph 1, the third subparagraph is replaced by the following:

‘A substantial modification subject to condition may be implemented unless the Member State concerned specified that the condition is suspensive. Unless otherwise specified, a fulfilment of the condition does not require a submission of a request for another substantial modification.’

- (b) in paragraph 2, the second subparagraph, is replaced by the following:
 

‘Notwithstanding the first subparagraph, a Member State concerned may disagree with the conclusion of the reporting Member State only on the following grounds, provided that the consideration was raised during the process pursuant to Article 18(4) and it considers that it was not sufficiently addressed:

    - (a) when it considers that participation in the clinical trial would lead to a subject receiving an inferior treatment than in normal clinical practice in the Member State concerned;
    - (b) infringement of its national law as referred to in Article 90.’
- (23) Article 25 is amended as follows:
- (a) paragraph 1 is amended as follows:
    - (i) in the first subparagraph, point (e) is replaced by the following:
 

‘(e) justification as to why the clinical trial is a minimal-intervention or low-intervention clinical trial, in cases where this is claimed by the sponsor.’;
    - (ii) the second subparagraph is replaced by the following:
 

‘The list of required documentation and information for Part I is set out in Part I of Annex I. The list of required documentation for Part II is set out in Part II of Annex I.’;
  - (b) the following paragraphs 1a, 1b and 1c are inserted:
 

‘1a. The requirements for Part I may be adapted for minimal-intervention or low-intervention clinical trials.’

‘1b. The sponsor shall use harmonised templates, where such templates are available, for the submission of documents for Part II of the application dossier necessary for the authorisation of the clinical trial, in accordance with the requirements described in Article 7(1) of this Regulation.

1c. To draw up and update, when necessary, harmonised templates to be used by sponsors, the Commission shall be empowered to adopt implementing acts in accordance with Article 88. The harmonised templates may include standardised sections for documents referred to in Article 7(2) and in Annex I.’
  - (c) the following paragraph 2a is inserted:
 

‘2a. The requirements referred to in paragraph 2 may be adapted for minimal-intervention and low-intervention clinical trials.’
  - (d) the following paragraphs 8 and 9 are added:
 

‘8. An application dossier for an authorisation of a clinical trial or for an authorisation of a substantial modification may rely on health data accessed under Chapter IV of Regulation (EU) 2025/327 of the European Parliament and of the Council\*

9. National competent authorities and ethics committees shall ensure that the persons validating or assessing the initial application and substantial

modification requests only documents which are listed in Part I and Part II of Annex I and Annex II.’

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- \* Regulation (EU) 2025/327 of the European Parliament and of the Council of 11 February 2025 on the European Health Data Space and amending Directive 2011/24/EU and Regulation (EU) 2024/2847 (OJ L, 2025/327, 5.3.2025. ELI: <http://data.europa.eu/eli/reg/2025/327/oj>).

(24) the following Chapters IVa and IVb are inserted:

**‘Chapter IVa**

**INVESTIGATIONAL MEDICINAL PRODUCT CORE DOSSIER**

*Article 27a*

*Establishment of an investigational medicinal product core dossier*

1. At the time of submission of a clinical trial application referred to in Articles 5 and 11 the sponsor may request through the EU portal the establishment of an investigational medicinal product core dossier. To this end, the sponsor shall provide data and information referred to in point (Ga) of Part I of Annex I.
2. The sponsor shall submit the request for the establishment of the investigational medicinal product core dossier to all Member States concerned of the initial trial. The sponsor may extend this request to other Member States than the Member States concerned. The reporting Member State of the initial clinical trial shall become the depositary Member State.
3. The depositary Member State shall verify the completeness and suitability of the core dossier for the purposes of the initial clinical trial. At the latest by the time when the conclusion of the assessment of Part I is due in accordance with Article 6(3) the depositary Member State shall notify the sponsor and the other core dossier competent Member States through the EU portal of the establishment of the investigational medicinal products core dossier where the assessment is positive.
4. The investigational product core dossier shall be relied upon by the reporting Member State and the Member States concerned in the process of authorising the initial clinical trial referred to in paragraph 1.
5. Once established, the investigational medicinal product core dossier shall be referred to in all subsequent applications concerning the clinical trial in the context of which the investigational medicinal products core dossier was established and any other corresponding clinical trial.

*Article 27b*

*Maintenance and changes of the investigational medicinal products core dossier*

1. The sponsor shall keep the investigational medicinal product core dossier updated and shall review it at least once per year. When the sponsor identifies a necessity to update the investigational products core dossier, paragraph 2 applies.



2. When new information, relevant to maintain the suitability and completeness of an established investigational product core dossier becomes known to the sponsor, the sponsor shall submit to the depositary Member State, through the EU portal, a request for a change of the investigational medicinal product core dossier.
3. In case of a new application for an authorisation of a new corresponding clinical trial, the reporting Member State of that clinical trial together with the depositary Member State shall assess the suitability of the investigational product core dossier for the purpose of the authorisation of the trial application, that is;
  - (a) whether the investigational product core dossier is complete as regards the information on the characteristics and knowledge about the investigational medicinal products;
  - (b) if appropriate, the compliance with the requirements concerning the manufacturing and import of investigational medicinal products set out in Chapter IX;
  - (c) whether the investigator's brochure and the IMPD is adequate and complete for the scope of use as proposed by the sponsor in the application in accordance point Ga, Part I of Annex I.

The reporting Member State of the corresponding clinical trial shall communicate the results of its assessment to the depositary Member State.

If the investigational product core dossier does not contain all the information necessary for the authorisation of the clinical trial, the reporting Member State may request the sponsor to change the investigational product core dossier.

The sponsor shall in such situations request a change of the investigational medicinal product core dossier in accordance with paragraph 2.

4. After receiving the request for a change to the core dossier, independently of whether a change is submitted in the context of an assessment of an application related to a corresponding clinical trial or independently, the depositary Member State shall verify whether the core dossier, once changed, will continue to fulfil the requirements listed in paragraph 3 points (a), (b) and (c). The Member State concerned with the core dossier shall not duplicate the assessment of the depositary Member State. The depositary Member State may consult the Member State concerned as appropriate.
5. If a request for a core dossier change is submitted in the context of an ongoing assessment related to a corresponding clinical trial, the timeline for change of the core dossier shall allow for timely approval of the clinical trial.
6. The sponsor shall assess whether a change to the investigational product core dossier makes it necessary to submit a substantial modification in corresponding clinical trials that are ongoing.

#### *Article 27c*

*Procedural aspects related to the establishment and maintenance of the investigational medicinal products core dossier*

The Commission shall set out the detailed rules governing the submission of a request for the establishment of an investigational product core dossier, its assessment and maintenance by means of implementing acts, including the rules for cooperation between the core dossier competent Member States and the change of depositary Member State. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 88.”

## **Chapter IVb**

### **REGULATORY SANDBOXES AND USE OF AI**

#### *Article 27d*

##### *Regulatory sandbox*

1. The Commission may, pursuant to the procedure set out in paragraph 7, establish and operate a regulatory sandbox at Union level that provides a controlled and time-limited framework to enable, under real-world conditions, the testing of innovative approaches in clinical trials to which the full application of certain requirements of this Regulation is not possible or appropriate and which therefore may require adaptations.
2. The regulatory sandbox under this Regulation may encompass approaches to the authorisation and conduct of the clinical trials and where appropriate, maybe be implemented in coordination and synergies with the regulatory sandboxes established pursuant to Regulation (EU) 2024/1689 with full involvement of competent authorities supervising the sandbox under Regulation (EU) 2024/1689 and in accordance with the relevant procedures and rules for participating in those AI regulatory sandboxes.
3. The activities within a regulatory sandbox shall take place pursuant to a specific plan, for eligible clinical trials, which may be conducted under enhanced regulatory oversight of the Member States concerned. The plan shall clearly identify the requirements of this Regulation that are temporarily adapted or derogated from in the sandbox and that may relate to, as necessary, to source data and documentation requirements, recruitment and informed consent procedures, monitoring and reporting requirements, trial design rules, investigational medicines handling rules, safety reporting rules, site requirements. The plan shall also identify the roles and responsibilities of sponsors, investigators, and manufacturers.
4. A regulatory sandbox may be established only if the following conditions are met:
  - (a) it is not possible to authorise or conduct a clinical trial in full compliance with the requirements of this Regulation due to innovative approaches in the clinical trial or due to the specificity of the investigational medicinal product;
  - (b) the approaches referred to in point (a) are expected to contribute to at least one of the following objectives:
    - (i) increasing the robustness of the data generated in the trial;

- (ii) considerably decreasing clinical trial length, and increasing the efficiency of the clinical trial;
    - (iii) enabling new technologies and approaches in the development of medicinal products that have the potential to positively and distinctively contribute to better prevention, diagnosis, and treatment, as well as increase adherence to treatment plans or improve the efficiency of the provision of health care;
  - (c) the sandbox provides safeguards to ensure the safety, well-being, and fundamental rights of clinical trial participants, data robustness, and maintained integrity of the clinical trials within the sandbox.
5. The regulatory sandbox shall not affect the supervisory or corrective powers of the Member States concerned and shall operate under the direct supervision of the competent authorities in the Member State concerned for activities that take place on its territory.
  6. Before setting up a sandbox, the Commission shall request an opinion of the CTAG.
  7. The Commission may establish a regulatory sandbox by means of implementing acts, after taking into consideration opinions referred to in paragraph 6. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 88.
  8. Member States shall notify the Commission of any risk to health and safety or fundamental rights or integrity and robustness of data identified during the operation of a sandbox. In these cases, the Commission may, by means of implementing acts, suspend or revoke a regulatory sandbox.
  8. Without prejudice to Article 114(1) of [Regulation (EU) .../... of the European Parliament and the Council [*reference to be added after adoption cf. COM(2023) 193 final*], where in the context of a regulatory sandbox under Article 113 of Regulation (EU) .../... of the European Parliament and the Council [*reference to be added after adoption cf. COM(2023) 193 final*] is considered that new regulatory approaches in clinical trial are necessary for the product development, the Commission may consider to establish a regulatory sandbox under this Regulation to complement the regulatory sandbox established under Regulation (EU) .../... of the European Parliament and the Council [*reference to be added after adoption cf. COM(2023) 193 final*].

#### *Article 27e*

##### *Use of Artificial Intelligence in Clinical Trials*

1. For those clinical trials where the sponsor plan to use AI models or systems, the sponsor shall evaluate the benefits and risks related to patient safety and data robustness of the use of the AI in the context of a specific clinical trial for a specific purpose taking into account the guidelines laid down in Article 37 of Regulation [...] [Biotech Act].
2. The sponsor shall provide information in the protocol on the specific purpose of the use of AI models or systems and the description of the process in the context of the specific clinical trial.

3. When the investigation of a medicinal product in a clinical trial is combined with a performance study of an AI in vitro diagnostic medical device or a clinical investigation of an AI medical device, the provisions of Article 14 on coordinated assessment for authorising combined studies shall apply.
4. In cooperation with the CTAG and, where appropriate, the Medical Device Coordination Group, the Artificial Intelligence Board, the Agency shall develop guidelines referred to in paragraph 1 of this Article.

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\*\* Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL laying down Union procedures for the authorisation and supervision of medicinal products for human use and establishing rules governing the European Medicines Agency, amending Regulation (EC) No 1394/2007 and Regulation (EU) No 536/2014 and repealing Regulation (EC) No 726/2004, Regulation (EC) No 141/2000 and Regulation (EC) No 1901/2006, COM/2023/193final

(25) Article 28 is amended as follows:

- (a) paragraph 2 is deleted.
- (b) in paragraph 3, the last sentence is deleted.

(26) in Article 29(1), the following subparagraph is added:

‘The communication in the context of an interview between the investigator and the subject or the investigator and the subject and its legally designated representative, as applicable, may be done remotely through use of electronic means. The record of the informed consent procedure may have an electronic form and shall be signed relying on electronic identification means complying with Regulation (EU) No 910/2014 of the European Parliament and of the Council\* or the equivalent standards.

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\* Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC, OJ L 257, 28.8.2014.ELI: <http://data.europa.eu/eli/reg/2014/910/oj>.”

(27) in Article 30(3), point (c) is replaced by the following:

‘(c) the clinical trial is a minimal-intervention clinical trial;’

(28) in Article 31(1), point (e) is deleted;

(29) in Article 32 (1), point (e) is deleted;

(30) in Article 33, the following second paragraph is inserted:

‘Women who become pregnant or begin breastfeeding while participating in a clinical trial shall not be automatically excluded from participation in the clinical trial.’

(31) in Article 41, the following paragraph 5 is added:

‘5. Reporting requirements of adverse events and serious adverse events for minimal-intervention and low-intervention clinical trials shall be simplified by

applying a risk-based approach. Any such adaptation should be clearly stated and justified in the protocol by the sponsor.:

- (32) in Article 48, point (a) is replaced by the following:  
‘(a) whether the clinical trial is a minimal-intervention or low-intervention clinical trial;’;
- (33) the following Article 50a is inserted:

*‘Article 50a*

*Delivery of investigational and auxiliary medicinal products through a dispensing pharmacy, an authorised person or directly to the subject*

When justified in the protocol, the delivery of investigational medicinal products and auxiliary medicinal products to the clinical trials subjects may be ensured at a distance under the supervision of the investigator.

In case of a minimal-intervention and a low-intervention clinical trial, the distribution of the investigational medicinal products can be ensured in a Member State where the clinical trial has been authorised, under the responsibility of the investigator, through the dispensing pharmacies or by persons authorised to supply medicinal products to the subject.

The protocol and investigator’s brochure shall describe the arrangements for direct delivery to subjects or through dispensing pharmacies or persons authorised to supply to the patients, including the roles and responsibilities of all parties involved and procedures for secure handling, storage.

The direct delivery to subjects shall comply with the guidelines referred to in paragraph 1 of Article 63a.’:

- (34) in Article 51(1), first subparagraph is replaced by the following:  
‘Investigational medicinal products shall be traceable. They shall be stored, returned and/or destroyed as appropriate and proportionate to ensure the safety of the subject and the reliability and robustness of the data generated in the clinical trial, in particular, taking into account whether the investigational medicinal product is an authorised investigational medicinal product, and whether the clinical trial is a minimal-intervention or low-intervention clinical trial.’;
- (35) in Article 53(2), the first sentence is replaced by the following:  
‘The sponsor shall submit to the Member States concerned, through the EU portal, inspection reports of third country authorities concerning the clinical trial and relevant to subject safety.’
- (36) in Article 57, the first subparagraph is replaced by the following:  
‘The sponsor and the investigator shall keep a clinical trial master file. The clinical trial master file shall at all times contain the essential documents relating to that clinical trial which allow verification of the conduct of a clinical trial and the quality of the data generated, taking into account all characteristics of the clinical trial, including in particular whether the clinical trial is a minimal-intervention or low-intervention clinical trial.’;
- (37) Article 61 is amended as follows:

- (a) paragraph 6 is replaced by the following:
- ‘6. Member States shall make the processes set out in paragraph 5 subject to appropriate and proportionate requirements to ensure subject safety and reliability and robustness of the data generated in the clinical trial while taking into account the guidelines referred to in paragraph 7. They shall subject the processes to regular inspections.’;
- (b) the following paragraph 7 is added:
- ‘7. The inspection working groups referred to in Article 142, point (k) of Regulation (EU) .../... of the European Parliament and the Council [*reference to be added after adoption cf. COM(2023) 193 final*]\*, in agreement with the Commission, may draw up guidelines on general principles applicable to the processes set out in paragraph 5, including for auxiliary medicinal products, and revise them as necessary in order to take account of technical and scientific progress.

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\*Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL laying down Union procedures for the authorisation and supervision of medicinal products for human use and establishing rules governing the European Medicines Agency, amending Regulation (EC) No 1394/2007 and Regulation (EU) No 536/2014 and repealing Regulation (EC) No 726/2004, Regulation (EC) No 141/2000 and Regulation (EC) No 1901/2006, COM/2023/193final.’

- (38) in Article 63, paragraph 4 is replaced by the following:
- ‘4. The Member States shall ensure compliance with the requirements of this Article by means of inspections. Articles 188, with exception of its paragraph 3 and 4, and 189 of Directive (EU) .../... [*reference to be added after adoption cf. COM(2023) 192 final*]\* and article 52 of Regulation (EU) .../... of the European Parliament and the Council [*reference to be added after adoption cf. COM(2023) 193 final*]\*\* apply mutatis mutandis.

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\* Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the Union code relating to medicinal products for human use, and repealing Directive 2001/83/EC and Directive 2009/35/EC COM/2023/192final

\*\* Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL laying down Union procedures for the authorisation and supervision of medicinal products for human use and establishing rules governing the European Medicines Agency, amending Regulation (EC) No 1394/2007 and Regulation (EU) No 536/2014 and repealing Regulation (EC) No 726/2004, Regulation (EC) No 141/2000 and Regulation (EC) No 1901/2006, COM/2023/193final’

- (39) the following Article 63a is inserted:

‘Article 63a  
Distribution

1. The distribution of investigational medicinal shall comply with standards that shall ensure their quality and integrity. The Commission shall adopt delegated acts supplementing this Regulation by determining the standards of good distribution practices for investigational and auxiliary medicinal products taking into account the input of the inspection working groups referred to in Article 142, point (k) of Regulation (EU) .../... of the European Parliament and the Council [*reference to be added after adoption cf. COM(2023) 193 final*], and update them if necessary to take account of scientific and technical progress.
  2. Where the competent authority of the Member State considers it necessary, in particular where there are grounds for suspecting non-compliance with the requirements of this Article, it may carry out inspections to verify the compliance.
  3. Arrangements for inspections referred to in Article 63(1) apply mutatis mutandis to inspections of good distribution practices for investigational and auxiliary medicinal products.’;
- (40) in Article 76, paragraph 3 is replaced by the following:
- ‘3. Member States shall not require any additional use of the system referred to in paragraph 1 from the sponsor for minimal or low-intervention clinical trials, if any possible damage that could be suffered by a subject resulting from the use of the investigational medicinal product in accordance with the protocol of that specific clinical trial on the territory of that Member State is covered by the applicable compensation system already in place.’;
- (41) Article 78 is amended as follows:
- (a) paragraph 1 is replaced by the following:
- ’1. The national competent authorities shall organize inspections in order to supervise compliance with this Regulation.
- Member States shall appoint inspectors to perform the inspections in order to supervise compliance with this Regulation.
- The competent authority of the Member State shall have in place a system of supervision that shall include the following measures:
- (a) announced, and where appropriate, unannounced on-site inspections;
  - (b) remote inspections conducted where justified;
  - (c) compliance control;
  - (d) the effective follow up of the measures referred to in points (a), (b) and (c).’;
- (b) paragraph 6 is replaced by the following:
- “6. Following an inspection, the Member State under whose responsibility the inspection has been conducted, shall draw up an inspection report. That Member State shall make the inspection report available to the inspected entity and the sponsor of the relevant clinical trial and shall submit the inspection report through the EU portal within 90 days after conducting the inspection.”;

(c) paragraphs 8, 9 and 10 are added:

- ‘8. Upon a request by one or more competent authorities of the Member State, the inspection referred to in paragraph 1 may be carried out jointly by the inspectors from more than one Member State and the inspectors from the Agency.
- 9. Member States may delegate to another Member State or the Agency the conduct of a good clinical practice inspection. The Commission may adopt a delegated act in accordance with Article 89 to supplement this Regulation by laying down the procedures applicable to joint inspections and delegation of inspections.
- 10. This Article does not apply to the good manufacturing practice inspections and the good distribution practices inspections related to application of this Regulation, in accordance with Articles 63 and 63a respectively.’;

(42) Article 79 is replaced by the following:

*Article 79*

*Union controls*

- 1. The Commission may conduct controls in order to verify:
  - (a) whether the Member States correctly supervise compliance with this Regulation;
  - (b) whether regulatory system applicable to clinical trials conducted outside the Union ensures that the clinical trials references in the applications for marketing authorisations in the Union are designed, implemented and reported on what good clinical practice and ethical principle are concerned, on the basis of principles that are equivalent to the ones established in this Regulation;
  - (c) whether the regulatory system applicable to clinical trials conducted outside the Union ensures that Article 25(5) of this Regulation is complied with .
- 1a. In order to perform the Union controls referred to in paragraph (1) point (a), the Commission may verify whether competent authorities and ethics committees have in place adequate and effective mechanisms to ensure compliance with this Regulation as regards in particular the requirements related to:
  - (a) validation of the clinical trial application as referred to in Articles 5(3), 17(2) and Article 20;
  - (b) scientific and ethical review as referred to in Article 4, Articles 6(1), 7(1), 8, 9 and 10, assessment of substantial modifications as referred to in Articles 17 to 22, safety assessment referred to in Article 44;
  - (c) communication and coordination with other Member States as referred to in Articles 5 to 8, Article 14, Article 17 to 19, Article 22 and 23;
  - (d) manufacturing and import of investigational medicinal products as referred to in Articles 61 and 63(4);



- (e) application of corrective measures and penalties as referred to in Article 77 and 94;
  - (f) conduct inspections as referred to in Articles 78, 63 and 63a.
2. The Commission shall organise the controls referred to in paragraph 1 in cooperation with the national authorities and shall carry them out in a manner that avoids unnecessary administrative burden.
  3. When performing the controls referred to in paragraph 1, the Commission shall consult the relevant best practices.
  4. The Commission, in carrying out the controls referred to in paragraph 1, may be supported by experts from the competent authorities or ethics committees.
  5. Following each control, the Commission shall:
    - (a) prepare a draft report on the findings and, where appropriate, include recommendations addressing the shortcomings identified;
    - (b) send a copy of the draft report referred to in point (a) to the clinical trials national authority concerned for its comments;
    - (c) take the comments referred to in point (b) into account in preparing the final report; and
    - (d) submit the final report through the EU portal.”;
- (43) the following Article 79a is inserted:

*Article 79a*

*Obligations as regards Union controls*

Member States shall cooperate with the Commission in respect of the performance of the Union controls referred to in Article 79 (1). In particular, they shall:

- (a) ensure that the necessary technical assistance and the relevant documentation, upon justified request, is being provided to the Commission as well as provide any other support that the Commission requests to enable it to perform controls efficiently and effectively, including facilitating access to all premises or any part thereof, to personnel (interviews) and data, including IT systems of the competent authority that is relevant for the execution of their duties.
  - (b) take appropriate follow-up measures to remedy the shortcomings identified through those Commission controls;’
- (44) Article 81 is amended as follows:
- (a) paragraph 2 is replaced by the following:
    - ’2. The EU database shall be established to enable cooperation between the competent authorities of the Member States concerned to the extent that it is necessary for the application of this Regulation and to search for specific clinical trials. It shall also enable communication between sponsors and Member States concerned and reporting Member State as appropriate for the purpose of swift regulatory procedures. It shall enable sponsors to refer to previous submissions of an application for authorisation of a clinical trial or a substantial modification. It shall also enable citizens of the Union to have access to clinical information about

medicinal products. To this end all data held in the EU database shall be in an easily searchable format, all related data shall be grouped together by way of the EU trial number, and hyperlinks shall be provided to link together related data and documents held on the EU database and other databases managed by the Agency.’;

(b) paragraph 9 is replaced by the following:

’9. The sponsor shall permanently update in the EU database information on any changes to the clinical trials which are not substantial modifications but are relevant for the supervision of the clinical trial. The sponsor shall also update the EU portal to satisfy the condition to which an authorisation decision is subject to. An update may trigger a corrective measure from the reporting Member State or the Member State concerned requiring from the sponsor to submit a substantial modification concerning this change. The Member State concerned may issue such corrective measure within 7 days from the date of the update. The sponsor shall submit the substantial modification within period defined in the corrective measure by the Member State.’;

(45) Article 83 is replaced by the following:

#### *‘Article 83*

##### *Competent authorities and ethics committees*

1. Member States shall designate one national contact point to which they confer responsibility for the implementation and practical application of this Regulation. The Commission shall publish a list of national contact points.
2. Each Member State shall communicate the contact point referred to in paragraph 1 to the Commission. Member States shall ensure that competent authorities and ethics committees:
  - (a) have the necessary powers to perform all the necessary regulatory actions and inspections, pursuant to this Regulation.
  - (b) have, or have access to, a sufficient number of suitably qualified and experienced personnel, human and financial resources, operational capacity, and expertise, including technical expertise, for the effective and efficient performance of their tasks they have been made responsible for pursuant to this Regulation.’;

(46) the following Article 83a is inserted:

#### *‘Article 83a*

##### *Communication and coordination between competent authorities and between ethics committees*

1. Where more than one competent authority and ethics committee are responsible for performing regulatory activities or inspections in a Member State for the purpose of applying this Regulation, Member States shall ensure efficient and effective coordination among all the competent authorities and ethics committees concerned in order to guarantee the consistency and

effectiveness of the regulatory activities or inspections performed on their territory.

2. Within those Member States, the competent authorities shall cooperate with each other. They shall communicate information to each other for the effective implementation of the regulatory activities and inspections provided for in this Regulation.’;

(47) Article 85 is replaced by the following:

*‘Article 85*

*Clinical Trials Coordination and Advisory Group*

1. A Clinical Trials Coordination and Advisory Group (CTAG) is hereby established.
2. Each Member State shall appoint to the CTAG, for a three-year term which may be renewed once, one member and one alternate each with expertise in the field of clinical trials. The members of the CTAG shall be chosen for their competence and experience in the field of clinical trials. They shall represent the competent national authorities and the ethics committees of the Member States. The names and affiliations of members and alternates shall be made public by the Commission. The alternates shall represent and vote for the members in their absence.
3. For the purpose of the fulfilment of their tasks, CTAG members shall be able to rely on the contribution of experts from national competent authorities and ethics committees. These experts shall participate in CTAG meetings where relevant.
4. The CTAG shall use its best endeavors to reach consensus. If such consensus cannot be reached, the CTAG shall decide by a majority of its members. Members with diverging positions may request that their position and the grounds on which they are based are recorded.
5. The CTAG shall in particular have the following tasks:
  - (a) to support the exchange of information between the Member States and the Commission on the experience acquired with regard to the implementation of this Regulation;
  - (b) to assist the Commission in providing the support referred to in the second paragraph of Article 84;
  - (c) to prepare recommendations on criteria regarding the selection of a reporting Member State;
  - (d) to provide strategic steering on a common approach for the application of this Regulation and on the support of the clinical trials ecosystem in the Union;
  - (e) to contribute to the development of guidance aiming to ensure effective and harmonised implementation of this Regulation.
  - (f) to contribute to the development of guidelines on the use of the artificial intelligence models and systems in clinical trials in accordance with Article [xx] Regulation (EU) .../... [European Biotech Act]\*;

- (g) to provide advice, either of its own initiative or at the request of the Commission, in the assessment of any issue related to the implementation of this Regulation;
  - (h) to contribute to harmonised administrative practice with regard to clinical trials in the Member States;
  - (i) to provide a recommendation before setting up a regulatory sandbox.
6. The CTAG shall be chaired by a representative of the Commission. The chair shall not take part in votes of the CTAG.
  7. The CTAG may issue recommendations and opinions on matters related to clinical trials and shall endorse any guidance related to the application of this Regulation. The Commission shall publish the guidelines endorsed by the CTAG.
  8. The CTAG shall meet at regular intervals and whenever the situation requires, on a request from the Commission or a Member State. Any item of the agenda of the meeting shall be placed at the request of the Commission or a Member State.
  9. The secretariat shall be provided by the Commission.
  10. The CTAG shall draw up its rules of procedure. The rules of procedure shall be made public.
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(48) Article 93 is replaced by the following:

*'Article 93*

*Data protection*

1. When carrying out their tasks pursuant to this Regulation, sponsors are required to process personal data, including genetic data or data concerning health for the following purposes:
  - (a) for the submission of applications in accordance with Articles 5, 11, 14 and 16;
  - (b) to perform research activities in the context of a clinical trial in accordance with the protocol as authorised by the national competent authorities in accordance with point D, Part I of Annex I;
  - (c) to perform safety operations and reporting in accordance with Articles 41 to 43 and 52 to 54;
  - (d) to record, process, handle and store information in accordance with Article 56;
  - (e) to perform archiving in accordance with Article 58;
  - (f) to submit to the EU portal the summary of the results of the clinical trial, the lay summary, the clinical study report and, where applicable, raw data, in accordance with Article 37(4).

2. When carrying out their tasks pursuant to this Regulation, investigators are required to process personal data, including genetic data or data concerning health for the following purposes:
  - (a) to perform research activities in the context of a clinical trial in accordance with the protocol as authorised by the national competent authorities in accordance with point D, Part I, Annex I;
  - (b) to perform safety reporting in accordance with Articles 41 and 54;
  - (c) to record, process, handle and store information in accordance with Article 56;
  - (d) to perform archiving in accordance with Article 58.
3. Sponsors and investigators shall make available personal data, including genetic data or data concerning health:
  - (a) to the competent authorities of the Member States for the purposes of oversight activities, including inspections, in accordance with Article 78;
  - (b) to the Commission for the purposes of controls, in accordance with Article 79.
4. For the processing assessment leading to the authorisation of clinical trial applications and operations referred to in this Article, sponsors and investigators are controllers within the meaning of Article 4(7) of Regulation (EU) 2016/679.
5. Personal data, including genetic data or data concerning health, shall be retained as long as required pursuant to Article 58 and in accordance with the conditions laid down therein.
6. Personal data collected and processed in accordance with this Regulation may be further processed by the same controller for the purposes of other clinical trials conducted under this Regulation, or for scientific research with the aim of protecting public health, improving standard of care and fostering the innovation capacity of European medical research.
7. By derogation from Article 9(4) of Regulation (EU) 2016/679, Member States may not maintain or introduce further conditions, including limitations, with regard to the processing of personal data, including genetic data or data concerning health in the context of clinical trials carried out in accordance with this Regulation.
8. Processing of personal data referred to in this Article shall be subject to appropriate technical and organisational measures to ensure the protection of the rights and freedoms of data subject. In particular, the controller shall obtain informed consent of the subject in accordance with Article 29 of this Regulation. The controllers shall also apply confidentiality rules concerning access to records and personal data of subjects and apply further safeguards that are appropriate for a specific clinical trial as requested in point D, Part I of Annex I (ak), (al), (am).

(49) Article 97 is replaced by the following:

*“Article 97*

**Review**

Five years after the date referred to in Article 99, second subparagraph, and every ten years thereafter, the Commission shall present a report to the European Parliament and to the Council on the application of this Regulation. That report shall include an assessment of the impact that the Regulation has had on scientific and technological progress, comprehensive information on the different types of clinical trials authorised pursuant to this Regulation, and the measures required in order to maintain the competitiveness of European clinical research. The report shall also assess progress made by monitoring as a key performance indicator the number of addition multinational clinical trials authorised in the Union over the 5-year period of the reporting, compared to the average number of such clinical trials authorised per year in the Union as of 2025;

The Commission shall, if appropriate, present a legislative proposal based on that report in order to update the provisions set out in this Regulation”

(50) in Article 98, paragraph 1 is replaced by the following:

‘1. This Regulation, as applicable on [Publication Office: please insert the date of the day before the date of application of Biotechnology Regulation] shall continue to apply to the procedures for authorisation, substantial modification of addition of a Member State concerned of a clinical trial where the request for the authorisation has been submitted before the date of entry into application as referred in Article 67(3), point (a), of Regulation [...] [European Biotech Act].’

(51) the following Article 98a is inserted;

*‘Article 98a*

*Development plan for the EU Portal and database*

The Agency shall be responsible for reporting, on the development, maintenance and, where relevant, adjustment of the EU portal in terms of timing, budgetary compliance and quality.

This would include a submission, after consulting the Commission, of a revised development plan for EU Portal and database to the Agency’s Management Board 1 month after entry into force of Regulation (EU).../... of the European Parliament and of the Council [include reference to Biotech Act proposal].\* The development plan shall ensure that all required system functionalities are available by the date of application as defined in Article [...] of Regulation (EU).../...[Biotech Act proposal].

The summary of the development plan with key milestones and timelines [once approved by the Management Board of the Agency] shall be made publicly available at the website of the Agency.’

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\*Biotechnology proposal

(52) Annex I is amended in accordance with Annex I to this Regulation.

### Amendments to Regulation (EU) 2019/6

Regulation (EU) 2019/6 is amended as follows:

- (1) in Article 3, the following paragraph 3 is inserted:

“The Union GMO legislation shall not apply to veterinary medicinal products containing or consisting of genetically modified organisms that are authorised or manufactured in accordance with this Regulation. The administration of veterinary medicinal products shall not bring the treated animal or their products under the scope of the GMO rules.”
- (2) in Article 4, the following points (45), (46) and (47) are added:
  - (45) “zoonosis’ means any disease and/or infection which is naturally transmissible directly or indirectly between animals and humans
  - (46) “‘veterinary medicinal products containing or consisting of genetically modified organisms’ means veterinary medicinal products that contain or consist of genetically modified organisms as defined in Article 2 point (2) of Directive 2001/18/EC” excluding organisms obtained through the techniques of genetic modification listed in Annex I B to Directive 2001/18/EC”;
  - (47) “‘regulatory sandbox’ means a time-limited regulatory framework that enables the development, placing on the market or use, under regulatory supervision, of innovative technologies, methods or products related to animal health which are directly or indirectly related to the development, manufacturing or use of veterinary medicinal products and which are not regulated under Union legislation”;
- (3) in Article 8, paragraph 5 is deleted;
- (4) Article 9 is amended as follows:
  - (a) the following paragraph 2a is inserted:

‘2a. In case of clinical trials with veterinary medicinal products containing or consisting of genetically modified organisms, the competent authorities shall assess potential adverse effects on human health and the environment, having regard to the specific characteristics of the product and in accordance with the principles for environmental risk assessment set out in Annex II. Where appropriate, the implementation of risk mitigation measures shall be required’.
  - (b) in paragraph (3), the following subparagraph is added:

‘During this period, where the trial concerns a veterinary medicinal product containing or consisting of genetically modified organisms, the competent authorities may consult with the bodies set up by the Union or Member States in accordance with under Directive 2001/18/EC, in particular in case of novel questions or first-in-class veterinary medicinal products. The consulted bodies shall ensure protection of commercially confidential information and security of exchange of information.’
  - (c) In paragraph (4), the following subparagraph is added:

‘In the context of the sponsor’s obligation to determine that there are no environmental grounds precluding the conduct of the study, in case of clinical trials with veterinary medicinal products containing or consisting of genetically modified organisms, where a risk to the environment or human health is identified, mitigation measures shall be implemented before the start of the trial, having regard to the specific characteristics of the product, the magnitude of the possible hazard and likelihood of that adverse effect occurring.’

- (5) In Article 28, paragraph 2 is replaced by the following:

‘During the process of examination of applications for marketing authorisations for veterinary medicinal products containing or consisting of genetically modified organisms, the Agency may hold consultations with the bodies set up by the Union or Member States in accordance with Directive 2001/18/EC, in particular for first-in-class products or when a novel question arises. The consulted bodies shall ensure protection of commercially confidential information and security of exchange of information.’

- (6) The following Article 40a is inserted:

*‘Article 40a*

**Extension of the supplementary protection certificate concerning biotechnology medicinal products treating zoonoses developed and authorised in the Union**

1. Where a marketing authorisation is granted by the Union to a veterinary medicinal product developed by means of a biotechnology process referred to in paragraphs 2(a) of Article 42 of Regulation (EU) 2019/6 that is intended to diagnose, treat or prevent zoonotic diseases, and that is protected either by a supplementary protection certificate in accordance with Regulation (EC) No 469/2009<sup>74</sup> of the European Parliament and of the Council, or by a patent which qualifies for the granting of such supplementary protection certificate, the holder of a patent or of such certificate shall be entitled to a 12-month extension of the periods referred to in Article 13, paragraphs 1 and 2 of Regulation (EC) No 469/2009, provided that the marketing authorisation applicant demonstrates that all of the following conditions are met:
  - (a) the medicinal product contains a new active substance distinctly different from that of any authorised medicinal product in the Union;
  - (b) the veterinary medicinal product has a mechanism of action distinctly different and shows a level of safety and efficacy which at least equivalent to that of any authorised veterinary medicinal product in the Union for the same zoonotic disease; and
  - (c) at least a manufacturing step, excluding packaging, quality testing and certification is performed in the Union.
2. The Agency shall assess compliance with the conditions referred to in paragraph 1 as part of the marketing authorisation procedure concerned.

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<sup>74</sup> Regulation (EC) No 469/2009 of the European Parliament and of the Council of 6 May 2009 concerning the supplementary protection certificate for medicinal products, OJ L 152, 16.6.2009, pp. 1



3. Where compliance is confirmed, the Agency's opinion shall issue a statement to that effect.
4. A copy of the statement referred to in paragraph 3 shall be included in the application for a certificate lodged under article 7 of of Regulation (EC) No 469/2009.

(7) Article 61 is replaced by the following:

*'Article 61*

**Variations that do not require assessment**

1. Marketing authorisation holders shall be entitled to implement variations included in the list established in accordance with Article 60(1), under the conditions specified therein.
2. Where a variation referred to in paragraph (1) affects the summary of product characteristics, the labelling or package leaflet, the marketing authorisation holder shall record the change in the product database within 30 days after its implementation.

The competent authority that granted the marketing authorisation or, in the case of veterinary medicinal products authorised under the centralised procedure, the Commission following an opinion by the Agency, shall amend the marketing authorisation in accordance with the change recorded by the marketing authorisation holder in the product database.

For veterinary medicinal products authorised under the centralised procedure, the amendment of the marketing authorisation shall be made by means of implementing acts which shall be adopted in accordance with the examination procedure referred to in Article 145(2).

3. Where a variation as referred to in paragraph (1) does not affect the summary of product characteristics, labelling or package leaflet, the marketing authorisation holder shall record the change in the product database within one year after its implementation.
4. Variations implemented by marketing authorisation holders in circumvention of the conditions laid down in the implementing act referred to in Article 60(1) shall not be valid.'

(8) the following Chapter IX is added:

**'CHAPTER IX**

**REGULATORY SANDBOX**

*Article 136a*

**Regulatory sandbox**

1. The Commission may set up a regulatory sandbox in accordance with the procedure set out in paragraphs 2 and 4 for innovative technologies, methods or products related to animal health which are directly or indirectly related to the development, manufacturing or use of veterinary medicinal products and

which are not regulated under other Union legislation, where the following conditions are met:

- (a) it can be expected that those technologies, methods or products will have a positive impact on animal health without unacceptable negative impacts on human health or the environment;
  - (b) the development, placing on the market or use of the technologies, methods or products concerned is hindered by the lack of a harmonised legal framework.
2. Developers of technologies, methods or products related to animal health which are directly or indirectly related to the development, manufacturing or use of veterinary medicinal products and which are not regulated under other Union legislation may send an application to the Agency requesting the development of a regulatory sandbox. The Agency shall assess applications received and, based on its assessment, may submit a recommendation to the Commission which shall include all of the following:
- (a) a justification for the regulatory sandbox, including a description of the proposed technologies, methods or products to be included;
  - (b) identification of existing regulatory challenges;
  - (c) estimation of potential benefits and potential risks to animal or human health or the environment;
  - (d) mapping of existing expertise available to the Agency required to address potential benefits and risks referred to in point (c). Where no relevant expertise is readily available to the Agency, it shall present a plan on how it intends to address the points identified under point (c);
  - (e) a proposal for the duration of the regulatory sandbox.
3. Upon receipt of the Agency's recommendation, the Commission shall take a decision, by means of an implementing act, in accordance with the examination procedure referred to in Article 145(2). Where the Commission agrees to the establishment of a regulatory sandbox, the implementing act shall specify the duration of the regulatory sandbox.
4. After a regulatory sandbox is established, the Agency shall take the following measures:
- (a) develop and make publicly available technical and scientific requirements for technologies, methods or products developed under the regulatory sandbox, taking due account of the potential risks of thereof for human and animal health and the environment;
  - (b) develop rules of procedure which ensure that the confidentiality of information exchanged is maintained;
  - (c) provide relevant scientific advice;
  - (d) assess the benefits and risks of technologies, methods or products developed under the regulatory sandbox and, where it considers that the benefits outweigh the risks, it shall address to the Commission a recommendation for their placing on the market or use.

The Agency shall levy a fee from the applicants in accordance with Article 4 of Regulation (EU) 2024/568<sup>75</sup> for the activities referred to in points c) and d) of the first subparagraph. The applicable amounts shall be published on the website of the Agency.

5. The Commission may, by means of an implementing act, authorise the placing on the market or the use of the technologies, methods or products developed under a regulatory sandbox in accordance with the examination procedure referred to in Article 145(2).

Technologies, methods or products developed under a regulatory sandbox shall not be placed on the market or used until they have been authorised by the Commission.

6. Where a serious risk to public or animal health or to the environment associated with the use of technologies, methods or products developed under a regulatory sandbox is identified by national competent authorities, they shall swiftly inform the Agency. Pending the adoption of a Commission decision pursuant to paragraph 8, national competent authorities may take interim measures, including the suspension of their placing on the market, the suspension of use, or recall measures.
7. Where the Agency is notified of a serious risk in accordance with paragraph 6, it shall swiftly assess the referred matter and, where appropriate, any possible impact for similar technologies, methods or products placed on the market which have been developed or used under a regulatory sandbox. In its assessment, the Agency shall consider the benefits for animal health and the identified risks.
8. Where the assessment referred to in paragraph 7 concludes that the benefit-risk balance is negative and there are no satisfactory risk mitigation measures that can be implemented, the Agency shall recommend the suspension or withdrawal of authorisation for placing on the market or use. The Commission shall take a decision, by means of an implementing act, in accordance with the examination procedure referred to in Article 145(2).
9. Following the assessment referred to in paragraphs 7, the Agency may recommend the Commission to put an end to the regulatory sandbox. The Agency's recommendation shall advise on appropriate actions concerning the technologies, methods or products in development under the regulatory sandbox. The Commission may, by means of an implementing act, terminate a regulatory sandbox in accordance with the examination procedure referred to in Article 145(2).
10. Two years before the end of the period of validity of an established regulatory sandbox, the Agency shall submit an assessment report on the progress of the regulatory sandbox to the Commission, including recommendations for a regulatory framework after the end of the regulatory sandbox. Where

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<sup>75</sup> Regulation (EU) 2024/568 of the European Parliament and of the Council of 7 February 2024 on fees and charges payable to the European Medicines Agency, amending Regulations (EU) 2017/745 and (EU) 2022/123 of the European Parliament and of the Council and repealing Regulation (EU) No 658/2014 of the European Parliament and of the Council and Council Regulation (EC) No 297/95 (OJ L OJ L 568, 14.2.2024)

appropriate, it may recommend the extension of the duration of the regulatory sandbox.

11. The Commission shall review the assessment report referred to in paragraph 10 and may take appropriate actions as regards the regulatory requirements for the marketing or use of technologies, methods or products under the scope of the regulatory sandbox after the termination thereof. Where appropriate, the Commission may extend the duration of a regulatory sandbox, by means of an implementing act, in accordance with the examination procedure referred to in Article 145(2).
12. The Agency shall keep a registry of regulatory sandboxes established in accordance with this Regulation. It shall prepare and publish each year a report on the implementation of the regulatory sandbox.'

- (9) Article 146 is replaced by the following:

*'Article 146*

**Amendments to Annex II**

'The Commission is empowered to adopt delegated acts in accordance with Article 147(2) in order to amend Annex II to take due account of technical and scientific progress.'

- (10) Annex II to Regulation (EU) 2019/6 is amended in accordance with Annex III to this Regulation.

*Article 60*

**Amendments to Regulation (EU) 2024/795**

Regulation (EU) 2024/795 is amended as follows:

- (a) in Article 2, the following paragraph 9 is added:
- '9. Health biotechnology strategic projects, including high-impact health biotechnology strategic projects recognised in accordance with Regulation [...] [European Biotech Act ] shall be deemed to contribute to the STEP objectives referred to in paragraph 1, point (a)(iii) or point (b), as appropriate.
- (b) in Article 4, paragraph 7 is replaced by the following:
- '7. Strategic projects recognised in accordance with the relevant provisions of the Regulation (EU) 2024/1735, Regulation (EU) 2024/1252, Regulation [...] [Critical Medicines Act] and health biotechnology strategic projects, including high-impact health biotechnology strategic projects recognised in accordance with Regulation [...] [European Biotech Act] that fall within the scope of Article 2 of this Regulation and that receive a contribution under the programmes referred to in Article 3 of this Regulation may also receive a contribution from any other Union programme, including funds under shared management, provided that those contributions do not cover the same costs. The rules of the relevant Union programme shall apply to the corresponding contribution to the strategic project. The cumulative funding shall not exceed the total eligible costs of the strategic project. The support from the different

Union programmes may be calculated on a pro rata basis in accordance with the documents setting out the conditions for support.’;

- (c) in Article 6(1), point (c) is replaced by the following:
- ‘(c) details of projects that have been recognized as strategic projects under Regulation (EU) 2024/1735, Regulation (EU) 2024/1252 and Regulation [...] [Critical Medicines Act] and as health biotechnology strategic projects, including as high-impact health biotechnology strategic projects under Regulation [...] [European Biotech Act], to the extent that they fall within the scope of Article 2 of this Regulation.’.

#### *Article 61*

### **Amendment to Regulation (EU) 2024/1938**

Regulation (EU) 2024/1938 is amended as follows:

- (1) In Article 3, the following point (60) is added:
- ‘(60) ‘regulatory sandbox’ means a regulatory framework which allows to develop, assess and test innovative or adapted regulatory solutions within a controlled environment pursuant to a specific plan, for a limited time and under regulatory supervision and which facilitates the development, assessment, authorisation or monitoring of innovative activities or substances which are likely to fall within the scope of this Regulation.’
- (2) in Article 13, the following paragraph 3a is inserted:
- ‘3a. The Commission may adopt implementing acts, setting out time limits for the provision, by the competent authorities consulted in accordance with paragraph 2, of a reply on the regulatory status of a substance, product or activity.
- Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 79(2).’
- (3) in Article 69(2), the first subparagraph is replaced by the following:
- ‘The Commission may adopt implementing acts setting out time limits for the SCB, to issue its opinions on the regulatory status of a substance, product or activity, in accordance with Article 13(3), first subparagraph.
- The Commission may adopt implementing acts setting out criteria and procedures for the consultation of advisory bodies established under other relevant Union legislation in relation to the performance of the SCB tasks, including time limits for those bodies to issue their opinions in the framework of such consultation.
- Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 79(2)
- (4) the following Article 39a is inserted:

#### *Article 39a*

### **SoHO regulatory sandboxes**

1. On a substantiated request from a SoHO entity, a Member State may set up regulatory sandboxes that provide a time limited controlled environment to

facilitate the development and testing of innovative products, services, processes or substances in the field of SoHO, under the supervision of one or more competent authorities and where the following conditions are met:

- (a) the characteristics or methods of those innovations and technologies are expected to distinctively contribute to the safety, quality, including the effectiveness of the SoHO or the SoHO activity or to provide a major contribution to patient access to treatment;
  - (b) the application of the requirements of this Regulation would impede or significantly delay the development of those innovations and technologies, due to scientific or regulatory challenges arising from the characteristics or methods related to that innovation or technology.
2. Member States may jointly set up the regulatory sandboxes referred to in paragraph 1. The Commission shall support such cooperation in accordance with Article 72 (1).
3. The regulatory sandbox shall seek to allow the assessment of the innovations referred to in paragraph 1 in a real-world environment under strict regulatory supervision, to ensure that the necessary evidence and data is generated to demonstrate their safety quality, including effectiveness in view of their distribution.
4. The regulatory sandbox may include clearly described derogations from the requirements set out in this Regulation. Those derogations may entail adapted, enhanced, waived or deferred requirements. Each derogation shall be limited to what is apt and strictly necessary to attain the objectives pursued and shall be duly justified and specified in the sandbox plan referred to in paragraph [6].
- However, the regulatory sandbox shall not include derogations from the provisions on standards concerning voluntary and unpaid nature of SoHO donations laid down in Article 54.
5. The regulatory sandboxes shall be conducted under the supervision of the SoHO competent authorities, and, where appropriate, in cooperation with competent authorities acting in accordance with other relevant Union legislative acts in the area of health or national legislation.
6. The activities within the regulatory sandbox shall take place in accordance with a specific regulatory sandbox plan developed by the SoHO competent authorities. The sandbox plan shall:
- (a) be informed by data provided by, and established following consultations with, the developers of the concerned innovations;
  - (b) identify the participants in the regulatory sandbox and their respective roles;
  - (c) identify the requirements of this Regulation that cannot be complied with, from which derogations are considered necessary and the adapted, enhanced, waived or deferred requirements entailed by such derogations;
  - (d) include appropriate measures to mitigate potential risks to health and to the environment;
  - (e) establish the duration of the regulatory sandbox.

- (f) explain the monitoring framework for the regulatory sandboxes including what aspects will be reported on, the frequency of reporting and data sources.
7. When establishing the regulatory sandbox, the SoHO competent authorities shall consult, where appropriate, the SCB, including by requesting scientific, technical or regulatory advice for the design of the sandbox plan. The SCB shall provide support and shall seek to foster a common approach for the design and the implementation of the regulatory sandboxes referred to in this Article.

For the purposes of the support to SoHO competent authorities referred to in the first subparagraph, the SCB may:

- (a) request information and data from holders of authorisations of SoHO preparations, leveraging information on the EU SoHO platform established under article 74 of this Regulation, developers, independent experts and researchers, representatives of healthcare professionals and patients and may engage with them in preliminary discussions;
  - (b) collaborate with the Foresight Panel for Emerging Health Innovation referred to in article 38 of Regulation (EU) .../...[European Biotech Act].
8. When setting up the regulatory sandbox, the SOHO competent authorities shall provide detailed, non-confidential information to the Commission, regarding the regulatory framework governing the specific regulatory sandbox set out in a regulatory sandbox plan. The Commission shall publish the information received, on the EU SoHO platform established under article 74 of this Regulation.
9. Upon the termination of the regulatory sandbox, the competent authorities shall submit to the SCB and to the Commission a detailed report on the regulatory sandbox and any possible follow up concerning in particular changes in the regulatory framework for the innovations or categories of innovations concerned, based on the learnings from the regulatory sandbox. The SCB shall publish the information received.

The information referred to in the first subparagraph may also be provided at regular intervals during the implementation of the sandbox.

10. A SoHO preparation resulting from an innovation developed as part of a regulatory sandbox may be distributed for human application only where authorised in accordance with Article 38(1). The initial validity of such authorisation shall not exceed the duration of the regulatory sandbox. The authorisation may be extended by the competent authority at the request of the relevant SoHO entity.
11. The regulatory sandboxes shall not affect the enforcement and monitoring responsibilities of the SoHO competent authorities pursuant to this Regulation and to other Union legislation.
12. Participants in the regulatory sandbox, in particular the developer shall remain liable under applicable national legislation for any harm inflicted on third parties as a result from the testing taking place in the regulatory sandbox. They shall inform the national SoHO competent authorities without undue delay of any information which might entail the amendment of the regulatory sandbox

or concerns the quality, safety or efficacy of products developed as part of a regulatory sandbox.

13. In case of identification of risks to public health or safety concerns or the environment associated with the use of the innovation covered by a regulatory sandbox, the sandbox participants shall immediately inform the SoHO competent authorities of the action taken to prevent those risks. The SoHO competent authorities shall take immediate and adequate temporary corrective measures, including to suspend, revoke or restrict the scope of the regulatory sandbox and shall inform the SCB and the Commission thereof.

## **CHAPTER [X]**

### **FINAL PROVISIONS**

#### *Article 62*

##### **Monitoring**

The Commission shall publish and keep up to date a list of health biotechnology strategic projects and high impact health biotechnology strategic projects.

#### *Article 63*

##### **Evaluation**

1. No sooner than *[insert date, five years after the date of entry into application of this Regulation...]*, the Commission shall evaluate this Regulation in light of the general objective that it pursues and referred to in Article 1(1)]and present a report on its main findings to the European Parliament and to the Council, the European Economic and Social Committee, and the Committee of the Regions, in particular on the impact of this Regulation and progress towards that objective.
2. The Member States shall, upon request, provide the Commission with any relevant information they have and that the Commission may need for its assessment pursuant to in paragraph 1.

#### *Article 64*

##### **Exercise of the delegation**

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
2. The power to adopt delegated acts referred to in Article 43(2) shall be conferred on the Commission for a period of five years from *[insert date of entry into force of this Regulation]*. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.



3. The delegation of power referred to in Articles 43(2) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted pursuant to Articles 43(2), shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

#### *Article 65*

##### **Committee procedure**

1. The Commission shall be assisted by the Standing Committee on Biotechnology. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

#### *Article 66*

##### **Handling of confidential information**

1. Information acquired in the course of implementing this Regulation shall be used only for the purposes of this Regulation and shall be protected by the relevant Union and national law.
2. Member States and the Commission shall ensure the protection of trade and business secrets and other sensitive, confidential and classified information obtained and processed in application of this Regulation, including recommendations and measures to be taken, in accordance with Union and relevant national law.
3. The Commission and Member States shall ensure that classified information provided or exchanged pursuant to this Regulation is not downgraded or declassified without the prior written consent of the originator in accordance with relevant Union or national law.
4. The Commission and the national authorities, their officials, employees and other persons working under the supervision of those authorities shall ensure the confidentiality of information obtained in carrying out their tasks and activities in

accordance with relevant Union or national law. This obligation also applies to all representatives of Member States, observers, experts and other participants attending meetings of the Steering Group.

#### *Article 67*

#### **Entry into force and application**

1. This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.
2. It shall apply as of the day of entry into force.
3. By way of derogation from paragraph 2:
  - (a) Article 58, points (5) to (12) and points (15) to (24) shall apply as of [*OP, please insert date: six months after entry into force of this Regulation*];
  - (b) Article 58, point (13) shall apply as of [*OP, please insert date: nine months after entry into force of this Regulation*];
  - (c) Article 58, point (25) shall apply as of [*OP, please insert date: nine months after entry into force of this Regulation*].

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Strasbourg,

*For the European Parliament*  
*The President*

*For the Council*  
*The President*

## **LEGISLATIVE FINANCIAL AND DIGITAL STATEMENT- AGENCIES**

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## 1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

### 1.1. Title of the proposal/initiative

Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on establishing a framework of measures for strengthening Europe's biotechnology and biomanufacturing sectors and amending Regulations (EU) No 536/2014 ('Clinical Trials Regulation'), (EC) No 1394/2007 (ATMP), (EU) 2024/1938 (SoHO), (EU) 2019/6 (Veterinary Medicine Products Regulation), and Regulation (EC) No 178/2002 (General Food Law) ('EU Biotech Act')

### 1.2. Policy area(s) concerned

Priority Area: Competitiveness, prosperity and security

Health, Biotech, Agriculture and Bioeconomy

### 1.3. Objective(s)

#### 1.3.1. General objective(s)

- (i) to improve the functioning of the internal market by establishing a framework to strengthen the competitiveness of the health biotechnology sector, from research to production,
- (ii) to create the conditions for the development and timely placing on the Union market, of biotechnology innovations, products and services,
- (iii) while safeguarding high standards for the protection of human health, animal health, patients and consumers, the environment, ethics, quality, food and feed safety, and biosecurity.

#### 1.3.2. Specific objective(s)

This general objective translates into the following specific objectives:

- (i) strengthen the biotechnology sector and reinforce the Union's research, development and production capabilities, by establishing a framework for the recognition of, and support measures for, strategic health biotechnology projects and high impact strategic health biotechnology projects (pillar 1);
- (ii) support funding of, investments in, and access to capital for, biotechnology companies and projects, including through the setting up of an EU health biotechnology investment pilot to fill the gap in spending on biotechnology innovation (pillar 2);
- (iii) improve the EU manufacturing capacity of, and expertise in biosimilars, including through international cooperation (pillar 3);
- (iv) facilitate the application of AI into the Union's biotechnology and health technology manufacturing ecosystems and frameworks, in line with the Regulation (EU) 2024/1689 (pillar 4);
- (v) ensure a legislative framework that encourages innovation and takes account of technological and scientific developments and progress, by establishing provisions for health biotechnology products (pillar 5);
- (vi) prevent the misuse of biotechnologies and strengthen biodefence capabilities (pillar 6).

(vii) enable the effectiveness of the measures under the pillars 1 to 6 through a legislative framework conducive to the use of biotechnology innovations, by amending Union legislation in particular on clinical trials, veterinary medicinal products, food and feed safety and related legislation (pillar 7).

**1.3.3. Expected result(s) and impact**

*Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.*

Overall, the Biotech Act is expected to support a smooth function of the Union internal market and the resilience and competitiveness of the Union biotechnology and biomanufacturing sector, while allowing allow end-users - including patients - to benefit from the availability of innovative technologies in the EU.

The Biotech Act will have the following expected results:

- - regulatory procedures to place products on the market are predictable, simplified and shorter, with reduced administrative burden;
- - innovation is supported by specific regulatory procedures that are fit for technological and scientific progress;
- - operators have better access to funding throughout the different stages of their development;
- - the EU's capabilities in research, development and production are reinforced, including for biodefence
- - availability of a skilled biotechnology workforce in the Union is improved;
- - there are clear rules preventing the misuse of biotechnologies.

**1.3.4. Indicators of performance**

*Specify the indicators for monitoring progress and achievements.*

Progress towards the objectives of the Biotech Act will be monitored using a set of quantitative and qualitative indicators. This assessment will draw on the strategic mapping of the Union's biotechnology ecosystem, to be established and maintained by the Commission.

Such monitoring shall be based on key performance indicators such as the increase in the number of clinical trials in the Union over the period of five years, as this indicator reflects both the attractiveness of the Union and the capacity of the European regulatory system to support clinical research with maintained high data quality and patients' safety standards.

**1.4. The proposal/initiative relates to:**

☒ a new action

☐ a new action following a pilot project / preparatory action<sup>1</sup>

<sup>1</sup> As referred to in Article 58(2), point (a) or (b) of the Financial Regulation.

☒ the extension of an existing action

.. a merger or redirection of one or more actions towards another/a new action

## **1.5. Grounds for the proposal/initiative**

### **1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative**

In the short term, the initiative requires the Commission to complete the strategic mapping of the Union's biotechnology ecosystem within six months of entry into force and to initiate the establishment of the new governance and support structures foreseen in the Regulation, including the EU Health Biotechnology Support Network, the Emerging Innovation Foresight Panel and the European Health Biotechnology Steering Group. The Commission would also proceed with adopting the necessary implementing and delegated acts, including those detailing the criteria and procedures for the recognition of health biotechnology strategic projects and high-impact health biotechnology strategic projects. In parallel, Member States must designate national single points of contact and begin applying the streamlined regulatory procedures.

The Commission and the Agencies will have to update and/or develop new tools and ways of operation to implement workflows resulting from the amendments to EU legislative frameworks in the health and food area. These amendments aim at simplifying regulatory procedures and creating regulatory environments conducive to innovation.

In the medium term, the strategic mapping would be updated and used to guide the selection of projects and the deployment of Union support, as well as further developments in Union policy for biotechnology.

### **1.5.2. Added value of EU involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this section 'added value of EU involvement' is the value resulting from EU action, that is additional to the value that would have been otherwise created by Member States alone.**

Reasons for action at EU level (ex-ante)

European companies are not competitive enough and face several market and regulatory barriers. Whilst several Member States have taken action to boost innovation in this field, many bottlenecks persist, and improvements are not expected to achieve the necessary levels for the Union to compete at a global scale.

Important regulatory barriers identified stem from EU legislation, therefore the proposed amendments seek to simplify EU legislations, enhance their legal clarity and certainty and make them fit to scientific and technological development.

Furthermore, the market drivers are occurring across the EU, affecting the functioning of the Union single market and EU's businesses competitiveness in the Union and globally. These hurdles result from insufficient capacity of EU companies to access private finance at a competitive scale, especially at later stages of development. Biotechnology clusters in the EU are scattered across Member States, without cross-border connections and continental scale, thus not able to compete globally. Compounded by the low level of storage, access and sharing of data in the area of biotechnology - including cross-borders -, the development and deployment

of AI solutions for biotechnology in the Union are not reaching their full potential. Finally, the gap in developing and retaining an adequately skilled workforce has been observed across the Union. These challenges are systemic, transnational in nature and cannot be addressed effectively through isolated national measures alone.

Expected generated EU added value (ex-post)

A harmonised but simplified EU regulatory framework, supported by strengthened collaboration in selected policy areas (access to capital, skills, AI and data) is expected to ensure all patients, users and citizens can benefit from these innovations to same extent in the EU, a level playing field for operations in the Union single market as well as to enhance the overall competitiveness of the EU. Coordinated EU action will generate economies of scale, reduce duplication of efforts, increase legal certainty for entrepreneurs operating across borders, and unlock cross-border investments, infrastructures and skills development that Member States acting alone could not achieve. It will also reinforce the EU's strategic autonomy in a critical technological area foster the development of adequate biosecurity capabilities.

### *1.5.3. Lessons learned from similar experiences in the past*

Developments in the biotechnology sector over the last decades shows that Europe's strong scientific base does not automatically translate into industrial competitiveness. Fragmented and complex regulatory frameworks, slow and divergent procedures, limited access to risk-tolerant capital, insufficient data sharing and interoperability, shallow public equity markets, and persistent skills shortages have repeatedly hindered the ability of EU innovators to scale and commercialise their technologies. Past efforts have also demonstrated that lack of coordinated EU action leads to duplication, delays, and missed opportunities for deploying biotechnology at scale, while emerging technologies such as AI raise regulatory and biosecurity challenges that cannot be adequately addressed at national level.

Experience from other strategic sectors saw targeted EU-level initiatives, combining regulatory simplification, coordinated investment, and infrastructure support, being deployed to address systemic bottlenecks - such as in the case of the Net-Zero Industry Act and the Critical Raw Materials Act. The same lessons apply to biotechnology: only a coherent and integrated EU approach can unlock the sector's full potential, strengthen competitiveness, and accelerate the safe deployment of biotechnology innovative across the Single Market.

### *1.5.4. Compatibility with the multiannual financial framework and possible synergies with other appropriate instruments*

In order to maximise its positive impact, the Biotech Act will build upon the strong knowledge base. The objectives of the Biotech Act may be supported under the future European Competitiveness Fund, in particular under the Health, Biotech, Agriculture and Bioeconomy Window. Horizon Europe may also be leveraged to complement the Biotech Act's objective of bringing biotechnology products to the market by supporting all stages of research and development of innovative ideas.



*1.5.5. Assessment of the different available financing options, including scope for redeployment*

N/A
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## 1.6. Duration of the proposal/initiative and of its financial impact

### ☐ limited duration

- “ in effect from [DD/MM]YYYY to [DD/MM]YYYY
- “ financial impact from YYYY to YYYY for commitment appropriations and from YYYY to YYYY for payment appropriations.

### ☒ unlimited duration

- Implementation with a start-up period from 2028 to 2029,
- followed by full-scale operation.

## 1.7. Method(s) of budget implementation planned<sup>2</sup>

### ☒ Direct management by the Commission

- ☒ by its departments, including by its staff in the Union delegations;
- ☒ by the executive agencies
- “ **Shared management** with the Member States

### ☐ Indirect management by entrusting budget implementation tasks to:

- “ third countries or the bodies they have designated
- “ international organisations and their agencies (to be specified)
- ☒ the European Investment Bank and the European Investment Fund
- “ bodies referred to in Articles 70 and 71 of the Financial Regulation
- “ public law bodies
- ☒ bodies governed by private law with a public service mission to the extent that they are provided with adequate financial guarantees
- ☒ bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that are provided with adequate financial guarantees
- “ bodies or persons entrusted with the implementation of specific actions in the common foreign and security policy pursuant to Title V of the Treaty on European Union, and identified in the relevant basic act
- ☒ bodies established in a Member State, governed by the private law of a Member State or Union law and eligible to be entrusted, in accordance with sector-specific rules, with the implementation of Union funds or budgetary guarantees, to the extent that such bodies are controlled by public law bodies or by bodies governed by private law with a public service mission, and are provided with adequate financial guarantees in the form of joint and several Soho by the controlling bodies or equivalent financial guarantees and which may be, for each action, limited to the maximum amount of the Union support.

Comments:

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<sup>2</sup> Details of budget implementation methods and references to the Financial Regulation may be found on the BUDGpedia site: <https://myintracomm.ec.europa.eu/corp/budget/financial-rules/budget-implementation/Pages/implementation-methods.aspx>.

The proposal envisions two main vehicles for biotechnology investment in the EU:

### **Support to High Impact Health Biotechnology Strategic Projects**

High Impact Health Biotechnology Strategic projects will boost the European ecosystem by expanding shared pilot facilities open to SMEs and academia alike, financially supporting Member State innovation procurement to create predictable demand for innovative products, and harnessing the potential of data and AI for Biotechnology

### **A Biotechnology Investment Pilot**

The Pilot aims to provide a full lifecycle approach to biotechnology finance by supporting both the intermediate equity approach for biotechnology equity investments and venture loans into the sector. This would enable European innovators to move from discovery to industrial scale by bridging the most capital-intensive stages of development. A company may, for instance, start with early-stage backing from a VC fund, then access tailored venture loans to build production capacity, securing co-investment along the financing journey. By linking these steps, the Pilot ensures that Europe's biotechnology champions can grow, manufacture and stay anchored in Europe.

## **2. MANAGEMENT MEASURES**

### **2.1. Monitoring and reporting rules**

The proposal relies on existing legislations and initiatives in the European Commission and the European Medicines Agency, which will facilitate monitoring of several indicators. For these, continuous data/information will be available.

In addition, five years after the Regulation's entry into application, and every five years thereafter, the Commission will evaluate its implementation, effectiveness and impact.

### **2.2. Management and control system(s)**

#### **2.2.1. *Justification of the budget implementation method(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed***

The actions for establishing a framework of measures for strengthening Europe's biotechnology and biomanufacturing sector will be implemented through direct and indirect management, using the implementation modes offered by the Financial Regulation, mainly being grants and procurement for the direct management mode. Direct management allows to establish grant agreements/contracts with beneficiaries/contractors directly engaged in activities that serve Union policies. The Commission ensures direct monitoring over the outcome of the actions financed. The payment modalities of the actions funded will be adapted to the risks pertaining to the financial transactions.

In order to ensure the effectiveness, efficiency and economy of the Commission controls, the control strategy will be oriented towards a balance of ex-ante and ex-post checks and focus on three key stages of grant/contract implementation, in accordance with the Financial Regulation and/ or the specific contractual provisions:

- Selection of proposals/award the contract to tenders that fit the policy objectives;
- Operational, monitoring and (ex ante) technical desk reviews that cover project implementation, public procurement, pre-financing, interim and final payments, management of guarantees;
- Ex-post controls at the beneficiaries will also be carried out on a sample of transactions. The selection of these transactions will combine a risk assessment and a random selection.

The annual EU subsidy will be transferred to the Agencies in accordance with their payment needs and upon their requests. The Agencies will be subject to administrative controls including budgetary control, internal audit, annual reports by the European Court of Auditors, the annual discharge for the execution of the Union budget and possible investigations conducted by OLAF to ensure, in particular, that the resources allocated to the Agencies are put to proper use. Through its representation in the Agencies' Management Board and Audit Committee, the Commission will receive audit reports and ensures that adequate actions are defined and timely implemented by the Agencies to address the issues identified. All payments will remain pre-financing payments until the Agencies' accounts have been audited by the European Court of Auditors and the Agencies has submitted its final accounts. If necessary, the Commission will recover unspent amounts of the instalments paid to the Agencies.

For provisions of this Regulation that require long-term coordination and large-scale public and private investment (i.e. for high impact health biotechnology strategic projects), the Commission may propose European Partnerships where the Union together with private and/or public partners, acting in full compliance with competition rules, commit to jointly supporting the development and implementation of a programme activities, including those related to market, regulatory or policy uptake.

The activities of the Agencies will also be subject to the supervision of the Ombudsman in accordance with Article 228 of the Treaty. These administrative controls provide a number of procedural safeguards to ensure that account is taken of the interests of the stakeholders.

2.2.2. *Information concerning the risks identified and the internal control system(s) set up to mitigate them*

The main risks relate to the Agencies' performance and independence in implementing the tasks entrusted to them. Underperformance or impaired independence could hamper the achievement of the objectives of this initiative and also reflect negatively on the Commission's reputation.

The Commission and the Agencies have put in place internal procedures that aim at covering the risks identified above. The internal procedures are in full compliance with the Financial Regulation and include anti-fraud measures and cost-benefit considerations.

First and foremost, sufficient resources should be made available to the Agencies in both financial and staffing terms to achieve the objectives of this initiative.

Furthermore, quality management will include both the integrated quality-management activities and risk-management activities within the Agencies. A risk review is conducted annually, with risks being assessed at a residual level, i.e. taking into account controls and mitigations already in place. Conducting self-assessments (as part of the EU Agencies benchmarking programme), annual reviews of sensitive functions and ex-post controls also fall within this area, as does maintain a register of exceptions.

To preserve impartiality and objectivity in every aspect of the Agencies' work, a number of policies and rules on management of competing interests have been put in place and will be regularly updated, describing specific arrangements, requirements and processes applying to the Agencies' Management Board, scientific committee members and experts, the Agencies' staff and candidates, as well as consultants and contractors. The Commission will be informed timely of relevant management and independence issues encountered by the Agencies and will react upon notified issues timely and adequately.

The proposal also envisages that the Commission promotes Biotechnology Investment Pilot for biotechnology investment in the EU.

The main risks are the following:

- Risk of not fully achieving the objectives of the Regulation due to insufficient uptake or quality/delays in the implementation of the selected projects or contracts;
- Risk of inefficient or non-economic use of investments awarded;

• Reputational risk for the Commission, if fraud or criminal activities are discovered; only partial assurance can be drawn from the third parties' internal control systems due to the rather large number of heterogeneous contractors and beneficiaries, each operating their own control system.

The Commission will allocate the necessary human and financial resources for the proper implementation of this Regulation and will put in place internal procedures that aim at covering the risks identified above. The internal procedures will be in full compliance with the Financial Regulation and include anti-fraud measures and cost-benefit considerations.

2.2.3. *Estimation and justification of the cost-effectiveness of the controls (ratio between the control costs and the value of the related funds managed), and assessment of the expected levels of risk of error (at payment & at closure)*

The Commission's and the Agencies' internal control strategies take into consideration the main cost drivers, and the efforts already taken over several years to reduce the cost of controls, without compromising the effectiveness of controls. The existing control systems proved to be able to prevent and/or to detect errors and/or irregularities, and in case of errors or irregularities, to correct them.

In the past five years, the Commission's yearly costs of controls under indirect management represented less than 1% of the annual budget spent on subsidies paid to the EMA and EFSA. The Agencies allocated less than 0,5% (EMA) and 5% (EFSA) of their total annual budget on control activities centring around integrated quality management, audit, anti-fraud measures, finance and verification processes, corporate risk management and self-assessment activities.

**2.3. Measures to prevent fraud and irregularities**

Preventing and detecting fraud is a key governance issue and a common control objective for all Commission's departments who have, in practical terms, the obligation to put in place the appropriate management and internal control procedures designed to deter, detect, correct or sanction irregularities and fraud, in line with articles 317 and 325 TFEU and article 36 FR.

As for its activities in indirect management, the Commission shall take appropriate measures ensuring that the financial interests of the European Union are protected by the application of preventive measures against fraud, corruption and any other illegal activities, by effective checks and, if irregularities are detected, by the recovery of the amounts wrongly paid and, where appropriate, by effective, proportional and deterrent penalties. To this effect, the Commission adopted an anti-fraud strategy, latest update of April 2019 (COM(2019)176), covering preventive, detective and corrective measures. The Commission or its representatives and the European Court of Auditors shall have the power of audit, on the basis of documents and on-the-spot, over all grant beneficiaries, contractors and subcontractors who have received Union funds. OLAF shall be authorised to carry out on-the-spot checks and inspections on economic operators concerned indirectly by such funding.

As regards the European Medicines Agency, the anti-fraud measures are provided for in Article 69 of Regulation (EC) No 726/2004 and the framework financial Regulation (2019/715). The Executive Director and the Management Board of the Agency will take the appropriate measures in accordance with the Internal Control

Principles applied across all EU institutions. In line with the Common Approach and Article 42 of the framework financial Regulation, an anti-fraud strategy has been developed and is followed by the Agency. The Agency's Anti-fraud strategy covers 3-year period and is accompanied by a corresponding action plan, outlining both specific focus areas and actions for the next years, and several continuous actions that are carried out every year, such as a specific standalone fraud risk assessment, with the identified fraud risks included in the overall Agency risk register. Anti-fraud trainings are organised as part of the induction training and via mandatory anti-fraud e-learning training for newcomers. Staff are made aware of how to report any suspects of wrongdoings and disciplinary procedures are in place as per the rules of the Staff Regulations.

As regards the European Food Safety Authority, the anti-fraud measures are provided for in Article 25 of Regulation (EC) No 178/2002 and the framework financial Regulation (2019/715). The Management Board will take the appropriate measures in accordance with the Internal Control Principles applied across all EU institutions. In line with the Common Approach and Article 42 of the framework financial Regulation, an anti-fraud strategy has been developed and is followed by the Authority. The Authority's Anti-fraud strategy is accompanied by a corresponding action plan, outlining both specific focus areas and actions for the next years, and several continuous actions that are carried out every year, such as a specific standalone fraud risk assessment, with the identified fraud risks included in the overall Agency risk register. Mandatory anti-fraud trainings are organised as part of the awareness anti-fraud sessions. Staff are made aware of how to report any suspects of wrongdoings and disciplinary procedures are in place as per the rules of the Staff Regulations.

### 3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

#### 3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

- Existing budget lines

*In order of multiannual financial framework headings and budget lines.*

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff. <sup>1</sup>	from EFTA countries <sup>2</sup>	from candidate countries and potential candidates <sup>3</sup>	From other third countries	other assigned revenue
2	Support expenditure of the programme	Non-diff	YES	YES	YES	NO
2	Union contribution to the European Medicines Agency	Non-diff.	YES	YES	YES	NO
2	Union contribution to the European Food Safety Agency	Diff.	YES	YES	YES	NO
4	20 01 02 01 - Headquarters and Representation offices - officials and temporary staff	Non-diff.	NO	NO	NO	NO
4	20 02 01 and 20 02 02 – External personnel – Headquarters and Representation offices	Non-diff.	NO	NO	NO	NO
4	20 02 06 02 - Conference and meeting costs	Non-diff.	NO	NO	NO	NO
4	20 02 06 01 - Missions, conferences and representation expenses	Non-diff.	NO	NO	NO	NO

<sup>1</sup> Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.

<sup>2</sup> EFTA: European Free Trade Association.

<sup>3</sup> Candidate countries and, where applicable, potential candidates from the Western Balkans.



### 3.2. Estimated financial impact of the proposal on appropriations

#### 3.2.1. Summary of estimated impact on operational appropriations

- The proposal/initiative does not require the use of operational appropriations
- ☒ The proposal/initiative requires the use of operational appropriations, as explained below

##### 3.2.1.1. Appropriations from voted budget

Amounts are indicative and do not prejudice the outcome of the ongoing negotiations on the next MFF.

EUR million (to three decimal places)

DG: SANTE			Year	Year	Year	Year	Year	Year	Year	TOTAL MFF 2028-2034
			2028	2029	2030	2031	2032	2033	2034	
Operational appropriations										
Programme Budget line	Commitments	(1a)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.
	Payments	(2a)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.
Appropriations of an administrative nature financed from the envelope of specific programmes										
Budget line - Technical Assistance -Support credits		(3)	2,626	2,626	2,626	2,626	2,626	2,626	2,626	18,382
TOTAL appropriations	Commitments	=1a+1b+3	2,626	2,626	2,626	2,626	2,626	2,626	2,626	18,382
for DG SANTE	Payments	=2a+2b+3	2,626	2,626	2,626	2,626	2,626	2,626	2,626	18,382

EU contribution to decentralised agencies

EUR million (to three decimal places)

<b>[Agency]: &lt;EMA .&gt;</b>	<b>Year 2028</b>	<b>Year 2029</b>	<b>Year 2030</b>	<b>Year 2031</b>	<b>Year 2032</b>	<b>Year 2033</b>	<b>Year 2034</b>	<b>TOTAL 2028 - 2034</b>	<b>POST 2034 annual expenditure)</b>
Budget line: EMA / EU Budget contribution to the agency	10,055	8,153	2,196	2,240	2,285	2,330	2,377	29,635	2,425

EUR million (to three decimal places)

<b>EFSA</b>	<b>Year 2028</b>	<b>Year 2029</b>	<b>Year 2030</b>	<b>Year 2031</b>	<b>Year 2032</b>	<b>Year 2033</b>	<b>Year 2034</b>	<b>TOTAL 2028- 2034</b>	<b>POST 2034(annual expenditure)</b>
Budget line: EFSA/ EU Budget contribution to the agency	0,882	1,800	1,836	1,872	1,910	1,948	1,987	12,235	2,027

For EFSA and EMA for the first year only 50 % of the average staff costs are taken into account as it is expected that not all positions will be filled from the beginning of the year

Without prejudice to the negotiations on the next MFF, the appropriations allocated to the agencies from 2028 onwards will be compensated via redeployments from programmes under the 2028-2034 MFF. If a compensatory reduction is needed, the resources allocated to the agencies and their funding streams and sources may need to be revised.

EUR million (to three decimal places)

			Year	Year	Year	Year	Year	Year	Year	TOTAL MFF 2028-2034
			2028	2029	2030	2031	2032	2033	2034	
TOTAL operational appropriations (including contribution to EMA and EFSA)	Commitments	(4)	10,938	9,953	4,032	4,112	4,194	4,278	4,364	41,870
	Payments	(5)	10,938	9,953	4,032	4,112	4,194	4,278	4,364	41,870
TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)	2,626	2,626	2,626	2,626	2,626	2,626	2,626	18,382
<b>TOTAL appropriations under HEADING SANTE</b> of the multiannual financial framework	Commitments	=4+6	13,564	12,579	6,658	6,738	6,820	6,904	6,990	60,252
	Payments	=5+6	13,564	12,579	6,658	6,738	6,820	6,904	6,990	60,252

Without prejudice to the negotiations on the next MFF, the appropriations allocated to the agencies from 2028 onwards will be compensated via redeployments from programmes under the 2028-2034 MFF. If a compensatory reduction is needed, the resources allocated to the agencies and their funding streams and sources may need to be revised.

EUR million (to three decimal places)

<b>Heading of multiannual financial framework</b>	<b>4</b>	<b>‘Administrative expenditure’</b>
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DG: SANTE		Year <b>2028</b>	Year <b>2029</b>	Year <b>2030</b>	Year <b>2031</b>	Year <b>2032</b>	Year <b>2033</b>	Year <b>2034</b>	<b>TOTAL MFF 2028- 2034</b>
Human resources		6,371	6,371	6,371	6,371	6,371	6,371	6,371	<b>44,597</b>
Other administrative expenditure		0,010	0,010	0,010	0,011	0,011	0,011	0,011	<b>0,075</b>
<b>TOTAL DG SANTE</b>	Appropriations	<b>6,381</b>	<b>6,381</b>	<b>6,381</b>	<b>6,382</b>	<b>6,382</b>	<b>6,382</b>	<b>6,382</b>	<b>44,672</b>

<b>TOTAL appropriations under HEADING 4 of the multiannual financial framework</b>	(Total commitments = Total payments)	<b>6,381</b>	<b>6,381</b>	<b>6,381</b>	<b>6,382</b>	<b>6,382</b>	<b>6,382</b>	<b>6,382</b>	<b>44,672</b>
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– Amounts are indicative and do not prejudice the outcome of the ongoing negotiations on the next MFF.

**TOTAL HEADING 1 to 4 C1**

	Year 2028		Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL MFF 2028-2034
TOTAL appropriations under HEADINGS 1 to 4	Commitments	19,945	18,960	13,039	13,120	13,202	13,286	13,372	104,924
of the multiannual financial framework	Payments	19,945	18,960	13,039	13,120	13,202	13,286	13,372	104,924

\* Figures in the table above are all strictly indicative pending the outcome of the 2028-2034 MFF negotiations which cannot be prejudged.

*3.2.2. Estimated output funded from operational appropriations (not to be completed for decentralised agencies)*

The output funded from operational appropriations cannot be calculated as the outcome of the 2028-2034 MFF negotiations, still ongoing at time of completing the LFDS, cannot be prejudged.

3.2.3. *Summary of estimated impact on administrative appropriations (not to be completed for decentralised agencies)*

- “ The proposal/initiative does not require the use of appropriations of an administrative nature
- x The proposal/initiative requires the use of appropriations of an administrative nature, as explained below

– 3.2.3.1 Appropriations from voted budget

VOTED APPROPRIATIONS	Year	Year	Year	Year	Year	Year	Year	TOTAL 2028 - 2034	POST
	2028	2029	2030	2031	2032	2033	2034		2034(annual expenditure)
HEADING 4									
Human resources	6,371	6,371	6,371	6,371	6,371	6,371	6,371	44,597	6,371
Other administrative expenditure	0,010	0,010	0,010	0,011	0,011	0,011	0,011	0,075	0,011
Subtotal HEADING 4	6,381	6,381	6,381	6,382	6,382	6,382	6,382	44,672	6,382
Outside HEADING 4									
Human resources	2,626	2,626	2,626	2,626	2,626	2,626	2,626	18,382	2,626
Other expenditure of an administrative nature	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Subtotal outside HEADING 4	2,626	2,626	2,626	2,626	2,626	2,626	2,626	18,382	2,626
TOTAL	9,007	9,007	9,007	9,008	9,008	9,008	9,008	63,054	9,008

- \* Figures in the tables above are all strictly indicative pending the outcome of the 2028-2034 MFF negotiations which cannot be prejudged.

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3.2.4. *Estimated requirements of human resources (not to be completed for decentralised agencies)*

- “ The proposal/initiative does not require the use of human resources
- ☒ The proposal/initiative requires the use of human resources, as explained below

### 3.2.4.1. Financed from voted budget

Estimate to be expressed in full-time equivalent units (FTEs)<sup>1</sup>

<b>TOTAL VOTED APPROPRIATIONS + EXTERNAL ASSIGNED REVENUES</b>	Year <b>2028</b>	Year <b>2029</b>	Year <b>2030</b>	Year <b>2031</b>	Year <b>2032</b>	Year <b>2033</b>	Year <b>2034</b>	POST <b>2034(annual expenditure)</b>
<b>Establishment plan posts (officials and temporary staff)</b>								
20 01 02 01 (Headquarters and Commission's Representation Offices)	29	29	29	29	29	29	29	29
20 01 02 03 (EU Delegations)	0	0	0	0	0	0	0	0
01 01 01 01 (Indirect research)	0	0	0	0	0	0	0	0
01 01 01 11 (Direct research)	0	0	0	0	0	0	0	0
Other budget lines (specify)	0	0	0	0	0	0	0	0
<b>• External staff (in Full Time Equivalent unit: FTE)</b>								
20 02 01 (AC, END from the 'global envelope')	9	9	9	9	9	9	9	9
20 02 03 (AC, AL, END and JPD in the EU Delegations)	0	0	0	0	0	0	0	0
Admin. Support line [XX.01.YY.YY] [2]	- at Headquarters	0	0	0	0	0	0	0
	- in EU Delegations	0	0	0	0	0	0	0
01 01 01 02 (AC, END - Indirect research)	0	0	0	0	0	0	0	0
01 01 01 12 (AC, END - Direct research)	0	0	0	0	0	0	0	0
Other budget lines (specify) - Heading 4	0	0	0	0	0	0	0	0
Other budget lines (specify) - Outside Heading 4	26	26	26	26	26	26	26	26
<b>TOTAL</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>

\* Figures in the tables above are all strictly indicative pending the outcome of the 2028-2034 MFF negotiations which cannot be prejudged.

Considering the overall strained situation in Heading 4, in terms of both staffing and the level of appropriations, the human resources required will be only partly met by staff from the DG who are already assigned to the management of the action and/or have been redeployed within the DG.

<sup>1</sup> Please specify below the table how many FTEs within the number indicated are already assigned to the management of the action and/or can be redeployed within your DG and what are your net needs.

24 additional establishment plan posts which are required to implement the proposal and 4 SNEs (in FTEs) to be covered with additional staff to be financed under heading 4. 26 CAs will be financed from appropriations of an administrative nature financed from the envelope of specific programmes. 5ADs, 4 CAs and 1 SNE posts to be covered by current staff available in the Commission services.

The staff required to implement the proposal (in FTEs):

	To be covered by current staff available in the Commission services	Exceptional additional staff*		
		To be financed under Heading 4 or Research	To be financed from BA line	To be financed from fees
Establishment plan posts	5 ADs	19 ADs 5 ASTs	N/A	
External staff (CA, SNEs, INT)	4 CAs (FIV) and 1 SNE	4 SNEs	20 CAs FGIV 6 CAs FGIII	

The provisions of the Biotech Act, focused on health and food applications in the biotechnology sector, were developed by a temporary taskforce in DG SANTE with support of line units fully resourced to other tasks across different directorates. To fully implement the Act's provisions — which aim to streamline and future proof the regulatory system, enhance research, development, manufacturing and financing of biotechnology products, enable use of AI, foster skills and safe use of biotechnology — additional dedicated personnel will be needed, as presented in the table above and detailed below.

Description of tasks to be carried out by SANTE:

Officials and temporary staff	<p>24 FTEs (AD profiles) to:</p> <ul style="list-style-type: none"> <li>• Manage the workload related to the revision and implementation of the following legislation <ul style="list-style-type: none"> <li>○ <b>Amendment to Regulation (EU) 2024/1938 (SoHO):</b> handle increased number of cases concerning the development of novel nologysandboxes in the field of SoHO.</li> <li>○ <b>Amendments to Regulation (EC) No 1394/2007 on Advanced Therapeutic Medicinal Products (ATMPs):</b> draft delegated acts in relation to what constitute an ATMP in line with amendments to Regulation (EC) No 1394/2007 foreseen by this Regulation.</li> <li>○ <b>Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation'):</b> prepare the delegated acts and implementing acts related to the changes of CTR, support the work of expert groups developing</li> </ul> </li> </ul>
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	<p>guidance and best practices, coordinate with relevant authorities for coherence with other regulatory frameworks, monitor the preparedness of Member States for the harmonised implementation of the changes to the CTR, monitor and steer the changes to the Clinical Trials Information System.</p> <ul style="list-style-type: none"> <li>○ <b>Amendments to Regulation (EC) No 178/2002 ('General Food Law'):</b> comment on behalf of the Commission prior to the commencement of a proposed regulatory sandbox and of any adaptations thereof; Develop of implementing acts , review annual reports of Member States that have set up regulatory sandboxes, proceed to the necessary adaptations of the applicable legislative framework where required.</li> <li>• Manage a panel of experts advising the Commission on new biotechnology developments i.e., <b>Foresight Panel for Emerging Health Innovation.</b></li> <li>• Set up and manage the regulatory sandboxes <b>for novel health biotechnology products not falling in any other legislation in the area of health.</b></li> <li>• Develop implementing acts as needed, detail criteria, draft call for proposals and follow the implementation of <b>High Impact Health Biotechnology strategic projects</b> on: biotechnology research and development, availability of late-stage capital, AI biotechnology applications and biosecurity.</li> <li>• Draft call for proposals and follow the implementation of innovative and precommercial procurement projects, the establishment of an <b>EU Health Biotechnology Support Network</b> of local antennas supporting biotechnology undertakings;</li> <li>• Provide policy and legal guidance to and coordinate with: <ul style="list-style-type: none"> <li>○ EMA on AI systems Deployment and Use in the Lifecycle of Medicinal Products.</li> <li>○ Implementing partners on the management of the Biotechnology Investment Pilot.</li> <li>○ Member States on the supervision of economic operators handling potential biosecurity risk products.</li> </ul> </li> </ul> <p>5 (AST profiles) to:</p> <ul style="list-style-type: none"> <li>• Provide administrative and logistic support to experts' meetings of <b>the Advisory Group on Biosecurity and Artificial Intelligence</b> and to meetings of Member States and the Commission in the <b>European Health Biotechnology Steering Group.</b></li> <li>• Support the process of projects selection and assessment for <b>High Impact Health Biotechnology strategic projects</b> and assist with information management.</li> <li>• Develop and maintain a <b>Union Regulatory Status Repository</b> to assist developers in navigating cases of health biotechnology products.</li> </ul>
External staff	<p>5 SNEs and 24 CAs (FGV) to support ADs with:</p> <ul style="list-style-type: none"> <li>• Expert selection and appointment and dissemination of discussion papers produced</li> </ul>

	<p>by the <b>Foresight Panel for emerging health innovation</b>, support content preparation of panels meetings.</p> <ul style="list-style-type: none"> <li>• Setting up and management of <b>Regulatory Sandbox for novel health biotechnology products not falling in any other legislation in the area of health</b></li> <li>• Commenting on proposed regulatory sandboxes in the framework of the <b>General Food Law</b> and with the development of implementing and delegated acts.</li> <li>• Drafting of calls for proposal for <b>High Impact Health Biotechnology Strategic Projects</b> and follow their implementation, in different areas (biotechnology research and development, availability of late-stage capital, AI biotechnology applications and biosecurity) and for the establishment of the <b>and the EU Health Biotechnology Support Network</b>.</li> <li>• Providing technical content development of the AI-Biotechnology Support Module and its continued maintenance and update with information to be disseminated by the Biotechnology Support Network.</li> <li>• Ensuring coordination in management of funding and liaison with implementing partners in the context of the <b>EU Biotechnology Investment Pilot</b>.</li> <li>• Drafting of guidelines on the enforcement of biosecurity provision to be enforced in cooperation with Member States and relevant delegated or implementing acts, monitor and analyse landscape to identify promising technologies and to support ADs in developing and following calls for capability projects.</li> <li>• Preparing meeting content and support management of the meetings of <b>the Advisory Group on Biosecurity and Artificial Intelligence</b> and the <b>European Health Biotechnology Steering Group</b>.</li> </ul> <p>6 CAs (FGIII) to:</p> <ul style="list-style-type: none"> <li>• Provide administrative support to the organisation of the experts' meetings of the <b>Foresight Panel for emerging health innovation</b>.</li> <li>• Promote and facilitate the networking and cooperation among projects and maintain updated lists of High Impact Health Biotechnology Strategic Project.</li> <li>• Support with workflow of queries and management of information of the <b>EU Health Biotechnology Support Network</b>.</li> </ul>
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3.2.5. *Overview of estimated impact on digital technology-related investments (not to be completed for decentralised agencies)*

Compulsory: the best estimate of the digital technology-related investments entailed by the proposal/initiative should be included in the table below.

Exceptionally, when required for the implementation of the proposal/initiative, the appropriations under Heading 4 should be presented in the designated line.

The appropriations under Headings 1-3 should be reflected as "Policy IT expenditure on operational programmes". This expenditure refers to the operational budget to be used to re-use/ buy/ develop IT platforms/ tools directly linked to the implementation of the initiative and their associated investments (e.g. licences, studies, data storage etc). The information provided in this table should be consistent with details presented under Section 4 "Digital dimensions".

TOTAL Digital and IT	Year	Year	Year	Year	Year	Year	Year	TOTAL MFF
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appropriations	2028	2029	2030	2031	2032	2033	2034	2028 - 2034
<b>HEADING 4</b>								
IT expenditure (corporate)	0	0	0	0	0	0	0	0
<b>Subtotal HEADING 4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Outside HEADING 4</b>								
Policy IT expenditure on operational programmes	0	0	0	0	0	0	0	0
<b>Subtotal outside HEADING 4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

3.2.6. *Compatibility with the current multiannual financial framework (not to be completed for decentralised agencies)*

The proposal/initiative:

- ☒ can be fully financed through redeployment within the relevant heading of the multiannual financial framework (MFF)

The initiative will be fully financed via redeployments from programmes under the 2028-2034 MFF

- " requires use of the unallocated margin under the relevant heading of the MFF and/or use of the special instruments as defined in the MFF Regulation
- " requires a revision of the MFF

3.2.7. *Third-party contributions (not to be completed for decentralised agencies)*

The proposal/initiative:

- does not provide for co-financing by third parties
- ☒ provides for the co-financing by third parties estimated below:

Appropriations in EUR million (to three decimal places)

	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	Total
Specify the co-financing body								

TOTAL appropriations co-financed								
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### 3.2.8. Estimated human resources and the use of appropriations required in EMA

#### Staff requirements (full-time equivalent units)

[Agency]: <EMA .>	Year	Year	Year	Year	Year	Year	Year	POST
	2028	2029	2030	2031	2032	2033	2034	2034
Temporary agents (AD Grades)	5	5	5	5	5	5	5	5
Temporary agents (AST grades)	2	2	2	2	2	2	2	2
Temporary agents (AD+AST) subtotal	7	7	7	7	7	7	7	7
Contract staff	5	5	5	5	5	5	5	5
Seconded National Experts								
Contract agents and SNE subtotal	5	5	5	5	5	5	5	5
TOTAL staff	12	12	12	12	12	12	12	12

#### Appropriations covered by the EU budget contribution in EUR million (to three decimal places)

[Agency]: <EMA .>	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 - 2034	POST 2034(annual expenditure)
Title 1: Staff expenditure	1,055	2,153	2,196	2,240	2,285	2,330	2,377	14,635	2,425
Title 2: Infrastructure and operating expenditure (IT investments) =	9,000	6,000						15,000	
Title 3: Operational expenditure								0,000	

<b>TOTAL of appropriations covered by the EU Budget</b>	<b>10,055</b>	<b>8,153</b>	<b>2,196</b>	<b>2,240</b>	<b>2,285</b>	<b>2,330</b>	<b>2,377</b>	<b>29,635</b>	<b>2,425</b>
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IT investments: EMA currently maintains the Clinical Trials Information System (CTIS) development and maintenance. This Regulation contains major new provisions directly impacting CTIS and need its strengthening. The core objectives of the amendments to the Clinical Trials Regulation (EU 526/2014) will be implementable only following significant IT developments and establishment of new workflows. We anticipate that these new provisions will necessitate fundamental redesign and build of CTIS followed by long-term maintenance including technology refresh.

**Overview/summary of human resources and appropriations (in EUR million) required by the proposal/initiative in a decentralised agency**

[Agency]: <EMA .>	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 - 2034	POST 2034
Temporary agents (AD+AST)	7	7	7	7	7	7	7		12
Contract agents	5	5	5	5	5	5	5		5
Seconded National Experts	0	0	0	0	0	0	0		
<b>Total staff</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>		<b>12</b>
Appropriations covered by the EU Budget	10,055	8,153	2,196	2,240	2,285	2,330	2,377	<b>29,635</b>	2,425
Appropriations covered by fees	0,000	0,000	0,000	0,000	0,000	0,000	0,000	<b>0,000</b>	0,000
Appropriations co-financed (if applicable)	0,000	0,000	0,000	0,000	0,000	0,000	0,000	<b>0,000</b>	0,000
<b>TOTAL appropriations</b>	<b>10,055</b>	<b>8,153</b>	<b>2,196</b>	<b>2,240</b>	<b>2,285</b>	<b>2,330</b>	<b>2,377</b>	<b>29,635</b>	<b>2,425</b>

Appropriations covered by fees: Veterinary sandboxes established in this Regulation will be supported by fees, however being a completely new use case for which EMA will not be able to establish the fee level before the coming into effect of this Regulation, it is impossible to establish an amount and assess the level of contribution at this stage.

Without prejudice to the negotiations on the next MFF, the appropriations allocated to the agencies from 2028 onwards will be compensated via redeployments from programmes under the 2028-2034 MFF. If a compensatory reduction is needed, the resources allocated to the agencies and their funding streams and sources may need to be revised.

**Description of tasks to be carried out by the European Medicines Agency (EMA):**

Officials and temporary staff	<p>The Biotech Act proposal will contain <b>major new provisions on the management of Clinical Trials</b>. These include multiple new workflows, parallel submissions, amended dossier requirement, a core product dossier and extension to combined studies including in-vitro diagnostics, among others.</p> <p>The requested 5 ADs will be:</p> <ul style="list-style-type: none"> <li>Managing the significantly increased daily operations of Clinical Trial</li> </ul>
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	<p>Information System (CTIS) including the access and tasks of its &gt;20,000 users and close to <b>3000 initial clinical trial applications</b> and <b>thousands of substantial modification applications</b>.</p> <ul style="list-style-type: none"> <li>• Identifying, designing, reviewing and ensuring oversight of the delivery process for new functionalities and modules in CTIS in line with relevant legal provisions.</li> <li>• Monitoring the performance of the contractor,</li> <li>• Working with CTIS subject matter experts and stakeholders, to prioritise and validate CTIS technical specifications, in line with relevant legal provisions.</li> <li>• Performing CTIS testing activities, including for the new functionalities and modules.</li> <li>• Planning and performing change management activities.</li> <li>• Performing communication, engagement and training of all relevant stakeholders (e.g. sponsors, Member State regulatory bodies ).</li> <li>• Maintaining the training materials up to date.</li> <li>• Monitoring the KPIs of the IT system and the CTR for regular reporting</li> <li>• Delivering reports when requested</li> <li>• Regulatory compliance check of the IT system</li> </ul> <p>2 AST will:</p> <ul style="list-style-type: none"> <li>• Support AD organization of meetings with sponsors and/or experts and drafting minutes.</li> <li>• Support and coordinate engagement with CTIS subject matter experts and stakeholders.</li> </ul> <p>Support and coordinate communication and training activities with sponsors, member state authorities, ethics bodies etc.</p>
External staff	<p>The requested 5 FTE will be supporting ADs in:</p> <ul style="list-style-type: none"> <li>• Overall support to the ADs, and as appropriate, in the case of national experts, they provide expertise</li> <li>• Implementation of the development plan</li> <li>• Contribute to coordination tasks</li> <li>• Maintaining continuous availability and operation of CTIS.</li> <li>• Managing post-delivery maintenance, providing support to relevant</li> </ul>

	<p>stakeholders (e.g. IT and business service desk).</p> <ul style="list-style-type: none"> <li>performing continuous monitoring of the CTIS function and performance.</li> <li>Providing programme and project management.</li> <li>Response to queries from stakeholders</li> <li>Support the development of CTIS training material</li> <li>Stakeholder communication (e.g. CTIS Forum and other events)</li> </ul> <p><b>The extra resources are absolutely necessary since timely implementation of the amendments targeting competitiveness are dependent on substantial IT development that would need to be set up in short time.</b></p>
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### 3.2.9. Estimated human resources and the use of appropriations required in EFSA

#### Staff requirements (full-time equivalent units)

<b>[Agency]: &lt;EFSA&gt;</b>	Year	Year	Year	Year	Year	Year	Year	POST
	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2034</b>
Temporary agents (AD Grades)	5	5	5	5	5	5	5	5
Temporary agents (AST grades)	1	1	1	1	1	1	1	1
<i>Temporary agents (AD+AST) subtotal</i>	6	6	6	6	6	6	6	6
Contract staff	8	8	8	8	8	8	8	8
Seconded National Experts								
<i>Contract agents and SNE subtotal</i>	8	8	8	8	8	8	8	8
<b>TOTAL staff</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>

**Overview/summary of human resources and appropriations (in EUR million) required by the proposal/initiative in a decentralised agency**

[Agency]: <EFSA>	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 - 2034	POST 2034(annual expenditure )
Title 1: Staff expenditure	0,882	1,800	1,836	1,872	1,910	1,948	1,987	12,235	2,027
Title 2: Infrastructure and operating expenditure								0,000	
Title 3: Operational expenditure								0,000	
<b>TOTAL of appropriations covered by the EU Budget</b>	<b>0,882</b>	<b>1,800</b>	<b>1,836</b>	<b>1,872</b>	<b>1,910</b>	<b>1,948</b>	<b>1,987</b>	<b>12,235</b>	<b>2,027</b>

[Agency]: <EFSA>	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 - 2034	POST 2034
Temporary agents (AD+AST)	6	6	6	6	6	6	6		6
Contract agents	8	8	8	8	8	8	8		8
Seconded National Experts	0	0	0	0	0	0	0		
<b>Total staff</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>		<b>14</b>
Appropriations covered by the EU Budget	0,882	1,800	1,836	1,872	1,910	1,948	1,987	12,235	2,027
Appropriations covered by fees	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Appropriations co-financed (if applicable)	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
<b>TOTAL appropriations</b>	<b>0,882</b>	<b>1,800</b>	<b>1,836</b>	<b>1,872</b>	<b>1,910</b>	<b>1,948</b>	<b>1,987</b>	<b>12,235</b>	<b>2,027</b>



Without prejudice to the negotiations on the next MFF, the appropriations allocated to the agencies from 2028 onwards will be compensated via redeployments from programmes under the 2028-2034 MFF. If a compensatory reduction is needed, the resources allocated to the agencies and their funding streams and sources may need to be revised.

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Description of tasks to be carried out by the European Food Safety Agency (EFSA):

Officials and temporary staff	<p>Currently, there are a lot of delays during the EU risk assessment as EFSA receives low quality dossiers, for which it has to frequently stop the EU risk assessment process and request applicants to provide clarifications and/or additional information. To enhance innovation and to ensure that applicants, and especially SMEs, submit high quality/comprehensive application dossiers it is imperative to support them at pre-submission phase. This will ensure that the EU risk assessment finishes within the time provided increasing the applicants’ chances of reaching the market as quickly as they can (while keeping funding from investors).</p> <p>Currently EFSA provides pre-submission advice only as regards what an application dossier needs to contain (administrative/regulatory aspects). Given the restricted scope of pre-submission advice (PSA), the uptake of the existing PSA is limited; applicants primarily need support on the scientific aspects of preparing a dossier.</p> <p>The provisions of the Biotech Act <b>will significantly increase</b> EFSA workload, in particular <b>due to the enlarged scope of PSA which will now cover <u>also scientific advice</u> (i.e. what kind of studies, advice on the appropriate study design depending on the subject matter at issue, etc).</b> Given the considerable attractiveness of the proposed changes for applicants, especially for SMEs, this is expected to result in a significant increased uptake of pre-submission advice (PSA) especially by SMEs both in terms of numbers of requests for pre-submission advice but also in the breadth and coverage of advice to be given.</p> <p><u>As regards numbers,</u> <b>EFSA expects about 200 requests per year across all authorisation domains in the food chain – which are many and diverse</b> – both for new products/substances and renewals where applicable (e.g. novel foods, food additives/enzymes/flavourings, feed additives, plant protection products, maximum residue limits of pesticides, GM food and feed, food contact materials, health claims,</p>
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addition of vitamins and minerals and other substances to foods, etc).

As regards the breadth and coverage of the advice to be given, EFSA will now be required to carry out **a closer evaluation of the request at hand and provide tailor-made** advice covering both administrative/regulatory aspects **but also scientific aspects on each individual case**.

Thus, the requested -5 ADs are necessary to:

- **Prepare and provide tailor-made** pre-submission advice consisting of scientific advice including on the type and design of studies to be submitted in support of an application/notification and on the content of the application/notification at hand. The scientific advice will be particularly demanding as it needs to be specific to the needs of each individual application taking also into account the profile of the applicant at hand (e.g. SME that has no experience with applications) as well as the subject matter (type of product, applicable sectoral legislation, type of approval, e.g. new or renewal etc). This includes additional tasks such as:
  - **coordinate** with subject matter units for the needed tasks, involvement of working group Experts, Panel experts, who might also later be involved in dossier assessment; In this respect, **additional research and work would need to be carried out as regards previous scientific outputs of the EFSA of all 11 Panels across all authorisation procedures in the food chain, data requirements set out in sectoral legislation and all relevant scientific guidances**, where such exist as well as **the latest scientific information** that may be relevant for the applicant concerned;
  - **coordinate with Member State experts** in the relevant **EFSA networks/fora** but also with other EU agencies where needed – in the area of pesticides where the approval system of active substances is semi-decentralised this will need additional effort to coordinate with the relevant MS authorities to ensure the provision of PSA from EFSA and from the MS authorities in a consistent manner;
  - **exchange with the requestor** (on acceptability, requests for clarifications);
  - **regular consultation with EFSA's legal department to provide advice** in line with the applicable rules (remit of pre-submission advice, public disclosure of the advice

	<p>given once corresponding valid applications are made etc.) ensure the clarity and consistency of the pre-submission advice to all requestors across all authorisation procedures, especially where applicants would need to apply for more than 1 authorisation process for placing products on the market (application for novel foods and subsequently application for a health claim);</p> <ul style="list-style-type: none"> <li>○ coordinate the timely handling of all PSA requests in a manner that provides added value to the applicants and ensure that high quality dossiers are subsequently submitted.</li> <li>- <b>promotion of the pre-submission advice</b> provided by EFSA upon request among applicants and particularly SMEs, who are often one-time applicant and have no experience on how to prepare application dossiers for risk assessment purposes;</li> <li>- to effectively explain the ‘<b>pre-submission advice (PSA)</b>’ <b>process</b> to potential requestors;</li> <li>- to ensure <b>appropriate training to the subject matter units and/or relevant experts</b> both on the required content of dossiers and on the scientific front taking into account the EFSA scientific guidance documents and data requirements laid down in the sector specific legislation.</li> </ul> <p>The permanent 5 AD positions will ensure clarity and consistency in the provision of PSA, maintain the uptake of PSA to ensure that high quality dossiers are later submitted that would accelerate the risk assessment process and that the <b>knowledge is retained within EFSA in the most effective manner.</b></p> <p>1 Assistant staff (AST) is needed for:</p> <ul style="list-style-type: none"> <li>- organization of tele-meetings with the requestor and/or experts (if needed) and drafting minutes;</li> <li>- developing a knowledge database and ensuring its maintenance, monitoring, reporting, auditing of the requests;</li> <li>- following up on the continuous improvement of the service and support IT tool improvements;</li> <li>- supporting applicants on the characteristics of the service and the IT Tools;</li> <li>- disseminating the service among applicants and SMEs, supporting the publication of summary in Open EFSA, publication of full advice at the time of a validated dossier.</li> </ul>
External staff	Given the expected considerable increased uptake of the PSA in the

early years of entry into application of this enlarged service, the permanent staff would need the support of 8 CAs (FGIV) to set in motion the relevant process and the establishment/maintenance in terms of content of a knowledge database for future use for all the tasks outlined and for all authorisation procedures across the food chain for which EFSA is responsible to provide scientific advice. More specifically:

- perform reception and triage of the request;
- analyse the request and ensure appropriate understanding what is needed to provide tailor-made advice;
- liaise with the technical units and identify the relevant and appropriate profile of scientific experts (either from the established panels or their working groups or even from the reserve list of experts) that could support the scientific aspects of PSA depending on each individual request; ensure their participation, analysis and input to the provision of the PSA;
- perform literature review and preparatory work to support the scientific experts and ensure also the provision of PSA on administrative/regulatory aspects;
- exchanges with the requestor (on acceptability, requests for clarifications) and setting up where appropriate PSA meetings;
- review of written replies and summaries to ensure consistency;
- ensure that the replies provided are introduced into a knowledge database to keep records of past advice for future use depending on the relevant needs of the requests at hand;
- drafting of the written advice to be sent to the requestor, finalisation of the advice and ensure that public disclosure of the PSA advice does not contain personal data or other confidential information.

**If such staffing is not guaranteed and given the considerable increase of PSA that is expected**, EFSA would not be able to deliver on the PSA advice without moving staff from its ‘core business’ – which is the provision of risk assessment – to the pre-submission phase. **This will result in even more delays** than currently occur in the delivery of scientific outputs, **defeating the very purpose of the Biotech act**, which is to stimulate innovation and ensure that the time to the market for innovators is reduced.

Therefore, it is absolutely imperative for ensuring the objectives of the Biotech act to guarantee the EFSA additional resources so as to avoid any **direct negative impact on the timeliness and speed of delivery of scientific opinions.**

### 3.3. Estimated impact on revenue

- The proposal/initiative has no financial impact on revenue.
- The proposal/initiative has the following financial impact:
  - on own resources
  - on other revenue
  - please indicate, if the revenue is assigned to expenditure lines

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative <sup>2</sup>						
		Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034
Article .....								

For assigned revenue, specify the budget expenditure line(s) affected.

[...]

Other remarks (e.g. method/formula used for calculating the impact on revenue or any other information).

[...]

## 4. DIGITAL DIMENSIONS

### 4.1. Requirements of digital relevance

*High-level description of the requirements of digital relevance and related categories (data, process digitalisation & automation, digital solutions and/or digital public services)*

Reference to the requirement	Requirement description	Actors affected or concerned by the requirement	High-level Processes	Categories
<i>Article [3] 1b Health Biotechnology Strategic Projects</i>	Scaling-up or upgrading critical research and technology infrastructures underpinning the development,	Member State authorities, Research organisations, Biotechnology industry actors	Technical documentation, Data generation, Data processing	Data, Digital Solution

<sup>2</sup> As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 20% for collection costs.

	testing and validation of biotechnology products, including but not limited to pilot or testing infrastructures for biomanufacturing, data and digital platforms;			
<i>Article [3] 1c Health Biotechnology Strategic Projects</i>	accelerating innovation and technology deployment through one or more of the following features: (i) introducing or scaling up breakthrough innovations in biotechnology that have the potential to strengthen the Union's industrial competitiveness, including AI-enabled technologies and tools;	Commission, Member State authorities, Research organisations, Biotechnology industry actors	Technical documentation, Data generation, Data processing	Data, Digital Solution
<i>Article [4] 1d High Impact Health Biotechnology Strategic Projects</i>	the project contributes to the development of trusted testing environments for AI-enabled biotechnology innovations, fulfilling the conditions laid down in Article [36], paragraph [1] or it is Biotechnology Data Quality	Commission, Member State authorities, Research organisations, Biotechnology industry actors	Data generation, Data processing	Data, Digital Solution

	Accelerator High Impact Project, fulfilling the conditions laid down in Article [37]			
<i>Article [5] a Biotechnology Development Accelerator</i>	it provides trusted testing or demonstration facilities replicating real-world biomanufacturing processes, including general manufacturing practices (GMPs) compliant processes, or their enabling technologies, for process testing, validation, and small batch manufacturing, including for the initial phases of clinical trials; such enabling technologies may include digital technologies, including AI with specific applicability in biotechnology and biomanufacturing;	Commission, Member State authorities, Research organisations, Biotechnology industry actors	Data generation, Data processing	Data, Digital Solution
<i>Article [5] c Biotechnology Development Accelerator</i>	it aims to support hands-on and work-based training programmes aligned with the Union's skills and workforce development objectives in the biotechnology and biomanufacturing	Commission, Member State authorities, Research organisations, Biotechnology industry actors	Technical documentation, Information exchange	Data, Digital Solution

	sectors or in relation to enabling technologies, such as digital technologies including AI, with specific applicability in biotechnology and biomanufacturing;			
<i>Article [5] d Biotechnology Development Accelerator</i>	it conducts applied research in biotechnology or biomanufacturing, or in relation to enabling technologies, such as digital technologies including AI, with specific applicability in biotechnology and biomanufacturing	Research organisations, Biotechnology industry actors	Data generation, data processing	Data, Digital Solution
<i>Article [11] 7 Single Points of Contact</i>	Member States shall promote the reuse of existing data, studies and authorisations in order to avoid duplication of procedures, reduce administrative burden and ensure consistency of decision-making. For that purpose, they shall ensure that, when assessing an application, competent authorities duly take into account all relevant studies, assessments and valid permits or	Member State authorities	Reuse of existing data	Data



	<p>authorisations already carried out or issued for the same project or its components, provided that they remain applicable and up to date.</p>			
<p><i>Article [15] 2e Networks of Health Biotechnology Clusters</i></p>	<p>Such networking and cooperation should aim to: e) promote the development of interoperable infrastructure and digital platforms, and AI-enabled technologies supporting biotechnology and biomanufacturing</p>	<p>Commission, Member State authorities, Research organisations, Biotechnology industry actors</p>	<p>Information exchange</p>	<p>Data</p>
<p><i>Article [16] 6a Access Principles and Security Safeguards</i></p>	<p>access by a non-associated third country or by a non-associated third-country entity to sensitive information is prevented and the employees or other persons involved have national security clearance issued by a Member State or an associated country, where appropriate;</p>	<p>Non-associated third country, Non-associated third-country entity, Member States, Associated countries</p>	<p>Access to data</p>	<p>Data</p>
<p><i>Article [16] 6b Access Principles and Security Safeguards</i></p>	<p>intellectual property arising from, and the results of, the activities related to the access to infrastructures and datasets remain within the legal entity that is</p>	<p>Non-associated third country, Non-associated third-country entity, Member States, Associated</p>	<p>Access to infrastructures and datasets</p>	<p>Data</p>

	granted access, during and after such access, are not subject to control or restriction by a non-associated third country or by a non-associated third-country entity, and are neither exported outside the Union or outside associated countries nor accessible from outside the Union or outside associated countries without the approval of the Member State or the associated country in which the legal entity is established and in accordance with the objectives of this Regulation	countries		
<i>Article [17] 2e Strategic Mapping of the Union's Biotechnology Ecosystem</i>	use of data and artificial intelligence, by assessing access to data, computing and digital infrastructures for biotechnology and identifying opportunities to foster responsible AI-enabled innovation and contribute to the mitigation of related risks.	Union bodies and agencies, industry stakeholders and research organisations	Mapping	Data
<i>Article [21] 5a Composition and</i>	facilitate the exchange of information and	Members of the Steering Group,	Information exchange	Data, Digital Public Service

<i>Functioning of the Steering Group</i>	best practices among Member States, the Commission, and relevant stakeholders in relation to the recognition and the implementation of health biotechnology strategic projects and high impact health biotechnology strategic projects;	Commission, Member State authorities, research organisations, biotechnology industry actors		
<i>Article [21] 5h Composition and Functioning of the Steering Group</i>	facilitate the coordination and information exchange among the Member States on enforcement of the biosecurity provisions in this regulation and other emerging biosecurity topics as provided for in Article	Commission, Member State authorities	Information exchange	Data, Digital public service
<i>Article [29]b Health Biotechnology Strategic Projects for Biosimilars</i>	it contributes to the research, development and marketing authorisation of biosimilar products, and where appropriate to strengthen the use of platform technologies. It includes analytical methodologies that would reduce the need for clinical data for biosimilar	Member State authorities	Use of platform technologies	Data

	medicinal products, without affecting their quality, safety and efficacy.			
<p><i>Article [31]</i></p> <p><i>Guidance on the deployment and use of systems based on advanced technologies, including AI, in the lifecycle of medicinal products</i></p>	<p>The European Medicines Agency ('the Agency') shall develop guidance on the deployment and use of artificial-intelligence systems ('AI systems') and of general-purpose AI models in the lifecycle of medicinal products development, including during pre-clinical research, clinical development and trials, manufacturing and post-authorisation monitoring.</p> <p>Such guidance shall comply with relevant EU legislation and shall be developed and updated in cooperation with the Commission.</p>	<p>Commission, EU Agencies, Member State authorities, industry stakeholders and research organisations</p>	<p>Technical documentation</p>	<p>The European Medicines Agency ('the Agency') shall develop guidance on the deployment and use of artificial-intelligence systems ('AI systems') and of general-purpose AI models in the lifecycle of medicinal products development, including during pre-clinical research, clinical development and trials, manufacturing and post-authorisation monitoring.</p> <p>Such guidance shall comply with relevant EU legislation and shall be developed and updated in cooperation with the Commission.</p>
<i>Article [32]1</i>	A project located	Commission,	Data	Data

<i>Biotechnology testing environments for advanced biotechnology innovations</i>	in the Union that contributes to the development of trusted testing environments for AI-enabled biotechnology innovations shall be recognised as a high-impact health biotechnology strategic project where, in addition to the conditions laid down in Article [6], paragraph [1], it substantially strengthens the Union's capacity for responsible experimentation, development, testing and validation of such innovations and it fulfils all of the following conditions:	Member State authorities	generation, Data processing, setting up testing environments for AI	
<i>Article [33] 2a Biotechnology Data Quality Accelerator</i>	aim to foster the development and deployment of trustworthy and competitive AI applications in health biotechnologies, including large-scale and general-purpose models;	Research organisations, Biotechnology industry actors	Development and deployment of AI solutions	Data
<i>Article [33] 2b Biotechnology Data Quality Accelerator</i>	ensure that datasets are established, managed and processed in accordance with applicable Union legislation on data governance, ethics	Research organisations, Biotechnology industry actors	Data generation, data processing	Data

	and fundamental rights, including Regulation (EU) 2025/327 [European Health Data Space], Regulation (EU) 2016/679 [General Data Protection Regulation].			
<i>Article [33] 2c Biotechnology Data Quality Accelerator</i>	make such datasets, or the metadata and reference annotations thereof, available under fair, reasonable and non-discriminatory conditions, ensuring equitable access for users including research organisations, SMEs and public institutions, in compliance with the provisions of Article [9] of this Regulation.	Research organisations, Biotechnology industry actors	Data access	Data
<i>Article [33] 2d Biotechnology Data Quality Accelerator</i>	contribute to the development of Union standards and quality frameworks for data representativeness, provenance, interoperability and annotation in biotechnology;	Research organisations, Biotechnology industry actors	Data interoperability, Standard Development	Data
<i>Article [33] 2e Biotechnology Data Quality Accelerator</i>	support, where appropriate, the integration of these datasets into Union infrastructures,	Research organisations, Biotechnology industry actors	Infrastructure interoperability, Data integration	Data

	including the European Health Data Space, European Research Area data spaces, or other, including the infrastructures operated by high impact health biotechnology strategic projects.			
<i>Article [33] 2f Biotechnology Data Quality Accelerator</i>	give due consideration to the interoperability with platforms deployed pursuant to the EHDS and other relevant data spaces.	Research organisations, Biotechnology industry actors	Platform interoperability	Data
<i>Article [35] 1 Union Regulatory Status Repository</i>	The Commission shall compile, maintain, develop and make publicly available a Regulatory Status Repository to assist developers in navigating cases of novel biotechnology products ('Regulatory Status Repository').	Member State authorities, Commission	Technical documentation, Information exchange	Data
<i>Article [35] 2 Union Regulatory Status Repository</i>	The Regulatory Status Repository shall contain: a) decisions, opinions, scientific recommendations regarding the regulatory status of a health innovations,	Member State authorities, Commission	Technical documentation, Information exchange	Data

	<p>issued pursuant to the mechanisms laid down in Article 4 of [revised Regulation (EU) 2017/745], Articles 61 and 62 of [revised Regulation (EC) No 726/2004] and Articles 13 and 69 of Regulation (EU) 2024/1938;</p> <p>b) the summaries of the scientific recommendations delivered by the European Medicines Agency in accordance with Article 17 of Regulation (EC) No 1394/2007 on whether a product falls within the definition of an advanced therapy medicinal product or not;</p> <p>c) the discussion papers delivered by the Foresight Panel for Emerging Health Innovation.</p>			
<p><i>Article [35] 3</i></p> <p><i>Union Regulatory Status Repository</i></p>	<p>Member States shall make publicly available, through the relevant national platforms or registries, decisions, opinions, scientific recommendations, and other outputs issued at national</p>	<p>Member State authorities, Commission</p>	<p>Technical documentation, Information exchange</p>	<p>Data</p>



	level concerning the regulatory status of novel biotechnology products. Member States shall inform the Commission where such information is made available.			
<i>Article [39] Regulatory Sandboxes provided for in the applicable frameworks and Cross Framework Communication</i>	<p>The European Medicines Agency, the MDCG, the SCB and the Foresight Panel, as applicable, shall facilitate dialogue among the authorities responsible for the setting up and the implementation of regulatory sandboxes for novel health biotechnology products. This dialogue shall focus on exchanging mutual learnings and findings, specifically including:</p> <p>(a) promoting knowledge sharing, by facilitating the exchange of information, experiences and best practices, including on regulatory approaches, technological challenges</p>	Member State authorities, Commission	Technical documentation, Information exchange	Data, Digital public service

<p><i>Article [40]</i></p> <p><i>Regulatory sandboxes for novel health biotechnology products not falling under other sandboxes in Union legislation</i></p>	<p>The Commission may, by means of implementing acts, lay down common principles, criteria and practical arrangements for the assessment of applications received from developers and for the establishment and the supervision of the regulatory sandboxes and for sandbox plans.</p>	<p>Commission</p>	<p>Technical documentation</p>	<p>Digital public service</p>
<p><i>Article [41] d</i></p> <p><i>EU Biothreat Radar High Impact Projects</i></p>	<p>ensure that sequencing data generated through early detection activities is shared in a timely manner via the European Nucleotide Archive (ENA), to enable access and use by actors across the Union for the development, validation and deployment of advanced pathogen detection and characterisation methods; engage in partnerships among industry, academia, public authorities and defence actors to ensure data sharing and integration of warning systems;</p>	<p>Commission, Member State authorities, Biotechnology industry actors, Research Organisations</p>	<p>Surveillance, data sharing</p>	<p>Data</p>

<i>Article [42] f Biodefence capability high impact strategic project</i>	development, validation and benchmarking of methods for the detection and attribution of genetic engineering, including the creation of open genetic engineering detection tools	Commission, Member State authorities	Health cross border Surveillance, data sharing	Data
<i>Article [44] Verification of Legitimate Need</i>	An economic operator that makes available on the Union market, including through online marketplaces, biotechnology products of concern, shall, for each transaction, verify proof of identity of the prospective customer, record the transaction, including the quantities ordered, and assess whether the customer has a legitimate need.	Economic operator, prospective customer	Identity verification	Data
<i>Article [46] Prevention and Reporting of Misuse</i>	For the purpose of preventing and detecting biotechnology misuse, economic operators and online marketplaces shall	Economic operators, Online marketplaces	Data reporting, Information exchange	Data

	report suspicious transactions,			
<i>Article [48] 2 National Inspection Authorities</i>	Member States shall ensure that the national inspection authority has the resources and investigative powers necessary to perform their tasks, including the power to request information and records, to carry out on-site inspections and, where appropriate, to conduct test purchases, including online.	Commission, Member State authorities	Information exchange	Data
<i>Article [48] 4 National Inspection Authorities</i>	Member States shall ensure the participation of national inspection authorities, as appropriate, in the relevant activities of the Steering Group, in particular for the exchange of information on implementation practices, inspection findings and emerging risks.	Commission, Member State authorities	Information exchange	Data (data flow)
<i>Article [49] Commission Enforcement Support and Monitoring</i>	The Commission may support and monitor national competent authorities in the enforcement of this section, by taking actions such as requesting	Commission	Monitoring, requesting information	Data, Digital public service

	information and records and running training exercises.			
<i>Article [52] Advisory Group on Biosecurity</i>	AI models in biological applications. The Commission, based on advice by the Advisory Group on Biosecurity, and where appropriate, in cooperation with the Steering Group, may issue and regularly update guidance, to assist actors in the supply chain and the competent authorities, and to facilitate cooperation between them.	Commission, Member State authorities, Actors in the supply chain	Monitoring, access to data, Technical guidelines	Data, Digital public service
<i>Article [53] Biological Systemic Risk</i>	The Commission shall monitor systemic risk from AI models in biological applications and propose mitigating actions, based on advice provided by the Scientific Panel, including boosting biodefense capabilities or regulation, including on assessment and mitigation of systemic risk from those models, as appropriate.	Commission, Member State authorities	Monitoring systemic risk	Data
<i>Article [54]</i>	information on how to exchange	Commission, Member State	Information	Data

<i>Monitoring and Guidance</i>	relevant information between competent authorities, national contact points and among Member States;	authorities	exchange	
<i>Article [55] Coordination on Biosecurity and Biosafety</i>	The Steering Group in cooperation with the Commission, facilitates coordination and information exchange on emerging AI-enabled bio-risks;	Commission, Member State authorities	Information exchange, Technical Guidelines	Data, Digital Public Service
<i>Article [56] Amendments to Regulation (EC) No 178/2002 (General Food Law): Article 3</i>	‘regulatory sandbox’ means a controlled environment where participants can test innovative products or substances and related processes as well as data and other regulatory requirements at a pre-market stage under a set of defined rules and monitoring and for a limited period of time.	Commission, Member State authorities	Technical documentation, Information Exchange	Data
<i>Article [56] Amendments to Regulation (EC) No 178/2002 (General Food Law): Article 49a (3) General provisions on regulatory sandboxes</i>	Regulatory sandboxes may be established in relation to the following: (a) all stages of the production, processing and distribution of food with the exception of novel foods, and	Member States	Facilitating the development, testing, and validation of technologies; Testing data requirements Testing alternative regulatory requirements	Technologies, Data

	<p>also of the feed produced for, or fed to food-producing animals; (b) food contact materials, with the exception of plastic recycled materials; (c) products, other than food and feed, containing or consisting of genetically modified organisms as defined in Article 2, point (2), of Directive 2001/18/EC, excluding organisms obtained through the techniques of genetic modification listed in Annex I B to Directive 2001/18/EC. The making available of products within a regulatory sandbox shall not be regarded as placing on the market.</p> <p>Regulatory sandboxes shall have the following objectives:</p> <p>(a) facilitating the development, testing and validation of technologies, products and substances before they obtain authorisation or</p>		<p>(such as digital labelling instead of actual labels on food products).</p>	
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	<p>approval for placing on the market, where so required by Union law;</p> <p>(b) testing data requirements, including the type and design of studies required for conducting a safety and/or efficacy assessment;</p> <p>(c) testing alternative regulatory requirements and appraising their performance as regards the attainment of the objectives of the applicable Union sectoral law in comparison to the existing requirements; in the areas where Union law provides for an approval or authorisation, as well as in the area of food information to consumers</p>			
<p><i>Article [56] Amendments to Regulation (EC) No 178/2002 (General Food Law): Article 3</i></p>	<p>‘regulatory sandbox’ means a controlled environment where participants can test innovative products or substances and related processes as well as data and other regulatory requirements at a</p>	<p>Commission, Member State authorities</p>	<p>Technical documentation, Information Exchange</p>	<p>Data</p>



	pre-market stage under a set of defined rules and monitoring and for a limited period of time.			
<i>Article [56] Amendments to Regulation (EC) No 178/2002 (General Food Law): Article 49a (3)General provisions on regulatory sandboxes</i>	Regulatory sandboxes may be established in relation to the following: (a) all stages of the production, processing and distribution of food with the exception of novel foods, and also of the feed produced for, or fed to food-producing animals; (b) food contact materials, with the exception of plastic recycled materials; (c) products, other than food and feed, containing or consisting of genetically modified organisms as defined in Article 2, point (2), of Directive 2001/18/EC, excluding organisms obtained through the techniques of genetic modification listed in Annex I B to Directive 2001/18/EC. The making available	Member States	Facilitating the development, testing, and validation of technologies;  Testing data requirements  Testing alternative regulatory requirements (such as digital labelling instead of actual labels on food products).	Technologies, Data

	<p>of products within a regulatory sandbox shall not be regarded as placing on the market.</p> <p>Regulatory sandboxes shall have the following objectives:</p> <p>(a) facilitating the development, testing and validation of technologies, products and substances before they obtain authorisation or approval for placing on the market, where so required by Union law;</p> <p>(b) testing data requirements, including the type and design of studies required for conducting a safety and/or efficacy assessment;</p> <p>(c) testing alternative regulatory requirements and appraising their performance as regards the attainment of the objectives of the applicable Union sectoral law in comparison to the existing requirements; in the areas where Union law</p>			
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	provides for an approval or authorisation, as well as in the area of food information to consumers			
<i>Article [56] Amendments to Regulation (EC) No 178/2002 (General Food Law): Article 49a</i>  <i>General provisions on regulatory sandboxes</i>	<p>Member States shall monitor and supervise the operation of regulatory sandboxes that they establish and ensure compliance with the regulatory sandbox plan.</p> <p>A participant to an established regulatory sandbox shall immediately inform the competent authorities of the Member State(s) concerned if it considers or has reason to believe that the conditions of the regulatory sandbox plan have not been complied with and/or there are potential risks to public health, animal health or welfare, plant health or to the environment, which may require the revocation of the regulatory sandbox or the amendment of the regulatory sandbox plan to</p>	Member States, Commission	Monitoring and Supervision, Information exchange	Data

	<p>provide for mitigating measures. Participants shall also immediately inform the competent authorities of any other information that concerns the quality, safety or efficacy of the subject matter of the relevant regulatory sandbox.</p> <p>Member States shall immediately notify to the Commission and, where relevant, to the Authority any violation of the conditions set out in the regulatory sandbox plan and/or the identification of any potential risks to public health, animal health or welfare, plant health or to the environment.</p> <p>Member States shall suspend or revoke a regulatory sandbox at any time on their own motion, or at the request of the Commission in accordance with paragraph 9, in either of the following cases:</p> <p>(a) the requirements and conditions</p>			
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	<p>governing the regulatory sandbox plan are not met; (b) where necessary to protect public health, animal health or welfare, plant health or the environment and there is no possibility for effective mitigation measures.</p> <p>Member States shall inform the Commission, the Authority and the other Member States without delay of the suspension or revocation of a regulatory sandbox and of the reasons.</p> <p>Where after the setting up of a regulatory sandbox in their territory, a Member State identifies risks to public health, animal health and welfare, plant health and to the environment which can be fully mitigated by amendments to the regulatory sandbox plan, it shall communicate to the Commission, the Authority and the other Member States the draft</p>			
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	<p>amendments in accordance with the procedure laid down in Article 49b.</p> <p>Where the Commission considers that one of the cases referred to in paragraph 7 is fulfilled, it shall immediately adopt implementing acts.in accordance with the procedure referred to in Article 58(2) requesting the suspension or the revocation of the regulatory sandbox concerned.</p> <p>However, in emergencies, the Commission may provisionally adopt an implementing act requesting the suspension of the regulatory sandbox concerned after consulting the Member State(s) concerned and informing the other Member States. As soon as possible, and at most within 10 working days, the measure taken shall be confirmed, amended or revoked in accordance with</p>			
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	<p>the procedure referred to in Article 58(2) and the reasons for the Commission's decision shall be made public without delay.</p> <p>A Member State may prolong the duration once of a regulatory sandbox for a limited time where this is justified by the need to attain the objective of the specific regulatory sandbox at hand and shall inform the Commission, the Authority and the other Member States thereof.</p> <p>The Commission may, by means of implementing acts, specify common principles or practical arrangements for the establishment and supervision of regulatory sandboxes, including the establishment of sandboxes involving several Member States pursuant to this Article, Article 49b and 49c. Those implementing acts shall be adopted in accordance with the procedure</p>			
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	referred to in Article 58(2).			
<p><i>Article [56] Amendments to Regulation (EC) No 178/2002 (General Food Law): Article 49b</i></p> <p><i>Establishment of regulatory sandboxes at national level</i></p>	<p>Where a Member State deems it appropriate to establish a regulatory sandbox pursuant to Article 49a, it shall communicate to the Commission, the Authority and the other Member States a draft regulatory sandbox plan 60 days prior to the commencement</p>	<p>Commission, EFSA, Member State authorities</p>	<p>Information exchange</p>	<p>Data</p>
<p><i>Article [56] Amendments to Regulation (EC) No 178/2002 (General Food Law): Article 49c</i></p> <p><i>Other responsibilities, monitoring and reporting obligations regarding regulatory sandboxes</i></p>	<p>Regulatory sandboxes shall not affect the enforcement and monitoring responsibilities of the competent authorities set out in Article 17 and in other sectoral legislation. Participants, with the exception of final consumers, in particular the operator that is the developer of the product or substance concerned, shall remain liable under applicable national legislation for any harm inflicted on third parties as a result from the</p>	<p>Commission, Agency (EFSA), Member State authorities</p>	<p>Monitoring, Information exchange</p>	<p>Data</p>



	<p>testing taking place in the sandbox.</p> <p>Member States shall submit annual reports to the Commission on the results from the implementation of regulatory sandboxes, including good practices developed, lessons learnt and recommendations on their setup and, where relevant, on the application of the relevant sectorial Union legislation. Those reports shall be made publicly available by the Commission.</p> <p>The Authority shall also ensure the necessary revisions of its guidance where relevant and appropriate on the basis of those annual reports.</p>			
<p><i>Article [58] Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation')</i></p>	<p>Article 5: Submission of an application through EU portal</p> <p>Article 6: Assessment report by the reporting Member State—Aspects covered by Part I</p> <p>Article 7: Assessment report</p>	<p>Biotechnology industry actors, Commission, Agency, Member States</p>	<p>Submission of an application, Information exchange, access to application</p>	<p>Data, Process automation, EU portal</p>

	<p>- Aspects covered by Part II</p> <p>Article 8: Decision on the clinical trial by Member States to sponsor</p> <p>Article 9: Persons assessing the application</p> <p>Article 14c: Coordinated assessment for the authorisation of combined studies</p> <p>Article 17: Validation of an application for the authorisation of a substantial modification of an aspect covered by Part I of the assessment report</p> <p>Article 19: Decision on the substantial modification of an aspect covered by Part I of the assessment report</p> <p>Article 20: validation, assessment and decision regarding a substantial modification of an aspect covered by Part II of the assessment report</p> <p>Article 21: Substantial modification of aspects covered by Parts I and II of the assessment report</p>			
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	Article 25: Data submitted in the application dossier			
<i>Article [58] Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation')/Article 27e: Use of AI in Clinical Trials</i>	Sponsors shall evaluate AI models or AI systems proposed to be used in the context of the lifecycle of the specific clinical trial	Biotechnology industry actors, Commission, Agency, Member States	Evaluation of AI models	Data
<i>Article [58] Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation') Articles 41 –46, 55, 56-58, 79a regarding reporting requirements</i>	Article 41: Reporting of adverse events and serious adverse events by the investigator to the sponsor Article 42: Reporting of suspected unexpected serious adverse reactions by the sponsor to the Agency Article 43: Annual reporting by the sponsor to the Agency Article 44: Assessment by Member States Article 46: Reporting with regard to auxiliary medicinal products Article 48: Monitoring Article 52: Reporting of serious breaches	Biotechnology industry actors, Commission, Agency, Member States	Reporting	Data, EU portal

	<p>Article 55: Investigator's brochure</p> <p>Article 56: Recording, processing, handling and storage of clinical trial information:</p> <p>Article 57: Clinical trial master file</p> <p>Article 58: Archiving of the clinical trial master file</p> <p>Article 79a: Obligations as regards Union controls: Ensure that the necessary technical assistance and the available documentation, upon justified request, is being provided to the Commission as well as any other support that the Commission requests</p>			
<p><i>Article [58] Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation')</i></p>	<p>Article 81 is amended: The sponsor shall permanently update in the EU database information on any changes to the clinical trials which are not substantial modifications but are relevant for the</p>	<p>Commission, Agency (EMA), Member States</p>	<p>Reporting</p>	<p>Data, digital solution, process automation, EU portal, EU database</p>

	supervision of the clinical trial. The sponsor shall also update the EU portal to satisfy a condition to which an authorisation decision is subject to.			
<i>Article [58] Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation')</i>	Article 93: Data protection: Sponsors shall comply with Regulation (EU) 2016/679 to process personal data, including data concerning health, in the public interest of health in the context of the entire lifecycle of a clinical trial, from the preparation of the application for the authorisation of the clinical trial to the end of the archiving period	Biotechnology industry actors, Commission, Agency, Member States	Data protection	Data
<i>Article [59] Amendments to Regulation (EU) 2019/6 (Veterinary Medicine Products Regulation)</i>	Article 61 (2). Where a variation as referred to in paragraph (1) affects the summary of product characteristics, labelling or package leaflet, the marketing authorisation holder shall record the change in the product database within 30 days	Commission, Member State authorities, Agency	Information exchange	Data

	after its implementation.			
Article [59] <i>Amendments to Regulation (EU) 2019/6 (Veterinary Medicine Products Regulation)</i>	‘CHAPTER IX REGULATORY SANDBOX Article 136a Regulatory sandbox 5. After a sandbox is established, the Agency shall:  a) develop and make publicly available technical and scientific requirements for technologies, methods or products developed under the sandbox, taking due account of the potential risks of thereof for human and animal health and the environment;	Commission, Member State authorities	Technical documentation, Information Exchange	Data
Article [61] <i>Amendments to Regulation (EC) No 2024/1938 Article [39a] 3</i> <i>SoHO regulatory sandboxes</i>	The regulatory sandbox shall aim to allow the assessment of the innovations referred to in paragraph 1 in a real-world environment under strict regulatory supervision, to ensure that the necessary evidence and data is generated to demonstrate their, safety quality, including effectiveness in view of their distribution.	Member State authorities, Commission	Assessment of innovations	Data

<p><i>Article [61] Amendments to Regulation (EC) No 2024/1398</i></p> <p><i>Article [39a] 7a SoHO regulatory sandboxes</i></p>	<p>request information and data from holders of authorisations of SoHO preparations, developers independent experts and researchers, representatives of healthcare professionals and patients and may engage with them in preliminary discussions;</p>	<p>Member State authorities, developers, independent experts and researchers, representatives of healthcare professionals and patients</p>	<p>Data access, information exchange, leveraging information published on the EU SoHO platform (art 74.3(b) of Regulation (EU)2024/1938,</p>	<p>Data</p>
<p><i>Article [63] Evaluation</i></p>	<p>The national authorities and the economic operators shall, upon request, provide the Commission with any relevant information they have and that the Commission may need for its assessment pursuant to in paragraph 1</p>	<p>Commission, Member State authorities, research organisations, biotechnology industry actors</p>	<p>Information exchange</p>	<p>Data</p>
<p><i>Article [66] Handling of Confidential Information</i></p>	<p>Member States and the Commission shall ensure the protection of trade and business secrets and other sensitive, confidential and classified information obtained and processed in application of this Regulation,</p>	<p>Commission, Member States</p>	<p>Information exchange</p>	<p>Data, Digital solution</p>

	<p>including recommendations and measures to be taken, in accordance with Union and relevant national law.</p> <p>The Commission and Member States shall ensure that classified information provided or exchanged pursuant to this Regulation is not downgraded or declassified without the prior written consent of the originator in accordance with relevant Union or national law.</p>			
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## 4.2. Data

*High-level description of the data in scope*

Type of data	Reference to the requirement(s)	Standard and/or specification (if applicable)
Data required for testing and validation of biotechnology products	<p><i>Article [3] 1 Health Biotechnology Strategic Projects</i></p> <p><i>Article [4] 1 High Impact Health Biotechnology Strategic Projects</i></p> <p><i>Article [15] 2e Networks of Health Biotechnology Clusters</i></p> <p><i>Article [5] Biotechnology Development Accelerator</i></p> <p><i>Article [30] Strategic Projects for Biosimilars</i></p> <p><i>Article [32] Biotechnology Testing Environments for advanced biotechnology innovations</i></p> <p><i>Article [33] 2 Biotechnology Data Quality Accelerator</i></p> <p><i>Article [59] Amendments to Regulation (EU) 2019/6 (Veterinary Medicine Products Regulation)</i></p> <p><i>Article [61] Amendments to Regulation (EC) No 2024/1938/ Article [39a] 3 SoHO regulatory sandboxes</i></p> <p><i>Article [49a] General</i></p>	N.A.

	<i>provisions on regulatory sandboxes</i>	
Sensitive information, biotechnology datasets	<i>Article [16] Access Principles and Security Safeguards</i>	N.A.
Mapping of existing infrastructures	<i>Article [17] Strategic Mapping of the Union's Biotechnology Ecosystem</i>	N.A.
Guidance on the use and deployment of AI	<i>Article [31] Guidance on the deployment and use of systems based on advanced technologies including AI Systems in the Lifecycle of Medicinal Products</i>	N.A.
Regulatory decisions, opinions, recommendations	<i>Article [35] 1 Union Regulatory Status Repository</i>	N.A.
Personal health data, clinical data	<i>Article [58] Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation')</i>	N.A.
Cross-border surveillance of biological threats	<i>Article [41] EU Biothreat Radar High Impact Projects</i> <i>Article [42] Biodefence capability high impact strategic project</i> <i>Article [44] Verification of Legitimate Need</i> <i>Article [46] Prevention and Reporting of Misuse</i>	One implementing Act/Delegated Act foreseen

	<p><i>Article [48]</i> <i>National Inspection Authorities</i></p> <p><i>Article [49]</i> <i>Commission Enforcement Support and Monitoring</i></p> <p><i>Article [52]</i> <i>Advisory Group on Biosecurity</i></p> <p><i>Article [53]</i> <i>Biological Systemic Risk</i></p> <p><i>Article [54]</i> <i>Monitoring and Guidance</i></p> <p><i>Article [55]</i> <i>Coordination on Biosecurity and Biosafety</i></p>	
Handling of confidential information	<i>Article [66] Handling of Confidential Information</i>	N.A.

### **Alignment with the European Data Strategy**

*Explanation of how the requirement(s) are aligned with the European Data Strategy*

Article [33] Biotechnology Data Quality Accelerator High Impact Health Biotechnology Strategic Projects will ensure that datasets are established, managed and processed in accordance with applicable Union legislation on data governance, ethics and fundamental rights, including Regulation (EU) 2025/327 [European Health Data Space], Regulation (EU) 2016/679 [General Data Protection Regulation].

### Alignment with the once-only principle

*Explanation of how the once-only principle has been considered and how the possibility to reuse existing data has been explored*

The legal provision allows for the reuse of data and evidence that has already been submitted for the purposes of a first registration.

*Explanation of how newly created data is findable, accessible, interoperable and reusable, and meets high-quality standards*

Through Union programmes and infrastructures, the Act promotes fair, reasonable and non-discriminatory access to high-quality data resources for researchers, SMEs and public institutions, thereby accelerating innovation while ensuring compliance with Union standards on data protection, ethics and security.

### Data flows

*High-level description of the data flows*

Type of data	Reference(s) to the requirement(s)	Actors who provide the data	Actors who receive the data	Trigger for the data exchange	Frequency (if applicable)
Data required for testing and validation of biotechnology products	Article [3]1 Health Biotechnology Strategic Projects Article [4] 1 High Impact Health Biotechnology Strategic Projects Article [5] Biotechnology Development Accelerator Article [15] 2e Networks	Biotechnology industry actors, Research organizations	Member States, Commission, Agencies (EMA, EFSA)	Testing and validation of innovations	N.A.

	<p><i>of Health Biotechnology Clusters</i></p> <p><i>Article [29] Strategic Projects for Biosimilars</i></p> <p><i>Article [32] Article [32]</i></p> <p><i>Biotechnology testing environments for advanced biotechnology innovations</i></p> <p><i>Article [33] Biotechnology Data Quality Accelerator</i></p> <p><i>Article [56] Amendments to Regulation (EC) No 178/2002 (General Food Law): Article [49a] General</i></p> <p><i>Article [59] Amendments to Regulation (EU) 2019/6 (Veterinary Medicine Products Regulation)</i></p> <p><i>Article [61] Amendments to Regulation (EC) No 2024/1398/ Article [39a] 3 SoHO regulatory sandboxes provisions on regulatory</i></p>				
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	<i>sandboxes</i>				
Reuse of existing data	<i>Article [11] Single Points of Contact</i>	Biotechnology industry actors, Research organizations	Member States, Commission	permit-granting process for strategic biotechnology projects and high impact biotechnology projects	
Guidance on the use and deployment of AI	<i>Article [31] Guidance on the deployment and use of systems based on advanced technologies including AI, in the Lifecycle of Medicinal Products</i>	Member States, Agency (EMA), Commission	Biotechnology industry actors, Research organizations	Guidance for biotechnology industry actors and research organizations on the deployment and use of AI systems and general purpose AI models in the lifecycle of medicinal product development	
Regulatory decisions, opinions, recommendations	<i>Article [35] 1 Union Regulatory Status Repository</i>	Member States, Agency (EMA), Commission	Biotechnology industry actors, Research organizations	Repository will assist developers in navigating cases of novel biotechnology health biotechnology products	
Personal health data, clinical data	<i>Article [58] Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation')</i>	Biotechnology industry actors, Research organizations	Member States, Agency (EMA) Commission	Submission of clinical trial	
Cross-border surveillance of biological	<i>Article [41] EU Biothreat</i>	Biotechnology industry actors,	Member States,	Detection, characterisation,	

threats	<i>Radar High Impact Projects</i> <i>Article [42]</i> <i>Biodefence capability high impact strategic project</i> <i>Article [44]</i> <i>Verification of Legitimate Need</i> <i>Article [46]</i> <i>Prevention and Reporting of Misuse</i> <i>Article [48]</i> <i>National Inspection Authorities</i> <i>Article [49]</i> <i>Commission Enforcement Support and Monitoring</i> <i>Article [52]</i> <i>Advisory Group on Biosecurity</i> <i>Article [53]</i> <i>Biological Systemic Risk</i> <i>Article [54]</i> <i>Monitoring and Guidance</i> <i>Article [55]</i> <i>Coordination on Biosecurity and Biosafety</i>	Research organization s	Commission	identification, analysis and assessment of biological threats	
Handling of	<i>Article [66]</i>	Member	Biotechnolo	Information	

confidential information	<i>Handling of Confidential Information</i>	States, Commission	gy industry actors, Research organizations	acquired in the course of regulation, trade and business secrets	
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### 4.3. Digital solutions

#### *High-level description of digital solutions*

Digital solution	Reference(s) to the requirement(s)	Main mandated functionalities	Responsible body	How is accessibility catered for?	How is reusability considered?	Use of AI technologies (if applicable)
Biotechnology testing environments for advanced biotechnology innovations	Article [32] Biotechnology testing environments for advanced biotechnology innovations - high-impact biotechnology strategic projects	Development of trusted testing environments for biotechnology innovations	Commission, Member States			Yes

*For each digital solution, explanation of how the digital solution complies with applicable digital policies and legislative enactments*

#### **Digital solution #1: Biotechnology testing Environments for advanced biotechnology innovations**

Digital and/or sectorial policy (when these are applicable)	Explanation on how it aligns	
<i>AI Act</i>	Development and testing of AI enabled biotechnology solutions is in line with Article 51. It ensures that these systems fulfil the obligations set out in	



	Articles 53-55 of the act.	
<b><i>EU Cybersecurity framework</i></b>	Article 10 “Access Principles and Security Safeguards” provides that health biotechnology strategic projects, high impact biotechnology strategic projects, and any other entities operating infrastructures, facilities and services established or supported in accordance with this Regulation shall ensure that access to and the operation of their infrastructures, facilities and services complies, where applicable, with Directive (EU) 2022/2555 of the European Parliament and of the Council (NIS2 Directive), including the relevant cybersecurity risk-management and reporting obligations.	
<b><i>eIDAS</i></b>	Individuals and organisations will use electronic identification in line with EU legislation.	
<b><i>Single Digital Gateway and IMI</i></b>	N.A.	
<b><i>Others</i></b>		

#### 4.4. Interoperability assessment

*High-level description of the digital public service(s) affected by the requirements*

<b>Digital public service or category of digital public services</b>	<b>Description</b>	<b>Reference(s) to the requirement(s)</b>	<b>Interoperable Europe Solution(s) (NOT APPLICABLE)</b>	<b>Other interoperability solution(s)</b>
Biotechnology Data Quality Accelerator	Biotechnology Data Quality Accelerator, aimed at improving data	<i>Article [33] Biotechnology Data Quality Accelerator</i>	//	

	quality at source, enhancing interoperability and annotation, and fostering the creation, curation, maintenance and use of shared datasets for the development and refinement of AI systems and models in health biotechnology.			
Category of digital public services according to <u>COFOG</u> #1			//	

**Digital public service #1 Biotechnology Data Quality Accelerator**

Assessment	Measure(s)	Potential remaining barriers (if applicable)
<b>Alignment with existing digital and sectorial policies</b> <b>Please list the applicable digital and sectorial policies identified</b>	The Biotechnology Data Quality Accelerator will operate in accordance with applicable Union legislation on data governance, ethics and fundamental rights, including Regulation (EU) 2025/327 [European Health Data Space], Regulation (EU) 2016/679 [General Data Protection Regulation].	N.A.
<b>Organisational measures for a smooth cross-border digital public services delivery</b> <b>Please list the governance measures foreseen</b>	It will support, where appropriate, the integration of these datasets into Union infrastructures, including the European Health Data Space, European Research Area data spaces, or other, including the infrastructures operated by high impact health biotechnology strategic projects.	N.A.
<b>Measures taken to ensure a shared understanding of the data</b> <b>Please list such measures</b>	Datasets, or the metadata and reference annotations thereof, will be available under fair, reasonable and non-discriminatory conditions, ensuring equitable access for users including research organisations, SMEs and public institutions.	N.A.
<b>Use of commonly agreed open technical specifications and standards</b> <b>Please list such measures</b>	It will contribute to the development of Union standards and quality frameworks for data representativeness, provenance, interoperability	N.A.

	and annotation in biotechnology	
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#### 4.5. Measures to support digital implementation

*High-level description of measures supporting digital implementation*

Description of the measure	Reference(s) to the requirement(s)	Commission role (if applicable)	Actors to be involved (if applicable)	Expected timeline (if applicable)
Adopting guidelines	<p>Article [4] High Impact Health Biotechnology Strategic Projects</p> <p>Article [14] Financial and technical support</p> <p>Article [15] Networks of Health Biotechnology Clusters</p> <p>Article [39] Regulatory Sandboxes provided for in the applicable frameworks and Cross Framework Communication</p> <p>Article [58] Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation'):</p> <ul style="list-style-type: none"> <li>Article 37: End of a clinical trial, temporary halt and early termination of a clinical trial and submission of the results</li> <li>Article 47: Compliance with the protocol and good clinical</li> </ul>	Commission will produce guidelines or will be involved in the production of guidelines	Agency (EMA, EFSA), Advisory Groups composed of Member State Representatives	

	<ul style="list-style-type: none"> <li>practice</li> <li>• Article 63: Manufacturing and import</li> <li>• Article 85: Clinical Trials Coordination and Advisory Group</li> </ul>			
Designing policy implementation pilots	Article [15] Networks of Health Biotechnology Clusters	Commission will participate through the Steering Group	Member States, Biotechnology Industry actors, Research organizations	
Sandboxing	<p>Article [39] Regulatory sandboxes provided for in the applicable frameworks and cross-framework communication</p> <p>Article [40] Regulatory sandboxes or novel health biotechnology products not falling under other sandboxes in Union legislation</p> <p>Article [58] Amendments to Regulation (EU) No 536/2014 ('Clinical Trials Regulation')/Article 85: Clinical Trials Coordination and Advisory Group</p> <p>Article [59] Amendments to Regulation (EU) 2019/6 (Veterinary Medicine Products Regulation) Article 136a: Regulatory</p>	Commission shall encourage setting up regulatory sandboxes for AI biotechnology solutions, Substances of Human Origin	Member States	

	sandbox Article [61] Amendment to Regulation (EU) 2024/1938 (SoHO)/Article 39a: SOHO regulatory sandboxes			
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