

Horizon Europe – Cluster 4: Digital, Industry and Space

What is Horizon Europe?

Horizon Europe is the EU's key funding programme for research and innovation with a budget of €95.5 billion for the period 2021-2027. It tackles climate change, helps to achieve the UN's Sustainable Development Goals and boosts Europe's competitiveness and growth.

The programme facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges. It supports the creation and better sharing of knowledge and technologies.

It also creates jobs, fully engages Europe's talent pool, boosts economic growth, promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area.

For information on UK participation in the programme see UKRO's [dedicated factsheet](#).

What are clusters in Horizon Europe?

The 'Global Challenges and European Industrial Competitiveness' pillar of Horizon Europe will take forward the current societal challenges and industrial technologies in a more 'top-down' approach, addressing EU and global policy challenges. These challenges and opportunities will be integrated into six clusters - each with a number of specific intervention areas - designed to incentivise cross-disciplinary, cross-sectoral, cross-policy and international collaboration. In terms of addressing global political priorities, each cluster contributes towards several Sustainable Development Goals (SDG) and many SDGs will be supported by more than one cluster.

The clusters and their intervention areas are expected to achieve greater impact when compared to the societal challenges of Horizon 2020 since they cut across classical boundaries between disciplines and address different types of challenges. The integrated clusters of activities derive from the [First Strategic Plan for Horizon Europe 2021-24](#) and form the basis for support to collaborative research and innovation projects under the 'Global Challenges and European Industrial Competitiveness' pillar.

What is funded under Cluster 4?

Cluster 4 has an overall budget of €15.349 billion. With this funding, it aims to bring together activities on digital technologies, key enabling industrial and space technologies, and the sustainable supply of raw materials, to enable a faster and more profound digital and industrial transformation across Europe. Activities funded under this cluster ensure that Europe is at the forefront of the next industrial and digital revolution. By investing in the development, demonstration and deployment of key enabling technologies and ensuring a secure, sustainable and affordable supply of raw and advanced materials, Cluster 4 will help the EU secure its strategic autonomy and support European industry in significantly reducing its environmental footprint.

Areas of intervention

The specific areas of intervention in Cluster 4 include:

- Manufacturing technologies
- Advanced materials
- Next Generation Internet
- Circular industries
- Space, including Earth Observation
- Emerging enabling technologies

- Key digital technologies, including quantum technologies
- Artificial Intelligence and robotics
- Advanced computing and big data
- Low-carbon and clean industry

As Europe works towards a more resilient, green, and digital future, the EU needs to maintain a strong industrial and technological presence in key parts of digital (and other) supply chains, as well as retain continued access to critical raw materials, technologies and services that are safe and secure for European industry, all while safeguarding its ability to access and operate safely in space.

Therefore, following on from 2023, in 2024 the actions under this cluster will support key enabling technologies that are strategically important for Europe’s industrial future, and deliver on the relevant impacts from the Strategic Plan, through the following six destinations – each with several dedicated calls for proposals:



Call timings

The 2023 deadlines for Cluster 4 have now closed.

The 2024 single-stage calls have deadlines in either February 2024, March 2024 or September 2024.

The 2024 two-stage calls have deadlines in either February and September 2024 or in April and September 2024.

Please note that some topics have specific eligibility criteria, listed under eligibility and admissibility conditions, such as the obligation to include legal entities established in the target country/region. Applicants are advised to check the work programme for details relating to their topics of interest.

Restrictions on participation

While the collaborative calls for proposals in Horizon Europe are characterised by general openness (allowing, in principle, organisations from any country to participate), there will be some new restrictions on participation, stemming from the programme’s legal basis. These restrictions will be particularly important for calls for proposals launched under Cluster 4:

- **Restrictions on the participation of organisations based in certain Associated Countries**
- the legal basis of Horizon Europe allows the Commission to exclude organisations based in

the Associated Countries from certain calls for proposals to protect the Union's strategic assets, interests, autonomy or security. This is exceptional and allowed only in duly justified cases.

- In specific space calls, the eligibility of entities established in the United Kingdom to participate is conditional on the United Kingdom's equivalent space calls being published and open to EU entities on a reciprocal basis. This condition must be fulfilled on the opening date of the call(s) in question for proposal submissions from the UK to be eligible.
- Participation in specific quantum calls is limited to legal entities established in EU Member States, Iceland, Norway and Israel.
- **Restrictions on the participation of organisations based in EU Member States/Associated Countries but controlled by other countries** - to protect the Union's strategic assets, interests, autonomy and/or security, the Work Programme may also exclude from individual calls proposals from organisations based in EU Member States or Associated Countries if they are directly or indirectly controlled by third countries, or by legal entities from such third countries.
- **Participation in specific calls related to rare materials or quantum technology might be limited to legal entities established in the following countries:** EU Member States, Associated Countries, African Union Member States, 'Mercado Común del Sur' (MERCOSUR) countries, CARIFORUM countries, Andean Community, countries associated with the 'Organisation for Economic Co-operation and Development' (OECD), and countries with which the EU has concluded strategic partnerships on raw materials.

Such restrictions will be explicitly mentioned in the 'Topic conditions and documents' section.

As a novelty in the 2023-24 Work Programme, legal entities established in China are not eligible to participate in Innovation Actions in any capacity in calls under Destinations 2, 3, 4, 5 and 6.

Relevant EU policy areas and developments

This Work Programme part will contribute to the objectives of the [New Industrial Strategy for Europe](#), the [European Green Deal](#) and the [Circular Economy Action Plan](#). Furthermore, it will support the aims of the following EU digital strategies: [Shaping Europe's Digital Future](#), [European Data Strategy](#), [Artificial Intelligence White Paper](#), [Digital Decade Communication](#), as well as the [Space Strategy for Europe](#). It will also contribute to the [twin digital and green transformation](#).

More information

- [Horizon Europe website](#) and [Cluster 4 website](#)
- [2023-24 Work Programme for Cluster 4](#)

Horizon Europe's legal basis:

- [Regulation establishing Horizon Europe](#)
- [Decision establishing the Specific Programme of Horizon Europe](#)
- [First Strategic Plan for Horizon Europe \(2021-2024\)](#)
- [Second Strategic Plan for Horizon Europe \(2025-2027\)](#)

UKRO Portal

- [UKRO Portal](#) (subscriber access required)