

HORIZON EUROPE NIGERIA FOCAL AREAS

INNOVATION AND TECHNOLOGY

The Proposed Subthemes and NCPs for Technology, Innovation and Cross-Cutting Thematic Areas

The Research Activities for the subtheme are captured under Cluster 2, 3, 4, and 5 of Pillar 2 (Pillar 2 - Global Challenges and European Industrial Competitiveness).

The other possible research activities streams are captured under Pillar 3 - Innovative Europe - This pillar aims to foster all forms of innovation, including breakthrough innovation, and market deployment of innovative solutions. It will focus on scaling up breakthrough and market-creating innovation through the European Innovation Council (EIC) as well as activities aimed at enhancing and developing the overall European Innovation landscape and support to the European Institute of Innovation and Technology (EIT).

Cluster 2: Culture, Creativity, and Inclusive Societies

This cluster will focus on funding activities that will help the EU promote a model of inclusive and sustainable growth while reaping the benefits of technological advancements. Furthermore, will it help to enhance trust in and promote innovation of democratic governance, as well as combat inequalities, unemployment, marginalization, discrimination, and radicalization. The funded activities will help guarantee human rights, foster cultural diversity, and European cultural heritage, and empower citizens through social innovation. Finally, the management of migration and the integration of migrants into European societies will also continue to be priority issues.

Confirmed areas of intervention:

The specific areas of intervention in Cluster 2 include:

- Democracy and Governance
- Social and economic transformations
- Culture, cultural heritage, and creativity

Cluster 3: Civil Security for Society

This cluster will focus on activities in support of the implementation of EU policy priorities relating to security, including cybersecurity, and disaster risk management. Research and innovation activities will help to put into practice the EU Maritime Security Strategy and, as concerns EU maritime borders, take in a role in developing integrated border management.

Alongside supporting EU policy responses to security challenges, research and innovation within this cluster will boost the competitiveness of companies and research organizations in the EU civil security sector.

Confirmed areas of intervention

The specific areas of intervention in Cluster 3 include:

- Disaster-resilient societies (four sub-topics):
- Chemical, biological, radiological, nuclear, and explosive (CBRN-E) incidents;
- Climate-related risks and extreme events;
- Geological disasters, such as earthquakes, volcanic eruptions, and tsunamis
- Pandemics and emerging infectious diseases.
- Protection and Security – EU external borders;
- Protection and Security – Protection of public places;
- Protection and Security – Security and resilience of infrastructure and vital societal functions;
- Protection and Security – Maritime security;
- Protection and Security – Fighting crime and terrorism;
- Cybersecurity

Cluster 4: Digital, Industry & Space

This cluster will bring together activities on digital, key enabling, and space technologies, as well as on a sustainable supply of raw materials, to enable a faster and more profound digital and industrial transformation across Europe. Activities funded under this cluster will ensure that Europe is at the forefront of the next industrial and digital revolutions. Furthermore, 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, this cluster will help the EU secure its strategic autonomy and support European industry in significantly reducing its environmental footprint.

Confirmed 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

Cluster 5: Climate, Energy, and Mobility

This cluster will focus specifically on fostering climate action, while at the same time improving the sustainability, security and competitiveness of the energy and transport industry. Actions funded under this cluster will provide the basis for systemic change as well as shaping the necessary technological, industrial economic and societal transformations to achieve climate neutrality in an inclusive and socially fair way.

Confirmed areas of intervention

The specific areas of intervention in Cluster 5 include:

- Advance climate science and solutions for a climate-neutral and resilient society,
- Cross-sectoral solutions for decarbonization;
- Develop cost-efficient, net zero-greenhouse gas emissions energy system centered on renewables;
- Develop demand-side solutions to decarbonize the energy system;
- Develop low-carbon and competitive transport solutions across all modes;
- Develop seamless, smart, safe, accessible, and inclusive mobility systems.