

MISSION ILLUSTRATIVE EXAMPLES

In order to support the exercise of mission-oriented discussion and due to the lack of standard definition of missions, 3 examples are displayed in this document. These are meant merely for pedagogical use and in no way prejudice future possible missions in content or form.

The topics and content of the mission examples have been developed by non-experts in these fields. The objective is not to discuss the technical validity and completeness of the examples, but to discuss the most adequate way to define missions.

ILLUSTRATIVE EXAMPLE 1

Thematic Area of Intervention

Prevention and treatment of infectious diseases

Mission

Tackling infectious diseases through prevention of at least 60% of new cases of overall infections and efficient treatment of no less than 90% of cases, including Antimicrobial Resistance (AMR), by 2027

R&I Areas

- Single, cross-Europe informatics system tool/program for real-time communication and reporting of early warning diseases outbreaks and AMRs by 2025;
- R&D of solutions for WHO critical priority pathogens list for R&D of new antibiotics in “Priority 1: CRITICAL” by 2027;
- R&D of real-time diagnosis for the 5 top most common infectious related conditions by 2027;
- Smart-antibiotics technology that operates the release of the active substance according with the presence of respective infectious agents by 2027;
- New economic model that incentives to boost the development of new antimicrobials AMR including from livestock by 2025.

ILLUSTRATIVE EXAMPLE 2

Thematic Area of Intervention

Improving cyber-security - access to protected networks, computers, programs and data

Mission

Reduction of cyber-attacks, personal damage and unauthorized access up to 70% throughout Europe by 2027 through emerging technologies (Artificial Intelligence (AI), Machine Learning (ML) and BlockChain)

R&I Areas

- AI-based “Firewalls” systems that can be used on personal and companies structures by 2025;
- EU government-based quantum computing system with quantum-resistant public-key cryptographic algorithms for public Big Data storage and World Wide Web scans by 2027;
- Block chain-decentralized network technology to be used as cyber security shield for personal and enterprise devices (smartphones, computers) by 2025;
- System for identification and access management using ML and block chain technologies allied to continuous authentications and behavioural biometrics (monitor things like keystroke patterns) by 2025;
- Data footprint technology protected by block chain and other technologies for data protection by 2027.

Thematic Area of Intervention

Accelerating the clean energy transition

Mission

Development of cost effective energy storage technologies that will allow 90% of the EUs energy use to come from renewable energy, by 2027

R&I Areas

- Advanced and post lithium-ion technology for big and small long lasting energy storage (such as flow batteries) by 2025;
- Combined natural gas battery-powered plant, using batteries as buffer between grid demand and power plant capability by 2027;
- Electro mobility with next generation of batteries technologies that can meet future electric grid needs by 2025.
- Large scale adoption of household energy storage systems that allow for off-grid domestic renewable energy consumption and local off-grid energy communities.