Destination 1: Climate neutral, Circular and Digitised Production

- High-precision OR complex product manufacturing – potentially including the use of photonics (Made in Europe and Photonics Partnerships) (IA)

- Factory-level and value chain approaches for remanufacturing (Made in Europe Partnership) (IA)

- Achieving resiliency in value networks through modelling and Manufacturing as a Service (Made in Europe Partnership) (RIA)

- Foresight and technology transfer for Manufacturing as a Service (Made in Europe Partnership) (CSA)

- Energy efficiency breakthroughs in the process industries (Processes4Planet partnership) (RIA)

- Electrification of high temperature heating systems (Processes4Planet Partnership) (IA)

- Modelling industry transition to climate neutrality, sustainability and circularity (Processes4Planet partnership) (RIA)

- Hubs for circularity for near zero emissions regions applying industrial symbiosis and cooperative approach to heavy industrialized clusters and surrounding ecosystems (Processes4Planet partnership) (IA)

- Sustainable and efficient industrial water consumption: through energy and solute recovery (Processes4Planet partnership) (RIA)

- Circular economy in process industries: Upcycling large volumes of secondary resources (Processes4Planet partnership) (RIA)

- Low carbon-dioxide emission technologies for melting iron-bearing feed materials OR smart carbon usage and improved energy & resource efficiency via process integration (Clean Steel Partnership) (IA)

- Circular economy solutions for the valorisation of low-quality scrap streams, materials recirculation with high recycling rate, and residue valorisation for long term goal towards zero waste (Clean Steel Partnership) (RIA)

- **(Two stage)**Intelligent data acquisition and analysis of materials and products in existing built works (RIA)

Destination 2: Increased Autonomy in Key Strategic Value Chains for Resilient Industry

- Bioinspired and biomimetic materials for sustainable textiles (IA)

- Smart sensors for the Electronic Appliances market (RIA)

- Advanced (nano and bio-based) materials for sustainable agriculture (RIA)

- Advanced materials for magnets in applications for the New Energies Market (RIA)

- Innovative technologies for sustainable and decarbonised extraction (RIA)

- Technologies for processing and refining of critical raw materials (IA)

- Recycling technologies for critical raw materials from EoL products (IA)

- Earth Observation platform, products and services for raw materials (IA)

- Expert network on Critical raw materials (CSA)

- Recyclability and resource efficiency of Rare Earth based magnets (IA)

- Innovative methods for safety and sustainability assessments of chemicals and materials (RIA)

- Integrated approach for impact assessment of safe and sustainable chemicals and materials (RIA)

- Computational models for the development of safe and sustainable by design chemicals and materials (RIA)

- Coordination and knowledge sharing across materials development communities (CSA)

- Boosting generation and diffusion of advanced technologies in SMEs based on a supply chain model (CSA)

- Affordable Housing District Demonstrator (IA)

Destination 3: World-leading Data and Computing Technologies

- Integration of data life cycle, architectures and standards for complex data cycles and/or human factors, language (AI, data and robotics partnership) (RIA)

- Collaboration with NSF on fundamental research on new concepts for distributed computing and swarm intelligence (CSA)

- Cognitive Computing Continuum: Intelligence and automation for more efficient data processing (AI, data and robotics partnership) (RIA)

- Coordination and Support of Cognitive Computing Continuum research and policy (CSA)

Destination 4: Digital & Emerging Technologies for Competitiveness and Fit for the Green Deal

Call - Digital and emerging technologies for competitiveness and fit for the Green Deal

- Novel paradigms and approaches, towards AI-driven autonomous robots (AI, data and robotics partnership) (RIA)

- Adaptive multi-scale modelling and characterisation suites from lab to production (RIA)

- Pervasive photonics - multi-technology integration for digital infrastructure, sensors and internet of things (Photonics partnership)(RIA)

- Versatile light sources and systems as tools for manufacturing and medical application (Photonics Partnership) (RIA)

- Advanced imaging and sensing technologies (IA)(Photonics Partnership)

- Industrial leadership in AI, Data and Robotics – advanced human robot interaction (AI Data and Robotics Partnership) (IA)

- Low TRL research in micro-electronics and integration technologies for industrial solutions (RIA)

- Sustainable safe-by-design 2D materials technology (RIA)

- 2D materials of tomorrow (RIA)

- Quantum Photonic Integrated Circuit technologies (RIA)

- Investing in alternative quantum computation and simulation platform technologies (RIA)

- Framework Partnership Agreement for developing large-scale quantum Computing platform technologies (FPA)

- generation quantum sensing and metrology technologies (RIA)

- Photonic Strategies and Skills Development (CSA) (Photonics Partnership)

Destination 5: Open Strategic Autonomy in Developing, Deploying and Using Global Space-Based Infrastructures, Services, Applications and Data

- End-to-end Earth observation systems and associated services

- Future Space Ecosystem and Enabling Technologies

- Future Space Ecosystem: Management and Coordination Activity

- New space transportation solutions and services

- Modern, flexible and efficient European test, production and launch facilities

- Evolution of services: Copernicus

- Copernicus for Atmosphere and Climate Change, including CO_2

- Copernicus for Emergency Management

- Copernicus in-situ component

- Quantum Communication Technologies for space systems

- Quantum Space Gravimetry Phase-A Study

- Scientific exploitation of space data

- Space technologies for European non-dependence and competitiveness

Destination 6: A human-centred and ethical development of digital and industrial technologies

- Toolbox for efficient IP licensing for market uptake and societal value creation (CSA)

- Piloting communities of expert facilitators to improve industry-academia-public sector co-creation (CSA)

- Fostering knowledge valorisation through societal and cultural interactions (CSA)

- Pilots for an innovative human-centric industry (RIA)

- Drivers and success factors for progress towards Industry 5.0 (RIA)

- Localised and Urban Manufacturing, supporting creativity and the New European Bauhaus (RIA using FSTP)

- Green and digital skills and training needs for a just transition (CSA)

- Boosting industrial symbiosis by standardisation (CSA)

- Provide for a strong and sustainable pool of experts for European Standardisation: attract the students of university/HEI

- Pre-normative research and standardisation in industrial ecosystems (CSA)

- International Hub for Digital Partnerships in the Indo-Pacific (CSA)

- R&I cooperation with Sub-Saharan Africa (CSA)

- R&I cooperation with Latin America (Mexico, Brazil, Argentina, and other countries in the BELLA network or members of RedClara) (CSA)

- Efficient trustworthy AI - making the best of data (AI, Data and Robotics Partnership) (RIA)

- Large Scale pilots on trustworthy AI data and robotics addressing key societal challenges (AI Data and Robotics Partnership) (IA)

- Natural Language Understanding and Interaction in Advanced Language Technologies (AI Data and Robotics Partnership) (RIA)

- Through AI from Disinformation to Trust (IA)

- Next Generation Internet Fund (RIA)

- Pilots for the Next Generation Internet (IA)

- Next Generation Internet International Collaboration - USA (RIA)

- Next Generation Internet Commons Policy (CSA)

- Next Generation eXtended Reality (RIA)

- eXtended Reality for Industry 5.0 (IA)

- Supporting the emergence of an open human-centric Metaverse (CSA)

- Support facility for digital standardisation and international cooperation in digital partnerships (CSA)

- Promoting EU standards globally (CSA)

- Digital Humanism - Putting people at the centre of the digital transformation (CSA)

- Art-driven digital innovation: Towards human compatible and ecologically conscious technology (CSA)