**Allegato 2**

**i-MATT** - **I**talian **MAT**erials **T**echnologies Infrastructure

**Abstract**

**i-MATT** will be focused on developing knowledge and know-how in the field of advanced materials and related industrial processes, to transfer this knowledge to the main industrial sectors, so that it can foster innovation in products, processes and services. **i-MATT** will be strongly characterized by the leadership of the National Research Council of Italy (CNR), the largest national research body, as well as by skills, experiences and technologies that the private partner of the Public-Private Partnership (PPP) will share, being companies with a very high profile (partly already identified) leaders in their respective industrial sector, with a strong positioning in the national, European and international market.

**i-MATT** will be structured in accordance with the contents of the National Research Plan 2021-2027 and the Smart Specialization Strategies at the National and Regional level, contributing to the alignment of priorities at EU level.

**i-MATT** will be structured as a “Multi-Site” Infrastructure covering different Italian Regions to match the innovation needs of different productive and industrial districts.

Specialization fields of **i-MATT** will be the following:

• Materials for packaging, both flexible and rigid, to enable plastic-free packaging

• Materials for advanced mechanics

• Materials for energy

• Materials for health in a one-health approach

* Digital platforms for data management, processes and protocols.

For each of these industrial sectors, solutions of specific interest will be analyzed, following issues and inputs of the private companies that will join the PPP. These will be the starting points to define possible future synergies and common technological goals for the entire supply chains, harvesting the potential customers to whom **i-MATT** will offer its services, thereby assuring the development and sustainability of the infrastructure.

**i-MATT** will be a driver for the industrial innovation for the way it is designed and the forseen major upgrade phases. It will be a source for new high-tech components, instruments and related services and it will offer opportunities to remove technological and market barriers leading to further innovation, generating knowledge transfer.

Moreover, the innovation infrastructure will be a key for the promotion of sustainable industrialization, a means to increase access to markets, to improve high quality scientific research and the capacities of the industrial sector. Thanks to **i-MATT** theindustrial diversification will be strongly encouraged.

**i-MATT** will strengthen connections with the territories and with the local communities in the research and innovation processes: considering them both as recipients of the interventions and as bearers of challenges, acting in this way as an enabling factor of the transformative innovation processes of the territories, enabling and improving the contamination.

The **i-MATT** consortium addresses in a holistic and tailored way different objectives: it fosters collaboration and co-creation of the PPP based on the excellent expertise and outreach and bridging the gap between large, medium enterprises and research organizations, by developing a common joint infrastructure in advanced technologies that connects the research community, large industry users, technology providers and market.

The nature of the PPP will cover a broad range of TRL: the presence of CNR with its laboratories, will secure the implementation of activities related to pre-competitive research, whereas the presence of the companies, will foster activities toward the market.