## OT4.3 - CONCEPT FOR ADVANCED MANUFACTURING INNOVATION ECOSYSTEMS TO INTEGRATE SMEs INTO WORLD-CLASS CLUSTERS

### Output factsheet: Strategies and action plans

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### Summary description of the strategy/action plan (developed and/or implemented)

- Version 1
As part of the NUCLEI joint strategy for the commercialization, valorisation and exploitation of the set of transnational i-services supporting innovation in businesses for the advanced manufacturing supply chain (tested with a large pool of companies in the course of the pilot actions), this Output consists in the conception of one ideal structure for transnational collaboration to support top SMEs to integrate knowledge into world-class and embed cross-value chains. The so called Concept for future advanced system for creating a manufacturing cross-European value chains consists, so, in a paper that emphasises the necessary peculiarities to establish one transnational innovation networks (for the advanced-manufacturing Central Europe ecosystems to (1) reinforcing groups of SMEs in R&D joint exploitation (2) financial endowment to SMEs and Risk finance aid that shall be financed by CTE.

The goal is the creation of one innovation network where pools of companies of different Countries, represented in the project by “intermediate bodies”, are enabled to cooperate together in the development of new components and solution with an exploitable market potential.

The cooperation system shall be organized in sub-projects to encourage special fast-lanes for KET applicability in SMEs, thus transforming the next NUCLEI phase in a larger FRAMEWORK PROJECT open to a new aggregations of SMEs, R&D performers & business intermediaries from other CE Regions.

1. In the first step, a group of 5-6 intermediate bodies (all official project partners) defines an overall technology agenda, that consists in some innovation and business targets and requirements to be pursued by their own companies.

2. In the second step, the intermediate bodies launch open tenders for SMEs and start-ups focused on some specific technology / sectorial domains. Only then, SMEs and startups, could submit proposals to one (or perhaps more) of these open calls. As results of this second step, a certain number of SMEs of different countries are grouped in sub-projects and are committed to work together do develop technical-based solutions serving the needs of the consortium.

3. In the third step, groups of companies cooperate and share their own R&D infrastructures (like laboratories, industrial plants etc...) to develop “highly innovative infrastructure, components services and applications and validates their usefulness in real developments. This will allow the joint technologies to be further developed into marketable components and to train SMEs and web entrepreneurs on sophisticated technologies for innovative services and applications.

4. The step four is about transferability of the results to industry, and the possible integration of the conceived solutions into the industrial layout.

NUTS region(s) concerned by the strategy/action plan (relevant NUTS level)
ITH3, Veneto
ITH5, Emilia-Romagna
AT31, Oberösterreich
SK04, Východné Slovensko
PL51, Dolnośląskie
DE21, Oberbayern
CZ01, Praha

Expected impact and benefits of the strategy/action plan for the concerned territories and target groups

The present conceptualization is backed by the European Commission, as it interpret the provisions of EC REG. 651/2014 and it proposes a collaborative open-innovation model to support SMEs from different Countries to participate in thematic innovation projects upon a common technological agenda that shall improve the impacts on the market of the final products.

Given the importance of the ETC for the cohesion policy providing a framework for the implementation of joint actions and policy exchanges between national, regional and local actors from different Member States or third countries, the EC REG. 651/2014 address certain difficulties faced by ETC projects in order to facilitate their compliance with State aid rules. The ETC-specific issues that this Regulation should address relate to the applicable regional aid intensity for ETC projects, SMEs' cooperation costs linked to ETC projects and to obligations concerning publication and information, reporting and keeping records for monitoring purposes.

So, the provisions let SMEs organisational cooperation for the development of joint business strategies or management structures, common services or services to facilitate cooperation, coordinated activities such as research or marketing, the support of networks and clusters, the improvement of accessibility and communication, the use of joint instruments to encourage entrepreneurship and trade with SMEs. This kind of issues are considered when the innovation network collaborative model was conceived.

Sustainability of the developed or implemented strategy/action plan and its transferability to other territories and stakeholders
Considering both the normative background and inspirational principles and the technical and financial provisions, and taking into consideration the opportunities offered by the European Territorial Cooperation offered by Programme’s call for proposals, the sustainability of such collaborative models depends on numerous factors: favourable legislation (local and European, with specific regard to the EU MFF 2021-2027) and - obviously - the market-impact of the common-approach developed products.

Since the approach is forged basically in a cooperation system organized in sub-projects to encourage special fast-lanes for KET applicability in SMEs, thus transforming the next NUCLEI phase in a larger FRAMEWORK PROJECT open to a new aggregations of SMEs, R&D performers & business intermediaries from other CE Regions, the replicability can be high.

Given the current timeframe, the conceptualization of one brand new project consist in a cooperation system organized in sub-projects to encourage special fast-lanes for KET applicability in SMEs shall be applied into the EU Multiannual Financial Framework 2021-2027 (new EU programming period).

As highlighted by the Investment guidance of cohesion policy funding 2021-27, Among the five main objectives that will drive EU investments in 2021-2027, between 65% to 85% of ERDF and Cohesion Fund resources will be allocated to objectives 1 and 2 concerning innovation and climate goals:

• Smarter Europe, through innovation, digitisation, economic transformation and support to small and medium-sized businesses
• a Greener, carbon free Europe, implementing the Paris Agreement and investing in energy transition, renewables and the fight against climate change

Cohesion Policy supports reforms for an investment-friendly environment, where businesses can thrive. Full complementarity and coordination with the new, enhanced Reform Support Programme will be ensured. So, beside the ultimate goal of set the right conditions for growth and job creation, new “enabling” conditions to help remove barriers to investments, the consortia taking part in the NUCLEI+ cooperation system 2021-2027, when defining their own transnational technology agenda, should address the definition of shared technology / sectorial domains into climate-neutral applications.

Lessons learned from the development/implementation process of the strategy/action plan and added value of transnational cooperation

The NUCLEI project has conceptualized the advanced manufacturing Innovation ecosystems to integrate SMEs into world-class clusters, but the implementation of this system was not part of the NUCLEI workprogramme. Anyway, looking at the impact of the pilot actions and - in specific - the preliminary business deals, there lesson learnt showed that there are avenues to let SMEs of different countries working together. This shall be better achieved according to a common technology agenda, that consists in some innovation and business targets and requirements to be pursued by their own companies.

References to relevant deliverables and web-links
If applicable, pictures or images to be provided as annex
This Output is connected to the deliverable Deliverable D.T4.3.1