



Call for Proposals for Activities to be executed in 2022

Guidelines for the Call Version 1.1 (pre-call)

EIT Manufacturing

Paris-Saclay, France | 2021-03-01

www.eitmanufacturing.eu

EIT Manufacturing is supported by the EIT, a body of the European Union

Contents

L	For	eword	2			
2	Prir	ciples and Thematic Areas	2			
3		posal Structure and Submission				
1	Rev	roposal Structure and Submissioneview Process and Selection Criteria				
5	Key	Dates	6			
ŝ	Anr	nex	7			
	6.1	Flagships	7			
	6.2	Innovation Activities				
	6.3	Education Activities	15			
	6.4	Business Creation Activities	32			
	6.5	Regional Innovation Scheme (RIS) Activities	37			
	6.6	Guidance and Support	41			
	6.7	Financial Aspects	41			
	6.8	General comments to be taken under consideration in elaborating the proposals	41			
	6.9	Participation of organisations from Associated Countries previously eligible for funding under Horizon 2020				
	6.10	EIT Core Key Performance Indicators (KPIs)	44			
	6.11	KIC-specific Key Performance Indicators (KPIs), as relevant for proposals to this call	48			
	6.12	Glossary	52			

Note: These Guidelines are based on the current set of requirements by EIT. They are subject to change if / when new requirements are defined or existing requirements are changed. In particular, this may happen when concrete regulations of the new Horizon Europe framework become known.

Version History:

Version 1.0	Initial version, published for the pre-call
Version 1.1	Clarification about consortium composition involving external partners in section 2

1 Foreword

EIT Manufacturing will put Europe at the centre of a global revolution and boost manufacturing innovation in Europe by connecting people with skills, technologies with markets, and innovators with investors. Technological progress is now exponential, and it is changing the industrial, social and competitive landscape faster than ever before. Our aim is not only to adapt to this revolution, but to lead it. To do so, we need to overcome value network fragmentation and bring stakeholders together. We need to make better use of our knowledge and our strengths to create value and deploy agile mechanisms to accelerate and steer innovation, shaping the future role of manufacturing in our society.

With the needs, concerns and ideas of economy and society at its core, the mission of EIT Manufacturing is to empower its partners and stakeholders to fundamentally transform the manufacturing system and meet the global demands of present and future generations. In 2021, the third EIT Manufacturing Call for Proposals (for Activities to be executed starting in 2022) will build upon the experiences and lessons learnt and drive the community one step further in the achievement of its long-term goals.

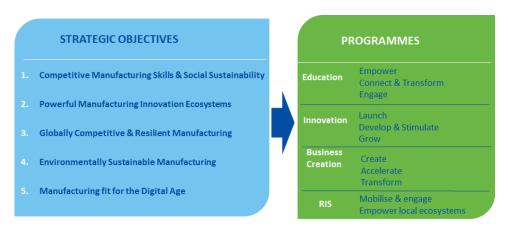


Fig 1. Strategic objectives and programmes of EIT Manufacturing

Activities of EIT Manufacturing are aimed towards the strategic objectives of the KIC and the programmes are the instruments to achieve the objectives for the EIT Manufacturing community.

Exploiting these opportunites will require to combine aspects of innovation, education and business creation, in an integrated fashion. Activities along these lines will be at the heart of EIT Manufacturing. Proposals for these activities will be solicited through a call process open to all Partners of EIT Manufacturing, i.e. Members and their Linked Third Parties, Activity Partners, but also open to non-Partner (external) organizations, including SMEs and Start-ups, that can bring added-value to them. This document describes the goals and the process of the call, as well as an outline of how a convincing and integrated portfolio of Activities will be selected. The chosen Activities will start in 2022.

2 Principles and Thematic Areas

This call requests proposals for activities in the Areas

- Innovation
- Education
- Business Creation
- Regional Innovation Scheme (RIS)

All proposals should align with EIT Manufacturing's overall vision, mission, and set of KPIs.

Proposals should clearly define targets for added value, business impact and/or societal impact.

In order to ensure alignment of proposals with EIT Manufacturing Strategic objectives, the following call thematics (Flagships) have been defined. The patern of the Flagship consists of lever(s) for a Strategic Objective. Proposals should at least contribute to one of EIT Manufacturing's four flagships

- Human-machine co-working for socially sustainable manufacturing
- Flexible production systems for competitive manufacturing
- Low environmental footprint systems & circular economy for Green manufacturing
- Digital & collaborative solutions for innovative manufacturing ecosystems

Each Activity of EIT Manufacturing should be executed by an **entrepreneurial team** consisting of Partners of EIT Manufacturing, i.e. Members and their Linked Third Parties and Activity Partners. **Non-Partner organisations** can also participate and will be assigned the Activity Partner status for one (1) year (see glossary) if the activity proposal they participate in is successful.

Teams also include Linked Third Parties (LTPs) of member organisations (e.g. daughter companies).

The entrepreneurial teams should represent, at least two different Co-Location Centres (CLCs), preferrably combining education, business, and R&D background. Consortium shall take carefull consideration in forming teams with regards to the number of organisations and the additional coordination complexity for larger teams. Well defined rationale is required to balance out between partners competences and coordination especially for the anticipated project duration.

For 2022, EIT Manufacturing aims to put together a portfolio of activities up to a total EIT Grant of € 45-50m.

The total maximum EIT funding per year in the Call 2022 for an EIT Manufacturing Member, including any Linked Third Parties (LTPs), is € 1,000,000. At most, three LTPs of a Member may receive funding. Please take this into account when creating the proposals, keeping in mind the high success rate of proposals is expected.

For each Activity Partners and non-Partner organizations the maximum funding will be € 300,000.

Non-Partner organisations can also be included in teams by **sub-contracting** (up to € 60,000, using best-value-for-money selection processes according to EIT procurement policy). Involving SMEs or start-ups is particularly relevant for Innovation Activities. Please be aware that sub-contractors need to be selected via a documented procurement process, keeping best-value-for-money principles in mind.

The duration of Activities should be planned for 1 to 2 years (depending on the Area and Segment selected – for details, see the descriptions in the Annex). Depending on the duration of the Activities, one to two stage-gate reviews will be performed by EIT Manufacturing in order to thoroughly monitor and assess the activities performance.

For the 2-year activities, tangible outputs are expected to be created already in the first year, like contribution to KPIs, proven and substantiated go-to-market results, financial sustainability etc.

Organisations that are not yet partners of EIT Manufacturing can express their interest to participate in proposals by registering -> here. When the registration is approved by EIT Manufacturing, the organization's expression of interest is visible to all EIT Manufacturing Partners, can be selected in the proposal form, and assigned budget. Note, however, that employees of those organisations will not get access to the EIT Manufacturing intranet and therefore will not be able to edit proposals. The Activity Leader or the co-editors of the proposal can export the proposal and share externally. In case a proposal is accepted, external organisation involved will get the partnership status of an Activity Partner (see Glossary). Then also employees can register themselves in the system.

At most half of a consortium can be from external organisations, so at **a minimum 50% of the participants must be from existing partners** (members, LTPs, or Activity Partners that are SMEs and therefore can be Activity Partners for a second year).

One Member organisation (or LTP) takes the lead partner role, acting as **Activity Leader** of the overall Activity. The Activity Leader is responsible for deliverables and impact of the overall Activity. Activity Partners or external organizations can not lead an Activity.

At least one of the consortium partners shall be the **Business Owner** expected to exploit the tangible and non tangible (in the case of software, IP, knowledge etc.) outcome of the activity. Each Activity can have several Business Owners. Consortium partners will have to agree who will have this role based on the anticipated exploitation approach.

In the case of Innovation activities, this is an organisation that is able to bring proof of traction from potential customers, packages the output of the activity ("product owner"), and brings it to the market, either as part of the activity or shortly thereafter. For Innovation proposals, examples of organisations that can take this role include: a technology integrator, a service provider, an SME, a spin-off startup that will be created as an outcome of the Activity, or a business line/unit of a corporation taking part of the activity consortium .

Analogously, in the case of Education activities, this is an organization that knows the unmet needs of the target groups (i.e., students, professionals, executives); that takes the lead and represents the consortium in bringing the education products and services to the learners and to the customers. For education proposals, the Business Owner could be any type of organization delivering education and training.

The Business Owner would typically also be responsible for, or at least representing the consortium with reference to, the activity's contribution to the financial sustainability of EIT Manufacturing, if offered as part of the activity proposal.

3 Proposal Structure and Submission

The call will be executed in two phases: a **pre-call** (submission deadline March 22, 2021) and a **final call** (deadline May 7, 2021).

Note: Proposals that were not submitted for the pre-call cannot be accepted for the final call.

The proposals are submitted through the online submission tool available at EIT Manufacturing's Intranet, which will be available starting March 1st. To access the submission system, please log in to (or register yourself at) the EIT Manufacturing Intranet at http://plaza.eitmanufacturing.eu/. Select "Call for Proposals 2022 – Submission System" from "Call for Proposals at the top menu bar, or click on the respective button in the dashboard. When filling out the template, please refer to the help information provided in the template next to each field.

For the pre-call, not all information required for the final call will need to be provided. For the pre-call, we expect concise project sketches containing e.g. the following points (these may differ depending on the Area selected):

- Lead Partner, including contact person;
- Activity title and Area;
- Purpose of the Activity, including a concise statement and brief "elevator pitch";
- Compact work plan including start/end of the activity, major milestones and deliverables; next project steps towards implementation following acceptance.
- Target KPIs values;
- Estimated costs and EIT funding request for 2022;
 For multi-year proposals, planned costs need to be provided for each year;
- Estimated revenue projections resulting from the commercialization of the Activity results and the backflow of part of this to EIT Manufacturing (financial sustainability contribution)

Pre-call proposals can be submitted when Tab 0 and Tab 1 of the submission form are completely filled and the click on "Check and Save" in the respective tabs was successful. Information in the other tabs is not mandatory, but should be sufficiently detailed to allow an assessment of the above mentioned points.

For full proposals in the final call, the template will contain additional fields to provide information about gender balance and diversity, Knowledge Triangle Integration, and dissemination plans (depending on the Area your proposal is in), as well as a breakdown of the Activity into work packages (tasks) and their descriptions; detailed budget per task and partner; and budget justifications. You can also modify and improve the information provided in the pre-call version of the submission template.

4 Review Process and Selection Criteria

The review of the pre-call submission will be done by the EIT Manufacturing Directors in charge of the respective areas Education, Business Creation, and Regional Innovation Scheme.

They will assess the proposals in relation to

- Eligibility criteria,
- Adherence to Call Guidelines

For details please refer to Annex 6.2 to 6.5. Feeback to the pre-call proposals will be provided after the close of the pre-call. No proposals will be rejected at this stage. Feedback and recommendations are intended to guide the teams to elaborate successful and highly qualified proposals.

The review of the activity proposals submitted to the final call will be done by a panel of external experts selected by EIT Manufacturing. They will assess:

- Technical content, excellence and relevance of the proposals,
- Go-to-market strategy and convincing value proposition,
- Viability of the contribution to financial sustainability

The results of the expert review will be guiding the Management Team of EIT Manufacturing when making the decision on which activity proposals will be finally selected. The selected proposals shall form a well balanced portfolio matching expected available budget and strategic expectations of the EIT manufacturing management. Proposers will be informed on the outcome in the feedback tab (tab 6) of the proposal.

The portfolio of selected 2022 Activities will form part of the "Business Plan 2022-24", which will be submitted to EIT by the end of September 30th. A high level description on how the selected Activities contribute to the EIT Manufacturing strategy and what overall impact they will generate, will be included.

5 Key Dates

March 1	Pre-Call opening
March 22	Pre-Call closed
March 23 – April 9	Feedback by Pillar Directors (comments on formal aspects and strategic fit, compliance with eligibility criteria)
March 25	Final Call opening
May 7 23:59 CEST	Deadline for full proposals (Final Call closed)
May 28	External expert review completed
June 11	External expert consensus meetings completed
June 15-16	MT final decision on proposals to be included in Draft Business Plan
July 2	Final feedback for all proposals available (MT decision result, review comments, correction requests)
July 23	Proposals updated to include MT feedback
September 1	Approval of Draft Business Plan by EIT Manufacturing Supervisory Board
mid September	Approval of Business Plan by EIT Manufacturing Partner Assembly
September 30	Submission of Draft Business Plan to EIT

Subsequent steps include the review of the Business Plan by EIT HQ, the feedback in the form of a list of required changes to the Business Plan (and therefore also to some of the proposed Activities), the communication by EIT HQ about the final available funding for EIT Manufacturing, and the resubmission of a revised Business Plan meeting the budget and the change requirements of EIT. This final Business Plan forms the basis for the *Specific Annex to the Internal Agreement* that EIT Manufacturing will sign with the Partners in early 2022.

6 Annex

6.1 Flagships

EIT Manufacturing will use Flagships and Innovation Hotspots to guide our efforts in Innovation, Education, and Business Creation towards high potential innovation and entrepreneurship. Innovation hotspots are the intersection between a current or emerging industry need, and one or more enabling technologies that could help meet this need.

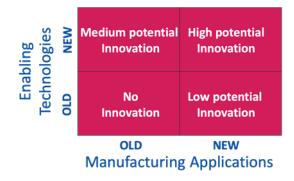


Fig 2. Innovation Hotspots - intersecting enabling technologies and manufacturing applications

For education in particular, the creation of new knowledge and new practices is source of high potential as depicted in Figure 2 through the creation of learning nuggets for instance. Taking a closer look to Innovation and Business Creation, a not-so-new manufacturing use case can also generate innovation hence exploitation when implementing alternative to the business model implemented.

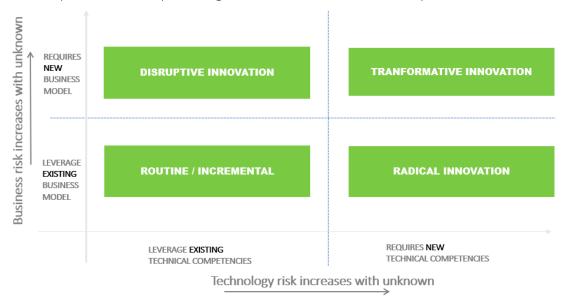


Fig 3. Innovation versus risk: business and competencies levers for growth.

In Fig.3, the routine/incremental innovation quadrant is where the risk of implementing an innovation is minimum but not where the highest potential lies. EIT Manufacturing programmes, especially for Innovation, are dedicated to provide support to higher business growth potential, potentially more risky, on the 3 other quadrants, the so-called breakthrough innovations. New technologies on the right end side quandrants and new business approaches on the top quadrants are area of high potential.

Innovation hotspots that have particularly high social, environmental and economic impacts, and need a sustained effort to build capacity in Europe, are designated as Flagships. EIT Manufacturing has selected four initial Flagships.

6.1.1 Flagship - Human-machine co-working for socially sustainable manufacturing

Human-machine co-working is a lever to use in a view to maximize job openness to all workers' by removing language, disability, age, gender barriers and maximize workers' well-being & motivation.

Diverse technologies delivering physical and/or cognitive assistance should facilitate attractivity and facilitate employment hence social sustainability within the manufacturing section which is EIT Manufacturing key strategic objective.

6.1.2 Flagship - Flexible production systems for competitive manufacturing

Proposal under this flagship should foster adaptable & versatile production lines or process chains to manufacture small batches, mass customization, Make-to-Order products, personalized and/or smart products. Through flexibility (e.g. reconfigurable production cells and mounting chains), the systems proposed shall also be crisis-resilient and help minimize failures/downtimes & interruption times, maintenance impact or procurement/shipping interruptions.

The lever to achieve this objective is to implement any kind of system, process, work organisation, technology that will make a production chain more flexible, more adaptable to produce diverse products adapting quickly to market condition and changes hence increase manufacturing competivity which is a Key EIT Manufacturing startegic objective.

6.1.3 Flagship - Low environmental footprint systems & circular economy for Green manufacturing

Proposal under this flagship should minimize energy/raw materials/natural resources consumption and/or GHG/pollutants emissions of manufacturing systems as first lever. The scope includes also as second lever any solution that can contribute to a circular economy. (e.g. waste recycling, demanufacturing i.e. product disassembly for reusing or recycling purpose, re-manufacturing i.e. new products manufacturing from reused or repaired parts). The scope can also includes logistical, control & maintenance systems for manufacturing production systems.

6.1.4 Flagship - Digital & collaborative solutions for innovative manufacturing ecosystems

Collaborative solutions could consist in: digital sharing solutions (e.g. data or knowledge sharing based on Artificial Intelligence, platforms, cloud, etc.); physical sharing solutions (e.g. human workforce or production resources sharing); digital & physical hybrid solutions (e.g. IoT, CPS, etc.); any other solutions based on new organizations within value networks* Innovative manufacturing ecosystems should foster business/co-creation and enhance efficiency throughout the manufacturing value networks* while preserving EU sovereignty & establishing EU standards on data. The solutions proposed could also enable resilience by allowing quick reconfigurations inside manufacturing value networks*.

*Value networks refer to actors of the manufacturing value chain, business partners and service providers working hand in hand in a new organization to enhance manufacturing collaborations.

6.2 Innovation Activities

Innovation is production or adoption, assimilation and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services and markets; development of new methods of production; establishment of new management systems. It is both a process and an outcome. Innovation goes beyond reseach and development (technology focus) as shown in Figure 4.

The EIT Manufacturing community is looking for Innovation Activities based on a feasible and proven technology, that can provide a desirable new solution (product/service/process) to address users' needs and will lead to a viable business in the next 1-2 years; the focus is on breakthrough innovation (radical, disruptive or transformative in Figure 3) that is has reached sufficient maturity and needs an extra push for the business to become reality.

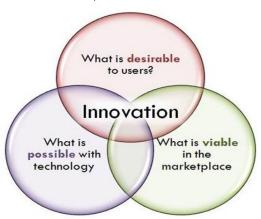


Figure 4: innovation components for success

Proposers should focus on products and services with real economic, environmental, and societal impacts. All activities in EIT Manufacturing are expected to be carried out with an open innovation mindset.

The proposal shall be aligned with at least one of the four EIT Manufacturing flagships with the following restrictions (applicable only to innovation):

- Human-machine co-working for socially sustainable manufacturing:
- Robots only or mere automation solutions without positive impact on human work will be out of scope
 - Flexible production systems for competitive manufacturing

Additive manufacturing or 3D printing solutions can be considered but shall not constitute the core aspect to achieve production system flexibility. Proposal focusing only at improving 3D printing solution will be out of scope.

- Low environmental footprint systems & circular economy for Green manufacturing Zero-defect solutions will be out of scope
 - Digital & collaborative solutions for innovative manufacturing ecosystems

The aim of the Call 2022 is to develop **both the technical integration and the business maturity level** of entrepreneurial projects. On the second aspect, it means increasing the market traction and robustness of the proposed solutions for scaling, to ensure or increase adoption within manufacturers as end users.

¹ Crossan & Apaydin, 2010, p. 1155

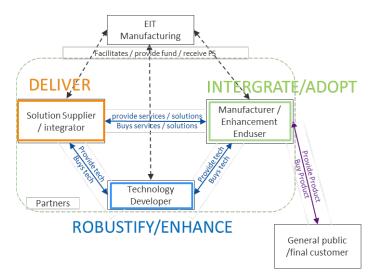


Figure 5: Schematic overview of the manufacturing ecosystem

Prior to applying to the call, innovation activity proposals should...

- ...clearly define the acute and real manufacturing problems that need to be solved and how they will address them
- ...have clearly IDENTIFIED SEVERAL USE CASES, ideally in different industrial sectors, to show the genericity of the solutions
- ...have novel technology-based solutions (products or services) that are robust and market-ready with potential for real commercial exploitation at the end of the 1st year of the project
- ...ensure that technology brick providers (RTOs/universities, SME, startups,...), system integrator or service providers (SME, Larger company...) and application end users (manufacturers) are part of the consortium team
- ...propose a pathway how to contribute to the financial sustainability of EIT Manufacturing if it is successful on the market...
- ...carefully address EIT performance KPIs
- ...translate innovation findings into learning nuggets and associated learning path with an evaluation nugget during the project
- ... clearly specify which actions that are taken to achieve knowledge triangle integration, gender balance and diversity and sustainability to be in line with the European Union's objectives

It is very important that INNOVATION activities can prove that advanced enabling technologies are creating significant value for potential customers by helping them address unmet needs in a new and desirable way so that they are willing to adopt and purchase the proposed solutions. These solutions should be commercializable through dedicated and adapted business approach. In addition, the proposal should contribute to the financial sustainability of EIT Manufacturing.

Examples of enabling technologies are shown below, but the list should not limit the activity proposals to explore only new enabling technologies.



Fig 6. Examples of enabling technologies

EIT will invest in highly motivated and entrepreneurial teams that run their Activity like a real venture and who are committed to deliver commercial products and services with breakthrough potential. The call offers funding for innovation activities in the DEVELOP programme .

DEVELOP INNOVATION activities should result in the increase in Market Readiness Level (MRL) AND Technology Readiness Level (TRL), Integration Readiness Level (IRL) and associated System Readiness Level (SRL). The requirement is that the project is already quite mature and has reached:

- at least TRL = 6 for most components (technology demonstrated in industrially relevant environment) and at least IRL = 3 to 4 corresponding to a SRL = 3 (System Development and Demonstration)
- AND at least MRL = 4-5 (market testing campaign done on small scale for stakeholders or on large scale for early adopters).

A. Technology Readiness Level (TRL), Integration Readiness Level (IRL) and System Readiness Level (SRL)²

The TRL scale only evaluates the maturity of an individual technology. In the case of a complex multi-component system which involves different technologies, it is necessary to assess the level and risk of integration of these components. The Integration Readiness Level (IRL) is introduced to describe the integration maturity of a developing technology with another technology, developing or mature; this index considers not only physical properties of integration, such as interfaces or standards, but also interaction, compatibility, reliability, quality, performance, and consistent ontology when two components are being integrated.

IRL	Definition
7	The integration of technologies has been <i>verified and validated</i> with sufficient detail to be actionable.
6	The integrating technologies can <i>accept, translate, and structure information</i> for its intended application.
5	There is sufficient <i>control</i> between technologies necessary to establish, manage, and terminate the integration.
4	There is sufficient detail in the <i>quality and assurance</i> of the integration between technologies.
3	There is <i>compatibility</i> (i.e. common language) between technologies to orderly and efficiently integrate and interact.
2	There is some level of specificity to characterize the interaction (i.e. ability to influence) between technologies through their interface.
1	An interface (i.e. physical connection) between technologies has been identified with sufficient detail to allow characterization of the relationship.

Table 1: Integration Readiness Levels

Firstly, the overall system should be sub-divided into its main components and the TRL of each individual component is to be evaluated. The overall TRL for the whole system corresponds to components with the lowest value TRL.

It is expected that the Activity will address this gap and increase the lowest TRL components to a higher level and/or improve the overall integration of components to achieve SRL >=4 at the end of the project and this should be integrated within the scope of work in the workplan.

For a more thorough evaluation, the IRL between 2 components and their associated technologies should be estimated. Finally, the global SRL for the whole system is assessed; the 5 SRLs are shown in Table 2 as well as a guideline for corresponding TRL – IRL – TRL in the case of 2 components.

The Activity is expected to bring the new product, process, or service to the market, taking them to at least TRL = 7 - 9, IRL = 4 - 5 and SRL = 4.

² TRL to SRL: The Concept of Systems Readiness Levels, B. Sauser, D. Verma, J. Ramirez-Marquez, R. Gove, Conference on Systems Engineering Research, Los Angeles, CA, April 7-8, 2006

SRL	Name	TRL – IRL – TRL	Definition
		guideline	
_	Operations & Support	9 – 7 – 9	Execute a support program that meets operational support performance requirements and sustains the system in the most cost-effective manor over its
	Зарроге		total life cycle.
4	Production &	8 – 7 – 8	Achieve operational capability that satisfies mission needs.
	Development		
			Develop a system or increment of capability; reduce integration and
3	System		manufacturing risk; ensure operational supportability; reduce logistics footprint;
Development & implement			implement human systems integration; design for producibility; ensure
	· · · · · · · · · · · · · · · · · · ·		affordability and protection of critical program information; and
			demonstrate system integration, interoperability, safety, and utility.
2	Technology	4 – 2 – 4	Reduce technology risks and determine appropriate set of technologies to
	Development		integrate into a full system.
1	Concept Refinement	1-1-1	Refine initial concept. Develop system/technology development strategy

Table 2: System Readiness Levels

B. Market Readiness Level (MRL)

As the outcome of the Activity, a minimum MRL = 6 should be reached i.e., proof of traction should be achieved. The proposal shall include business plans and actions to confirm this. In addition, the proposal shall describe the contribution of the Activity to the Financial Sustainability Mechanism from the EIT Manufacturing.

C. Risks

General external risks that apply to all situations (such as uncertainties linked to the Covid-crisis) are not considered here. Project specific risks shall be identified, prioritized, and mitigated/reduced as much as possible. For instance, they usually fall into the following categories:

- project management and execution risks: scope, cost, time, resources, communication within the team
- technology-related risks (e.g., feasibility, intellectual property, etc.)
- market-related risks (e.g., solution-market fit, commercial viability, etc.)
- Other risks (e.g., supply chain, regulatory, etc.)



Figure 7: Example of Market Readiness Level Scale

The summary of the Innovation DEVELOP call overview is given in the following table:

Description	Partnerships	Duration	KAVA budget	Specific Features
Collaborative Activities that accelerate commercia- lization and market traction of products, processes and/or services	 3 – 6 partners ≥ 2 CLCs technology brick providers (RTOs/universities, or specialized SME/startup), system integrator and application end users 		Maximum 1.3 M€ total funding per project (including minimum 30% co- funding from the applicants)	 At least 2 END USERS for the innovative solution from different profiles with associated use cases adaptations. At least one business owner should be assigned in the proposal and a work package should be dedicated to go-to-market strategy and tasks. Market traction (MRL=6) or higher expected at the end. Evaluation of the TRL & IRL of the sub-components of the technical solution and address the associated risks Learning nugget creation and marketing video required as outputs

There will be 2 stage-gate reviews, one at mid-year and the second one at the end of the year when the final report must be submitted. 12-month duration projects with a clear market focus are strongly recommended and preferred for the call. Also note that, in the project build-up, milestone are to be clearly related to Go/no Go step associated to Key deliverable(s) and/or output(s). The following outputs/deliverables of an innovation Activity are requested:

- Commercialization plan
- Financial sustainability agreement
- Proof of market traction or higher MRL achieved (e.g. solution's adoption by new users/ customers)
- Technical report describing how higher TRL/SRL was achieved and the technical specifications of the product
- Dissemination plan creation of both training material (e.g. Nugget) and a marketing video (describing the goal of the project, team members, outcomes and results, commercial and other benefits, etc.). Consortium are expected to ensure that the video can be mounted either for pure dissemination of project results but also as a marketing tool to address the project market targets.
- Overview of the next steps (e.g. creation of a spin-off to exploit the outcome)

³Activities of a longer duration of 12 months might be considered only if exploitation and go-to-market are achieved within the 1st year.

⁴ The objective is to ensure the solution generic enough to be scalable for diverse end users. For instance: corporate versus SME, RIS origin versus non-RIS, corporate of different sectors (ideal case), etc.

For the innovation pillar, the pre-call from 1st to 22nd March requires from the applicants to register their intention to submit. They need to enter at least the following basic information:

- proposal title and proposal purpose
- expected outcomes and impact
- the consortium's partners
- the link to the flagships.

After the pre-call is closed, feedback will be provided to the applicants, related only to formal aspects and strategic fit, compliance with eligibility criteria NOT on the content of the proposal. The formal call will open on 25th March when the full proposal should be prepared and submitted until 7th May. Proposals sent after 7th May will not be accepted.

6.2.1 Evaluation Criteria for Innovation Activities

For the Call in 2021 for future projects starting in 2022, selection focus will be to support the last mile toward market implementation. As such, both TRL (Technology readiness Level) and MRL (Market Readiness Level) will be scrutinized to ensure that the proposed projects deliver solutions and/or system that will reach or expand market exploitation at the end of the project. The panels of expert reviewers will consist of independent technical expert and business evaluators.

Different elements will be considered for the evaluation of the proposed solution

- Legitimacy: adequate fit of the team/resources with the problem to be solved
- Desirability: unsatisfactory current solutions for the end users
- Acceptation by end users and prescribers
- Feasibility: technical capability
- Viability: bringing value to customers and generating a sustained revenue stream
- Alignment with the EIT's Strategic Objectives, Flagships and EU's values
- Impact: economic, environmental, or societal sustainability
- Implementation: project execution, deliverables/outputs and risk mitigation

Within the Develop Innovation segment, activities will aim at finalising or improving integration of different components of high TRL, addressing and raising the TRL of the component with the lowest one and ensuring market traction of the new solution (e.g. by deploying it to new industrial sectors or new customers). The consortium shall explore all opportunities of exploitation with all partners: they are requested to present a coherent and convincing go-to market view and a pathway for contribution to the Financial Sustainability Mechanism.

6.3 Education Activities

The Education Pillar aims at fully contribute to the EIT Manufacturing Strategic Agenda and its anticipated impact. Education focuses on humans: engage, connect and empower them to become the backbone of a strong European Manufacturing Innovation Community; a propserous and inclusive society.

Education is key to pursue the strategic objectives of EIT Manufacturing: SO1 Manufacturing skills and talents; SO2 Manufacturing Innovation Ecosystems; SO3 Digitalisation of Manufacturing; SO4 Customer-driven Manufacturing; SO5 Socially Sustainable Manufacturing; SO6 Environmentally Sustainable Manufacturing; and to contribute to the Strategic Development Goals (SDGs)

Furthermore, Education plays a role in supporting business and innovation along the the 4 flagships, Digitalization, Green transition, increase of Resilience, and other relevant trajectories in Manufacturing.

The Education activities of EIT Manufacturing are structured along three Programs:I) **Empower**, to develop EIT Labelled journey for students and professionals; II) **Connect and Transform** to create the infrastructures and the learning experiences that enable individuals and organizations to network, skill, upskill and reskill within the Manufacturing Innovation Community; III) **Engage** to reach out to pupils, youngsters, society at large and other industries to create reciprocal awareness, attraction and involvement to manufacturing. These three programs, which progress in synergy and alignment with the innovation, business creation and RIS activities, are structured in 8 segments addressing individuals, enterprises and schools, as illustrated in Figure 8.



Figure 8 EITM Education programs and segments addressed by the call 2022

Table 3 below provides an overvew of the call with reference to the Education programs and segments. The activities in 2020 and 2021 have created the educational assets and launched the education and training programs. The strategy for 2022 –2023 is to integrate the programs in order to accompany individuals and organizations along their life and transformation journeys: to turn the results of the activity into assets that can be re-used and expanded to multiply the impact; to search for highly innovative education and training solutions; to exploit available resouces, networks and collaborations. The new calls launched for 2022-23 are expected to build on the assets and infrastructures created in 2020 and to strengthen and expand the programs launched in 2021.

In line with the general evaluation criteria described in Chapter 4, with specific reference to the Education, the following criteria will be taken into consideration for education projects:

- 1. **Strategic fit:** Alignment with EITM strategic objectives, requirements, policies (including RIS, gender and inclusion, Knowledge Triangle Integration)
- **2. Education & Training Effectiveness and Impact:** Effective education, skilling, up-skilling, reskilling, engaging of relevant target groups.
- **3. EITM Value added:** Integration with EITM educational infrastructures and content: the Guided Learning Platform **GLP**, the Digital Nuggets **DNs**, the Teaching & Learning Factories **T&LFs** networks, the **YML** network, or other initiatives and funding programs. Avoidance of duplications. Contribution to EITM assets and **Financial Sustainability**.
- **4.** Implementation Quality and credibility of the workplan.

Table 3. EDUCATION call overview

Program	Segment	Description of the call	Partnership	Duration	Expected KAVA budget	Target groups	Specific features
EMPOWER	1.1 EIT Labelled Masters 1.2 EIT Labelled PhD	Not included in the call. Possibilities to join the programs in 2021 or 2022					
EMPOWER	1.10 EITM Labelled Flexy Enhance Programme	Equip learners I&E skills + sustainability + verticals on advanced technology applications Individual learning trajectories (includes industrial internship, GLP, T&LFs)	3-6 Partners (Uni, RTO, Ind), at least 3 countries representing different working cultures	The Activity will run for max 2 years ^[1] .	Several Proposals can be approved, max 250 keuro per activity (max 10keuro per learner)	Employees and professionals	Demonstrate d engagement of min 6 - 10 companies to host internship and to enroll overall min 10 employees/p rofessionals. Check list 1.0, 1.10 Additional submission form 1.10.
CONNECT & TRANSFORM	1.4 Skill- driven learning	Learning paths for students, employees, long life learners	Min. 3 partners from at least 2 different CLCs. Involvement of industrial partner	The Activity will run for max 1 year.	Several Proposals can be approved. 100 -250 k€ funding per Activity	Companies, professionals , executives or students.	Engagement of the target groups. Check list 1.0, 1.4 Additional submission form 1.4.
CONNECT & TRANSFORM	1.6 Pioneering Learning Journeys	Courses focus on innovation, entrepreneur ship, advanced studies in manufactur ing (includes GLP, T&LFNs)	Summer School for 2022: 5-10 partners, min. 1 partners from the EITM Master School consortium and min. 1 partner from RIS Countries min 2 CLCs Doctoral School programmes: 3-6 Partners, min. 2 partners from the EITM Doctoral School consortium and min. 1 partner from RIS Countries, min. 2 CLCs	The Activity will run for 1 year.	Summer School for 2022: only 1 proposal is expected to be funded Doctoral School programmes : two proposals will be funded in total (one per programme section)	EITM Labelled Master and Doctoral School students + external participants, including professionals and researchers	Innovative didactic methods. Involvement of I&E education experts. Preliminary engagement of external paying participants. Check list 1.0, 1.6 Additional submission form 1.6.

CONNECT & TRANSFORM	1.3 Education for Transforming Organization s	Consulting and training trajectory for (S)MEs companies to upskill several roles towards the transformation (digital, green, resilience)	3-6 Partners (1/3 industry) at least 3 countries, representing different working cultures. Mandatory involvement of industrial associations or similar entities.	The Activity will run for max 2 years ^[2] to deliver cycles of 5-9 months training.	Several proposal can be approved 100-300 k€ funding per Activity	SMEs	Preliminary engagement of 6-10 manufacturi ng (S)MEs committed to undertake the trajectory and expose to training at 2 people per working area/compet ence area/hierarc hy. Check list 1.0, 1.3 Additional submission form 1.3.
ENGAGE	1.7 Programs to engage Society and Pupils	Engage pupils and youngster	Min. 2 partners from at least 2 different CLCs. Involvement of relevant networks is encouraged	The Activity will run for 1 year.	Several Proposals can be approved; 100-150 k€ funding per Activity	Pupils, Young people, girls,	Preliminary engagement of teachers. Check list 1.0, 1.7 Additional submission form 1.7.
ENGAGE	Programs to engage other sectors	Not included in Some activities	the call. running through XI	KIC projects			

6.3.1 EITM Labelled Enhance Flexy

Highly qualifying personalized learning for employees and professionals

Target: manufacturing employees and professionals

Purpose: equip learners with entrepreneurial skills & sustainability + verticals on advanced technology application

Scope: (EIT labelled) personalized learning with final certification

Channels: GLP, hands-on activities, industrial internship, cross-organizational teamwork, coaching.

Duration: max 2 years (to deliver 12-18 months training)

Partnership: 3-6 Partners (Uni, RTO, Ind), at least 3 countries, representing different working cultures **Funding:** max 250 euro per activity (max 10k per learner).

Special conditions: Demonstrated engagement of min 6-10 companies to host internship and to enroll overall min 10 employees/professionals.

KPIs:

- EITHE08.1 Training and mentoring activities (non-labelled EIT training activities) # of participants
- EITHE08.2 Training and mentoring activities (non-labelled EIT training activities) # of participants in RIS
- EITHE11.1 Financial Sustainability (Revenues)
- KIC.G03 # Digital nuggets created
- KIC.G04 # Digital nuggets consumed
- KIC.E01 # Badges issued to document and testify the achievement of a learning outcome

KIC.R01 # of teaching and learning factories projects implemented in EIT RIS countries

Financial Sustainability Mechanisms: Tuition fees, Revenue Sharing, Digital Content Agreement (mandatory for Digital Nuggets Created).

Forms

- Check list 1.0 Education
- Check list 1.10 Enhance Flexy Program

6.3.2 Skills-driven Learning

Short learning paths aiming at developing specific skills for students, employees, long life learners

Target: manufacturing employees and professionals, long-life-learners, students

Purpose: support leaners in the development of the needed skills

Scope: skill-driven learning with micro- certification

Channels: GLP, T&LFNs, blended courses

Duration: 1 year

Partnership: Min. 3 partners from at least 2 different CLCs. Involvement of industrial partner.

Funding: 100 -250 k€ per Activity

Special conditions: Not applicable

KPIs:

- EITHE08.1 Training and mentoring activities (non-labelled EIT training activities) # of participants
- EITHE08.2 Training and mentoring activities (non-labelled EIT training activities) # of participants in RIS
- EITHE11.1 Financial Sustainability (Revenues)
- KIC.G03 # Digital nuggets created
- KIC.G04 # Digital nuggets consumed
- KIC.E01 # Badges issued to document and testify the achievement of a learning outcome
- KIC.E02 Number of educational products launched (not nuggets, nor part of pathways)
- KIC.RO1 # of teaching and learning factories projects implemented in EIT RIS countries

Financial Sustainability Mechanisms: Digital Content Agreement (mandatory for Digital Nuggets Created), Revenue Sharing, Success Fee

Forms

- Check list 1.0 Education
- Check list 1.4 -Skills Driven

6.3.3 Pioneering Learning Journeys

Innovative added value modules for EIT Labelled Master and Doctoral School programs, and open to selected external participants, mainly aiming at developing I&E and sustainability competences. A short presentation of the Master School is provided in ANNEX 1. A presentation of Doctoral School programme is provided in ANNEX 2. These annexes allow the applicants to understand the context, where the selected Innovative added value modules will be delivered and to provide additional info,

For the Master School one module is expected:

such as the expected Overarching Learning Outcomes (OLOs).

- Summer School for 2022

For Doctoral School the annual I&E programme is the target of the call. This programme is organized in two modules:

- Spring/Summer 2022 (January – July)

- Autumn/Winter 2022 (August-December)

Proposal must target specifically only one of the following sub-segments:

- Summer School for 2022
- Doctoral School programme for either
 - o Spring/Summer 2022 (January July)
 - or
 - o Autumn/Winter 2022 (August-December)

6.3.3.1 Summer School for EITM Master School programmes - 2022

Target: Master of Science students, professionals

Purpose: equip learners with Innovation and entrepreneurial skills and capabilities (see OLO table in A ppendix document for Master and Doctoral School programmes - MASTER programme section) **Scope:** (EIT labelled) Master of Science I&E Summer School for EITM students and for external students and professionals.

This Summer School is a mandatory activity of the EITM Master School programmes. It focuses on teaching innovation and entrepreneurship to the students in the context of manufacturing and its related societal challenges, such as, but not limited to, the four EITM flagships. It must include a strong usage of industrial challenges and innovative technologies to allow the students to practice on real business environment. The programme must include a social and networking programme as well, to develop professional network of students.

For more info about the EITM Master School and its related OLOs, please have a look to Appendix document for Master and Doctoral School programmes.

Channels: hands-on activities, innovative pedagogical approaches, industrial challenges and training, cross-organizational teamwork, coaching.

Duration: the activity will last 1 year, with the summer school duration of min 16 days (5ECTS equivalent, where 1 ECTS=25 hours, including both study in classroom and study time outside classroom) to be delivered in summer 2022. The format can be in a raw of three weeks or inside a period of 6 weeks.

Partnership: 5-10 Partners (Uni, RTO, Ind), min. 1 partner from EITM Master School partner universities, min. 1 partner from RIS Countries, min 2 CLC . The selected proposal will be a new KAVA and it will include EITM personnel at zero cost, to define fees and alignment of the programme with the EITM strategic agenda and KPIs and to support marketing and communication activities.

Funding: Funding range is 200.000 - 300.000 euro, with 20% of budget reserved to partners from RIS Countries. 1 proposal only is expected to be funded. External organizations and professional not associated to EITM can join either as external partners, willing to pay the affiliation fee to EIT Manufacturing for year 2022, or as subcontractors, in this case they will be selected by the winning consortium through public procurement. In the case of subcontracting collaboration choice, external experts about I&E education can register into the Education I&E expert portal, to have more visibility towards consortium partners:

https://plaza.eitmanufacturing.eu/PROMISE/PRIVATE/FORMS/form.aspx?guid=5EB71D55-07D2-4278-9339-E135FEDEA9C5

Special conditions:

<u>Logistic:</u> EITM Master students accommodations paid by the grant; travels to/from summer school location(s) are excluded. External students must organize travel and accommodation by themselves. Organizer must organize EITM Master students accommodation and provide support to find accommodation to other external students. Travel expenses (not accommodation expenses) during summer school (for instance for company visits and social activities) are under organizers responsibility and are covered by the grant for all students.

<u>Partnership:</u> Demonstrated engagement and active participation (teaching, networking, provide industrial challenges etc.) of minimum 3 companies and 3 external I&E experts (both professionals and companies are allowed). An educational I&E expert must be appointed as supervisor (Programme Coordinator) of the Summer School programme. This role can be done by a consortium partner or by an external expert, eventually through subcontracting. In this second case the consortium must present the criteria for the educational I&E supervisor selection. A students evaluation committee made of Scientific and Industrial representatives,

expert in I&E, must be establish as well for students OLOs evaluation (see also Quality review special conditions).

<u>Pedagogical approach</u>: Learning by Doing approach is required with strong focus on all OLOs (see annex 1), manufacturing societal challenge systemic view and business exploitation projects, based on real industrial challenges, provided by industries. Pedagogical approaches and experts from different fields are welcome (science, art, game, sport, makers, press, influencers etc.), but the students must be able to contextualize their new skills and capabilities inside manufacturing sector and associated societal challenges. Inclusion of T&L factories and networking opportunities with industries are also strongly encouraged. Students must be allowed to get reflection tools and time about their new skills and capabilities.

<u>Digital Learning:</u> Digital learning content modules development to be provided to the students before the starting of the Summer School for a knowledge common baseline or to be used during the summer school activities is also encouraged. The resulting material will be included into the EITM GLP for future re-use and treated according to GLP guidelines.

Number of students: Min number of students:

- o expected 120 from EITM Master School, with free access to all activities and paid accommodation.
- o Min. 60 external students, with special attention to women and RIS students involvement. A students recruitment plan and a selection committee must be proposed for the selection of the external students (while applications will be manage through a centralized SW provided by EITM). External students pay a participation fee and also travel and accommodation expenses. Fees have to be proposed by the specific consortium and listed into the financial sustainability fields of the submission system (general fee only). Special fee conditions must be allowed to women and RIS students.

<u>Communication & Dissemination:</u> A communication and dissemination plan must be provided for the programme, including the active participation of the participating students, I&E experts, industrial partners, teachers and other stakeholders. Participants success stories are encouraged to be collected and highlighted during the communication campaign. The communication and dissemination will be supported by EITM Master School office.

<u>Quality review:</u> A specific quality review plan of the whole summer school organization and programme must be included into the proposal.

Evaluation of students OLOs achievement and activity quality review by the learners and teachers must be included. A students evaluation committee made of Scientific and Industrial representative expert in I&E, overall where the Summer School Programme Coordinator is not an I&E expert must be appointed.

<u>Financial sustainability:</u> The Summer School is available for free to the EITM Master School students, completing their first year of studies.

The consortium must propose a tuition fee to ensure the Summer School financial sustainability. The final fee, including special fees for women, RIS students and universities will be agreed with the EITM Master School head. In the financial sustainability tab of the submission system the proposed main fee for the Summer School must be included.

Financial Sustainability Mechanism: Tuition fees, Digital Content Agreement (mandatory for Digital Nuggets Created)

KPIs:

- EITHE08.1 Training and mentoring activities (non-labelled EIT training activities) # of participants
- EITHE08.2 Training and mentoring activities (non-labelled EIT training activities) # of participants in RIS
- EITHE11.1 Financial Sustainability (Revenues)

Forms:

- Check list 1.0 Education
- Check list 1.6 Pioneering learning journeys

6.3.3.2 Doctoral School annual programme - 2022

Target: PhD students, professionals

Purpose: equip learners with Innovation and entrepreneurial skills and capabilities (see OLO table in A ppendix document for Master and Doctoral School programmes - Doctoral programme section)

Scope: (EIT labelled) Doctoral School I&E annual programme for EITM students and for external students and professionals. The Doctoral School Programme is organized in two sessions: one in Spring/Summer 2022 (January – July) and a second one in Autumn/Winter 2022 (August-December).

Spring/summer 2021 programme (15 ECTs)

- Delivery time: January July 2022
- It can be done either in presence or online. If the consortium chooses the option "in presence", a risk plan must address a detailed alternative in case the COVID-19 situation (or other cases) won't allow to have the programme as planned.
- Welcome by January/March: online, or the consortium can include it during the seminar.
- Seminar (eventually online) plus one or more webinar series = 5 ECTS in total, + hackathons (2 ECTS) focused on a single topic with several challenges 1 or 2 days events) (EITM to propose some examples)
- Summer school + Venture basic 7 ECTS in total
- Mentorship by industrial partners networking activity series (1 ECTS)
- Industrial Doctorate positions call to "recruit" industries for PhD positions and secondments
- Social and networking programme must be included, on top to mandatory networking activities with industries

The programme must focus on delivery of Innovation and Entrepreneurship training in line with at least one of the EIT Manufacturing flagships and their main societal challenges objectives. The programme must cover at minimum the following OLOs (see annex 2 for OLO definition): OLO2, OLO3, OLO4, OLO6.

Autumn/winter programme (15 ECTS):

- Delivery time: August December 2022
- It can be done either in presence or online, if the consortium chooses the option "in presence", a risk plan must address a detailed plan in case the COVID-19 situation won't allow to have the programme as planned.
- Winter school topic guidelines + Venture advanced (7 ECTS)
- Webinar (5 ECTS) + Hackathon (2 ECTS focused on a single topic with several challenges 1 or 2 days events)
- Mentorship + Networking events series by industrial partners (1 ECTS)
- Closing graduation ceremony for distribution of EIT label certificates. The consortium can include it either at the end of the winter school or during the last in presence activity.
- Industrial Doctorate positions call to "recruit" industries for PhD positions and secondments
- Social and networking programme must be included, on top to mandatory networking activities with industries

The programme must focus on delivery Innovation and Entrepreneurship training in line with at least one of the EIT Manufacturing flagships and their main societal challenges objectives.

The programme must cover at minimum the following OLOs (for OLO definition see Appendix document for Master and Doctoral School programmes – DOCTORAL School Section): OLO1, OLO2, OLO4, OLO5, OLO7.

Channels: hands-on activities, innovative pedagogical approaches, industrial challenges and training, cross-organizational teamwork, coaching.

Duration: The project activity will last in total one year to allow planning, delivery, review, dissemination of the results and activity reporting.

The Doctoral School Programme is organized in two sessions: one in Spring/Summer 2022 (January – July) and a second one in Autumn/Winter 2022 (August-December). The proposals must target one of the programme sections only, meaning either Spring/Summer 2022 (January – July) or Autumn/Winter 2022 (August-December). Each programme section must deliver 15 ECTS, where 1 ECTS is the equivalence of 25 hours, including both study in classroom and study time outside classroom.

Partnership: 3-6 Partners (Uni, RTO, Ind), min. 2 partners from the EITM Doctoral School consortium and min. 1 partner from RIS Countries, min 2 CLCs. List of EITM Doctoral School partner universities is available at Doctoral School web page: **EIT Manufacturing Doctoral School – EIT manufacturing.** The selected proposals will be two new KAVA and they will include EITM personnel at zero cost, to define fees and alignment of the programme with the EITM strategic agenda and KPIs and support for marketing and communication activities.

Funding: Max 100.000 euro per programme section, with 30% of budget reserved to RIS Countries. 2 proposals will be funded, 1 per each programme section (meaning 1 proposal for Spring/Summer 2022 (January – July) programme and 1 proposal for Autumn/Winter 2022 (August-December) programme). External organizations and professionals not associated to EITM can join either as associated partners (see general application process), willing to pay the affiliation fee to EIT Manufacturing for year 2022, or as subcontractors, in this case they will be selected by the winning consortia through public procurement. In the case of subcontracting collaboration choice, external experts about I&E education can register into the Education I&E expert portal, to make easier for the winning consortia to contact them: https://plaza.eitmanufacturing.eu/PROMISE/PRIVATE/FORMS/form.aspx?guid=5EB71D55-07D2-4278-9339-E135FEDEA9C5

Special conditions:

<u>Logistic:</u> Either Summer School or Winter school must be located in RIS Countries. Other activities can be located at consortium choice. Organizers are not responsible for providing travel, participants will arrange their own travel to/from the location and the accommodation expenses. Only travels for the Summer/Winter school programme execution are eligible by the grant, including travels for networking sessions, company visits and social programme. The same rules are valid for other kind of programme activities along the year round, such as seminars, venture programme etc. In any case, for onsite activities, such as summer/winter school, the consortium must provide logistic coordination, including support for finding accommodation, on site working space for courses, projects and hands-on activities, site visits, social programme etc.

<u>Partnership:</u> Demonstrated engagement and active involvement (teaching, networking, provide industrial challenges etc.) of minimum 3 companies and 3 external I&E experts (both professionals and companies are allowed). An educational I&E expert must be appointed as supervisor of the programme. This role can be done by a consortium partner or by an external expert, through subcontracting. In this second case the consortium must present the criteria for the educational I&E supervisor selection. A students evaluation committee made of Scientific and Industrial representative expert in I&E must be establish as well for students OLOs evaluation (see also Quality review special conditions).

<u>Programme:</u> Specific activities for women leadership and entrepreneurship are welcome, overall inside the venture programme.

<u>Pedagogical approach</u>: Learning by Doing approach is required with strong focus on all OLOs, manufacturing societal challenge systemic view and business exploitation projects. Venture Programme must focus on turning research ideas into business and startups. Novel pedagogical approaches and experts from different fields are welcome (art, game, sport, makers, press, influencers etc.), but the students must be able to contextualize their new skills and capabilities inside manufacturing sector, associated societal challenges and entrepreneurship. Inclusion of T&L factories projects are also strongly encouraged.

Students must be allowed to get reflection tools and time about their new skills and capabilities.

<u>Digital learning:</u> blended activities are allowed. Digital learning content modules development to be provided to the students before the start of specific activities for a

knowledge common baseline or during the programme activities is also encouraged. The resulting material will be included into the EITM GLP for future re-use, and treated according to GLP guidelines.

Number of students: Min number of students:

- expected 50 students from EITM Doctoral School, with free access to mandatory
- Min. 20 external students per activity/group of activities, with special attention to women and RIS students involvement. A students recruitment plan and a selection committee must be proposed for the selection of the external students (while applications will be manage through a centralized SW provided by EITM). External students pay a participation fee and also travel and accommodation expenses. Fees have to be proposed by the specific consortium and listed into the financial sustainability fields. Special fee conditions must be allowed to women and RIS students.

<u>Communication & Dissemination:</u> a communication and dissemination plan must be provided for the programme, including the active participation of the participating students, I&E experts, industrial partners, teachers and other stakeholders. Participants success stories are encouraged to be collected and highlighted during the communication campaign. The communication and dissemination will be supported with the EITM Doctoral School office.

<u>Quality review:</u> specific quality review plan of the programme must be included into the proposal, at activity/group of activities level.

Evaluation of the students OLO achievements during and at the end of the programme must be accessed by students and teachers. A students evaluation committee made of Scientific and Industrial representative expert in I&E, overall where the Programme Coordinator is not an I&E expert must be appointed.

<u>Financial sustainability:</u> the Doctoral School programme is available for free to the EITM Doctoral School students up to 30 ECTS. EITM Doctoral School students grants free access to one of the Summer/Winter School activities. For the second one they get special discounted tuition fee.

The consortium must propose inside the proposal a tuition fee range for each activity or group of them, in case, for instance, of series of webinar, to ensure the programme financial sustainability. The final fee, including special fees for women, RIS students and universities and for EITM Doctoral School students (only elective courses) will be agreed with the EITM Doctoral School head. In the financial sustainability tab of the submission system the average main fee for the full programme must be included.

Financial Sustainability Mechanism: Digital Content Agreement (mandatory for Digital Nuggets Created), Tuition fees

KPIs:

- EITHE08.1 Training and mentoring activities (non-labelled EIT training activities) # of participants
- EITHE08.2 Training and mentoring activities (non-labelled EIT training activities) # of participants in RIS
- EITHE11.1Financial Sustainability (Revenues)

Forms:

- Check list 1.0 Education
- Check list 1.6 Pioneering learning journeys

6.3.4 Education for Transforming Organizations

Consulting and training programs for (S)MEs created and delivered with the support of industrial associations, cluster or other Network partners trusted by the companies.

The role of the Network partner is essential to facilitate the match between learning needs and education and training provision.

Overall these activities should accompanies groups of (S)MEs willing to prepare their Human Capital for a transition (digital, green, resilience, technological): from an initial assessment of the skill gaps, to the co-design of a roadmap; the assignment of training paths to the employees; the delivery; the final evaluation and assessment. In this segment, each company should involve at least 2 people per working area/competence area/hierarchy in at least one learning path.

Target: groups of (S)MEs

Purpose: support SMEs in preparing transitions (digital, green, technological, etc.) through education **Scope:** initial skill assessment, roadmap, learning paths, evaluation and final assessment and certification

Channels: GLP, T&LFNs, blended courses

Duration: max 2 years to deliver cycles of 5-9 months training

Partnership: 3-6 Partners (1/3 industry) at least 3 countries, representing different working cultures.

Involvement of industrial associations/network partners.

Funding: 100 -300 k€ per Activity

Special conditions: Preliminary engagement of 6-10 manufacturing (S)MEs committed to undertake the trajectory and expose to training at 2 people per working area/competence area/hierarchy.

Financial Sustainability Mechanisms: Digital Content Agreement (mandatory for Digital Nuggets Created), Revenue Sharing

KPIs:

- EITHE08.1 Training and mentoring activities (non-labelled EIT training activities) # of participants
- EITHE08.2 Training and mentoring activities (non-labelled EIT training activities) # of participants in RIS
- EITHE11.1 Financial Sustainability (Revenues)
- KIC.G03 # Digital nuggets created
- KIC.G04 # Digital nuggets consumed
- KIC.E01 # Badges issued to document and testify the achievement of a learning outcome
- KIC.RO1 # of teaching and learning factories projects implemented in EIT RIS countries

Forms:

- Check list 1.0 General requirements
- Check list 1.3 Transforming Organizations

6.3.5 Programs to engage Society and Pupils

Engage Pupils, Young people, girls, diverse/disadvantaged groups

Activities that create awareness about manufacturing and stimulate creativity and passion in the young generations, and specific groups of diverse and disadvantaged people to attract them to manufacturing education, training and jobs. Proposed activities should leverage on existing initiatives and networks, with a wide outreach and/or valuable impact, and bring an EIT-M specific and recognizable value added.

Target: Pupils, Young people, girls, diverse/ disadvantaged groups

Purpose: create awareness about manufacturing and stimulate creativity and passion to attract the target group to manufacturing education, training and jobs

Scope: creativeness, STEM, digital skills

Channels: GLP, T&LFNs, educational products, other

Duration: 1 year

Partnership: Min. 2 partners from at least 2 different CLCs with different cultures and languages, Involvement of relevant Networks operating with teachers is encouraged.

Funding : Projects should be in the range of 100 to 150 k€ per activity

Special conditions: Preliminary engagement of teachers.

Financial Sustainability Mechanisms: Digital Content Agreement (mandatory for Digital Nuggets Created), Revenue Sharing, No Financial Sustainability and Social Impact

KPIs:

- EITHE08.1 Training and mentoring activities (non-labelled EIT training activities) # of participants
- EITHE08.2 Training and mentoring activities (non-labelled EIT training activities) # of participants in RIS
- EITHE11.1 Financial Sustainability (Revenues)
- KIC.G03 # Digital nuggets created
- KIC.G04 # Digital nuggets consumed
- KIC.E01 # Badges issued to document and testify the achievement of a learning outcome

Forms:

- Check list 1.0 Education
- Check list 1.3 Programs to Engage Society and Pupils

6.3.6 Financial Sustainability for Education activities

Besides pursuing the strategic objectives, Education activities are expected to contribute to the Financial Sustainability (FS), to ensure that the activities funded by EITM contribute to a progressive financial autonomy of the KIC. The objective is creating revenues streams that increase year after year to allow EITM to continue its mission after the EIT funding is ended.

Each activity will be required to choose one or more among the following options concerning the FS mechanism adopted:

- 1) Digital content agreement The activity will grant EITM the rights to commercialize the digital learning content created, thus contributing to the generation of revenues.
- 2) Revenues sharing The activity will commercialize the education & training product or service and will grant EITM royalties on the future sales.
- 3) Success fee The activity will commercialize the education & training product or service and grant a fixed sum to EITM in case of success. The definition of success and the sum will have to be negotiated with EITM.
- 4) Tuition fees The activity will origin tuition fees for EITM Master/PhD Schools. In this case the tuition fees will be received directly by EITM.
- 5) None, the project has a very high social impact (for segment 1.7)

In the Submission Form, besides selecting the FS mechanisms, activities will be required to fill the projection of revenues, as paid by the learners/customers. The revenues can be zero for segment 1.7.

In addition, activities will be required to fill in the projection of the financial flows contributing to the FS of EITM. These are expected to be 70% for the Digital Content Agreement mechanism, and 100% for Tuition Fees.

6.3.7 Timeline, Check Lists and Submission template for Education activities

<u>Please note:</u> for Education proposals, the fields that are going to be evaluated during the precall phase are the following:

- Activity Title, Leader (TAB 1 Contacts)
- Consortium (TAB 1 Contacts)
- Activity Purpose (TAB 2 Activity Overview)
- KPIs (TAB 2 Activity Overview)
- Budget Overview (TAB 3 Activity Specific Info)
- Contribution to Financial Sustainability (TAB 4 Sustainability)
- Additional file with the check lists, relevant for the specific segment, duly filled in (TAB 3 Activity Specific Info)

This information will be used for elaborating the feedback and the recommendations for the full proposal.

These checklists are included only as an overview in the guidelines, the corresponding Excel file is available for download in the submission form in TAB 3 – Activity Specific Info. The checklists should be filled in and uploaded to the proposal.

6.3.7.1 Check list 1.0 – Education

Gender balance and inclusion of diversity have to be taken into account very seriously in EITM Activities					
	reach to industry/science related women association				
	use a non-discriminatory/ inclusive wording				
How do you plan to foster gender balance through	mentoring schemes for women				
the activity and increase the level of female	use of gender balanced role models in the educational/marketing content (examples, pictures, photos, movies)				
engagement? (multiple choice)	involve women in the complete product cycle development (requirements definition, testing, promotion, among others)				
	Take into consideration women ergonomics and safety				
	Others				
Is your activity targeting a specific market segment or learners segment	If yes (why and which)				
How do you intend to	Elderly people				
engage the following	Women				
catergories or make your product/service usage	Non english speaking people				
compatible with:	Others?				
	Visually impaired people				
Does your activity	Hearing impaired people				
target/takes into consideration people with	Physically Impared/ disabled people				
specific requirements,	Intellectually disabled people				
	Others				

Digital learning content. One of the key element of EITM education strategy is the GLP (Guided Learning Platform). All activities are encouraged to create digital content (nuggets) to be used on the platform for achieving impact (the nuggets are open access), for supporting the financial sustainability of the KIC and contributing to the KTI integration.

Can you confirm that:

Before create digital nuggets, you check the content that is already available on the GLP; the handbook and best practices; the connection with the EITM frameworks (e.g. metadata)

In creating the digital nugget you pay the highest attention to the rights for the reproduction of third party material and the acknowledgment of the sources

You are aware that in order to deliver the digital nuggets as a result of the project, it is necessary to sign the Digital Content Agreement

Dissemination and Communication is mandatory for any EITM funded activity.

Please confirm that:

You will create a logo, flyer, data sheet of the project for communication purposes by EITM and the partners

You will promote the activity on the social channels of the partner organizations

You will participate in the events organized by EITM and the CLCs.

You will produce a footage video as an output of the activity for dissemination purposes

6.3.7.2 Check list 1.10 – Enhance Flexy Program

	PRECALL Please confirm (yes), or explain (why not)
The recommended number of companies committed to enrol at least one employee/professional and to host at least one intern in the Flexy Program has been achieved?	
Do you plan to promote the Flexy program to recruit self-funded participants?	
Do you plan to assess the initial competences of the participants?	
Do you plan to co-design with the learners and with the companies the targeted final competences of the participants and personalized learning trajectories for them?	
Do you plan to support the learners in developing	
- competences to incorporate Sustainability and Ethical concerns in manufacturing plans and decision?	
- Creativity, Innovation and Entrepreneurial skills	
- Leadership competences?	
- Intercultural skills?	
- Digital skills?	
- Flagships related knowledge and skills?	
Do you plan to include in the personalized learning trajectories the following elements:	
- at least 3 months of internship for each learner?	
- the digital nuggets/learning paths of the GLP?	

- T&LFNs sessions?	
- cross-boundary, cross-organizational challenges and teamwork?	
- Assigned academic mentor	
 Assigned business/industrial coaching 	
Do you plan to continuously monitor and support the progress of the learners along the personalized trajectories?	
Do you plan to assess the competences finally achieved by the learners?	
Additional information	PRECALL Please fill in
Additional information	PRECALL Please IIII III
Number of companies involved and committed to host internships	PRECALL Please IIII III
	PRECALL Please IIII III
Number of companies involved and committed to host internships	PRECALL Please IIII III
Number of companies involved and committed to host internships Number of employees/ professionals enrolled by the companies	PRECALL Please IIII III
Number of companies involved and committed to host internships Number of employees/ professionals enrolled by the companies Number of self-funded participants	PRECALL Please IIII III
Number of companies involved and committed to host internships Number of employees/ professionals enrolled by the companies Number of self-funded participants Planned fee for the self-funding participants	PRECALL Please IIII III

6.3.7.3 Check list 1.4 – Skills Driven

	PRECALL Please confirm (yes), or explain (why not)
The target groups have been clearly identified and involved in the activity?	
The learning needs have been analysed?	
The existing education and training offer has been identified and analysed?	
The barriers that hamper the learners to benefit from the existing education and training offer have been analysed?	
Your proposal can overcome these barriers and effectively achieve skilling, up-skilling or re-skilling of the target groups?	
Do you plan to include in the personalized learning trajectories the following elements:	
 the digital nuggets/learning paths of the GLP? 	
- T&LFNs sessions?	
- cross-boundary, cross-organizational challenges and teamwork?	
- Assigned academic mentor	
- Assigned business/industrial coaching	
Do you plan to continuously monitor and support the progress of the learners along the personalized trajectories?	
Do you plan to assess the competences finally achieved by the learners?	

PRECALL Please confirm (yes), or explain (why not)

For EITM is important to create synergies with its existing infrastructure and avoid overlapping, therefore it is required to present a general overview of the learning units that will be developed by the Activity.

Please note that this information will be used for elaborating the feedback and the recommendations for the full proposal, but it will be possible to re-elaborate and adapt during the execution phase

Additional Information	PRECALL Please fill in		
What are your targets groups			
Do you plan in your skill-driven learning to have a final evaluation with micro-credentials certificate?			
Suggested fee for the certificate			
Which is the main subject you're planning to cover?			
	Digital Nuggets (developed on purpose)		
	Digital nuggets (re-use, already available in EITM Platform)		
	Learning Factory Sessions		
	Teaching Factory Sessions		
Please tick the boxes of the elements you're planning to use or	VR/AR Sessions		
develop in your program:	Simulation Sessions		
	Testbeds/demonstrators		
	Gamification		
	F2F or remote lectures		
	F2F or remote workshops		
	Pre-assessment		
	Final assessment		

In the table below, please list the planned learning units and expected duration (add as many rows as needed).

Subject/Title	Expected workload in hrs (max 0.5hr in case of nuggets)
1.	
2.	
N	

6.3.7.4 Check list 1.6 – Pioneering Learning Journeys

	PRECALL Please confirm (yes), or explain (why not)
The recommended number of companies has been achieved?	
The criteria for selecting external experts have been defined?	
Do you have a plan to enroll external students?	
Do you have defined a general fee?	
Do you have addressed all the required OLOs?	

	PRECALL Please confirm (yes), or explain (why not)
Do you plan to support the learners in developing	
 competences to incorporate Sustainability and Ethical concerns in manufacturing plans and decision? 	
- Creativity, Innovation and Entrepreneurial skills[1]	
- Leadership competences?	
- Intercultural skills?	
- Digital skills?	
- Flagships related knowledge and skills?	
Do you use an innovative pedagogical learning approach?	
Do you plan to develop any digital nugget/learning path for future GLP upload?	
Do you plan to deliver any T&L Factory activity?	
Do you have a quality review plan in place?	
Do you plan to assess the competences finally achieved by the learners?	
Do industries and research centers have an active role towards the students?	
Is your consortium in line with the partnership, RIS and CLCs number requirements?	

Additional Information	PRECALL Please fill in
Suggested fee (average for the Doctoral School programme) for the activity/programme	
Additional FS contribution mechanism (if any)	

6.3.7.5 Check list 1.3 – Education for Transforming Organizations

	PRECALL Please confirm (yes), or explain (why not)
Have Networking partners, such as industrial associations, trusted by SMEs been involved?	
Is a number of 6-10 manufacturing (S)MEs across at least 2 CLCs willing to undertake the project and prepare for a transition (digital, green, technological, etc.)?	
Are they committed to undertake the trajectory and expose to training at least 2 people per working area/competence area/hierarchy?	
Is your project starting with a joint assessment of the skills gaps and learning needs of the involved (S)MEs?	
Does your project include the definition of a roadmap, together with the (S)MEs and facilitated by the Network Partners?	
Do you plan to define learning paths for all the relevant roles (e.g., designer, maintenance technicians, operators, managers, etc.)?	
Do you plan to reuse the digital nuggets/learning paths of the GLP?	
Do you plan to use T&LFNs sessions?	
Do you plan to monitor with the companies the progress and achievements of the learning?	
Do you plan to assess the competences finally achieved by the learners?	

	PRECALL Please confirm (yes), or explain (why not)
Do you plan to have a final evaluation of the achievements and satisfaction of the companies and an assessment of the whole program with lesson learnt and recommendations for future initiatives?	
Additional Information	PRECALL Please fill in
How many Network Partners have been actively involved in the project?	
How many companies have been involved?	
What transitions are they preparing for? (what is their main challenge from a human capital point of view)?	
What organizational areas do you address? (technical, production, logistics, HR, etc.)	
Do you plan to ask a fee to the companies?	

6.3.7.6 Check list 1.3 – Programs to engage Society and Pupils

	PRECALL Please confirm (yes), or explain (why not)
Have you involved the teachers or other relevant entry point to reach your target groups?	
Have you leveraged existing network/initiatives to enlarge the number of participants	
Have you exploited the results of previous Engagement Projects?	
Additional Information	PRECALL <u>Please fill in</u>
How many teachers have been actively involved in the project?	

6.3.8 Evaluation criteria for Education activities

The Education Activities will have to provide some initial information for the pre-call assessment by filling in as indicated in 6.3.7 Timeline, Check Lists and Submission template for Education activities and by uploading the additional excel file fileld in with the check lists and the additional form.

The precall evaluation will be limited to:

The eligibility, alignment with the call guidelines, and suitability and value added with reference to the portfolio of EITM education and training (e.g. avoidance of duplication with previously supported activities).

The following questions summarise the evaluation criteria for the Full Call for BP2022.

Excellence and Strategic Fit

- 1. How significant is the way the proposal address one (or more) of the EITM strategic objectives, the Manufacturing flagships and the specific call segment?
- 2. How well is the activity is aligned with the EITM policies (gender, RIS, communication..) and does it integrate the Knowledge Triangle?

Education & Training Effectiveness & Impact

- 3. How effectively does the proposal satisfy the relevant needs and overcome the barriers of the target group(s) (individuals and organizations)?
- 4. To what extent does the proposal contribute to increase the number of the EIT Manufacturing students/trainees or community members benefitting from education and training?

EITM Value added

- 5. How much does the proposal enrich, leverage and promote the EITM educational infrastructures and learning content?
- How significantly does the proposal contribute to the EITM Financial Sustainability?

<u>Implementation</u>

- 7. Does the team have the expertise, capacity and reach required to carry out the activity?
- 8. Are work plan, milestones, output, deliverables, KPIs, well defined, credible, realistic, and adequate for what the Activity wants to achieve?
- 9. How well the policies (gender, RIS, communication and KTI) is reflected in the descriptions?
- 10. Does the budget cover all expected costs for the planned Activity and the "value for money" appropriate?

6.4 Business Creation Activities

EIT Manufacturing is looking for Business Creation Activities that are focused on developing and implementing programs that address on one hand Startups and Scaleups (CREATE and ACCELERATE) and on the other hand small, medium, intermediate companies (TRANSFORM) needs. The activities cover all 5 CLCs (including the RIS countries atteahed to those CLCs).

2022 guidelines are mainly a continuation of 2021 guidelines. The contents have not changed, but 2020 and 2021 Calls show clearly the need to have more FOCUS, QUALITY and REASONNABLE PAYBACK (FS mechanism) regarding the proposals submitted to the pillar

Business Creation provides a large spectrum of services support (business development, access to finance, business specfic expertise.) to develop technology-based European high growth ambitious companies (Gazelles). To respect and fullfill its mission, the pillar must focus on business. The pillar is not for improving technology maturity. Having a sound business case to survive in a competitive environment is a "non negotiable" entry criteria for activities in this pillar.

Regarding activity duration:

- For 1 Year Activity: situation unchanged
- For 1 +1 Year Activity: a mid-term assessment for GO / No GO is required. For this reason the activity needs to provide:
 - o Budget expenses breakdown per year
 - o Intermediate KPI targets achievement at mid-term (end of the year)

In Business creation, KPIs are important element to ensure performance of activities. There are in a limited numbers and must be correctly documented to ensure "Value for Money" delivered to the community. In overall, KPIs are directly and/or indirectly connected to 4 dimensions: Quantity, Quality, Financial impacts, Societal impacts. Proposals should make sure to contribute appropriately in a realtistic but ambitious way.

Table 4 below provides a summary of the 2020 Business Creation calls.

Table 4. BUSINESS CREATION call overview

Type of call/category	Description	Partnership	Duration	Expected KAVA budget	Participa nts	Specific features
"Create"	Launch new European high- growth manufacturing businesses.	2-4 partners from at least 2 different CLCs. Network Partners can access at no EIT Funding.	The Activity will run for 1 year or 1+1 year. Potential extension to following years.	0,5M€ max for each Activity. Several Proposals can be approved	30 through min 2 calls/year Program duration: 6 months min	This activity purpose is to address the early-stage needs: Young entrepreneurs to create startups, Spin – offs, startups (< 2 years old, low commercial revenues)
"Accelerate"	Accelerate and scale up promising European companies (start-ups and SMEs)	2-4 core partners from at least 2 different CLCs. Network Partners can access at no EIT Funding.	The Activity will run for 1 year or 1+1 year. Potential extension to following years.	0,5M€ max for each Activity. Several Proposals can be approved	30 through min 2 calls/year Program duration: 6 months min	This activity purpose is to address the scaling up needs: Go To Market, Growth
"Transform"	Transforming existing manufacturing companies in Europe, by adopting new technologies and business models	2-4 core partners from at least 2 different CLCs. Network Partners can access at no EIT Funding.	The Activity will run for 1 year. Potential extension to following years.	0,5M€ max for each Activity. Several Proposals can be approved	20 through min 2 calls/year Program duration: 6 months min	This activity purpose is to support SMEs, intermediate and larger industrial companies in their transformation

Activity proposals should be aligned with one of the following business creation programmes:

6.4.1 "Create" Programme

The objective of this Programme is to launch the next generation of European high-growth manufacturing businesses.

This activity purpose is to address the early-stage needs: Young entrepreneurs to create startups, Spin –offs, startups (< 2 years old, low commercial revenues).

It should be run by organizations, which have expertise and capabilities similar to Incubators and Accelerators. Ideally, it provides in a structured way following services:

- Scouting of the most promising early stage projects / startups
- Operational support to startups in their early stage (e.g. hosting)
- Coaching and mentoring, notably with defining and executing a clear business plan building
- Supporting early stages in their business development: introduction to potential customers, intiation of business deals

The programme should support 30 early stages projects / startups (Ready to Go to Market, not innovative projects which are already financed under the Innovation pillar) starting in 2021 and the concept should be scalable for the following years. Participants will become part of the EIT ecosystem

Deliverables:

It is highly recommended to limit the Deliverables to maximum of 10. 5 to 7 is a good number. All the deliverables can be aggregated in one (1) deliverable, provided that the Applicants ensure that the requested topics enumerated below are properly and distinctly covered in that one deliverable.

The deliverables enumerated below are strongly recommended and can be complemented with other Deliverables that the Proposers consider valuable and necessary:

- SWOT assessment of companies/projects selected into the programme
- Product / technology ideation or development report
- Commercial activities engagement report
- Mentoring & Consulting report
- Report of social impact from the KIC activity

Notes: All the reports are a consolidated view at portfolio level of the companies/entrepreneurs supported through the KIC activity.

6.4.2 "Accelerate" Programme

The objective of this Programme is to accelerate and scale up promising European manufacturing technology companies.

This activity purpose is to address the scaling up needs: Go To Market, Growth. It should be run by organizations which have expertise and capabilities similar to Accelerators, and Corporate Venture funds.

Ideally, it provides in a structured way following services:

- Scouting of the most promising sacleups (e.g. hosting)
- Supporting product development roadmap definition and execution
- Supporting business development: introduction to potential customers, intiation of business deals, access to new markets/industries
- Supporting Access To Finance needs from scaleups, by connecting them with relevant investors

The programme should support **30 scaleups** starting in 2021 and the concept should be scalable for the following years. Participants will become part of the EIT ecosystem.

Deliverables:

It is highly recommended to limit the Deliverables to maximum of 10. 5 to 7 is a good number. All the deliverables can be aggregated in one (1) deliverable, provided that the Applicants ensure that the requested topics enumerated below are properly and distinctly covered in that one deliverable. The deliverables enumerated below are strongly recommended and can be complemented with other Deliverables that the Proposers consider valuable and necessary:

- Technology/Product development plan,
- Technology/Product commercialization report,
- Revenues generation plan,
- Access to Finance report
- Report of social impact from the KIC activity

Notes: All the reports are a consolidated view at portfolio level of the companies/entrepreneurs supported through the KIC activity.

6.4.3 "Transform" Programme

The objective of this Programme is transforming existing manufacturing companies in Europe, by fostering adoption of new technologies and business models. The programme targets manufacturing companies, providers and integrators of solutions in the manufacturing value chain.

This activity purpose is to support SMEs, intermediate and larger industrial companies in their transformation. It should be run by organizations, such as SMEs association and Industrial Business Units.

Ideally, it provides in a structured way following services:

- Clarification of the tranformation needs
- Connecting SMEs / intermediate companies with appropriate "mature" innovative startups (not solution to test concepts, but mature solution to roll-out and scaleup in companies to generate transformation and benefits at scale)
- Supporting exectution of the transformation, with change management support
- Overseeing revenues generated via the transformation, in order to ensure a "fair" payback to EIT Manufacturing
- Supporting Access To Finance needs for Transformation programs, by leveraging regional and national financing mechanisms

The programme should support 20 companies starting in 2021 and the concept should be scalable for the following years. Participants at the programme will become part of the EIT ecosystem.

Deliverables:

It is highly recommended to limit the Deliverables to maximum of 10. 5 to 7 is a good number. All the deliverables can be aggregated in one (1) deliverable, provided that the Applicants ensure that the requested topics enumerated below are properly and distinctly covered in that one deliverable.

The deliverables enumerated below are strongly recommended and can be complemented with other Deliverables that the Proposers consider valuable and necessary:

- Report of advanced and scaleup solutions designed or implemented for transformation
- Report of Transformation business cases (benefits vs resources needed)
- Report of Transformation implementation, including the execution planning
- Plan of revenues generated from companies transformation (1-3 / 1-5 years)
- Report of social impact from the KIC activity

Notes: All the reports are a consolidated view at portfolio level of the companies/entrepreneurs supported through the KIC activity.

6.4.4 Evaluation Criteria for Business Creation Activities

Excellence and Strategic Fit

- Does the proposal address one (or more) of the EIT Manufacturing flagships in a significant way.
- Does the proposal clearly identify its uniqueness / competitive advantage versus existing state-of-the-art programmes?
- Are the specific objectives of the call addressed and justified?
- Are the mechanisms described for a contribution to EIT Manufacturing's financial sustainability (if any) realistic?
- How well does the proposal contribute to Knowledge Triangle Integration?

<u>Impact</u>

- Does the proposal ensure that the chosen KPIs, Deliverables and Outputs fit with the activities' objectives and are timely in implementation?
- Does the proposal show a clear and sound projection of revenues that will be generated (at least from year 1 to 3, preferably for year 1 to 5)?
- Does the proposal show clearly its societal impacts (non-financial), and how it will be measured as a contribution to the European ecosystem?
- Does the proposal explain how it will become self-sustainable beyond EIT Manufacturing funding?
- Does the proposal explain how it plans to scale and disseminate the Business Creation activity within the partnership and beyond?

- How convincing is the preliminary plan on what happens after the project ends and how it can be realized?
- Does the proposal include appropriate communication measures to increase the impact of the activity and brand recognition of EIT Manufacturing and how well are they described?

<u>Implementation</u>

- Does the team have the expertise and capacity required to carry out the activity?
- Does the proposal show how it will go to market with its products and services? What customers are targeted? How it will acquire clients to ensure revenues generation?
- Are work plan and milestones credible, realistic, and adequate for what the Activity wants to achieve?
- Are outputs, deliverables, outcomes and impact of the proposal well defined?
- Does the budget cover all expected costs and is it adequate for the planned Activity?
- Does the proposal explain how the activity identifies and recruits the right participants to the program
- Does the proposal address internationalisation?
- Does the proposed program enable participants access to technology and competences?

6.5 Regional Innovation Scheme (RIS) Activities

The EIT Manufacturing RIS aims at widening participation in the KIC's activities, as well as increasing the impact of EIT Manufacturing in EIT RIS countries. The EIT RIS has been designed as a two-way interaction scheme. By sharing its good practice related to Knowledge Triangle Integration and increasing its activities in EIT RIS eligible countries, EIT Manufacturing welcomes activities for further developing business skills, talent, cooperation opportunities in education, currently untapped entrepreneurial potential, accessing markets and business, customers for innovative ventures, innovation, knowledge, know-how and technology transfer possibilities, additional testbeds for applications of innovative solutions as well as access to co-funding options provided by EU, regional and national support schemes.

EIT Manufacturing RIS aims towards engaging local stakeholders —individuals (notably students, researchers) and entities (e.g. start-ups, scale-ups, universities, research labs, NGOs, regions and cities)—in EIT Manufacturing activities. The call for 2022 includes education, innovation and business creation RIS activities.

All the activities under this action line should receive broad publicity on local and regional levels by raising awareness of the brand of EIT Manufacturing and the KTI model, through the collaboration and interlinking of leading entities from higher education, research and business areas. Synergies with regional/national or H2020/Horizon Europe programmes are strongly recommended.

Unless otherwise stated, the EIT Manufacturing RIS activities have, in general, the same eligibility criteria with the other activities. However, in all cases, proposals for EIT Manufacturing RIS activities need to demonstrate their contribution to enhancing the innovation capacity of RIS countries and regions. For example, by:

- i) Having enhanced participation of organisations from EIT RIS countries;
- ii) Involving relevant stakeholders from EIT RIS countries in EIT Manufacturing activities;
- iii) Executing pilot implementations and demonstrators in EIT RIS countries
- iv) Having enhanced, specific impact to EIT RIS countries
- v) Deploying activities in EIT RIS countries and regions where EIT Manufacturing has limited or no presence yet

Proposals should target one of the following segments.

6.5.1 Teaching and Learning Factories in EIT RIS countries.

Teaching and Learning Factories are powerful tools to integrate practical experiences into technical and academic training.

Proposed activities should at first aim on raising awareness and demonstrating the concepts of Teaching and Learning factories in EIT RIS countries, creating, installing and further developing teaching and learning factories in EIT RIS countries and eventually implementing TLF projects. Future networking activities and integration models with existing and future academic programs and with the GLP should be examined.

Furthermore, we encourage activities with focus on improving the methodology and didactics of teaching and learning factories, taking into account any relevant characteristics in EIT RIS countries. It is expected that the projects address at least one of our flagships.

Activities are encouraged to involve external participants (especially manufacturing companies and SMEs) from EIT RIS countries as activity partners.

This call topic is for education RIS activities. Expected budget per activity: 250k.

6.5.2 Programs to engage Society and Pupils in EIT RIS countries.

Awareness about manufacturing in early ages will be crucial for the future of manufacturing as a whole, as well for the supply of future workforce. Young students, e.g. in secondary schools, should be aware about the challenges for manufacturing (e.g. digitalization), but also about career opportunities and the technological advancement of manufacturing.

Proposed activities should create a realistic and positive image of manufacturing and encourage young students in RIS countries to consider a career in manufacturing and therefore help ensuring a future with available and well qualified workforce for European manufacturing.

Orientation on the four flagships is desirable, but not mandatory. Proposals targeting specific groups (i.e. females) are welcome.

Proposals are expected to show that they are well aware of specific requirements and challenges in RIS countries and clearly demonstrate the capability to reach a large number of relevant stakeholders in RIS countries. Activities are further encouraged to deploy engagement activities in countries where EIT Manufacturing has limited or no presence yet. Large geographical coverage is desired.

Projects are encouraged to carry out targeted information campaigns and networking events in RIS countries in order to promote opportunities provided by EIT Manufacturing, and trigger and facilitate industry involvement in educational programmes/projects domestically and internationally, with special emphasis in RIS area.

This call topic is for education RIS activities. Expected budget per activity: 200k.

6.5.3 Innovating for a Circular Economy at EIT RIS

This call is for projects aiming to develop innovative solutions relevant to the Flagship "Low environmental footprint systems & circular economy for Green manufacturing" in EIT RIS countries.

This activity aims to support especially the transition to Circular Economy in manufacturing in EIT RIS countries, focusing on aspects like zero-defect manufacturing, zero-waste manufacturing, virtualization/dematerialisation, remanufacturing, preventive maintenance, and tackling specific characteristics, obstacles, but also opportunities found in EIT RIS. Proposals should identify who will be the potential customers.

The economic, environmental and societal impact of the relevant activities in EIT RIS area should be clearly identified.

The specific call is eligible only for organizations coming from EIT RIS Countries.

This call topic is for innovation RIS activities. Expected budget per activity: 300k.

6.5.4 Artificial Intelligence at EIT RIS

This call is for projects aiming to support innovative solutions relevant to the Flagship "Digital & collaborative solutions for innovative manufacturing ecosystems", with special focus—although not restricted- on applying Artificial Intelligence in manufacturing.

Artificial Intelligence is an emerging and, in some cases, greenfield opportunity and the activities here aim to support stakeholders in EIT RIS countries to enhance their innovation capacity, increase their offerings and reach new markets, by exploiting this opportunity. Proposals should identify who will be the potential customers.

Applicants should identify which local/regional parameters expect to address with their innovative solutions, as well as the industrial sectors that will be addressed.

The economic, environmental and societal impact of the relevant activities in EIT RIS area should be clearly identified.

The specific call is eligible only for organizations coming from EIT RIS Countries.

This call topic is for innovation RIS activities. Expected budget per activity: 300k.

6.5.5 Evolution of research results – Innovation

The aim of this activity will be to set up a Competition to attract, select and support teams/entities coming from EIT RIS countries towards bringing to the market solutions that have been developed within the context of other H2020, Horizon Europe or national/regional programmes.

The activity should foresee financial support to the selected candidates to market their product, as well as in-kind support (e.g. mentoring, training, testing, piloting, advise on improvements, etc.). In all cases, financial returns towards the Financial Sustainability (FS) of EIT Manufacturing should be pursued.

Increased dissemination is expected towards increasing EIT Manufacturing's visibility in EIT RIS countries. Gender balance should be promoted.

The proposers will have to develop and run the competition, in collaboration with EIT Manufacturing HQ-RIS. Consortia of 2-4 partners are expected.

The involvement of a substantial number of external RIS organisations (during the activity implementation and through the competition) is required.

This call topic is for innovation RIS activities. Expected budget of the activity: 700k.

6.5.6 Digital Transformation for manufacturing at EIT RIS countries

This call is for an activity that will facilitate cooperation of entities in RIS (esp. SMEs) with existing high-technology infrastructures (e.g. DIHs, KET centres, etc) towards:

- i) Developing, demonstrating and/or enhacing innovative solutions;
- facilitating manufacturing companies and professionals in EIT RIS countries to advance through their participation in EIT Manufacturing actitivites, where digital skills are developed, utilized and broadened;
- supporting entrepreneurship and intrapreneurship for professionals based on the latest innovation trends and processes of new digital business opportunities for manufacturing.

The activity should demonstrate how EIT Manufacturing can in practice help local players to cover needs such as digital transformation in manufacturing. The activities can include education, innovation and business creation aspects, but we consider that they could mostly support business creation through transfrormation and, thus, the focus should be towards business creation.

The involvement of a substantial number of external RIS organisations (during the activity implementation and through an open call) is expected.

The proposed RIS activities may include education, innovation and business creation aspects. Expected budget of the activity: 350k.

6.5.7 Evaluation Criteria for RIS Activities

RIS proposals will be reviewed following mostly the criteria stated above under Education (applicable to the segments described in 6.5.1 & 6.5.2 above), Innovation (applicable to the segments described in 6.5.3, 6.5.4 & 6.5.5 above) and Business Creation (applicable to the segment described in 6.5.6*), according to their nature.

In all cases, the following aspects will in addition be looked at:

- Is the proposed project going to engage in its activities a significant number of partners and/or activity partners from RIS countries?
- Is the proposed project going to address a good number of RIS countries?
- Does the proposal clearly describe the benefits for stakeholders in RIS countries and/or regions?
- Does the proposal convince that it will strongly contribute to the advancement of the innovation performance of RIS countries?
- Does the proposal include appropriate communication measures to increase the impact of the activity and brand recognition of EIT, EIT RIS and EIT Manufacturing and how well are they described?

^{*}Activities in the segment described in 6.5.6 above can include education, innovation and business creation aspects, but we consider that they could mostly support business creation ('Transform') and, thus, the business creation criteria apply.

Table 5. RIS call overview

Segment	Short Description	Partnership	Duration	Expected KAVA budget	Expected Participants	Specific features
Teaching and Learning Factories in EIT RIS countries.	Establish and operate TLFs in EIT RIS counties.	Min. 3 core partners from at least 2 different CLCs.	1-2 years.	Expected budget per activity: ~250k/year	Manufacturing companies, universities, individuals (students and industrial workforce).	Involvement of external participants from EIT RIS counties is encouraged.
Programs to engage Society and Pupils in EIT RIS countries.	Increasing awareness and attracting young people to manufacturing.	Min. 3 core partners from at least 2 different CLCs.	1-2 years.	Expected budget per activity: ~200k/year	Students, individuals, stakeholders.	Large geographical coverage is desired.
Innovating for Circular Economy at EIT RIS	Activities aiming to promote innovative solutions relevant to the Flagship "Low environmental footprint systems & circular economy for Green manufacturing"" in EIT RIS countries.	Min. 3 core partners from at least 2 different CLCs.	1 year.	Expected budget per activity: ~300k.	Manufacturing companies, Universities, RTOs.	The specific call is eligible only for organizations coming from EIT RIS Countries.
Al at EIT RIS	Innovations relevant to the Flagship "Digital & collaborative solutions for innovative manufacturing ecosystems", with special focus — although not restricted- on applying Artificial Intelligence in manufacturing.	Min. 3 core partners from at least 2 different CLCs.	1 year.	Expected budget per activity: ~300k.	Manufacturing companies, Universities, RTOs.	A sectorial focus (1-2 industrial sectors) is advised, but not required. The specific call is eligible only for organizations coming from EIT RIS Countries.
Evolution of research results — Innovation	Set up a competition to attract, select and support entities from EIT RIS countries towards bringing to the market solutions that have been developed within the context of other H2020/HEurope or national/regional programmes.	Suggested consortium of 2-4 core partners.	1 year. Extension probable.	Estimated budget 700k, including the grants to external participants . 1 activity is foreseen.	Manufacturing companies, Universities, RTOs.	The involvement of a substantial number of external RIS organisations (during the activity implementation and through the competition) is expected.

Digital	Facilitate	Min. 3 core	1 year.	Estimated	Manufacturing	The involvement of a
Transformation	cooperation of	partners	Extension	budget	companies,	substantial number of
for	entities in RIS	from at	probable.	350k,	Universities,	external RIS
manufacturing	(esp. SMEs) with	least 2		including	RTOs.	organisations (during
at EIT RIS	existing high-	different		the grants		the activity
countries	technology	CLCs.		to external		implementation and
	infrastructures			participants		through an open call)
	towards					is expected.
	innovative			1 activity is		
	solutions.			foreseen.		

6.6 Guidance and Support

Support for matchmaking and devising proposals can be given by the functional directors of EIT Manufacturing:

Innovation: Jean-François Duroch
 Education: Paola Fantini paola.fantini@eitmanufacturing.eu
 Business Creation: Godwill Bancole godwill.bancole@eitmanufacturing.eu

RIS: Konstantinos Georgoulias konstantinos.georgoulias@eitmanufacturing.eu

Questions related to the overall process, EIT definitions and requirements can be addressed to

CfPSupport@eitmanufacturing.eu

6.7 Financial Aspects

For *Innovation Activities*, project teams have to provide own contributions to **co-fund** 30% of the total eligible KAVA costs of the activity.

For *Education Activities*, no co-funding is expected. EIT Manufacturing will fund 100% of the eligible KAVA costs of Education Activities for all types of organizations.

For *Business Creation Activities*, project teams are encouraged to provide own contributions to co-fund a 10% of the total eligible KAVA costs of the Activity.

For *RIS Activities*, the same funding rules apply based on the type of activity. Specifically, 6.5.1 & 6.5.2 are for education RIS activities, 6.5.3 & 6.5.4 are for innovation RIS activities and 6.5.5 is for business creation. The activities in 6.5.6 can include education, innovation and business creation aspects, but we consider that they could mostly support business creation and, thus, a 10% cofunding contribution is encouraged in this case.

EIT Manufacturing aims to generate a return on investment for the Activities it funds, in order to gradually achieve **financial sustainability** and independence from EIT funding in the longer term. Therefore proposals are required to suggest and quantify a mechanism to contribute to the financial sustainability of EIT Manufacturing in case of successful outcomes (e.g. products or services successfully launched in the market as a result of the activities etc.). Mechanisms may include licensing deals, sharing of revenue or economic value added, equity in start-ups created by Innovation Activities and/or supported by Business Creation Activities, tuition fees for education programmes (in particular professional education), or other mechanisms being relevant to the activities content and consortia interests.

6.8 General comments to be taken under consideration in elaborating the proposals

All proposals should review the feedback to the pre-call submission and expand/elaborate the proposal accordingly. Changes to budget, partner composition, and project scope are possible. Note that the

overview budget as submitted in tab 3 is for the final call not editable any more, but retained for reference only. The final Activity budget needs to be specified in tab 5.

An Education / Innovation / Business Creation / RIS Activity we want to execute in 2021 should have

- a definition of the added value and business/societal impact traced with KPIs, e.g. creating a new Start-up (see Annex, section 6.11 for the list of KPIs);
- one or more clearly defined deliverables;
- a strong partner commitment and a European dimension involving multiple IHs and partners.
- a dissemination plan on how to communicate the results of the Activity, following EIT branding guidelines.

6.8.1 Innovation

Requirements for Innovation Projects are:

- Each team consists of 3-6 partners from ≥ 2 CLCs: technology brick providers (RTOs/universities, or specialized SME/startup), system integrator
- technology brick providers (RTOs/universities, or specialized SME/startup), system integrator **and** application end users
- Each innovation project should lead to clear outputs and commercial exploitation: new marketed products/services/ processes, or startups creation, within 1-2 years after project completion;
- Each innovation project should have a clear commercialisation strategy of the project outputs, indicating close cooperation with the customers/citizens, potential financial returns from the project and potential contribution of the project towards achieving the Innovation Community's financial sustainability;
- Thus the solution should have sufficient genericity to be scalable in the future and at this stage needs to demonstrate at least 2 identified use cases;
- Projects should clearly state the knowledge and technologies the solution builds on;
- The proposals should consider and address gender balance and diversity, knowledge triangle integration as well as social and environmental sustainability;
- The creation of guidelines or similar documents are not valid outputs for innovation projects
- The inclusion of partners solely for dissemination or project management purposes should only be done exceptionally and if justified by unique elements brought by the partner in those domains;

To guide the applicant in designing a proposal that fulfills EIT Manufacturing expectations, two templates are provided to address additional aspects not covered in the existing fields of the submission system (the templates can be downloaded following the links available in Tab 3 - Activity Specific Info):

- Innovation Annexes which have been grouped in a single word file covering challenge exploration, technical solution and project planning, market understanding and business model/commercialization
- Checklist 1.0 for general requirements: questionnaire related to digital learning content, dissemination and communication, social and environmental sustainability.

These templates will be available on 1st March at the pre-call, so that the applicants can start to prepare them for the call.

6.8.2 Education

The Education activities are to be conceived taking into account the following:

- We are an EU Innovation community with a mission, a long-term strategy and commitment to achieve results and impact.
- We pursue sustainability, SDGs, gender balance, inclusion.
- The Calls are our instrument to create a **collective work**, along flagships, and different but integrated streams for innovation, business creation and Regional Innovation Scheme.

- We expect the activities of 2022 to build on the activities of the previous years to generate more value and impact.
- We expect activities to support our financial sustainability.
- Use the **guidelines**, **check lists and forms**, elaborated to facilitate the integration of the proposal into this joint endeavor.

If you have not attended, you may access to the recorded special sessions of the Match Making addressing:

- Innovation and Entrepreneurship in Education
- Upskilling (with examples of nuggets and digital learning paths for the Guided Learning Paltform GLP)
- Teaching and Learning Factories

6.8.3 Business Creation

Proposals for the EIT Manufacturing Business Creation Activities should comply with the following objectives:

- Cobranded with EIT Manufacturing
- Being executed at two (preferable three) locations within at least two different countries
- Conducted by partners from academia/research and industry in a collaborative way
- Having a common itinerary, structure and approach across the locations
- A proven track record on delivering successful international programmes.
- Provide participants with access to global markets to maximise growth opportunity and EIT impact.
- Partners must prove their capability to attract participants to the program (some committed participants will be higly appreciated).

Proposals for the EIT Manufacturing Business Creation Activities should include:

- A process to advertise and scout for participants across Europe, with at least 4 calls/year ("Creation" Activities) or 2 calls/year ("Acceleration" and "Transformation" Activities).
- A rigorous process, criteria, and knowledge base to select participants. EIT Manufacturing must be involved during the selection process.
- A structured approach to provide mentorship, access to technical expertise, IP and legal support and other competences required In addition for the "Transformation" activities, a plan on workforce reskilling may be requiered.
- Enabling access to required technology and competencies when needed (e.g. through the EIT Manufacturing partner network).
- When needed, enabling access to market (first sales) and funding schemes for "Creation" Activities, and access/suport to internationalisation for "Acceleration" Activities.
- A proven supporting scheme for start-ups and/or companies (SMEs and Large), including deliverables and KPIs.
- Successful participants could receive funding to suppport their need to launch/expand.
 Partners should themselves attract Venture Capitals and other sources of investment (Corporate Verturing, Family Offices, Private Investors, etc.).
- A stage-gating process to define a decision point for participants, either to move onto the next stage or to stop their participation.
- Specifications on how the activity integrates education, innovation and business creation aspects Knowledge Triangle Integration (KTI).
- Contain a Gender Equality Policy (not vision) and at least one output related to the communication, dissemination and outreach to citizens.

The budget cannot include cash contributions to start-ups as EIT funding, and subgranting should be limited as much as possible.

Partners are encouraged to provide a co-funding of 10% of the KAVA costs. A contribution to the financial sustainability of EIT Manufacturing in the form of financial backflow of part of the revenue generated by the proposed activities or equity stakes of start-ups supported is expected.

6.8.4 Regional Innovation Scheme (RIS)

EIT RIS aims to enhance the innovation capacity of EIT RIS countries, by -among others- opening up the Innovation Communities to entities that cannot (yet) become KIC partners, as well as providing targeted support to individuals and entities from EIT RIS eligible countries to take part in KICs activities and benefit from KIC services and programmes.

The same eligibility criteria with the other topics to participate apply, unless it is otherwise mentioned. Similarly, the aforementioned comments and guidelines for Education (6.8.2) and Innovation (6.8.1) activities apply in general also to the RIS Education and RIS Innovation activities, unless otherwise stated. However, proposals for EIT Manufacturing RIS activities need always to demonstrate their contribution to enhancing the innovation capacity of EIT RIS countries and regions.

Recommendations:

- Involve a large number of stakeholders from EIT RIS eligible countries: Individuals (e.g. students, researchers, etc) and entities (e.g. universities, research labs, regions and cities, etc).
- Involve a large number or organisations (especially manufacrturing companies and SMEs) as activity partners (ref. to Glossary for Activity Partner definition).
- Benefits and impact should always be oriented towards EIT RIS eligible countries to enhance their innovation capacity.
- Activities should receive broad publicity at local level by, among other things, raising awareness of the EIT Community brand and its KTI model.
- Target especially regions and countries where EIT Manufacturing has limited presence yet.
- Provide a conrete plan on how innovations originating from RIS countries will become avaiWhere applicable, pilot implementations and demonstrators should be in EIT RIS countries

6.9 Participation of organisations from Associated Countries previously eligible for funding under Horizon 2020

Organisations from countries previously listed as associated under the Horizon 2020 programme may participate in proposals under the provison that funding for them will be dependent on the agreements reached under Horizon Europe.

6.10 EIT Core Key Performance Indicators (KPIs)

The table below lists the updated KPIs as recently defined by EIT. Note that this may not be the final list. Changes will be implemented in the submission system when available and an update to this document published on the intranet. "Year N" below refers to the operational year for the proposals of the call, in this case 2021. Each proposal should only indicate the applicable KPIs defined for their Area (leftmost column).

In the main Call, proposals should be also associated with relevant KIC specific KPIs. The list of the KIC specific will be provided in an update of this document for the final call.

Table 6. EIT Core KPIs: List of KPIs as defined by EIT for which a target number can be specified (further KPIs will have to be measured as part of Activity reporting). Targets for RIS KPIs should additionally also be included in the target for the "parent" KPI.

Code	KPI Category	KPI Title	KPI Definition	Evidence requirements
EITHE02.1	Innovation	Designed/Tested Innovations	Number of innovations introduced on the market during the KAVA duration or within 3 years after completion thereof. Innovations include new or significantly improved products (goods or services) and processes sold. Each reported innovation should have a sales revenue of at least 10 000 EUR documented. [target] Innovations introduced on the market must be directly linked with the KAVA and reported in the year when they reached the first 10 000 EUR revenue (but not later than three years after completion of the KAVA). Open access innovations having at least 200 satisfied users should be reported separately with the number of users satisfied with the innovation.	 Declaration of the product owner describing the innovativeness (new or significant improvement in terms of physical of functional parameters) of a product/process, link to the KIC societal challenge and the KAVA, as well as information on the KAVA investment in the innovation development. Documented proof such as an invoice or an online sales records demonstrating that the purchase of at least 10,000 EUR has been made by a customer/s. For open access innovations the evidence should prove: Number of users who have downloaded the innovation Number of users with satisfactory feedback
EITHE02.2 -EITRIS	Innovation	EIT RIS marketed innovations	number of products or processes (as per EITHE02.1 definition) launched on the market by organisations from the EIT RIS countries	As for EITHE02.1
EITHE03.1	Business Creation	Supported start- ups/scale-ups	# Start-ups and scale-ups supported by KICs for at least 2 months in year N, provided the KIC's services contribute to the company's growth (including potential growth). [target] Examples of such services are mentoring, consultancy on access to finance and markets, product/service marketing, legal advice, internationalisation, match-making, etc.	Declaration of the start-up supported confirming the length and type of services provided by the KIC and how they contributed to the growth of start-up. The declaration shall also include short description of the start-up and its core business formal signed agreement between KIC and the ventures clearly stating what is being provided, when and with which milestones / deliverables for the start-up to go onto the next stage of BC services and, if applicable, what is KIC receiving in exchange registration certificate of the venture receiving BC services

EITHE03.2 -EITRIS	Business Creation	EIT RIS Start- ups/scale-ups supported	Number of start-ups and scale-ups registered in EIT RIS country supported by KICs for at least 2 months in year N	As for EITHE3.1
EITHE04.1	Business Creation	Start-ups created of/for innovation	Number of start-ups established in year N as a result/ based on the output(s) of Innovation/ Research related KAVA(s), or start-ups created for the purpose of an innovation project to organise and support the development of an asset (but not later than three years after completion of the KAVA).	•Registration certificate of a start- up established in year N •Declaration of the start-up demonstrating substantial link with the specific KIC KAVA (indication of the specific output of KIC KAVA(s) or asset development) and proof for the KAVA investment in the start-up. The declaration shall include short description of the start-up and its core business
EITHE04.2 -EITRIS	Business Creation	EIT RIS Start-ups created of/for innovation	Number of start-ups registered in EIT RIS country in year N and established as a result/ based on the output(s) of Innovation/ Research related KAVA(s), or created for the purpose of an innovation project to organise and support the development of an asset	As for EITHE04.1
EITHE05.1	Business Creation	Start-ups created of EIT labelled MSc/PhD programmes	Number of start-ups established in year N by students enrolled and graduates from EIT labelled MSc and PhD programmes. To be eligible, a start-up should be created during EIT labelled programme (by students) or within 3 years from the graduation (by graduates).	•Registration certificate of a start- up established in year N •Declaration of the student confirming the length and type of EIT labelled study programme taken and any KIC contribution to the establishment of start-up. The declaration shall include short description of the start-up and its core business.
EITHE05.2 -EITRIS	Business Creation	EIT RIS start-ups created of EIT labelled MSc/PhD programmes	Number of start-ups established in EIT RIS countries in year N by EIT labelled MSc and PhD students or graduates.	As for EITHE05.1
EITHE06.1	Business Creation	Investment attracted by KIC supported start- ups/scale-ups	Total EUR amount of private and public capital attracted within year N by supported start-up/scale-ups (per country) that have received KIC business creation services support of total duration of at least two months, within a maximum of three years following the last received KIC KAVA support activity.	•Declaration of a start-up proving the amount, type of investment (tbc), source of income by type (public/private) and a link to a specific KAVA and support received.
			(the definition and supporting evidence will be updated once the HE respective KPI is developed; acceptance of debt financing or grants will be confirmed alongside the definition)	

EITHEO6.2 -EITRIS	Business Creation	Investment attracted by KIC supported EIT RIS start-ups/scale-ups Graduates from EIT labelled MSc/PhD	Total EUR amount of private and public capital attracted within year N by supported start-ups/scale-ups established in the EIT RIS countries, that have received KIC business creation services support of total duration of at least two months, within a maximum of three years following the last received KIC KAVA support activity. Sum of graduates from EIT labelled Masters and EIT labelled PhD	As for EITHE06.1
EITHE08.1	Education	programmes Participants in (non-	programmes in year N. Number of successful participants in EIT	n/a
EIIILUU.I	Eddeation	degree) education and training	professional development courses, online training courses and other education/training activity delivered or in a process of delivery (by country and type of programme), including data on country of citizenship and gender.	
			Only participant who successfully finished the programme to be counted. For this KPI, only those education and training activities which have clearly defined learning outcomes and which carries out competency assessment method are applicable.	
EITHE09.1	Education	EIT labelled MSc/PhD students and graduates who joined start-ups	number of students who joined start- ups during their EIT Label MSc and PhD studies. Sum of EIT Label graduates who joined start-ups up to 3 years after graduation. Join means join as an owner of an existing start-up, or be employed by a start-up.	n/a
EITHE13.1	Horizontal Outputs	KIC success stories	20 quality success stories per year submitted by KIC to EIT on continuous basis (e.g. 5 per quarter) and accepted by EIT. The success stories should follow the EIT respective guidelines and should be accepted by the EIT including eligible nominees for the EIT awards.	n/a

6.11 KIC-specific Key Performance Indicators (KPIs), as relevant for proposals to this call

Code	Area	KPI Title	KPI Definition	Evidence requirements
KIC.E01	Education	# Badges issued to document and testify the achievement of a learning outcome in EIT Manufacturing education programmes, not including EIT-labelled Master and PhD	Badges indicate a learning outcome of a learning path is documented with a learning certification (=badge) in year N. A learning path consists of a combination of nuggets and/or other learning modules, created to bring a learner from an initial to a final competence level and can be customized. It is assumed that the modularity and customisation of learning paths encourage and facilitate the learners in acquiring more certificates to strengthen their professional profile.	List of certificates provided including: names, contact details (email address), gender and country of citizenship, indication of the educational programme, acceptance of privacy policy/consent to data collection and sharing with EIT. The list is to be confirmed by the KIC Education Director. Source for such list are the enrollments at the GLP and in physical classes, i.e. the information requirements must be recorded when registering for training courses.
KIC.E02	Education	Number of educational products launched	EIT Manufacturing aims at creating education products which consists of a physical or digital/printable KIT that can be used to enable learning experiences such games, experiments or workshops. This indicator measures the number of educational products which are offered to learners or schools or universities and what. Applicable to Education proposals.	Educational products launched should be communicated to the Education Director by the activity leader (through a template), proof of offering the product to market.
KIC.EO4	Education	Number of teachers involved in engage programmes	EIT Manufactuing aims at attracting pupils and youngsters to manufacturing, also through the engagement and collaboration with teachers. This indicator measures the number of teachers taking part in any engage project or using one of the educational products created by EIT Manufacturing. Applicable to Education proposals.	Participating teachers has to register on one of the EIT platforms, upon request of the activity leader. They have to state the number of pupils involved.
KIC.E05	Education	Number of pupils/target people involved in engage programmes	EIT Manufactuing aims at attracting and empowering pupils and target groups to manufacturing (e.g., girls, or migrants), through the engagement programs. This indicator measures the number of participants taking part in any engage project or using one of the educational products created by EIT Manufacturing. Applicable to Education proposals.	Participating teachers has to register on one of the EIT platforms, upon request of the activity leader. They have to state the number of pupils involved.

KIC.G03	Education / Innovation	Number of digital nuggets created	EIT Manufacturing aims at create digital content in small units to address the education needs of target groups. This indicator measure every educational module that can be delivered digitally via the Guided Learning Platform having a learning time between 5 and 30 min. Applicable to proposals in all Areas.	The nuggets are uploaded on the Guided Learning Platform, the related information has to be given by activity leader to Education Director (through a template -tbd)
KIC.G04	Education / Innovation	Number of digital nuggets consumed	The EIT Manufacturing aims that at developing manufacturing competencies through the consumption of digital nuggets. This indicator measures the nuggets that are accessed and used on the Guided Learning Platform by users. Applicable to proposals in all Areas.	The indicator is measured by the Guided Learning Platform.
KIC.B01	Business Creation	# of Manufacturing clients introduced to start-ups and SMEs, through the KIC Activity	This KPI's objective is to supervise the commercial activity generated through the KIC activity. It is defined by the number of Manufacturing clients that the KIC Activity introduced to its portfolio's companies, in order to allow those portfolio's companies to discuss clients' needs and develop business Be aware, this is not about match-making event. It is about driving a dedicated meeting between a portfolio company and Manufacturing clients to have a specific and deep discussion about clients' needs, solution proposal, and business opportunity	Formal signed declaration of honor from Coordinator, showing for the portfolio's companies: - the list of Manufacturing clients that were introduced (presented) to portfolio' companies - the material proof of such introductions, consisting of Minutes of meetings between the portfolio company and the Manufacturing client. Such Minutes must show the topics that were discussed in the and the actions that both parties (portfolio company and Manufacturing client) agree upon to develop business
KIC.BO2	Business Creation	# of deals (business transactions) initiated by startups and SMEs, through the KIC Activity	This KPI's objective is to supervise the commercial activity generated through the KIC activity. It is defined by the number of deals (business transactions) that the portfolio's companies initiated thanks to the support of the KIC Activity, in order to develop the business of the portfolio companies Deals can be proposal / agreement of: 1- Proof of Concept (PoC), 2-Product joint development, 3- Product joint commercialization, 4- Sales.	Formal signed declaration of honor from Coordinator, showing for the portfolio's companies: - the list of deals that were initiated by the portfolio companies thanks to the KIC Activity support. Those needs to be in discussion or concluded (successfully or not) - the proof of deals initiation, consisting of signed documents between the portfolio company and the Manufacturing client. Those signed documents must show the business cases that were discussed and the actions that both parties (portfolio company and Manufacturing client) agree upon to develop business

KIC.B03	Business Creation	# of "Qualified Business Analysis" delivered, through the KIC Activity	This KPI's objective is to supervise the Business critical thinking that must be promoted through the KIC activity. It is defined by the number of "Qualified Business Analysis" that were built and shared through the KIC activity The list of types of Business Analysis is as follow: Market studies Product and/or	Formal signed declaration of honor from Coordinator, showing the list of "Qualified Business Analysis", with those Analysis proposed in attached documents
			studies, Product and/or technology roadmap definition, Business Plan, Transformation Plan, Go To Market (marketing and commercialization) document, Go to Financing document	
			A Business Analysis is qualified, only if the EITM / Business Creation team (under Business Creation Director supervision) reviewed and accepted the analysis	
KIC.B04	Business Creation	# Business Creation reputation building events organized through the KIC Activity	This KPI's objective is to supervise the intensive and efficient communication/networking works that are essential to raise awareness and position EITM as a key Leader in driving Business Creation in Europe. It is defined by the number of events that the KIC Activity led or co-led to promote EIT Manufacturing / Business Creation awareness and reputation. Those events are with the presence of Business Creation team representative.	Formal signed declaration of honor from Coordinator, showing list of events led or co-led by KIC Activity. For each event information about: - where / when / attendees - topics of Business Creation presented - representative of Business Creation team
KIC.R01	RIS Activities	# of teaching and learning factories projects implemented in EIT RIS countries	Number of projects using or creating teaching and learning factories in RIS. Please note that one project is defined as one different case/ problem addressed. Applicable to all KAVAs since TLFs in RIS may also come up from the EDU pillar. The core EIT KPIs for RIS are also measured, considering all pillars.	This KPI will measure the number of Teaching & Learning Factories projects implemented in EIT RIS countries. Evidence required: Signed declaration listing the projects and reporting the requested KPI.

6.12 Glossary

The glossary defines the meaning of some key terms used in the context of EIT and/or EIT Manufacturing.

Activity	Everything that EIT Manufacturing does is organized into Activities. Each Activity belongs to one Segment, each Segment to one Area. Each Activity should contribute to the integration of the knowledge triangle of higher education, research and innovation, including the establishment, administrative and coordination activities of the KICs, and contributing to the overall objectives of the EIT
Activity Partner	To ensure effective participation of organisations that are not members (or their LTPs) of EIT Manufacturing, they will become so-called Activity Partners. They cannot take the lead partner role in an Activity and their participation will be limited to the duration of the respective involvement (usually 1 year). They will have to accede to the Framework Partnership Agreement (FPA); however, they will not need to become members of the EIT Manufacturing legal entity (LE). After the end of the activity they participate, they may keep an "inactive" status during the year(s) they are not engaged in any activity / project, or they may exit the FPA. Organisations collaborating through this model will pay a reduced yearly membership fee of 10,000 Euros
Area	EIT defines a number of areas in which it operates: Education; Innovation and Research; Entrepreneurship; Communication, Dissemination and Outreach; Regional Innovation Scheme; and Management and Coordination.
Business Plan	The document specifying the detailed plan of EIT Manufacturing for the upcoming year. It consists of a main body text and a number of annexes describing the Activities in detail. On the basis of the draft Business Plan submitted in September (and some other criteria) EIT decides on the budget available to EIT Manufacturing in the following year. The Business Plan will then be adjusted to match the assigned budget and forms the basis for the internal project agreements of EIT Manufacturing with its partners.
Co-funding	KAVA funding from other than EIT financial contribution sources, in particular partners own investments and national or regional public funding programmes.
Deliverable	It is the tangible document, medium, or other artefact encapsulating the quantifiable outputs (e.g. products, services) created by a KAVA in pursuit of a specific objective and defined in the Business Plan for each specific KAVA. Deliverables represent the outputs in a format that can be uploaded on Duna submission tool at the time of reporting. Not all outputs need to be translated into a deliverable. A deliverable shall be chosen in a way that can represent a proof of the KAVA's proper implementation. A minimum of one deliverable shall be planned per KAVA. Core KIC documents (plans and reports that support KIC work) are part of the KIC planning and monitoring process and should not be listed as deliverables of KAVAs. Examples: comparative studies, market analysis reports; handbook and training tools; innovative education and training modules; described new curricula and qualifications; product technical documentation; results of client's satisfactory survey or testing; e-learning modules manuals and statistics of attendance; documentation about seminars, workshops, conferences, online forums, newsletters etc.

GLP	Guided Learning Platform of EIT Manufacturing
Innovation Hotspots	Innovation hotspots are the tool that EIT Manufacturing will use to be both flexible and focused. To put it simply, they are an intersection between one or more emerging technologies and industry needs. Innovation hotspots will be continuously identified in the Launch programme by a working group that will rely on an agile process and tools to match technologies and needs and evaluate their potential. An example of a current innovation hotspot is the application of deep learning to online quality control, since it shows high potential to improve SME manufacturing operations at little cost.
KIC	"Knowledge and Innovation Community" – EIT Manufacturing is one of now eight KICs that operates under the regulations of EIT.
KAVA	"KIC Added Value Activity". This terminology is kept for historical reasons: up to 2020, each Activity consisted of a KAVA part and a KCA contribution. The KAVA part was the project that is executed and funded by the team of partners to achieve the goals of EIT Manufacturing. KAVAs should build on results created in KCAs. For the Call 2021, "KAVA" and "Activity" are used interchangeably.
KTI	Knowledge triangle integration. The concept refers to activities that integrates education, innovation and business creation aspects
Nuggets	Nuggets are short (<30 min) learning content units to be delivered online via our Guided Learning Platform. Each nugget addresses at least one competency and may have different formats (pdf, video, html, simulation,).
Output	It is what is directly produced or supplied through the KIC activities. In the context of the EIT, outputs may refer to the concrete technology, product, service, method, design, concept, methodology, approach, graduates, etc. created by a KAVA. Some outputs are monitored as KPIs. Examples: new products or processes, transformation of existing products, innovative education and training modules, new curricula and qualifications, elearning modules, guidance material for new approaches and methodologies, testbeds and experimental facilities, prototypes, patents, publications, etc.
Programmes	Each Area has a number of programmes. For the Area Education these are for example the Teaching and Learning Factories, Guided Learning Platforms, and Programmes to engage Society and Pupils (programmes correspond to what EIT calls "Segments")
RIS (Regional Innovation Scheme)	The EIT RIS (Regional Innovation Scheme) is designed to share good practices and experience emerging from the EIT Community's activities, as well as to widen participation in KIC activities. Therefore, the aim of the EIT RIS is to help disseminate the knowledge and know-how of the EIT Community and widen participation in the KICs across Europe. The EIT RIS focuses on countries with limited or no participation in the EIT Community's activities, where innovation capacity is moderate or modest and which otherwise would not be able to benefit from the experience gained by the KICs.
Segment	see → Programmes