

#### **DECISION 07/2017**

#### OF THE GOVERNING BOARD OF

### THE EUROPEAN INSTITUTE OF INNOVATION AND TECHNOLOGY (EIT)

#### ON THE ADOPTION OF THE EIT MONITORING STRATEGY

#### THE GOVERNING BOARD OF THE EUROPEAN INSTITUTE OF INNOVATION AND TECHNOLOGY,

Having regard to Regulation (EC) No 294/2008 of the European Parliament and of the Council of 11 March 2008 establishing the European Institute of Innovation and Technology<sup>1</sup>, as amended by Regulation (EU) No 1292/2013 of the European Parliament and of the Council of 11 December 2013<sup>2</sup> ("EIT Regulation"), in particular Article 7a and Section 2 (b) of the Statutes annexed to the EIT Regulation;

Having regard to Regulation (EU, Euratom) No 966/2012<sup>3</sup> of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002, as amended by Regulation (EU, Euratom) No 547/2014 of the European Parliament and of the Council of 15 May 2014<sup>4</sup> and by Regulation (EU, Euratom) 2015/1929 of the European Parliament and of the Council of 28 October 2015<sup>5</sup> ("EU Financial Regulation"), in particular Articles 6, 30(1)- (4) and 32 thereof;

Having regard to Commission Delegated Regulation (EU) No 1268/2012<sup>6</sup> of 29 October 2012 on the rules of application of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union, as amended by Commission Delegated Regulation (EU) 2015/2462 of 30 October 2015,<sup>7</sup> and in particular Articles 18(2), 217 and 225(1) thereof;

Having regard to the Decision of the EIT Governing Board of 27 December 2013 adopting the Financial Regulation for the European Institute of Innovation and Technology,<sup>8</sup> as amended by Decision 6/2015 of the Governing Board of the EIT of 5 March 2015<sup>9</sup> and by Decision 11/2016 of the Governing Board of the EIT of 20 April 2016<sup>10</sup> ("EIT Financial Regulation");

Having regard to Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020) and repealing Decision No 1982/2006/EC $^{11}$ ;

<sup>&</sup>lt;sup>1</sup> OJ L97 of 09.04.2008, p. 1

<sup>&</sup>lt;sup>2</sup> OJ L347 of 20.12.2013, p. 174

<sup>&</sup>lt;sup>3</sup> OJ L 298, 26.10.2012, p. 1

<sup>&</sup>lt;sup>4</sup> OJ L 163, 29.5.2014, p. 18

<sup>&</sup>lt;sup>5</sup> OJ L 286, 30.10.2015, p. 1

<sup>&</sup>lt;sup>6</sup> OJ L 362, 31.12.2012, p.1

<sup>&</sup>lt;sup>7</sup> OJ L 342, 29.12.2015, p. 7

<sup>&</sup>lt;sup>8</sup> 01364.EIT.2014.I

<sup>&</sup>lt;sup>9</sup> 00101.EIT.2015.I.GB34

<sup>&</sup>lt;sup>10</sup> 04141.EIT.2016.I.GB.41

<sup>&</sup>lt;sup>11</sup> OJ 347, 20.12.2013, p. 104



Having regard to Council Decision 2013/743/EU of 3 December 2013 establishing the Specific Programme Implementing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020) and repealing Decision No  $1982/2006/EC^{12}$ ;

Having regard to Regulation (EU) No 1290/2013<sup>13</sup> of the European Parliament and of the Council of 11 December 2013 laying down the rules for participation and dissemination in "Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020)" and repealing Regulation (EC) No 1906/2006 ( "Horizon 2020 Rules of Participation");

Having regard to Decision No 1312/2013/EU of the European Parliament and of the Council of 11 December 2013 on the Strategic Innovation Agenda of the European Institute of Innovation and Technology (EIT): the contribution of the EIT to a more innovative Europe<sup>14</sup> ("Strategic Innovation Agenda");

Having regard to the Decision No 34/2015 of the Governing Board of the European Institute of Innovation and Technology of 3 December 2015;

Having regard to the minutes of the 39<sup>th</sup> EIT Governing Board meeting adopted on 24 May 2016;

#### **WHEREAS**

- (1) The EIT shall put in place a monitoring system to ensure that the principles of sound financial management are met and are effective;
- (2) The EIT should organise continuous monitoring and periodic external evaluations of the output, results and impact of each Knowledge and Innovation Communities (KIC). The results should be reported to European Parliament and to the Council and shall be made public;
- (3) Information on good practices shall be communicated to external stakeholders with a view to make experience and benefits of KICs available to a wider public;
- (4) The EIT shall develop a set of measurable indicators and a monitoring, review and evaluation plan that meets specific demands (e.g. for Horizon 2020), and represents and communicates performance and added value in a credible manner at both EIT and KIC level;
- (5) The EIT Governing Board shall draw up criteria and procedures for the financing, monitoring and evaluating of the KICs activities;
- (6) The Monitoring Strategy shall be amended in order to include the new set of EIT Core KPIs against which the KICs are planning and reporting as of 2017.

<sup>&</sup>lt;sup>12</sup> OJ L 347, 20.12.2013, p. 965

<sup>&</sup>lt;sup>13</sup> OJ L 347, 20.12.2013, p .81

<sup>&</sup>lt;sup>14</sup> OJ L 347 of 20.12.2013, p. 892



#### HAS DECIDED AS FOLLOWS:

## Article 1 Adoption

The EIT Monitoring Strategy, as set out in the Annex, is adopted.

## Article 2 Repeal

Decision 34/2015 of the EIT Governing Board of 3 December 2015 is repealed and replaced with the present decision.

# Article 3 Entry into force

This decision shall enter into force on the day of its signature.

Done in Budapest on 29 May 2017<sup>15</sup>

Signed

Peter Olesen

Chairman of the EIT Governing Board

Annex: EIT Monitoring Strategy 2017

 $^{15}$  Approved by the EIT Governing Board via written procedure on 29 May 2017

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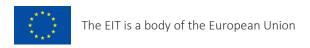


# **EIT Monitoring Strategy**

European Institute of Innovation and Technology (EIT)

Budapest | 29 May 2017

# www.eit.europa.eu



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# 1. Introduction

The European Union has established the EIT in 2008 and entrusted this body with a challenge with high societal importance: to develop and implement a new approach to innovation and entrepreneurship based on the concept of Knowledge Triangle Integration. The EIT should deliver new products, services and business models, address important societal issues such as climate change, the ageing society and the threat of resource depletion, and contribute to the strengthening of the European economy and the creation of new jobs. The EIT should achieve these goals by establishing and working with Knowledge Innovation Communities (KICs): excellence-driven, long term partnerships of higher education institutions, research organisations, companies and other stakeholders that cooperate in sustainable and long-term, self-supporting networks. At present five KICs have been established: Climate-KIC, EIT Digital, EIT Health, EIT Raw Materials, and KIC InnoEnergy. In 2016, the EIT Governing Board will designate two more KICs: EIT Food and EIT Manufacturing.

In the past years, the EIT and the first wave of KICs have shaped and improved their organisational structures and processes. In this context, elements of monitoring were defined and brought into practice taking four perspectives:

- The Horizon 2020 perspective: the provision of information on the EIT's contribution to Horizon 2020 objectives
- The EIT perspective which has two components: the monitoring and assessment of the
  operational and organisational efficiency and effectiveness of the EIT and of outputs, results and
  impacts of EIT specific activities, i.e. dissemination, outreach and improvements of the EIT KIC
  model.
- The Cross-KIC perspective: standardised information on key elements of KICs including outputs, results, impacts, operational efficiency and effectiveness, and elements as the degree of Knowledge Triangle Integration. This information is used among others in the annual decisions about allocation of funds to KICs and in the communication of results of the EIT Community to external stakeholders.
- The KIC perspective: KICs monitor and assess operational and organisational efficiency and effectiveness and their outputs, results and impacts.

This document has the objective to build upon the experiences and to devise a comprehensive monitoring strategy. This strategy is the fundament for a robust information and evidence base that enables the EIT to lead and manage its operations and produce the results and impacts aimed for in an efficient and effective manner.

In this document, the EIT Monitoring Strategy is described. In the second chapter, the EIT intervention logic is outlined and coupled to a framework that structures the monitoring and evaluation information. Terminology used in this report is presented. In Chapter three, the information need is elaborated in more detail as well as the objectives and scope of monitoring and evaluation of the EIT. Chapter four describes the organisational features and methodological aspects for implementation of the EIT Monitoring Strategy.

# Intervention Logic and Indicator Framework: Description and Terminology

The EIT Intervention logic determines the information need for the monitoring and evaluation. This logic is concisely explained. EIT has adopted an indicator framework to structure its monitoring and evaluation activities. This framework is presented and coupled to the intervention logic. The terminology used in this context is given.

## 2.1 Intervention Logic

The intervention<sup>1</sup> logic is elaborated step-wise starting from the policy issue addressed by the EIT, followed by a concise problem analysis, the mission and general objective of the EIT, and finally by summarising its specific objectives. The intervention logic is based on the EIT as part of Horizon 2020, its own Regulations and its Strategic Innovation Agenda.

Policy issue addressed by the EIT<sup>2</sup>

Europe faces structural weaknesses when it comes to innovation capacity and the ability to deliver new services, products and processes, thereby hampering sustainable economic growth and job creation.

Problem analysis<sup>2</sup>

Factors underlying the weaknesses in the innovation capability of Europe include:

- The relatively poor record of Europe as regards talent attraction and retention;
- The under-utilisation of existing research strengths in terms of creating economic or social value;
- The lack of research results brought to the market;
- Low levels of entrepreneurial activity and mind-set;
- Low leverage of private investment in R&D;
- A scale of resources, including human resources, in poles of excellence which is insufficient to compete globally:
- An excessive number of barriers to collaboration within the knowledge triangle of higher education, research and business on a European level.

<sup>&</sup>lt;sup>1</sup> An intervention is defined as the actions taken through which inputs, such as funds and other types or resources are mobilised to produce specific outputs. The EIT is an intervention at a high level of abstraction. At a higher granular level, more focused interventions may be discerned linked to the specific objectives of the EIT.

<sup>&</sup>lt;sup>2</sup> Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) and repealing Decision No 1982/2006/EC

#### Mission and objectives of the EIT<sup>3</sup>

The EIT's mission is to contribute to sustainable European growth and competitiveness by reinforcing the innovation capacity of Member States and the Union in order to address major challenges faced by European society.

The EIT's overall objective is to contribute to the development of the Union's and the Member States' innovation capacity by involving higher education, research and business activities at the highest standards and, in doing so, facilitate and enhance networking and co-operation and create synergies between innovation communities in Europe.

Specific objectives of the EIT in addressing the problem<sup>3, 2</sup>

In table 1, the specific objectives underlying activities of the EIT and its KICs are given clustered into three main categories. Examples of activities are given for each specific objective.

EIT Specific Objectives	Examples of activities	
Establishing KICs and improving the EIT model for KICs and for the integration of the Knowledge Triangle		
Implement the integration of the knowledge triangle of higher education, research and business.	Formation of KIC partnerships; joint ideation session for innovation projects in KICs; EIT Label Framework.	
Establish and grow KICs addressing identified societal challenges.	2016 Call for KIC Proposals addressing the thematic fields of Food4Future: Sustainable Supply Chain from Resources to Consumers (EIT Food) and Added-value Manufacturing (EIT Manufacturing).	
Achieve European wide impact through synergies facilitated by innovative funding model.	Mechanisms to provide complementary funding to EIT funds, thus increasing the effectiveness of investments; creation of KIC investment pipeline.	
Apply the principle of continuous quality improvement for the EIT model for KICs and for Knowledge Triangle Integration.	The development and implementation of guidelines for KICs' financial sustainability; topical strategy notes clarifying and/or defining essential elements of the EIT model for KICs and Knowledge Triangle Integration; the systematic development of targets for EIT and KIC activities; task force for simplification.	
Driving societal and economic impact through Knowledge Triangle Integration		
Transfer and apply higher education, research and innovation activities for new business creation.	Establishing start-ups arising from innovation and education activities of the KICs; accelerate start-ups in scaling up.	
Conduct cutting-edge and innovation-driven research in areas of key economic and societal interest.	Development of new products, services and business models in the thematic field of the KICs and bringing these innovations from research lab to the market.	

<sup>3</sup> Regulation (EU) No 1292/2013 of the European Parliament and of the Council of 11 December 2013 amending Regulation (EC) No 294/2008 establishing the European Institute of Innovation and Technology

Nurture entrepreneurial people through entrepreneurship education and training.	EIT labelled Master and PhD education, Massive Open Online Courses (MOOCs) and professional training courses. The EIT Alumni Community	
Contribute to combatting societal challenges.	Societal impact in themes addressed: Climate change mitigation and adaptation, sustainable energy, next generation information society, healthy living and active ageing, raw materials.	
Dissemination and outreach to enhance European impact		
Disseminate good practices and share knowledge and learnings.	EIT Stakeholder Forum, EIT Awards, EIT Regional Innovation Scheme (EIT RIS), EIT Awareness Days, publication of studies, reports, success stories etc., organisation of and participation in events by EIT, KICs and the wider innovation community.	
Link regional development to European opportunities.	EIT Regional Innovation Scheme (EIT RIS), synergies and complementarities of KIC Co-location Centres (CLCs) with regional initiatives and regional innovation eco-systems.	
Contribute to Europe's global competitiveness.	The contribution emerges systemically from the whole of activities as innovation is a driver of competitiveness.	

Table 1 EIT Specific Objectives

# 2.2 Monitoring, Evaluation and the Indicator Framework

In this section, definitions for monitoring and evaluations are given.

**Monitoring** is described in the European Commission "Better Regulation" package<sup>4</sup> as "a continuous and systematic process of data collection about an intervention. It helps identify and address any implementation problems and generates factual information for future evaluation and impact assessments. It helps to check whether the intervention is "on track" and to generate information that can be used to evaluate whether the intervention has achieved its objectives". A summary of the major features of monitoring described in literature is given in Figure 1.

- Data and information collected according to a predefined spatial and temporal pattern (fixed objects and a fixed frequency);
- Objectives and information need are clear it is known beforehand how the information will be used;
- Methodology for data collection is well defined and standardised.

Figure 1: Major features of monitoring in a nutshell

<sup>4</sup> http://ec.europa.eu/smart-regulation/evaluation/index\_en.htm

**Evaluation** is defined in the" Better Regulation" package<sup>4</sup> as an evidence-based judgement of the extent to which an intervention has

- Been effective and efficient.
- Been relevant given the needs and its objectives,
- Been coherent both internally and with other EU policy interventions, and
- Achieved EU added-value.

By evaluating, a critical look is taken whether the intervention is fit for purpose and delivers, at minimum cost, the desired changes to European businesses and citizens, and contributes to EU's global role.

Horizon 2020 states that Evaluations take a broader look at all aspects of performance, looking more at "whether" the changes and any movement towards the set objectives are due, at least in part, to the intervention and "why" an intervention has been more or less successful in achieving its policy objectives. It looks at what has happened, why something has occurred and in particular how much has changed as a consequence $^5$ 

Evaluations of the EIT and its KICs represent a systematic and objective assessment on their design, implementation and results. The aim is to determine the relevance and fulfilment of objectives, efficiency, effectiveness, impact and sustainability. The evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of the EIT, KICs and the EU.

**Reviews** are used by the EIT as described in the Framework Programme Agreement (FPA): Reviews deal with "the proper implementation of the specific actions (including assessments of deliverables and reports), compliance with obligations under the FPA and the Specific Agreements". Two types of reviews are discerned:

- Reviews that focus on particular features of KIC operations and verify proper implementation and compliance;
- Reviews that resemble evaluations but cover an activity, i.e. a group of measures that form a logic, coherent whole. This type of reviews assesses whether the overall direction is still the right one and whether the activities are likely to meet the purpose for which they were planned. Examples within the EIT are reviews on Business Creation, Education and KPIs. In the following, this type of reviews will be denoted as "Assessments". Like evaluations, Assessments consider effectiveness and efficiency, relevance, internal coherence and EU added value. Assessments also identify good practices that can be used to communicate to external stakeholders.

<sup>5</sup> Horizon 2020 indicators. Assessing the results and impact of Horizon 2020. European Commission, Directorate-General for Research and Innovation, ISBN 978-92-79-49476-5, 2015

The EIT has adopted a framework for its activities in the field of monitoring, Assessments and evaluations to align the separate activities into a coherent, efficient approach<sup>6,7,8</sup>. This framework is presented in a slightly modified form in Figure 2. This figure links the intervention logic, which describes how the policy issue relates to specific objectives and main activities, with the results chain – the logical steps that need to be taken to achieve the desired goals and results and given by the sequence inputs-activities-outputs-results-impacts in the figure. Thus, the EIT specific objectives are translated into activities with planned outputs and intended results. Activities are allocated resources (the inputs). The outputs are the carriers through which the intended social and economic results and (later) impacts are expected to be achieved. The actually realised results will depend on the effectiveness of the activities implemented and on other, often external factors.

One or more result indicators are associated with a particular result. Result indicators are developed using an *ex-ante* assessment in a deliberative process. Once result indicators are chosen, a baseline must be established- the value of the result indicator before the EIT and/or KIC activities have been undertaken or its value for a situation that is used as a reference. In addition, result targets need to be defined – the values of the result indicators that the activities aim to achieve. Insight in impacts of the activity concerned is obtained by assessing whether and by which extent changes in result indicators are the result of the activity itself or of "other factors". Impact assessments require additional information. For example, a comparison can be made between the values and temporal trends of the result indicators for environments in which EIT and KICs are active and "comparison environments" with a similar composition not affected by the activities of the EIT and/or KICs. The collection of such data (context indicators, see section 2.3) may be part of the monitoring process.

The evaluation criteria are defined as follows<sup>9,10</sup>:

- The relevance of the objectives is the extent to which strategies and practices of the EIT and KICs are aligned and consistent with the rationale, goals, objectives and requirements defined by the EIJ
- **Efficiency** measures how economically the resources/ inputs (financial, human and material resources used) are converted to the outputs (products, capital goods and services which may result).
- Effectiveness is a measure of the extent to which the EIT and KICs have achieved or are expected to achieve their objectives. Effectiveness can be measured at the level of outputs and results.

<sup>6</sup> European Union, Directorate General Regional Policy. Indicative Guidelines on Evaluation Methods: Ex Ante Evaluation (2006)

<sup>7</sup> TAFTIE's Taskforce Benchmarking Impact, Effectiveness and Efficiency of Innovation Instruments, 2014, "Evaluation Reference Model", Technopolis report.

<sup>8</sup> European Union, European Cohesion Fund & European Regional Development Fund, "Guidance document on Monitoring and Evaluation. Concepts and Recommendations", 2014,

http://ec.europa.eu/regional\_policy/sources/docoffic/2014/working/wd\_2014\_en.pdf

<sup>9</sup> OECD, Glossary of Key Terms in Evaluation and Results Based Management, 2002, reprinted in 2010.

<sup>10</sup> EU Better Regulation Toolbox, Tool #42: Identifying the evaluation criteria and questions

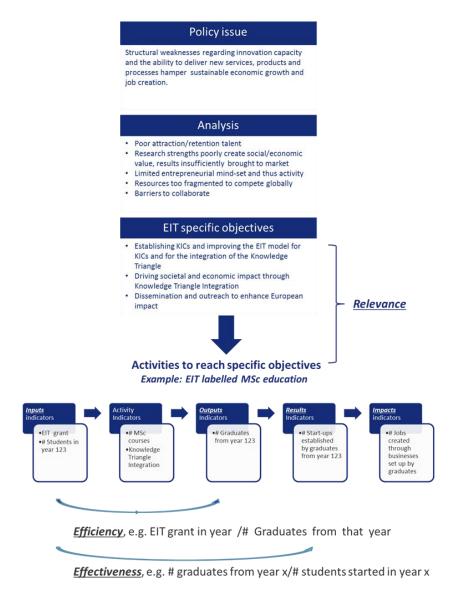


Figure 2: Intervention logic and framework for monitoring, Assessments and evaluations. Underlined terms in italic refer to the main evaluation criteria. *Possible* indicators for EIT labelled MSc education are depicted.

- **Utility** is a measure of relative satisfaction and judges the likely impacts against wider social, environmental and economic needs.
- Sustainability refers to the degree to which the benefits of the EIT respectively KICs continue after completion of the funding period or, in other words: the probability of continued long-term benefits.
- Inputs are the financial, human, and material resources used.

- Outputs are what is directly produced or supplied through the programmes of activities of the EIT and KICs<sup>10</sup>. The outputs are based on the targeted deliverables of the activities and follow from the operationalisation of the EIT specific objectives. *In the context of the EIT, outputs may refer to the concrete technology, product, service, method, design, concept, methodology, approach, number of graduates, etc. created by a KIC added-value activity (KAVA). Examples: new products or processes, transformation of existing products, innovative education and training modules, new curricula and qualifications, e-learning modules, guidance material for new approaches and methodologies, testbeds and experimental facilities, prototypes, patents, publications, etc.*
- Results of a KAVA capture more direct, short to medium term changes in a situation<sup>5</sup>. In the EIT context, results of a KAVA refer to the extent and kind of short to medium term changes the outputs have on its participants, the potential users of the outputs and the world at large. In many older publications the term "Outcomes" is used instead of "Results". In current EU publications, the term "Outcomes" has been phased out and replaced by "Results". The two terms have the same definition<sup>8,10</sup>
- Impact broadly defines the wider societal, economic or environmental cumulative changes over a longer period of time<sup>5</sup>.

Evaluations deal with the full set of questions on the level of EIT and/or KICs. Assessments consider in principle the same set of questions but focus on particular group of measures. Monitoring focuses primarily on the conversion from inputs to outputs and may include contextual information to support the assessment of the data gathered. Monitoring invokes annual cycles of data collection and interpretations, Assessments and evaluations are conducted in multi-annual cycles, involve an *ex-post* assessment of the topic investigated and may include a prospective *ex-ante* assessment of the (potential) results and impacts with a view to improve strategies, planning practices and/or procedures. The relationship between monitoring and evaluations is given in Figure 3.

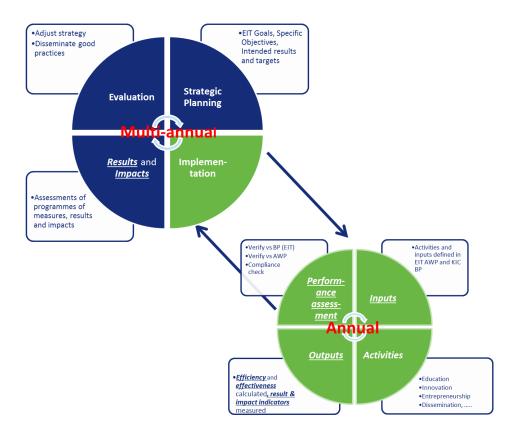


Figure 3 Monitoring and evaluation in perspective. Bold, underlined terms refer to criteria with associated indicators

# 2.3 Indicators: Terminology and Methodology

EU policies are becoming more results oriented; the Horizon 2020 programme is no exception. The principle of results-based management (RBM) plays a key role in increasing the results orientation. RBM uses feedback loops to achieve strategic goals<sup>11</sup>. Business processes, products and services are mapped and shown how they contribute to results. Information on (evidence for) the actual results is used for accountability, reporting and to feedback into the design, resourcing and delivery of operational activities. RBM entails a life-cycle approach to planning, monitoring and evaluation. In the planning stage, goals are set, activities developed, intended results defined and decisions taken on the allocation of resources. Once implementation begins, monitoring becomes important to ascertain whether all planned activities have been performed and to assess whether the intervention is on track to achieve the goals set. Evaluations and Assessments complement monitoring by providing a more rigorous and ideally independent assessment of progress during the implementation stage. Once the intervention has been completed, impact evaluations assess whether its goals have been achieved. The information obtained from monitoring and evaluation is important for taking corrective action during the implementation stage, and for generating lessons and recommendations for future interventions<sup>11</sup>.

Indicators measure progress along the results chain during the implementation process and are used to evaluate the overall success of the strategy. An indicator is defined as the measurement of an objective to be met, a resource mobilised, an effect obtained, a gauge of quality or a context variable. An indicator should be made up by a definition, a value and a measurement unit<sup>5</sup>.

The EIT uses different types of indicators to measure progress along the results chain. These indicators may be classified as descriptive or as performance indicators<sup>11</sup>:

- **Descriptive indicators** describe a situation or change and provide information that is not connected to a concrete target. These indicators respond to the question: "what's happening?"
- **Performance indicators** are quantitative metrics measuring the progress towards reaching a goal or an objective over time that is represented by a target value relative to a baseline. These indicators respond to the question: "Does it matter? Are we reaching targets?"

Both descriptive and performance indicators are used to measure progress in the result chain:

- **Input indicators** measure the financial, human and material resources used. Example: The budget allocated to a particular activity.
- Activity indicators measure the actions taken or work performed as a result of which inputs are mobilised to produce specific outputs. Example: the degree of Knowledge Triangle Integration
- Output indicators measure the products, capital goods and services which result from the activities. Example: Number of graduates from EIT labelled Master programmes.
- **Result indicators** measure the likely or achieved short-term and medium-term effects of an intervention's outputs. Tentative example: Proportion of Master graduates that have started a business.
- **Impact indicators** measure the positive and negative, primary and secondary long-term effects produced by the activities, directly or indirectly, intended or unintended.

Efficiency, effectiveness and sustainability indicators can be used to monitor and evaluate efficacy<sup>11</sup>. These indicators do not measure results, but present information about how changes at one level of the results chain translate into changes at the next level(s). Efficiency and effectiveness indicators are constructed from indicators along the results chain:

- Efficiency indicators represent the ratio of inputs needed per unit of output produced;
- Effectiveness indicators show the ratio of outputs (or the resources needed to produce the outputs) to produce one unit of result or impact (or the degree to which outputs affect results and impacts)

<sup>11</sup> Sarah Holzapfel, The role of indicators in development cooperation. Studies / Deutsches Institut für Entwicklungspolitik, ISBN 978-3-88985-588-6

In literature, sustainability indicators are defined as measuring the persistence of results or impacts over time after an intervention has ended. Within EIT, an indicator for financial sustainability of the KICs would belong to this category. Such an indicator has not been developed at this point in time.

The EIT may decide to incorporate **context indicators** in its monitoring programs. These are descriptive indicators that are tracked alongside performance indicators. They provide a broader view of conditions and external factors that may influence the ability of the EIT and KICs to achieve the goals. Contextual indicators may not only monitor potential risks or enabling factors that may affect achievements, but can also capture potential unwanted side-effects and provide information on general economic, political, social, structural or environmental trends against which results or impacts can be evaluated.

The EIT has currently a set of Key Performance Indicators (KPIs). The concept of Key Performance Indicator is not well defined in literature, nor in the EU. In literature, KPIs represent guideposts enabling an organisation to keep its strategy on track and helping it to manage, control and achieve desired results. The Seventh Framework Programme for Research and Technological Development (FP7) monitoring system was based on a coherent set of performance indicators. Among these performance indicators, "key indicators" were defined to address priority and sensitive issues, and taken together, were expected to provide a clear snapshot of the effectiveness and efficiency of FP7 implementation. Thus, KPIs appear to have functions for management and communication. In accordance with this line of reasoning, and with a paper contributing to the monitoring and evaluation guidelines in EU cohesion policy<sup>12</sup>, EIT uses the following definition for KPIs:

#### Key Performance Indicators (KPIs) are performance indicators that have the objectives:

- 1. To focus the attention of stakeholders (including policy-makers, the wider innovation Community and the media) on the intended results of the EIT and KICs by making these measureable and known and ensuring wide-open information on actual results;
- 2. To assess whether and how far the EIT and KICs are effective in delivering the intended results.

As of 2017 the KICs are planning and reporting against a set of new EIT core KPIs in order to better reflect effectiveness and efficiency of its intervention and better measure the KICs' performance. The change has been introduced in compliance with the methodology of defining KPIs provided in this document and reflecting the shift of the European policies towards an emphasis on results and impacts. The EIT Core KPIs will be considered in the competitive funding allocation process. The current set of the EIT's core KPIs is presented in table 2:

<sup>12</sup> F. Barza, P. McCann, A. Bonaccorsi, M. Brezzi, H. De Groot, J.E. Garcilazo, E. Marlier, J. Oliveira, M. Partridge, A. Rodriguez-Pose, M. Ruth, R. Scarpa, F, Vanclay, A. Varga. Outcome indicators and Targets. Towards a new system of monitoring and evaluation in EU cohesion policy. June 2011

Area	EIT Core KPI	Code	Definition/Formula
Education	# Graduates from EIT labelled MSc and PhD programmes	EITN01	Sum of graduates from EIT labelled Masters and EIT labelled PhD programmes in year N.  Supporting evidences: list of the graduates including: names, contact details (e-mail address), gender and country of citizenship, indication of the educational programme. The list is to be confirmed by the KIC Education Director.
Education	# Start-ups created by students enrolled and graduates from EIT labelled MSc and PhD programmes	EITN02	Sum of start-ups created by students enrolled and graduates from EIT labelled MSc and PhD programmes in year N.  To be eligible, a start-up should be created during EIT labelled programme (by students) or within three years from the graduation (by graduates).  Supporting evidences:  - registration certificate, company's profile, contact details and gender of the CEO/owner;  - document such as an invoice or an online sales record certifying the first financial transaction for a service/product sold to a customer, or a declaration of honour from a former student certifying the first commercial transaction with a reference to the customer.
Innovation	# Products (goods or services) or processes launched on the market	EITN03	Number of innovations introduced to the market during the KAVA duration or within three years after completion thereof. By innovations we mean new or significantly improved products (goods or services) and processes sold. Innovations should be reported in the year when they were introduced on the market (but not later than three years after completion of the KAVA).  Supporting evidences:  - description of product or process with specified performance characteristics/ physical parameters/ functionalities demonstrating novelty (new or significant improvement) of the product/ process;  - declaration demonstrating link with a specific KIC KAVA (indication of the specific output of KIC KAVA(s));  - documented proof such as an invoice or an online sales record demonstrating that the purchase has been made by a customer.

Area	EIT Core KPI	Code	Definition/Formula
	# Start-ups created as a result of innovation projects		Sum 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).  Supporting evidences:  - registration certificate, company's profile and contact details and gender of the owner/CEO;  - declaration demonstrating link with the specific KIC KAVA (indication of the specific output of KIC KAVA(s));  - document such as an invoice or an online sales record certifying a first financial transaction for a service/product (result of the KIC KAVA) sold to a customer.
	# Start-ups supported by KICs	EITN05	Number of start-ups that that have started receiving KIC's business creation (BC) services through KIC KAVA activities within year N. KIC should justify that the provided services contribute to the company's growth (including potential growth). Examples of such services are mentoring, consultancy on e.g. access to finance and markets, product/service marketing, legal advice, internationalisation, match-making, etc. The services should be provided for a total period of at least two months.
			Supporting evidences:  - list of supported start-ups including information on company's name and profile, contact data, name and gender of CEO/owner and reference to a specific KIC KAVA;  - formal signed agreement between KIC and the start-up 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 start-up receiving BC services.
	Investment attracted by start-ups supported by KICs	EITN06	Total EUR amount of private and public capital attracted within year N by ventures that have received KIC business creation services support of total duration of at least two months (as described in the output indicator above), within a

Area	EIT Core KPI	Code	Definition/Formula
	# Success stories submitted to and accepted by EIT	EITN07	maximum of three years following the last received KIC KAVA support activity.  Impact Fund investments into KIC supported start-ups should be measured separately.  Supporting evidences:  - list of the start-ups which attracted the capital including: company name and profile, contact data, amount of investments attracted, information on the investors (optionally) and reference to a specific KIC KAVA;  - press releases, or official announcements, or other official documents (e.g. signed declaration of honour by the Entrepreneurship Director confirming the accuracy of the provided information).  Good practises or success stories presented by KICs to the EIT according to a specific format and accepted by the EIT including eligible nominees for the EIT awards.
Communication,	# External participants in EIT RIS programmes	EITN08	Number of organisations from the EIT RIS defined regions selected via open calls that are collaborating with KIC and linked with a specific KAVA (including but are not limited to providing business creation services to start-ups, joint collaborations on developing joint solutions, participation in education activities).  Supporting evidences:  - list of organizations provided by the KIC including name, address, description of activity, EIT budget (if relevant), reference to KAVA;  - respective collaboration agreement or equivalent
and Coordination	Budget consumption of KICs Error rate of KICs	EITN09	describing the subject and nature of the collaboration/ RIS activity.  EIT grant approved / EIT grant committed (Calculated by EIT)  Ineligible KAVA costs established by EIT based on ex-ante checks / total KAVA cost declared by KIC. (Calculated by EIT)

Area	EIT Core KPI	Code	Definition/Formula
and Coordination	Financial Sustainability (FS): revenue of KIC LE and FS coefficient		The total revenues generated by the KIC LE in year N (absolute value in EUR) and FS coefficient (%) is the total revenues generated by the KIC LE divided by the total EIT KAVA in year N.  Supporting evidence: KICs' reports on financial sustainability and completed templates (revenues presented per category: 1) income generated by return on investment & equity, 2) education, 3) services and consulting, 4) membership fees, and 5) alternative funding sources for KIC LE (public and private)).

Table 2 EIT Core Key Performance Indicators

The EIT will report on its activities and provide measurable indicators as defined in the EIT and Horizon 2020 Regulations and planning documents as part of its annual activity report.

Indicators will fit in the logical framework given in figure 2 and should be are formulated according to the SMART principle:

#### The indicators should be **Specific**:

- Representative, describing the state or quality of an issue or subject, giving significant and precise information.
- Clearly and consistently defined, so as to be unambiguous and not lend themselves to various interpretations or to inconsistent results in different situations.
- Robust, well-founded basis in scientific knowledge.

#### The indicators should be Measureable:

- The indicators should have clear units, a scale for measuring, and a target or benchmark that enables to assess the significance of the information;
- Data and indicators should be normalized to make things comparable and provide a basis for comparisons within the EIT Community and with other initiatives;
- The data should be readily collectable, thereby lowering the technical and collection cost.

#### The indicators should be **Attainable**:

• Targets and benchmarks must be set to signify high performance but also be realistic.

#### The indicators should be **Relevant**:

- Tailored to the needs of the primary users (EIT, KICs);
- Have ownership by users;
- The framework of indicators should provide EIT and KIC management direction for actions to improve effectiveness, thus the cause-effect chain from result/impact to measure/activity should be represented by interconnected indicators;
- The logical framework and indicators should match with National and EU policy plans and programmes.

#### The indicators should be **Time bound:**

 The collection and interpretation has clear deadlines that are well attuned to the phases of control, reporting and decision making in the EIT.

Key Performance Indicators should in addition be policy relevant.

The logical framework (figure 2) and the indicators provide in a systematic manner insight in the functioning of the EIT KIC model and its results. The information generated enables the EIT to monitor, assess and measure all activities and to demonstrate its added value for innovation in Europe and for the EU economy. The indicators should take the investments done by the EIT as starting point and relate outputs, results and impacts to the EIT financial contributions ("KAVAS – KIC Added Value Activities").

# Objectives and Scope of Monitoring and Evaluations within the EIT

#### 3.1 Context

Information needs and obligations for monitoring and evaluations are rooted in the EIT Regulation<sup>13,3</sup>, the EIT Financial Regulation<sup>14</sup>, the EIT Strategic Innovation Agenda<sup>15</sup>, the Framework Partnership Agreements

<sup>13</sup> REGULATION (EC) No 294/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 March 2008 establishing the European Institute of Innovation and Technology

<sup>14</sup> DECISION OF THE GOVERNING BOARD OF THE EUROPEAN INSTITUTE OF INNOVATION AND TECHNOLOGY (EIT) of 27 December 2013 on adopting the financial regulation for the European Institute of Innovation and Technology

<sup>15</sup> DECISION No 1312/2013/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 11 December 2013 on the Strategic Innovation Agenda of the European Institute of Innovation and Technology (EIT): the contribution of the EIT to a more innovative Europe

and the H2020 Regulations<sup>2, 16, 17</sup>. Information requirements posed to the EIT lead to information requirements that the EIT puts to the KICs. Annex 1 of this document provides a concise summary of important regulations that underlie information needs or impose monitoring requirements on the EIT and subsequently on the KICs. The requirements are phrased in general terms like:

- Continuous monitoring and periodic external evaluations of the output, results and impact of each KIC. This information is among others used to assess the EU added value of the EIT;
- Performance monitoring of the EIT and KICs;
- Information and evidence regarding Knowledge Triangle Integration and its added value;
- Information on good practices to be communicated to external stakeholders with a view to make experience and benefits of KICs available to a wider public;
- Monitoring to ensure that the principles of sound financial management are met and are effective;

The documents do not elaborate requirements for monitoring and evaluations into detail. As part of its Monitoring Strategy the EIT has to develop a set of measurable indicators and a monitoring, review and evaluation plan that meets specific demands (e.g. for Horizon 2020), and represents and communicates performance and added value in a credible manner at both EIT and KIC level.

## 3.2 Purpose and scope of monitoring and evaluations

In this section, the purpose and scope of monitoring and evaluation within the EIT is elaborated from three closely interlinked perspectives: Strategy, Implementation and Results & Impacts. The information need covers activities of the EIT and undertakings of the KICs. Information on KIC activities is obtained from the monitoring and evaluation programmes of the KICs.

#### 3.2.1. Purpose and scope of monitoring and evaluations – Strategy

## The 'Strategy' perspective

In this document, the notion of strategy entails interlinked substantive and organisational components. The contents of strategy include the establishment of the vision and mission, goals and EIT specific objectives. As part of the monitoring strategy, the specific objectives have to be elaborated into sets of activities and result indicators with targets and baselines. The organisational component of the Strategy includes the development and fine-tuning of the institutional framework in which the EIT and KICs operate.

#### Purpose of monitoring and evaluating 'Strategy'

<sup>16</sup> REGULATION (EU) No 1290/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)" and repealing Regulation (EC) No 1906/2006

<sup>17</sup> COUNCIL DECISION 2013/743/EU of 3 December 2013 establishing the specific programme implementing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) and repealing Decisions 2006/971/EC, 2006/972/EC, 2006/973/EC, 2006/974/EC and 2006/975/EC

Monitoring and evaluation of 'Strategy' have the objective to ascertain that the strategy and components thereof are aligned with the EIT mission and vision, that they are implemented and produce, or have the potential to produce, the desired results and impacts efficiently and effectively.

The object of monitoring and evaluations are the EIT Strategy, the KICs' strategies, and components thereof (e.g. Entrepreneurship Education, Innovation, and Knowledge Triangle Integration).

The results of monitoring and evaluation of 'Strategy' may lead to adaptation or refinement of strategy or the strategic planning, examples including the EIT model for the KICs or components thereof, and may render insight in good practices that can be used for external communications.

#### Approaches used

Monitoring and evaluating the strategy of the KICs takes place in a well-defined procedure. The EIT Governing Board assesses the development and implementation of a KIC's multiannual strategy as well as its contribution to the EIT's overall mission twice per year. This strategic review tracks progress in key areas of KIC's development as identified by the EIT Governing Board during the annual hearings for the allocation of the EIT financial contribution to each KIC. The hearings take place during Q4. After the hearings, the EIT Governing Board may issue recommendations to a KIC on strategic elements to improve key areas and to further develop those elements that make each KIC unique. During Q2 or Q3, the EIT Governing Board assesses the progress made on the recommendations and discusses jointly the strategic direction of both the EIT and its KICs based on a report provided by the EIT summarising the findings of its monitoring and evaluation activities. This meeting forms part of the structured strategic dialogue between the EIT and the KICs.

The strategic assessment examines the integrated portfolio development and management and the integration of higher education, research and innovation in coherence with its multiannual strategy. The information used for the assessments is currently provided by the KIC Business Plans and Costs and Performance Reports and will be complemented in the future by information from the monitoring and evaluation system.

Monitoring of the EIT strategy is coupled to the systematic collection of information on result and impact indicators and possibly context indicators. Assessments will be conducted on topics that are central to implement the EIT specific objectives and that are linked to the (intended) results. Examples include the current Assessments on Business Creation and Education.

Assessments and evaluations are carried out by EIT staff and independent experts applying a mix of desk studies and on-site visits using KPIs and other indicators.

Of particular importance are the independent external evaluations of the EIT and the KICs carried out by the European Commission in the context of EIT Regulation No 294/2008, Horizon 2020 Regulation 1291/2013 and Horizon 2020 Regulation 1291/2013. Such evaluations are planned in 2016 and 2017. The scope of these evaluations is given in figure 4.

- EIT Regulation No 294/2008 calls for evaluations of the EIT. This evaluation shall cover all activities of the EIT and the KICs and shall assess the added value of the EIT, the impact, effectiveness, sustainability, efficiency and relevance of the activities pursued and their relationship and/or complementarity with existing national and Community policies, to support higher education, research and innovation. It shall take into account the views of stakeholders, at both European and national level. The first will be held in 2016.
- H2020 Regulation 1291/2013 calls for the evaluation of the EIT assessing the level of consumption and the efficiency in the use of the funds allocated, the contribution of the EIT and the KICs to the priority "Societal challenges" and the specific objective "Leadership in enabling and industrial technologies", the contribution of the EIT and the KICs to the integration of higher education, research and innovation and the ability of the KICs to integrate relevant new partners where they can provide added value; The first evaluation will be conducted in 2017;
- H2020 Regulation 1291/2013 calls for the evaluation of the EIT and will look at the achievements (at the
  level of results and progress towards achieving an impact, based, where applicable, on the indicators
  outlined in Annex II of the specific programme) of the objectives of Horizon 2020 and continued
  relevance of all related measures, the efficiency and use of resources and Union added-value.

#### 3.2.2. Purpose and scope of monitoring and evaluations – Implementation

#### The Implementation perspective

'Strategy' sets the organisational goals and objectives and sets out the priorities and main lines to achieve these. The Strategy is implemented by the management of EIT and the KICs in such a way that these organisational goals and objectives are attained in an effective and efficient manner through planning, organising, leading, and controlling organisational resources. This determines the scope for monitoring and evaluation of "Implementation".

The definition of monitoring is rather broad so that a variety of activities can be covered by this term. For

#### Figure 4: Evaluations of the EIT in 2016 and 2017

instance, internal control systems invoke a continuous, systematic collection of data and may thus be denoted as monitoring. The design and implementation of such systems are not considered in the context of the EIT Monitoring strategy. Information from internal control systems is, however, utilised for assessing the performance and cost reports to verify the legality and regularity of the financial aspects of the EIT KIC grants implementation, the provision of the deliverables agreed upon and the efficiency and effectiveness of KIC and EIT operations. Within the Monitoring Strategy, attention is paid to conditions that are required to ensure that the flow of such information from the KICs to the EIT is carried out in an efficient manner (see section 4.1)

#### Purpose of monitoring and evaluating implementation

Monitoring and evaluation of implementation has the objective to ascertain that:

- The EIT and KICs can implement performance based management for planning and implementation;
- The EIT and KICs implement activities, accomplish outputs and consume budget according to planning and adjust plans in a timely manner where justified;
- The EIT and KICs respect the basic principles of all applicable EU legal provisions, including good
  governance principles and sound financial management, ensuring that activities are eligible and
  conducted in legal and regulatory compliance and within a robust management and control
  system providing a high level of assurance;
- The EIT management can adopt a continuous quality improvement and adequate risk management approach;
- The KICs are on their way to become financially sustainable as set out in their respective strategies.

The object of monitoring and evaluations are the management practices of the EIT and the KICs and the implementation of activities in accordance with plans.

Monitoring and evaluation of 'Implementation' are aligned with and complement the KICs' annual business plan and corresponding KIC performance and cost reports. More specifically:

- KIC Business Plans describe the implementation of the seven-year KICs' strategy and the planned portfolio of KIC activities for a particular period (typically a calendar year). A KIC business plan includes the operationalisation of the KIC's strategy through for instance, its governance, management and organisational structures; the selection, description, and management of the KIC's portfolio of planned activities. It includes clear targets, deliverables and key performance indicators for each KIC added value activity. The EIT assesses the business plan. The decision on the funding allocation for the activities proposed is based on the business plan assessment in addition to analysis of the past performance and multi-annual strategy. The (amended) KIC Business Plan is the basis for the award of the EIT grant and is annexed to the specific grant agreement. The business plans contain in Annex II the Key Performance Indicators (KPIs), both for the "EIT core KPIs" and "KIC specific KPIs".
- KIC Performance and Cost Reports serve as the primary documents to assess the implementation of the corresponding business plan, the budget and the eligible expenditure of the annual EIT financial contribution. They provide a synthetic but strategic presentation of the implementation for the reference year of the business plan, through 'self-assessment' of executed activities and their results. KIC reports include the values for Key Performance Indicators (KPIs).

The information arising from monitoring and evaluation of 'Implementation' are used

1. To strengthen management processes, i.e. planning, organising, leading, and controlling organisational resources, with a view to improve the functioning of the whole system (e.g. lower error rates, increase absorption rates...).

- 2. To improve the implementation of the EIT model of KICs and KTI;
- 3. To meet and deliver on information requirements for the EIT, for instance those in the context of Horizon 2020;
- 4. To gather information on KIC outputs in view of grant allocations and external communications and dissemination:
- 5. To assess the KICs' progress towards financial sustainability.

The EIT Monitoring Strategy strives to strengthen and optimise monitoring and evaluation of the implementation along three major lines:

- Assessment and improvement of the system of indicators and KPIs. This includes an improved definition of existing KPIs and introduction of new indicators and KPIs (see also Chapter 4).
- A better alignment of the frequency of data collection to information and management needs taking logistical considerations into account.
- Standardisation of data-structures (e.g. budgets) and of the definition of data and indicators;

#### Approaches used

Monitoring and evaluations in the context of 'Implementation' include:

- Continuous monitoring using well-defined indicators according to a fixed schedule in time. The EIT
  Monitoring Strategy includes KPIs and other types of indicators to monitor EIT internal processes
  and Cross-KIC features. The KICs have in addition "KIC-specific indicators and KPIs", the
  development, implementation and assessment of these are a responsibility of the KICs.
  Continuous monitoring includes indicators that track progress in the result chain.
- Questionnaires to measure the degree of satisfaction of KIC stakeholders and/or clients;
- Assessments to improve specific elements in management or in the monitoring thereof. An example of the latter is the 2015 KPI Review.
- On-site visits. Such visits are carried out by EIT staff. Depending on the objective of the visit, external experts may take part (see chapter 4).

## 3.2.3. Purpose and scope of monitoring and evaluations – Results & Impacts

#### The perspective of results & impacts

EU policies become more result-oriented. Horizon 2020 notes that "performance, impact and added value of EU programmes need to be demonstrated in view of tighter budgets and more public attention to the effectiveness of public funding and EU-funded research"<sup>5</sup>. In this context it has been observed that

monitoring and evaluation tended in the past to put an emphasis on inputs and outputs. The current view is that monitoring and evaluations should focus on results and impacts<sup>5</sup>.

The EIT has the task to develop and implement the EIT model for KICs including the concepts of Knowledge Triangle Integration and Co-location Centres into a powerhouse for innovation and entrepreneurship in defined societal themes. The EIT has to demonstrate that its approach adds value and creates synergies with other EU, national and local innovation initiatives, and leads to, or has a credible outlook to lead to, results and impacts in line with its mission.

#### Purpose of monitoring and evaluating results & impacts

Monitoring and evaluating results and impacts have the objective to quantify the performance, impact and added value of the EIT and KICs. To this end, the changes in result indicators are measured and the forces driving the change in result indicators are analysed giving information on the contribution provided by the EIT and KIC interventions. This information is utilised in a broader impact assessment.

The impact of the EIT and KICs cannot be described simply as a sum of changes in result indicators as systemic effects take place. In addition, contextual information may be required. Methodologies for impact analyses are, however, beyond the scope of this strategy.

Information on results and impacts is used to assess the effectiveness of the strategy of EIT and KICs, to adapt strategic planning (if needed) and to provide credible information to external stakeholders.

#### Methodology used

- Results and impacts will be primarily assessed though dedicated assessments. These assessments
  may draw upon all information gathered in the (other) monitoring and evaluation activities and
  may use other information sources;
- Monitoring of results will be carried out by following the annual trend in result and impact indicators and their progress towards result targets.
- Monitoring of context indicators may be included.
- Additional information underpinning the EU added value of the EIT and its KIC model will be gathered. Such information may include:
  - o Information about the further development of KIC outputs after EIT funding will have terminated: career paths of alumni from EIT labelled educational programmes, further growth of start-ups and sales of products and services developed as KAVAs;
  - o Information representing the KIC contributions to the societal challenge the KICs stand for, e.g. climate change mitigation and adaption, sustainable energy etc.

# 4. Organisational and Methodological Aspects

# 4.1. Organisational aspects

In the context of the Horizon 2020, the EU Framework Programme for Research and Innovation, monitoring and evaluation of the EIT is performed by the European Commission. The EIT contributes to the Horizon 2020 monitoring through the submission of reports. Evaluations of the EIT are conducted by the Commission as set out in the EIT and Horizon 2020 Regulation.

As far as its strategic planning and implementation of its triennial and annual work programmes are concerned, the EIT reports to its Governing Board. Within the EIT, the EIT Director is ultimately responsible for all EIT monitoring and evaluation activities as well as for decisions how to follow up on findings and recommendations.

Within KICs, the KIC CEOs are responsible to provide the EIT with accurate inputs to its monitoring and evaluation activities and nominate a monitoring contact point (typically the COO). The KICs are responsible for the timely delivery of comprehensive information required at the designated times.

The following organisational structures between the EIT and KICs will be the basis for the supervision of the monitoring system:

- a) The EIT Director will carefully analyse and subsequently decide on actions to be taken regarding the implementation and potential review of the monitoring the strategy.
- b) At the implementation level, the EIT Forum, which consists of the EIT Director, KIC CEOs and Commission Observer will discuss corrective actions for operational horizontal issues of cross-KIC activities following up findings of the monitoring and evaluation system.
- c) At least once a year, the EIT staff and KIC management will bilaterally review the implementation as well as result & impact level progress with each KIC and propose corrective actions.

The resulting actions from the above monitoring system will feed into the planning and implementation cycle of the EIT and its KICs, including strategic recommendations issued by the EIT Governing Board subsequent to the Annual Hearings with KICs.

The information flow between KICs and EIT will be streamlined. Formats for the reporting of budgets and cost reports will be established or refined.

The EIT will prepare annually, as part of the Business Plan Guidelines for a given year n, a concise document with for year n+1 the information (indicators) to be provided and the timing thereof.

The EIT will incorporate in year n an annual rolling plan of surveys and, following a risk assessment exercise, of Assessments, on-site-visits, and evaluations for year n+1 in the EIT Annual Work Programme (AWP - from 2017 onwards the Single Programming Document). Updates will only be introduced if there is an urgent need and once annually. This plan will enable the EIT and KICs to align the implementation of monitoring and evaluation activities with a view to enhance efficiency.

#### 4.2. Evaluations and Assessments

#### 4.2.1. Organisational aspects

According to article 28 of the new FPA, the EIT has the right to carry out to checks and reviews. The latter deal with "the proper implementation of the specific action (including assessment of deliverables and reports), compliance with the obligations under the Framework Partnership Agreement and the Specific Agreement" (article 28.1). The EIT may carry out reviews directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). In section 2.2. of this document, two types of reviews have been discerned: reviews that focus on particular features of KIC operations and verify proper implementation and compliance, and reviews that resemble evaluations but cover an activity, i.e. a group of measures that form a logic, coherent whole. The latter type is denoted "Assessments" in this document. This paragraph describes how Assessments and evaluations will be conducted. On-site visits are a tool that can be used in the context of both types of reviews. The organization of such visits is dealt with in section 4.3.

The process for Assessments and/or evaluations is designed taking good evaluation practices in large international organisations as example<sup>18</sup>. Such practices include an "Evaluation Department" that has an independent position, mechanisms to protect the integrity of evaluation work by consultants and procedures ensuring that the views of relevant stakeholders are systematically sought. Independence of evaluations<sup>18,19</sup> entail *independence of mind* ("the state of mind that permits the provision of an opinion without being affected by influences that compromise professional judgment, allowing an individual to act with integrity, and exercise objectivity and professional scepticism") and *independence in appearance* ("the avoidance of facts and circumstances that are so significant that a reasonable and informed third party, having knowledge of all relevant information, including safeguards applied, would reasonably conclude (that) integrity, objectivity or professional scepticism had been compromised"). The Development Assistance Committee of the OECD specifies that an evaluation is independent<sup>18</sup> when it is "carried out by entities and persons free of the control of those responsible for the design and implementation of the development intervention". It also indicates that independent evaluation presumes "freedom from political influence and organizational pressure", "full access to information" and "full autonomy in carrying out investigations and reporting findings".

<sup>18</sup> Robert Picciotto, 2008, Evaluation Dependence at DFID. An independent assessment prepared for the Independent Advisory Committee for Development Impact, http://www.wipo.int/export/sites/www/about-wipo/en/oversight/iaod/evaluation/pdf/iadci\_dfid.pdf

<sup>19</sup> The Handbook of International Auditing by the International Federation of Accountants (2003)

Evaluations of the EIT itself are carried out by independent entities along the lines described above (see figure 4). Assessments conducted by the EIT serve internal purposes but may also be used during external evaluations of the EIT and KICs. The Assessments therefore have to comply with good practices developed and implemented by national and international bodies in order to be credible. The EIT may decide to carry out evaluations of individual KICs. The approach to such an evaluation will resemble the procedure outlined here.

In general, the following steps are taken to design and implement an Assessment or Evaluation:

- The EIT establishes a team which typically is composed of three EIT staff members. Care is taken that the team embodies the experience and competences required for a proper elaboration of the Assessment or evaluation;
- The team develops a Terms of Reference (ToR) and sends this for approval to the EIT management. A draft template for a ToR is given in Annex 2.
- External experts and/or a consultancy firm are contracted to carry out the assignment. Prior to
  selection of experts the qualifications and competences required to carry out the assignment will
  be identified. This information has to be included in the ToR. The selection of experts has to take
  place using the qualifications and competences delineated. The experts must be functionally
  independent, i.e. have no connections to the KICs and/or EIT.

#### The EIT assures<sup>18</sup>

- Behavioural independence: the Assessment team and experts are able and willing to set the
  work programme, produce high quality and uncompromising reports and to disclose findings
  without management imposed restrictions.
- Conflict of interest: current, immediate future or prior professional and personal relationships and considerations are not allowed to influence judgments of the Assessment team and experts or create the appearance of a lack of objectivity.

The team lead reports the findings to the EIT Director.

#### 4.2.2. Selection and Planning of Assessments

Assessments deal with coherent groups of measures/actions. Examples include those of Education, Business Creation and Knowledge Triangle Integration. External evaluations of the EIT and KICs are carried out within three years after the entry into force of a new Multiannual Financial Framework, currently implying a periodicity of about seven years. Assessments take place in the years between such evaluations in order to obtain an in-depth insight and understanding of key processes in the EIT and KICs with a view to improve weaknesses and build on strengths. Assessments have an important role to prepare the EIT Community for the external evaluations. The subjects for Assessments are selected based on the following criteria:

• The groups of measures/actions assessed are conducted by the EIT or by all KICs.

- The groups of measures/actions represent sizeable investments or pose high risks if carried out inappropriately;
- The groups of measures/actions are essential for achieving the specific objectives of the EIT outlined in section 2.1.

The EIT Director may decide to evaluate an individual KIC if required by the EIT's Governing Board, if the performance of the KIC gives rise to debates or in the context of the preparation of an evaluation of the EIT and KICs.

#### 4.3. On site visits

On-site visits to KICs may take place:

- In the context of monitoring
  - o To verify specific actions and compliance;
  - To obtain a better understanding of working practices, problems and successes of KICs.
     This contextual information is essential for a proper interpretation of the information obtained though monitoring
  - o To discuss with KIC representatives face-to-face issues with KIC representatives that may arise from assessing business plans or cost and performance reports, or from information gathered through monitoring or reviews.
- In the context of Assessments
  - o To check whether the overall direction of the activities looked at is still the right one and whether they are likely to meet the purpose for which they were planned.

On-site visits to KICs can be conducted by EIT staff and/or by contracted external experts. In all cases, an EIT officer is responsible for the process and contact for the KIC.

Concise plans for on-site visits will be made and provided to the KIC CEOs at least a month in advance. KIC CEOs should appoint a contact point in the KIC to give support in devising and organising the visit.

The plans should include:

- The objectives of the on-site visit;
- The KIC units and the staff (KIC LE, partners) that would be talked with;
- A tentative time schedule;
- A description of the way the information is to be used;
- If relevant: the expert proposed to be involved in the on-site visit. The KIC should verify that the expert has no conflict of interests.

The KIC contact can suggest alternatives and additions. The KIC contact and the EIT officer responsible for the on-site visit should reach agreement about the way the on-site visit is conducted. The matter is brought to the attention of the KIC CEO and the EIT Director if agreement is not reached. The EIT Director decides if the issue cannot be resolved.

The EIT officer should ensure that experts conducting on-site visits are well briefed about the KIC and the subject so that effective discussions can be held.

The EIT officer will ensure that a report of the visit is prepared and that a draft is provided to the KIC(s) for comments within a month after the visit. The report should provide a factual summary of observations, conclusions and recommendations. EIT management will look into the reports and conclude whether any action is required.

A (draft) template for the monitoring report including option for the on-site visits is given in Annex 3.

## 4.4. Surveys

Currently, no information is gathered using surveys using for instance questionnaires. This situation may change if it would be decided to obtain feedback from alumni from educational programmes, from start-ups that have been nurtured by the KICs and moved on, and from important stakeholders.

Questionnaires are considered a tool within monitoring and will be thus managed by the Head of the Monitoring Section within the PAM Unit. Questionnaires should be clear, concise and focussed on well-defined problem statements. The information will be gathered through electronic forms on internet.

# Annex 1 – Information Requirements

The need for monitoring and evaluation follows from:

- General provisions of the EU,
- legal documents and financial regulations applicable to the EIT and Horizon 2020;

A list of important documents and regulations is given along with a concise description of the relevance for monitoring.

Regulation relevant for the EIT	Concise explanation of relevance for EIT with implications for the KICs
Regulation (EU, EURATOM) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (" The EU Financial regulation")	<ul> <li>Provides basic principles to be respected.         Examples: respect for budgetary principles, principle of sound financial management;     </li> <li>Calls for internal control including monitoring of financial management and performance of EIT operations and consequently of KICs.</li> <li>Examples: Article 6 and Chapter 7-Articles 30.1, 30.2, 30.3, 30.4, 32</li> </ul>
Rules of Application (RAP) — Commission Regulation (EC, Euratom) No 1268/2012 of 29 October 2012 on the rules of application of I Regulation (EC, Euratom) No 966/2012 of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union (OJ L 298,26.10.2012, p.1)	See Chapter 6 (Principles of Sound financial management, Article 18.2: arrangements for monitoring, reporting and evaluation, taking due account of the respective responsibilities of all levels of government that will be involved in the implementation of the proposed programme or activity.
	Article 217 calls for "provisions on the monitoring of the implementation of support to financial intermediaries and final recipients including reporting by the financial intermediaries"
	<ul> <li>Article 225.1 states explicitly: In order to ensure the harmonised monitoring of financial instruments referred to in Article 140(12) of the Financial Regulation, a monitoring system shall be put in place by the authorising officer responsible to contribute to the provision of reasonable assurance that</li> </ul>

	Union funds are used in accordance with Article 32(2) of the Financial Regulation
European Governance — A White Paper COM(2001) 428	Elaborates principles for good governance within EU, for instance openness and accountability. Implication: EIT has the obligation to provide information on KICs, their operations and good practices to external stakeholders.
Webpage: Accountability of EU Regulatory Agencies; http://epthinktank.eu/2015/03/03/accountability-of-eu-regulatory-agencies/, includes link to paper Joint statement of European Parliament, the Council of the EU and the European Commission on decentralised agencies (2012)	Director of the EIT is accountable to the Governing Board, to the European parliament and to the Council for the use of the EU contribution through the annual discharge procedure. Performance indicators need to be introduced.
H2020 Framework Programme — Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020) (OJ 347, 20.12.2013, p. 104)	<ul> <li>Calls explicitly for effective performance management, including evaluation and monitoring with performance indicators (comment 46 page 109).</li> <li>Chapter IV deals with annual monitoring of H2020 implementation including EIT and evaluations. (See e.g. Article 31).</li> <li>Monitoring of KICs explicitly mentioned (page</li> </ul>
H2020 Specific Programme — Council Decision 2013/743/EU of 3 December 2013 establishing the Specific Programme Implementing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020) (OJ L 347, 20.12.2013, p. 965).	<ul> <li>171,section business logic)</li> <li>Article 9 on annual monitoring and information on implementation Horizon 2020;</li> <li>Annex 2 specifies monitoring components</li> </ul>
Rules for Participation (RfP) — Regulation (EU) No 1290/2013 of the European Parliament and of the Council of 11 of December 2013 laying down the rules for the participation and dissemination in Horizon 2020 — the Framework Programme for Research and Innovation (2014-2020) (OJ L 347, 20.12.2013,p.81).	<ul> <li>States that participants shall provide any information on their exploitation and dissemination related activities, and provide any documents necessary in accordance with the conditions laid down in the grant agreement.</li> <li>Information shall be made publicly available (article 43-3)</li> </ul>
REGULATION (EC) No 294/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 March	Consideration 11 (page L97/2) states that agreements between EIT and KICs will outline a mechanism for monitoring and evaluation of KIC activities and results;

2008 establishing the European Institute of Innovation and Technology	Article 16 calls for 1) continuous and systematic monitoring and periodic independent evaluation by EIT of all its activities including those managed by KICs and 2) Evaluation of the EIT and KICs every 5 years
	Governing Board draws up criteria and procedures for the financing, monitoring and evaluating of the activities of the KICs;
REGULATION (EU) No 1292/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 amending Regulation (EC) No 294/2008	Consideration 13 (page L 347/174) states the need for cooperation between KICs and EIT and clear principles for monitoring;
establishing the European Institute of Innovation and Technology	Adds article 7a to EIT regulations: EIT should organise continuous monitoring and periodic external evaluations of the output, results and impact of each KIC. results to be reported to European Parliament and to the Council and shall be made public;
	• Monitoring results part of process for allocating financial contribution to KICs (page L 347/179).
DECISION No 1312/2013/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 on the Strategic Innovation Agenda of the	<ul> <li>Section 2.3 deals with " new delivery mechanisms and results-oriented monitoring";</li> </ul>
European Institute of Innovation and Technology (EIT): the contribution of the EIT to a more innovative Europe	• Emphasises the need to set up a robust monitoring and evaluation system for the EIT (page L 347/901);
	Emphasises the monitoring of the quality and consistent implementation of the EIT-labelled degrees by across KICs (L 347/902).
DECISION OF THE GOVERNING BOARD OF THE EUROPEAN INSTITUTE OF INNOVATION AND TECHNOLOGY (EIT) of 27 December 2013 on adopting the financial regulation for the European	<ul> <li>Transposes EU Financial regulation to the EIT;</li> <li>Includes section on use of external experts for monitoring (page 4);</li> </ul>
Institute of Innovation and Technology	Monitoring of performance part of EIT internal control system (page 17).

# Annex 2 – Template for Terms of Reference (draft)

As a minimum, the following chapters should be included in a Terms of Reference

- 1. Title of assignment
- 2. Subject, rationale and context of assignment
- 3. Chapter with specific information on the topic to be reviewed;
- 4. Scope and objectives of the review including elements to be included as e.g. a consideration of efficiency, effectiveness, results and/or impacts;
- 5. A description of methods and information to be used;
- 6. Deliverables and reporting requirements;
  - a. Definition of clear tasks with deliverables;
  - b. General reporting requirements;
- 7. Organisation, meeting and timetable
  - a. Project team including identification of EIT staff and their roles;
  - b. The selection criteria for the experts: qualifications and competences that they should possess;
  - c. Consultation Group: role and composition;
  - d. Planning including inception meeting, intermediate reports and meeting(s), and meeting to discuss draft final report;
  - e. Special requirements (if applicable);
  - f. Timetable including milestones, number of working days per expert and places of work;
  - g. Estimated budget;
- 8. References
- 9. Annexes as appropriate

# Annex 3 – Monitoring Report Form Template

## General information

Type of the monitoring activity	(Participation to a network meeting with experts / field monitoring)	
Co-ordinator of the activity monitored	Name and affiliation of the coordinating person	
Visit date (if applicable)	(Starting date – end date)	
Monitoring Team	(names of team members)	
Persons met/ talked (If applicable)	(Name, Surname, Function, Institution, Town, Country - if many, attach a full list)	
Facilities visited (if applicable)	(Description)	
Place of meeting (if applicable)	(Venue address)	

#### Background and contextualised information

Background information of the monitoring activity should be presented which may be accompanied with relevant statistical information (including the budget of the KAVA) or historical developments in the KAVA or processes to be monitored. This section should not be longer than half a page.

#### Objective

The objective of the activity should be specific and clearly described. For instance, the activity may have the objective to clarify issues arising from Business Plans, Performance and Costs Reports, from monitoring data, or from experts recommendations (preparatory work including internal consultation to be carried out prior to the visit).

#### Agenda (applicable for the monitoring visits)

The agenda for the visit should have been prepared with the KIC representative and given as annex to the report. The agenda of the meeting should be agreed before the meeting.

#### **Findings**

The report should provide a summary of the justified findings and opinion in relation to the objective of the activity.

#### Good practices / success stories identified

Good practices or success stories should be described if discussed and identified

#### Ex-ante/ex-post checklists

Please indicate whether the monitoring activity required ex-ante or ex-post data collection. If yes, please give a brief summary and annex it to the report.

#### Were the objectives of the activity met?

Assess to what extent the objectives of the activity were met. If not fully, what will be the follow up actions?

#### Conclusions and recommendations

Main conclusions of the activity in respect to the areas under consideration.

Preliminary recommendations should be informally communicated to the KIC representatives and followed up afterwards formally.

If applicable, follow up actions need to be described in a SMART manner.

Potential gains/ benefits from the monitoring activity to be identified

#### Follow-up of the recommendations

If applicable, please present the timeline of the implementation and follow up of the recommendations. Recommendations should be addressed to the KIC or EIT Staff. All recommendation addressed to KIC should be sent to the KIC after the final monitoring report is approved by the hierarchical superior (Head of Unit or EIT Director). Recommendation of the final monitoring report should be included in the monitoring follow up database.

#### **Annexes**

Please list all the annexes.

#### Comments by KIC

The KIC is given the opportunity to give its view on the findings, discussions and conclusions presented.

#### Internal distribution of the report (PAM/PAC/DIR)

The list of the EIT staff to address the report should be outlined.

The coordinating officer is responsible to ensure the distribution of the final monitoring report to the relevant EIT staff that can benefit from the knowledge of the visit. All report are copied to the monitoring officer of the EIT.