

# MLE on innovation-enhancing procurement

## Modus operandi



## **Modus operandi – MLE IP**

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# **MLE on innovation-enhancing public procurement**

## **Modus operandi**

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## 1 Context and objectives

To support countries in reforming their research and innovation systems, DG Research and Innovation has set up a 'Policy Support Facility' (PSF) under Horizon 2020, aimed at "improving the design, implementation and evaluation of research and innovation policies". The PSF provides best practice, leading expertise and guidance to Member States and Associated Countries (on a voluntary basis) through a broad range of services to address their specific needs. In this way the Horizon 2020 Policy Support Facility replies to the strong need expressed by the Member States (i.e. ERAC consultations) to offer more customer-oriented services to support evidence-based policy-making.<sup>1</sup>

In particular, this 'Mutual Learning Exercise' (MLE) focuses on Innovation-Enhancing Procurement (IEP). It constitutes a demand-oriented initiative, focused on specific topics of interest related to the development of IEP processes, with a hands-on approach, which is translated into a project-based exchange of good practice based on "learning by doing".

The ultimate purpose of this MLE on innovation-enhancing procurement is to set up an EU knowledge-sharing service on IEP, encouraging mutual-learning, identifying good practices and providing advice in the field. The MLE aims to support Member States in designing, implementing and/or evaluating different policy instruments in relation to IEP. Besides, it is also expected that as a result of the MLE the following goals will be achieved:<sup>2</sup>

- To create a strategic framework for IEP, together with national strategies and action plans for promoting IEP. The framework should contain definitions, goals and indicators, tools and activities as well as roles and responsibilities of actors involved.
- To analyse the need for capacity building, raising awareness on IEP and offering support to contracting authorities.
- To investigate the required financial mechanisms for contracting authorities to undertake IEP.
- To develop a monitoring, evaluation, and impact assessment system of IEP in the Member States and in the EU. This might include proposals of new indicators on (different kinds of) IEP within CIS and the Innovation Union Scoreboard, accelerating the setting of adequate numerical targets.

Summing up, this MLE aims to constitute an effective policy learning tool for participating Member States. With it we intend to provide a peer supported learning based on the experiences participating Member States have gathered in relation to IEP. Hence, the involvement and commitment of Member States is a crucial element in the MLE, as the process will be mainly Member State-driven, and the results (i.e. learning) will be very much dependent on the practice (i.e. good, bad) of IEP at the national level.

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<sup>1</sup> The ERAC consultations refer to the survey carried out among ERAC members made by the European Research Area and Innovation Committee (ERAC) to mark the way forward for innovation procurement by identifying good practices across Europe and proposing ways to promote and implement these. The results of the ERAC consultations to the Member States on Innovation Procurement for year 2015 can be found in the ERAC 1209/15 document published by the European Union the 23<sup>rd</sup> of June 2015.

<sup>2</sup> These goals are described in more detail as Topics A – D at the end of section 2 below.

## 2 Scope and subtopics

*Innovations* are defined here as new creations of economic or societal importance, usually performed by firms. Innovations can be new or improved products or processes. New products (*product innovations*) may be material goods or intangible services; it is a question of *what* is produced. New processes (*process innovations*) may be technological or organizational; here, it is a question of *how* the products are produced. Of great importance, however, is that the new creations do not become successful innovations until they are actually commercialized or diffused (i.e. spread) to a considerable degree.<sup>3</sup> New creations that are not commercialized or diffused in other ways are not successful innovations at all, but prototypes.<sup>4</sup>

*Public procurement* is related to demand and occurs when a public agency or unit (national, regional or local) purchases a product (i.e. a good, a service – or a combination of these, as a system). There are different kinds of public procurement, and their relation to innovation differs radically. A lack of clear definitions of different kinds of public procurement can be quite problematic. It is not only a question of the choice of words. It can also lead to lack of clarity and efficiency in the analysis and in the policy decisions themselves. Thus, it is important to distinguish between different types of public procurement and define them clearly.

The following categories of public procurement have different goals and characteristics and are implemented in different ways by means of policy. The definitions of these categories will be summarized in Box 1 below.

Existing products (“off-the-shelf”) are purchased in *public regular procurement*, and the procuring authority/unit does not, in this case, demand any innovations (new products) from the bidders. Regular procurement may, for example, be the purchase of pens, paper, towels, milk for schools, telecommunication services, cars, etc. In regular public procurement the procuring part normally describes the desired product and its characteristics in the tender documentation. We call this *product procurement*.

A large number of regular public procurements are perfunctorily conducted, i.e. the procuring agency or unit describes the same product as in previous procurements in a routine manner (i.e. path dependency and inertias). These products must obviously be existing ones, since they can be described by the user. They may even be obsolete. If that is the case, qualitatively superior, products (i.e. innovations) may be excluded in the procurement process. A routine of simply describing the previously procured products makes it difficult or impossible for new products (innovations) to be accepted. This is a major obstacle to innovation. You get what you ask for – even if it is an obsolete product.

*Public innovation procurement* culminates in a public agency or unit placing an order for a product (following a process of accurately defining the need in terms that a supplier can respond to) to fulfil certain functions within a given time period, for which a product does not exist at the time of the order. The purpose is to satisfy unmet socioeconomic or environmental needs or to mitigate global challenges. This type of procurement *must* result in some form of product innovation before delivery can occur.

The sub-category *direct public innovation procurement* occurs when the procuring authority/unit is also the (end) user of the product that – at best – results from the

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<sup>3</sup> Innovations which are an accurate response to an unmet need may not be successful in diffusing into the marketplace for many reasons, but are never the less innovations.

<sup>4</sup> This definition is based upon the OECD Oslo Manual (OECD/Eurostat, 2005). This manual is the standard basis for work on innovation within the OECD and the EU – and elsewhere.

procurement. The procuring agency uses its own demand or need to promote an innovation. This is the “classical” case.<sup>5</sup>

The sub-category *catalytic*<sup>6</sup> *public innovation procurement* occurs when the procuring public agency functions as a catalyst, part-financier, and/or knowledge resource for the (end) users, which are represented by a “purchase group”. In this type of public innovation procurement, the need lies “outside” the public procuring organisation, which acts as a coordinator. The procuring agency, although not being the end user of the resulting product, has the task of “purchasing” the new product (i.e. an innovation) “on behalf of” other actors, both public and private. There is a product being sold and bought in the procurement process, i.e. there is a commitment to buy the developed product in a certain number or volume.<sup>7</sup> The agency thus acts as a “catalyst” for the development of innovations for wider use, and not for the direct satisfaction of needs of the procuring organisation. The purpose of conducting catalytic innovation procurement may, for example, be to mitigate global challenges.

Innovations may, of course, sometimes occur “spontaneously” in regular *product procurement*, if the product description is generic enough to include innovations (better products) that emerge anyway. One of the roles of innovation policy is, however, to create the conditions and incentives for the systematic emergence and development of innovations that help address and respond to socioeconomic and environmental needs, both in the present times and in the future. Therefore, innovations may be very much facilitated by so-called *functional procurement*<sup>8</sup> (as compared to *product procurement* – see above).

*Functional procurement* can be defined as the procurement of products by an authority/unit that describes *a function to be performed (or a problem to be solved) instead of describing the product that is to perform the function*. In functional procurement a public agency specifies *what* is to be achieved rather than *how* it is to be achieved. Hence, it is a matter of the *manner* in which a procurement call is set up and the tender documentation is formulated. Needs are translated into functions to which potential suppliers can respond. For example, a process where needs are accurately identified and presented as requirements in terms that suppliers can respond to. It *opens up* for innovation but does not *require* it. Functional procurement is the most important way in which “innovation friendly” procurement can be pursued, i.e. that innovations are not excluded or disadvantaged in public procurement and the conditions and incentives for the systematic emergence and development of innovations are created. However, it should also be noted that a functional tender is not sufficient on its own, but rather it requires a process by which the need is identified, accurately defined and market engaged prior to the formal (functional) tender.

An old product can still be procured (if it fulfils the - functional - specifications). Therefore, functional procurement does not (necessarily) mean innovation procurement. Since an innovation is not required in functional procurement, the risk of failure is smaller with functional procurement than with innovation procurement (which also

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<sup>5</sup> Direct innovation procurement has long been practiced in Sweden and other countries. Several examples are described and analysed in Edquist et al. (2000), Edquist and Zabala-Iturriagagoitia (2012) and Edquist et al. (2015).

<sup>6</sup> This concept as specified here was first formulated in (Edquist and Hommen, 1999) and further developed in (Edquist et al., 2000). There are different definitions of catalytic public innovation procurement around (e.g. in the Dutch SBIR Program), which are not considered here. Sweden has had a long and successful experience of catalytic innovation procurement by carrying out 60 catalytic procurements to date, for example the procurement of a refrigerator not using any freon and using only half the amount of electricity compared to existing ones.

<sup>7</sup> This is a difference as compared to Pre-Commercial Procurement (PCP) to be discussed later in this section.

<sup>8</sup> The perspective on functional procurement has been developed in Edquist (2015 and 2016), partly based on Edquist (2014).

requires functional procurement). In short, functional procurement is regular procurement (since it may result in the procurement of existing products), but it also allows for the procurement of new products (innovation).<sup>9</sup>

An example of functional procurement might be a public transportation agency, or a local government offering to buy a specified maximum decibel level in an apartment building close to a road or railway – instead of describing a noise barrier (e.g. a fence) in the tender documentation. The targeted decibel level can be achieved by suppliers/innovators in many ways (e.g. an earth wall, trees and plants, ‘silent’ asphalt, lower speed - thanks to surveillance cameras, something not yet imagined by anyone, etc.) – and which particular method or device leads to the mitigation of the problem does/should not matter.

Another example can be procuring ambulance services. The call for tenders should not specify where the ambulances are to be placed, but how quickly they can reach the people who need them. The supplier is the one who should make the decision on where they are to be placed to minimize their time to reach the patients and hence, maximize their effectiveness. Thus, one should not specify technical solutions or describe products (including services) in procurement – or even be too precise in the description of functions to be performed or problems to be solved.

*Pre-Commercial Procurement (PCP)* takes place when an expected R&D result or solution is procured by a public agency, i.e., it implies direct public R&D investments (or R&D subsidies). This type of procurement is not intended to lead to the procurement of (non-existing) products in a certain number or volume. A buyer of such a product is not at all involved in PCP. Thus, PCP is not a question of innovation procurement, since a product must be commercialised or spread in the economy or society to be considered to be an innovation at all.<sup>10</sup> PCP cannot be labelled product procurement, or innovation procurement. See Edquist and Zabala-Iturriagoitia (2015) for a comprehensive discussion of why PCP cannot be regarded as innovation procurement.<sup>11</sup>

An innovation is not the result of a PCP process as such. In PCP, research results are bought, not innovations. Such commercialisation is not even *allowed* to be part of the PCP process according to the EU regulations. PCP precludes innovation as a part of the procurement. Indeed, PCP is exempted from the EU procurement rules.<sup>12</sup>

A summary of the definitions of the categories of public procurement focused in this project is provided in Box 1 below. This table might be helpful to overcome the emerging and often unhelpful use of the term ‘innovative procurement’.

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<sup>9</sup> Obviously, functional public procurement can take the form of regular procurement or innovation procurement. Innovation procurement is however always functional procurement. Product procurement can only be regular procurement.

<sup>10</sup> See the first paragraph in this section.

<sup>11</sup> The failure to distinguish PCP from other forms of public innovation procurement is unhelpful when considering the policy frameworks necessary to support any of them.

<sup>12</sup> That this is so has been shown in detail in Edquist and Zabala-Iturriagoitia (2012, 2015) and Edquist (2015).



### Box 1 Types of public procurement addressed in this MLE

1. *Public innovation procurement* takes place when a public agency or unit prepares and places an order for a product to fulfil certain functions within a given time period, but for which a product does not exist at the time of the order.
  - a. The sub-category *direct public innovation procurement* occurs when the procuring authority/unit is also the (end) user of the product that – at best – results from the procurement.
  - b. The sub-category *catalytic public innovation procurement* occurs when the procuring public agency functions as a catalyst, part-financier, and/or knowledge resource for the (end) users, which are represented by a “purchase group”.
2. *Functional regular procurement* can be defined as the procurement of products by an authority/unit that describes a function to be performed (or a problem to be solved) instead of describing the product that is to perform the function.
3. *Pre-Commercial Procurement (PCP)* takes place when an expected R&D result or solution is procured by a public agency, i.e., it implies direct public R&D investments (or R&D subsidies).

The categories 1a, 1b and 2 can, together, be labelled *Innovation-Enhancing Public Procurement* (IEP) since products are sold and bought and buyers of those products are involved. They are all demand-side innovation policy instruments. Category 3 is rather a research policy instrument than an innovation policy instrument in a direct or immediate sense. It should however not be unrecognized that IEP is a process that aims to generate the conditions for the systematic emergence and development of innovations, and hence, its success as a process does not depend on whether an innovation is bought, but rather, that innovations (i.e. their development thereof) are given a fair opportunity in the procurement process. Even if we acknowledge here that a good IEP process will generally lead to some degree of innovation, IEP should however not only be judged on whether innovations are bought, but rather on the integrity of the process as a whole.

Public procurement accounts for 15 - 20 percent of GDP in many EU Member States and for more than 2 trillion euros in all of EU – an enormous sum.<sup>13</sup> Almost all of this is regular product procurement. A small part is (functional) innovation procurement and an even smaller part is functional regular procurement, although the statistical basis in this field is very weak due to the lack of adequate indicators that are firmly conceptually based. As will be indicated just below, functional regular procurement has the absolutely largest potential in enhancing innovations (Edquist, 2015 and 2017).

In principle, all regular procurement can be transformed into functional procurement (which does not mean that it should necessarily be done). The Swedish government took a decision to adopt a National Procurement Strategy in late June 2016. Functional procurement is a very important element in that strategy (Edquist, 2017 and 2016). In

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<sup>13</sup> According to the results of the ERAC consultation (see ERAC 1209/15), the latest estimations for public expenditure on works, goods and services were close to €2.3 trillion in year 2009, equalling 19.4% of European GDP.

the Swedish context, it has been proposed that the proportion of the regular procurement volume (state, county and municipality) to be described in functional terms should increase by five percent points every year over the next five years (Edquist, 2014). For Sweden, this proposal means that functional public procurement would amount to 175 billion crowns after five years (approx. €19 billion). This is actually 5% of the Swedish GDP. How much innovation this would lead to is impossible to say, *ex-ante*. The total Swedish public research budget is about 35 billion crowns per year, i.e. a fifth of the above. This is a viable objective, if the Swedish National Procurement Strategy is implemented in an appropriate way. Measured in economic terms, a transformation such as the one proposed here is an extremely powerful innovation policy instrument (Edquist, 2017).

The main reason for this proposal is that its implementation would release enormous creativity and innovativeness among suppliers – and for the public sector - within a very large proportion of the economy as a whole. The proposed approach would also lead to increased competition, not only among different potential suppliers of similar products, but also among radically different products that solve the same problem. All this leads to a higher quality of the public services (i.e. to innovations in the public sector). Functional public procurement has thus the largest potential to enhance innovations of all kinds of public procurement. This potential has, so far, been harvested to a very limited degree (Edquist, 2017).<sup>14</sup>

Although, PCP is not an innovation policy instrument in a direct and immediate sense, can be followed by, and lead to, innovations in a later stage, for example by the mechanisms (instruments) of public innovation procurement or functional procurement. PCP does not, in itself, lead to innovations, but it can be a precursor to innovation-enhancing procurement. In other words, PCP may be *useful* for innovation-enhancing procurement but it *is* not such procurement.

Similar is also true for scores of other innovation policy instruments that influences innovations, such as other kinds of public R&D support, education, support to entrepreneurship, interactive learning, changes in regulations, public financing of innovations, etc.<sup>15</sup> Hence innovations resulting from innovation-enhancing procurement can be influenced by a large number of innovation policy instruments, including PCP. But there is no reason to consider PCP “closer to” innovation-enhancing procurement than the other relevant policy instruments. If the objective is to address innovation-enhancing procurement in a proper sense, all these other policy instruments cannot be included. If the objective is to address innovation policy in a holistic sense, all or many of them (including PCP) should be included.<sup>16</sup>

It is very important to get it clear in our minds that PCP is *not* a demand side innovation policy instrument, but a supply side policy instrument in relation to innovation. However, PCP is a demand side policy instrument in relation to research, and it may even be functional procurement of research results (Edquist and Zabala-Iturriagagoitia, 2015).<sup>17</sup>

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<sup>14</sup> It is, of course, also very important that other restrictive conditions that prevent small or innovative firms from submitting bids are not included in the calls for tenders. At Region Skåne, which is a very advanced procuring organization in the Skåne region in Sweden, Louse Strand (Director of procurement) calls this an “innovation friendly washing machine”.

<sup>15</sup> The use of the very large amount of innovation policy instruments and how they can be combined with each other are systematically addressed in Borrás and Edquist (2013).

<sup>16</sup> A holistic innovation policy has been addressed in Edquist (2016a) and in several other publications referred to there.

<sup>17</sup> It has to be noted though that there are procurements of research services which do not comply with the exemption rule of the procurement directive. Also, subsidies can be used to orient research towards public/end-user demand. In an evolutionary perspective, this produces variation of which, later on, some solutions may be selected for innovation procurements.

The PCP type of public procurement may also be called “contract research”, which is public R&D financing that is highly problem-oriented and targeted (i.e. a solution to a specific challenge is often demanded). It thus differs considerably from general public R&D financing, or tax deduction that companies in many countries can use for R&D expenditures.<sup>18</sup>

The kinds of public procurement included in Box 1 above should not be mixed up with each other, simply because they are *different*<sup>19</sup>; they have different *goals* and are carried out in different *ways* (and PCP should certainly not be mixed up with innovation-enhancing procurement). Naturally, they can be used and combined in a complementary manner within an instrument mix. Hence, it is important to define the concepts precisely and separate them instead of lumping them together. For analysts, it is important for concepts to be defined precisely so that the phenomena they denote can be clearly understood. For policy makers, clear concepts are important for deciding what they should do, e.g., which goals to set for a certain type of procurement, i.e., what is to be procured and how the procurement is to be conducted.

This MLE will consider the kinds of procurement included in Box 1. Of these, regular functional procurement, together with associated preparatory actions, is considered to have the largest potential.<sup>20</sup>

In particular, the MLE will cover four topics:

#### ***Topic A - Developing a strategic framework for Innovation-Enhancing Procurement (IEP) and Pre-Commercial Procurement (PCP)***

As stated in the results of the ERAC consultation (see ERAC 1209/15), developing a strategic framework for innovation-enhancing procurement and pre-commercial procurement requires that the preconditions for policy development, such as the feasibility, the objectives, stakeholders and the funding, are determined. In order to implement such a strategic framework, it is recommended to work out an action plan for innovation-enhancing procurement with clear tasks and responsibilities, addressing in particular the challenges of the horizontal policy implementation in the ministries and agencies.

Accordingly, the analytical part of this framework will address definitions, goals, indicators, tools and activities as well as the roles and responsibilities of the relevant actors involved. This topic also aims to provide an overview of the current situation in relation to innovation-enhancing procurement in the participating Member States. We aim to share experiences in designing and setting up national strategies and action plans for promoting innovation-enhancing procurement. Features of the innovation systems of the participating Member States, the mix of policies and instruments in innovation policy, the coordination mechanisms to assess the effectiveness of the policies, obstacles to innovation-enhancing procurement and ways of overcoming them will also be addressed.

To address these objectives, the following activities will be undertaken:

- Define the key elements that a strategic framework for innovation-enhancing procurement should have,

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<sup>18</sup> The new “innovation partnership” procedure does not change the above about the relations between innovation-enhancing procurement and Pre-Commercial Procurement.

<sup>19</sup> This is also helpful to overcome the emerging and unhelpful use of the term “innovative procurement”.

<sup>20</sup> In the part enhancing innovation of Swedish National Procurement Strategy, the strongest emphasis is put on functional procurement. Pre-Commercial Procurement (PCP) plays no role in the strategy.

- Investigate the existing co-operation and co-ordination mechanisms (horizontal and vertical) in the innovation policy strategies of participating Member States, and the instrument mixes used in these,
- Provide a taxonomy of Member States according to the degree of evolution of their strategies in the field of innovation-enhancing procurement,
- Provide specific policy recommendations on how to implement the strategic framework for innovation-enhancing procurement according to the degree of homogeneity among these,<sup>21</sup> defining tasks and responsibilities addressing the challenges associated to each group of countries.

### ***Topic B: Capacity building for Innovation-Enhancing Procurement (IEP) and Pre-Commercial Procurement (PCP)***

Innovation-enhancing procurement requires organisational capacities and individual skills beyond the typical professional qualification in public agencies. Consequently, capacity building is an important factor to strengthen public agencies' readiness and ability to initiate and execute innovation-enhancing procurement. Since capacity building for innovation-enhancing procurement addresses a large set of issues, various types of national activities will be considered:

- Overview of capacity building policy initiatives such as:
  - awareness raising campaigns,
  - innovation procurement platforms (face-to-face exchange, e-platforms),
  - central support services/competence centres,
  - target group specific guidelines/training programmes (methods, content),
  - individual assistance for the preparation and execution of innovation-enhancing procurement.
- Review of existing evaluations/(self-)assessments of national capacity building initiatives for innovation procurement such as those mentioned above.
- Review of experiences and skills in specific processes such as:
  - identify “unmet needs”/“problems to solve” and optimize between addressing grand societal challenges, agency’s mission-related needs, investment needs and user needs,
  - scan for new solutions and relevant IPRs / decide IPR-ownership,
- coordinate the distributed responsibilities within an agency (i.e. procurement/ R&D/ budgeting/ top-management) and implement innovation procurement strategies/plans,
- think in terms of total cost of ownership (TCO) / consider co-financing,
- conduct early market engagement / open market consultation,

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<sup>21</sup> As it is widely acknowledged, innovation policy development varies greatly among the EU Member States. While some countries are quite advanced and already have in place dedicated innovation strategies, with their corresponding action plans in innovation procurement, others are lagging behind. Accordingly, it is necessary to create a taxonomy of countries according to their current state of development in relation to innovation-enhancing procurement, so the strategic framework provided by this topic A can be of use to all participating Member States, depending on the degree of sophistication of their innovation policies.

- use non-standard procurement procedures (e.g. functional/outcome based specifications, competitive/technical dialogue, innovation partnership),
- benefit from synergies of joint/co-operative innovation procurement (e.g. cost-/knowledge sharing via collaborative foresight/ market consultation/ tendering),
- set clear key performance indicators for the procurement, assess the risks of not achieving them, consider costs/risks vs. benefits and take care for strong monitoring during the entire process.

### ***Topic C: Financial and mechanisms in support of Innovation-Enhancing Procurement (IEP) and Pre-Commercial Procurement (PCP)***

Dedicated budgets, resourcing, and incentives are considered important features when developing a strategic framework for innovation-enhancing procurement and for undertaking PCP. The results of the ERAC consultation (see ERAC 1209/15) reveal that the contracting authorities of EU Member States are particularly concerned with the provision of financial incentives to undertake innovation procurement. However, this is not merely a concern of Member states. Indeed, the mobilisation of public procurers on the EU level also proceeds slowly.

This topic will review experience in the use of financial mechanisms in support of the adoption and practice of IEP and PCP, for example in resourcing enabling actions and providing incentives, and consider how such can be effectively deployed in support of the overall framework. The following subjects will be covered:

- Overview of experience in the use of financial mechanisms in support of IEP and PCP (practices, successes, challenges etc.),
- Review of existing evaluations of financial mechanisms for IEP and PCP,
- Review of EC financial mechanisms in support of IEP and PCP, for example: Cohesion Policy, Smart Specialisation, Structural Funds, H2020, etc.,
- Identification of financial mechanisms in support of the overall strategic framework (see Topic A).

### ***Topic D – Monitoring, evaluation and impact assessment of Innovation-Enhancing Procurement (IEP) and Pre-Commercial Procurement (PCP)***

Despite the widely recognized potential of innovation procurement, to date there is a lack of evidence to form a basis for policy-making. We do not even know the extent of different kinds of IEP and PCP in the Member States. This is partly because of the unavailability of a firm and structured conceptual basis that can form the basis for the creation and gathering of data. Hence, this topic will aim to create such a basis and start gathering data on IEP and PCP so as to set the basis for a comprehensive evaluation of procurement initiatives to enhance innovation.

The rationale for the inclusion of this topic D lies in that to date, there is limited practical experience on the potential of IEP and PCP, and the main barriers for their effective implementation. As evidenced in the ERAC consultation 2015, on the European level, innovation procurement is included as part of the Innobarometer Survey, the Community Innovation Survey, and the Public Sector Innovation Scoreboard. In this sense, some examples of questions regarding monitoring of procurement initiatives in the Community Innovation Survey and the Innobarometer Survey are: (i) Did your company sell an innovative good or service as part of any public procurement contract you won?; (ii) How important is each of the following customers, whether national or international, for the sale of your innovative goods or services (“other companies”, “public sector organizations”, “individual customers”)?

Even if there is evidence from some countries having started to monitor and assess their procurement activities (e.g. Netherlands, UK, Austria), we are still far from having consolidated a common strategic framework for the practice of IEP and PCP, not only at the national level, but also at the European and regional ones. Similarly, there is not yet enough evidence on the organizational barriers and routines that can prevent or lead to capacity building in public bodies, nor on the financial needs and incentives required for an efficient implementation of innovation procurement initiatives. Finally, we are also far from being in a sound context in terms of evaluation and monitoring, both methodologically and empirically.

The ultimate goal for this topic D is to provide a conceptual framework that sets the basis for the definition of possible indicators on the various components of IEP and PCP. These indicators would stimulate each member state to consider IEP and PCP not only in their public procurement strategy but also in their national innovation strategies and policies.<sup>22</sup> This final topic for the MLE on innovation-enhancing thus will aim to address the following issues:

Discuss the key elements of the procurement process that need to be monitored and assessed (e.g. functional procurement orientation, barriers and routines that prevent/lead to capacity building, financial resources, types of innovation-enhancing procurement implemented, etc.),

Specify the orientation of the indicators that will help to measure the above key elements (quantitative/qualitative), and provide a definition for each of these indicators,

Provide examples (i.e. case studies) that illustrate the usefulness of conducting evaluation exercises and the learning derived from these.

To carry out this Topic D we will have to set a common language according to which the different concepts to be included in the conceptual framework for the monitoring, evaluation and impact assessment of IEP and PCP are defined. As a result, we will first have to distinguish between these three concepts (i.e. monitoring, evaluation, impact). Then we will have to distinguish between a summative evaluation (i.e. measuring a programme's performance), a formative evaluation (i.e. incorporate learning into the implementation of the programme) and the different types of additionality according to which an evaluation can be conducted (i.e. input, output and behavioural additionality).

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<sup>22</sup> We also need to raise a flag here on the potential for misuse of indicators, and the 'you get what you measure' dilemma, which clearly may also influence the measurement of the degree of advancement of IEP and PCP practices.

### 3 Working approach and methodology

The MLE will follow the standard methodology for conducting Mutual Learning Exercises in the context of the Horizon 2020 Policy Support Facility "Mutual Learning Exercise - a new methodology".<sup>23</sup> As a Member State driven and policy challenge-based activity the MLE will promote mutual learning between the participating countries. The participating countries will get together to explore the best ways to tackle the identified policy challenges (i.e. (1) developing a strategic framework for IEP and PCP, (2) capacity building, (3) financial mechanisms, and (4) monitoring, evaluation and impact), acknowledging a need for change in the design and/or implementation of policy instruments and wishing to learn from experiences in other countries. It will take the form of a project-type of collaboration for a set period of time (January 2017 to January/February 2018) with defined resources and goals for each of the four topics discussed above.

Each participating country is expected to gain tailored information and expertise from the MLE, and is also open to other participants to learn from others' experiences. Thus, the project is based on open, frank, and confidential knowledge exchange between the participating countries. All participating countries are expected to participate actively, in a forthright manner, and to collect and synthesise the necessary empirical evidence in a timely manner and provide friendly peer support for the MLE.<sup>24</sup> Member States will also be supported with experienced practitioners so these can share their views on specific aspects that are deemed crucial in each of the four topics discussed earlier. The results of the survey may help in identifying experienced Member States in each of these aspects.

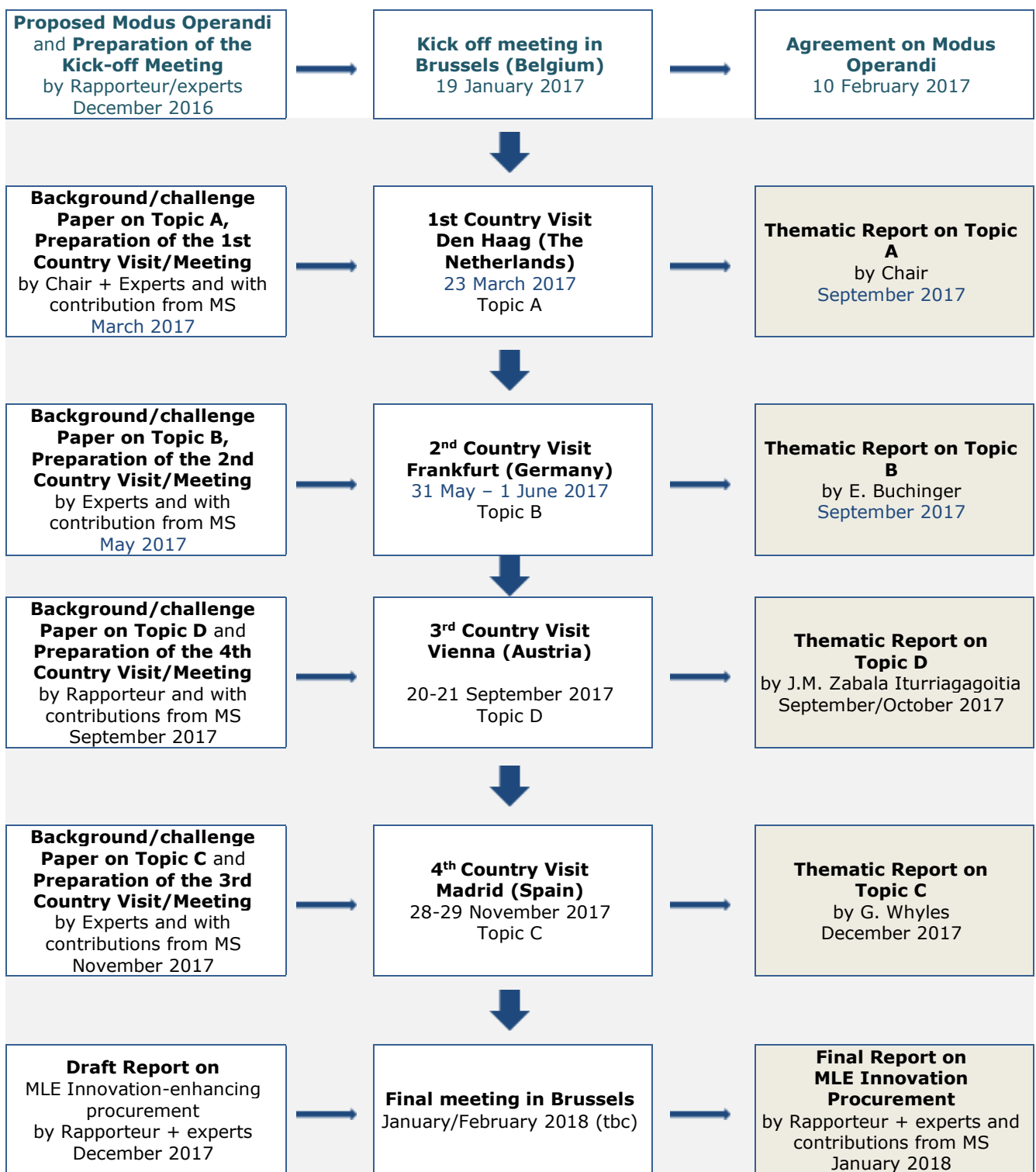
As already stated, the MLE will adopt a hands-on approach following a learning by doing rationale. Each of the four topics discussed earlier will have their corresponding thematic reports, drawing lessons for policy design/implementation/evaluation, which will also be accompanied by a country seminar. These thematic reports will be sent to participating Member States one week before the meeting on each topic, so these can also provide comments on feedback during such meetings. These thematic meetings may last between 1.5-2 days, depending on the topic and the number of presentations (by the host country and other experienced countries), and the time devoted to discussions. The goal is that countries can learn and exchange views on the management of IEP and PCP to the largest extent possible. The final draft of each thematic report will be finally delivered 1-2 weeks after the thematic meeting. These reports will identify good practices and allow for benchmarking processes, and include a set of concrete operational recommendations, lessons learned and success factors as well as barriers based on the gathered evidence. In addition, a final report on IEP and PCP will also be provided as a result of the MLE in which a summary of the main findings is provided, making particular emphasis on the policy implications of these findings. It will contain a policy-oriented Executive Summary.

The following chart illustrates the overall flow of meetings and thematic reports, presenting an overview of the allocation of work among the members of the MLE.

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<sup>23</sup> Mutual Learning Exercises in the context of the Horizon 2020 Policy Support Facility "Mutual Learning Exercise - a new methodology", Terttu Luukkonen, DG RTD.

<sup>24</sup> The specific knowledge interests around the identified policy challenges may vary to some extent between the participating Member States, but they are sufficiently close in order that the process can benefit all participants and that learning is mutual. This process is called peer-supported learning.



One of the milestones of this MLE will take place in the kick-off meeting, to be held in Brussels on the 19<sup>th</sup> of January 2017. Then, besides presenting to the participating Member States the general overview of the MLE process and its structure, the MLE team will have the opportunity to meet the country representatives on innovation-enhancing procurement, who are expected to present and discuss the major challenges, scope and topics/dimensions they wish that the MLE addresses. This focus group dynamic will be organized around a “World Café” with four tables each focusing on one Topic (A, B, C, D). It is regarded as a major step in the MLE as it will provide a general diagnosis of the state of play in relation to innovation-enhancing procurement. On the one hand, this diagnosis will help the Experts of the MLE to make a preliminary assessment of the topics that should be addressed in each of the thematic reports in particular and in the final report as a whole. On the other, it could also help the MLE team to identify a set of good practices from which it could be possible to set benchmarks for mutual learning for each of the participating countries.



Another issue, which still calls for further amplification is the methodology followed to gather data from each of the Member States. As illustrated in the chart above, it is expected to have at least four country visits, one per topic. These country visits should allow the Expert team to make interviews and gather qualitative data about each of the four topics (i.e. how they do what, what they search for, priorities, difficulties they encounter, levers of change, etc.). However, it is also considered that gathering quantitative data (e.g. through a survey to all participating Member States) could provide relevant information that could complement the qualitative information obtained in the country visits. This calls for a preliminary design of the questionnaire that could be included in such a survey. There have already been some experiences in similar exercises in Europe (e.g. UK, Finland, and Austria), so it should be possible to agree on a number of topics to be included in such a survey. The conceptual framework developed in Topic A will provide an important basis for the survey. As indicated, getting first-hand information from the country representatives in the kick-off meeting (i.e. World Café) should set the basis for such a design.

The questionnaire could also be used to capture most information on the four topics outlined above beforehand, so that each thematic paper can be written on the basis of the data collected through the survey. The combination of the information gathered through the country visits and the results of the survey could certainly shed further light not only on the general diagnosis, but also on the identification of good practices and benchmarks for mutual learning, but also for the definition of potential indicators to evaluate and monitor procurement policies to enhance innovation.

#### **4 Distribution of work**

The MLE on Innovation Procurement relies on the work of the following teams:

- The Expert Panel: responsible for the execution of the project and the production of the thematic reports and the final report. It is composed of: Charles Edquist (Chair), Jon Mikel Zabala-Iturriagagoitia (Rapporteur), Gaynor Whyles (Expert) and Eva Buchinger (Expert).
- The Participating countries: Austria, Germany, Netherlands, Estonia, Latvia, Lithuania, Slovenia, Spain, Portugal, France, Belgium, Ireland, Sweden, Norway, Greece and Turkey will participate in the MLE. Each of the participating countries will appoint a sufficiently high-level person with experience and knowledge on innovation-enhancing procurement, providing the necessary resources to contribute, provide data and information as the MLE requires, allotting time to attend meetings and potential country visits, among others.
- The PSF Team: will provide support to the Chair, and be in charge of the operational and logistic tasks in relation to the MLE. It is composed of a Xavier Vanden Bosch (European Commission Policy Officer), Tardos Gergely (Commission Policy Officer), Nikos Maroulis (Framework Contract Manager), Viola Peter (Project Manager), Jari Romanainen (Quality Reviewer), Hywel Jones (English Editor), Patricia Miravete Oñate (Administrator), and Julie Van Mele (Financial Manager).

Despite each of the above participants have been appointed due to their cross-cutting experience, it is still worthwhile deciding on who leads for each of the topics, and hence, who will be in charge of the development of each thematic report/country seminar.

- **Topic A** - Developing a strategic framework for innovation-related procurement: lead by Charles Edquist (Chair).
- **Topic B** - Capacity Building for innovation-related procurement: lead by Eva Buchinger (Expert).

- **Topic C** – Financial mechanisms for innovation-related procurement: lead by Gaynor Whyles (Expert).
- **Topic D** – Monitoring, evaluation and impact of innovation-related procurement: lead by Jon Mikel Zabala-Iturriagoitia (Rapporteur).

In spite of this distribution of work, it should also be stated that all participants in the MLE will be involved and hence contribute equally to all topics. At this stage though, it is not possible to provide an idea of the detailed potential contents of each of the thematic reports, as these will be very much dependent on the actual results of the country visits and the evidence provided by the survey. However, a preliminary idea on the potential contents to be included in each of these thematic reports can be inferred from the description of the tasks made in Section 2.

## 5 Planned schedule

Below it is provided an indicative schedule of the MLE, which is to be further agreed with the MLE participants and the Chair at the Kick off meeting.

Meetings	Who	Date (tentative)
<p><b>Kick-off meeting (Brussels-Belgium)</b></p> <ul style="list-style-type: none"> <li>• The MLE expert team, Chair, Rapporteur, Experts 2 and 3, will set the scene of the project by making presentations on “Innovation-enhancing public procurement”, propose an overall modus operandi, and collect feedback from participants regarding the different topics proposed.</li> <li>• Each Member State will provide a country-specific presentation on main challenges to be addressed and preliminary experiences to be shared during the MLE.</li> <li>• <i>Input:</i> Modus operandi from the MLE expert team (roadmap and work plan including country visits).</li> <li>• <i>Output:</i> Agreement on Modus Operandi (roadmap, work plan, expected outcomes, country visits, workshops, stakeholders’ involvement and distribution of tasks).</li> </ul>	Chair Rapporteur Experts PSF team Active countries Observer countries	January 19, 2017
<p><b>1<sup>st</sup> Country visit (The Hague–the Netherlands) : topic A</b></p> <ul style="list-style-type: none"> <li>• The Rapporteur will present a revised work plan to be validated.</li> <li>• The Chair will present a background/global challenge paper on Topic A – “Developing a Strategic framework for IEP and PCP” with the support of the Rapporteur and Experts 2 and 3.</li> <li>• <i>Input:</i> Background / global paper: main policy challenge and practices and instruments in place in participating countries.</li> <li>• <i>Deliverable:</i> Report of the overall challenge on Topic A – “Developing a Strategic framework for IEP and PCP”: an overview of the overall challenge, together with experts 2 and 3 and with inputs from participating countries.</li> </ul>	Chair Rapporteur Experts PSF Team Active countries Observer countries	23 March 2017
<p><b>2<sup>nd</sup> Country visit (Frankfurt-Germany): topic B</b></p> <ul style="list-style-type: none"> <li>• The Chair, Rapporteur, Experts 2 and 3, participating countries and Commission representatives make an information acquisition and learning visit to a participating country. They discuss about the policy challenges and the</li> </ul>	Chair Rapporteur Experts	31 May-1 June 2017

<p>design, implementation and monitoring and evaluation of the instruments or a policy mix to tackle the challenges, to improve their understanding.</p> <ul style="list-style-type: none"> <li>• <i>Input:</i> Background/challenge paper on Topic B – “<i>Capacity Building for IEP and PCP</i>”, with the contributions from participating countries. The paper will identify the main policy challenge and those practices and instruments in place in participating countries. It may suggest preliminary assessment of their validity and relevance.</li> <li>• <i>Deliverable:</i> Report on Topic B – “<i>Capacity Building for IEP and PCP</i>” with identified good practices, lessons learned and success factors based on robust evidence about the impacts of the measures.</li> </ul>	<p>PSF Team</p> <p>Active countries</p> <p>Observer countries</p>	
<p><b>3<sup>rd</sup> Country visit (Vienna-Austria): topic D</b></p> <ul style="list-style-type: none"> <li>• The Chair, Rapporteur, Expert 2 and 3, participating countries and Commission representatives make an information acquisition and learning visit to a participating country. They discuss about the policy challenges and the design, implementation and monitoring and evaluation of the instruments or a policy mix to tackle the challenges, to improve their understanding.</li> <li>• <i>Input:</i> background/challenge paper on Topic D – “<i>Monitoring, Evaluation and impact of IEP and PCP</i>” with the contributions from participating countries. The paper will identify the main policy challenge and those practices and instruments in place in participating countries. It may suggest preliminary assessment of their validity and relevance.</li> <li>• <i>Deliverable:</i> Report on Topic D – “<i>Monitoring, Evaluation and impact of IEP and PCP</i>” with identified good practices, lessons learned and success factors based on robust evidence about the impacts of the measures.</li> </ul>	<p>Chair</p> <p>Rapporteur</p> <p>Experts</p> <p>PSF Team</p> <p>Active countries</p> <p>Observer countries</p>	<p>20-21 September 2017</p>
<p><b>4<sup>th</sup> Country visit (Madrid-Spain): topic C</b></p> <ul style="list-style-type: none"> <li>• The Chair, Rapporteur, Expert 2 and 3, participating countries and Commission representatives make an information acquisition and learning visit to a participating country. They discuss about the policy challenges and the design, implementation and monitoring and evaluation of the instruments or a policy mix to tackle the challenges, to improve their understanding.</li> <li>• <i>Input:</i> background/challenge paper on Topic C – “<i>Financial mechanisms for IEP and PCP</i>” with the contributions from participating countries. The paper will identify the main policy challenge and those practices and instruments in place in participating countries. It may suggest preliminary assessment of their validity and relevance.</li> <li>• <i>Deliverable:</i> Report on Topic C – “<i>Financial mechanisms for IEP and PCP</i>” with identified good practices, lessons learned and success factors based on robust evidence about the impacts of the measures.</li> </ul>	<p>Chair</p> <p>Rapporteur</p> <p>Experts</p> <p>PSF Team</p> <p>Active countries</p> <p>Observer countries</p>	<p>28-29 November 2017</p>
<p><b>Final meeting (Brussels)</b></p> <ul style="list-style-type: none"> <li>• The Chair and the rapporteur will present a draft of the report of the MLE and discuss it with participating countries and other experts to agree on the findings, experiences and conclusions or recommended ways to tackle the challenges that are the focus of the MLE. They will also highlight possible follow-up initiatives of the MLE, including a discussion on the second sequence of the MLE on Innovation-enhancing Procurement.</li> </ul>	<p>Chair</p> <p>Rapporteur</p> <p>Experts</p> <p>PSF Team</p> <p>Active</p>	<p>January/February 2018 (tbc)</p>

<ul style="list-style-type: none"> <li>• <i>Input:</i> Draft Report of the MLE "IEP and PCP" with contributions of expert 2 and 3 and participating countries.</li> <li>• <i>Deliverable:</i> Final Report of the MLE "IEP and PCP" with identified good practices, lessons learned and success factors based on robust evidence about the impacts of the measures.</li> </ul>	countries	
	bserver countries	

## 6 Reports and deadlines

The table below reflects the reports to be delivered during the conduit of the research, together with the main responsible (i.e. lead) author, and the approximate (i.e. tentative) date for delivery to the MLE members. Deadlines are related to the indicative timetable of sections 3 (see chart) and 5, and would need to be adapted in case of changes in the planned schedule.

Reports	Leading Expert	Deadline (approx.)
Report on Modus Operandi	Rapporteur	Version 1 by 31 <sup>st</sup> December 2016  Final version as a follow up after kick-off meeting (19 <sup>th</sup> January 2017). Amended 22.09.2017
Background/challenge paper on Topic A - <i>Developing a Strategic framework for innovation-related procurement</i>	Chair, with Rapporteur and Experts 2 and 3	By end of February 2017
Final Thematic Report on Topic A - <i>Developing a Strategic framework for innovation-related procurement</i>	Chair, with Rapporteur and Experts 2 and 3	By end of March 2017
Background/challenge paper on Topic B - <i>Capacity Building for innovation-related procurement</i>	Experts 2 and 3 with Chair and Rapporteur	At least 1 week before the 2 <sup>nd</sup> Country Visit
Final Thematic Report on Topic B - <i>Capacity Building for innovation-related procurement</i>	Experts 2 and 3 with Chair and Rapporteur	As a follow up after 2 <sup>nd</sup> Country Visit
Background/challenge paper on Topic D - <i>Monitoring, Evaluation and impact of innovation-related procurement</i>	Chair, with Rapporteur and Experts 2 and 3	At least 1 week before the 3 <sup>rd</sup> Country Visit
Preliminary Design of the Survey	Chair, with Rapporteur and Experts 2 and 3	By End of September 2017
Final Thematic Report on Topic D - <i>Monitoring, Evaluation and impact of Innovation-related Procurement</i>	Chair, with Rapporteur and Experts 2 and 3	As a follow up after 3 <sup>rd</sup> Country Visit
Background/challenge paper on Topic C - <i>Financial mechanisms for innovation-related procurement</i>	Experts 2 and 3 with Chair and Rapporteur	At least 1 week before the 4 <sup>th</sup> Country Visit
Final design of the Survey	Chair, with Rapporteur and Experts 2 and 3	By end of October 2017
Final Thematic Report on Topic C - <i>Financial mechanisms for innovation-related procurement</i>	Experts 2 and 3 with Chair and Rapporteur	As a follow up after 4 <sup>th</sup> Country Visit
Draft Report of the MLE on Innovation-related procurement	Chair, with Rapporteur and Experts 2 and 3	At least 2 weeks before the Final meeting
Final Report of the MLE on Innovation-related procurement	Chair, with Rapporteur and Experts 2 and 3	As a follow up after the Final meeting

For this project, graphic design activities will be restricted to the adaptation of the existing layout for Horizon 2020 publications. All the reports and working documents (agendas, summaries, power point presentations from meetings) for this activity should follow a unique layout for the PSF deliverables (EC Visual identity requirements) and be sent for the approval to the Commission.

## **7 Stakeholders in the process**

The MLE participants considered the potential involvement of other initiatives and exercises arranged by the European Commission to provide additional expertise which may contribute to the learning and purpose of this MLE. They could be invited to participate selectively in specific meetings during Country Visits and/or be consulted by the Experts.

## 8 References

**Detailed references to the wider literature are included in the publications below.**

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Edquist, C. (2014). *Offentlig upphandling och innovation (Public Procurement and innovation – in Swedish)*. Stockholm, Sweden: Konkurrensverket (Swedish Competition Authority) Retrieved from <http://charlesedquist.com/2014/09/12/report-innovation-procurement-obstacles-and-possibilities/>

Edquist, C. (2015). Innovation-related Procurement as a Demand-oriented Innovation Policy Instrument. CIRCLE Papers in Innovation Studies, Paper No 2015/28.

Edquist, C. (2016). Op-ed article in the Swedish daily economical newspaper Dagens Industri entitled "Så kan upphandling förbättras" (Public Procurement can be improved in this way), January 27, 2016. The same text was also published as a debate article in Upphandling 24 under the title "Funktionsupphandling för ökad innovation" (Functional Procurement for Increased Innovation) February, 2016.

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OECD/Eurostat (2005). Oslo Manual. Guidelines for collecting and interpreting innovation data. Third Edition. OECD/European Commission.

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