D.T2.3.1 GENERAL TRAINING PACKAGE FOR TRAINING OF NEW MEMBERS OF THE NETWORK

Version 2

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Project context

The project PPI2Innovate explores how procurement strategies could be broadened and improved to boost and support innovation within Central European countries. The implementation of PPI2Innovate is carried out during the period of 1st of June 2016 – 31st of May 2019 within the frame of EU Interreg "CENTRAL EUROPE" program. It operates as an association of numerous partners from various Central European countries, including partners from Croatia, Czechia, Hungary, Italy, Poland and Slovenia. The project brings together agencies from different sectors (HAMAG-BICRO, CTRIA and RARR)[1], actors from research and development (UNITO, ICT TN, DEX IC)[2] and from public administration (Slovenian Ministry of Public Administration, the Region of Piedmont and local governments of Somogy Country in Hungary and Lublin in Poland). Their shared goal is to improve the procurement of innovation (PPI) within their countries.

Local knowledge is missing for the implementation of innovative procurement, therefore various actions needs to be done by the project partners to reach their overall goal. First, guiding tools for PPI were created and later adjusted to the national frameworks. Second, national and regional competence centers will be created which could contribute to the national capacity building of innovative procurements, to the change of attitudes towards procurement of innovation, and to the better cooperation and networking of actors working in the fields of research and development and public administration.

The project supports PPI in the region with the creation of following products: 3 thematic tools (Smart Health, Smart Energy and Smart Info Communication Technologies) for innovative procurement, customized for the six national frameworks and translated to their languages. The creation of an action plan to organize competence centers. National competence centers intend to involve new members to the network and to transfer the gathered knowledge to them. And a training package.

This present document is a guideline for established national competence centers from the six countries to transfer knowledge to new members of the network. Its primary objective is to build institutional capacities of new members in the practical using of the developed

[1] Croatian Agency for SMEs, Innovations and Investments; Central Transdanubian Regional Innovation Agency; Rzeszow Regional Development Agency

[2] University of Turin; ICT Technology Network Institute; DEX Innovation Centre

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SMART PPI tools from the three different subject areas for innovative procurement. It also aims to support the establishment and sustainable operation of competence centers among new members.

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Structure of the general training package

The present document is structured as followed. The first part provides an overview of training materials and knowledge what should be shared with new members. The second part is suggesting possible training methods and a training session plan for the virtual trainings carried out in the activity T2.3.5.

The first part of the training package builds on the results of previous outputs on PPI, including the PPI Smart Tools and Transregional Study of Institutional frameworks. These are complementary elements of the trainings and should be annex of this document. The training package incorporates the main findings of those documents, since they describe the knowledge what has been gathered within the PPI2Innovate project. In the second part, a short section is dedicated on how to plan a training session. That section aims to emphasize some key points how a training session should be planned, in case competence centres intend to create their own trainings or modify on the suggest training guideline. At the end, a draft plan of a training session will be presented.

The guideline includes take away messages, to highlight the key findings of each section and support the better understanding on that. Take away messages are separated from the text and placed in a blue box.

Last, the author of the present document suggests that the virtual trainings should be carried out by project partners with the use of the present document and the involvement of external trainers is optional. It is suggested because the knowledge gathered in this project is best known by project partners, besides, local PPI experts are missing in many countries or regions of project partners.

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PART 1)

The first part of the training package summarizes the knowledge and experiences that was gathered by far in the PPI2Innovate project. It aims to support the education of new members of competence centres, the future users of PPI methods. This part includes the overview of PPI, the national frameworks for PPI in project partner countries, the Smart PPI Tools in the three thematic fields and the pilot projects of the project. They provide essential inputs for newcomers of the network and are obligatory elements of the training sessions.

1. Introduction

Public procurement is a catalysator of innovation. According to the report of European Union, the "procurement market" is one of the biggest which uses suppliers to satisfy its needs. As a result of its scale, it significantly influences economic growth and competence, employment and jobs, and the general well-being of citizens. Decision-makers realized that procurement should be planned more carefully and with the buying of innovative technologies, devices and services, it can be a helpful tool to reach and meet international, national, regional and local goals and standards of public authorities. Although, in many cases innovative solutions are already available for certain issues, they can not appear in the market due to various factors. To find solution for their own needs and challenges, public procurers should help companies with innovative ideas to introduce their technology, devices or services to the market.

Exploration among the partners of PPI2Innovate clearly showed that even though, special attention is paid to public procurement of innovation and pre-commercial procurement (PCP) in EU and national scale, procurement of innovation in many countries is only in an embryotic stage (for example in Croatia, Czechia, Hungary, Italy, Poland and Slovenia). It is the result of the lack of practical implementation of procurement of innovation in bigger scale and low level of knowledge in regulations and laws of the field. That is why, in the first meeting of the project in Ljubljana, it was agreed to focus only on procurement of innovation and dismisses PCP.

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2. What needs to be shared with new members on PPI?

This chapter intends to summarize the knowledge which has to be shared with new members of the competence centre. The chapter does not aim to fully cover all the knowledge and experiences which was gathered during the project. It rather has the purpose of providing a framework of what has to be included in the trainings, thus the chapter builds up accordingly. First, it starts with the answering of some basic questions of public procurement of innovation, then continues with presenting the main stages of procurement and related take away messages and notes.

What is the importance of public procurement of innovation? PPI is an essential tool to boost innovation and support innovative companies. According to the report of DG Growth, public procurement expenses reached the 13,1% of the total GDP of the European Union. Considering the scale of the "procurement market", it plays an important role in economic growth, employment rates and the creation of jobs, economic competence and in the general wealth of the society. That is why, some decision-makers realized the importance of procurement to foster innovation, share the risks of development and implementation, and to invest in new technologies or services. Procurement might help companies – in this case companies dealing with innovative ideas –, to strengthen their economic position, competence and effectivity and bring their product to the market.

Innovation is an important factor to cope with the challenges from various sectors, such as health care, energy production and saving, transportation and communication, safety, environmental protection and global warming. These areas are prior for political decision-makers, because of national or international expectations, directives and regulations. Innovations for solving issues related to these sectors might already exist in the market in small volume (public procurement for innovation), or it has to be developed from research and development bases (procurement before market implementation).

Public authorities can boost innovation from the demand side, and the implementation of innovation might contribute to the increase in quality and long term stability of public services.

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To stimulate innovation, public procurement agencies should plan carefully how to support innovation on the market, and encourage the industry to invest in new knowledge, devices and research and development. Thus, procurement strategies focusing on the use of innovation contribute to the better quality of services of authorities, and it also helps companies to appear in the market and secure their positions which result in win-win situation for both parties.

Box 1. Main characteristics of PCP and PPI:

Pre-Commercial Procurement:

- It aims to link innovation from research and development to the needs of authorities
- PCP compares and validates solutions from different producers before they would implement their products in the market
- It helps innovations triggering changes in medium or long-term, but not effective for short term adaption
- PCP can be achieved through national, interregional, regional and local cooperations, depending on the size of the project, on its complexity, and on the available resources

Public Procurement of Innovation:

- PPI is usually utilized when a problem has to be solved with an already existing innovative tool or service, which does not require further research and development – it is ready for market implementation
- PPI does not buy innovation that needs further development
- PPI aims to close the gap in service quality among market users and the local authorities
- PPI supports technologies to appear earlier in the market
- PPI is effective in sectors or market segments where a great deal of the procurement comes from public authorities – transport, healthcare, energetics and informatics
- PPI can be achieved through national, interregional, regional and local cooperations, depending on the size of the project, on its complexity, and on the available resources

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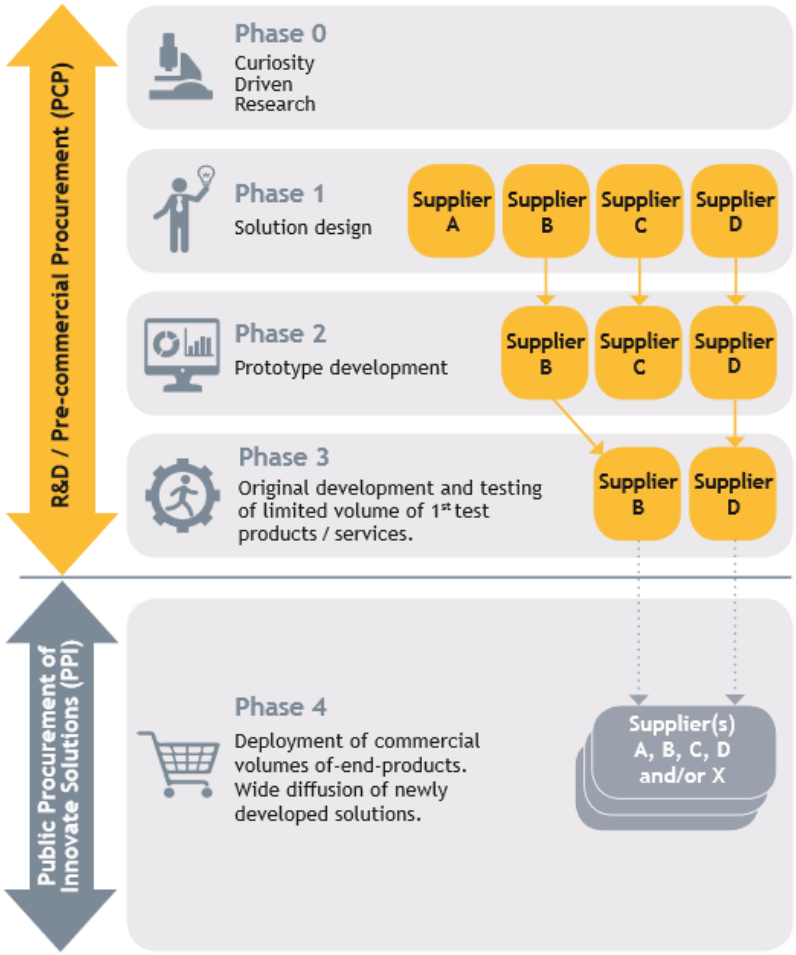
How public procurers can act as supporters of innovation? There are two types of procurement strategies which can support innovation: pre-commercial procurement (PCP) and public procurement of innovation (PPI) (Box 1.). Figure 1 captures the difference between the two approaches. PcP is the procurement of a product which is in the first phase of its life-cycle and requires co-working on the product with the producers. While PPI is procuring and existing or a product which will be fully-developed by the supplier, and the procurer's only role is to buy the prepared product. These procurement strategies differ significantly in their logic behind.

Figure 1 Difference between PcP and PPI



Source: SMART PPI tools

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Both procurement strategies are equally important in supporting innovation and have their benefits. Although, the present document and the training will focus only on PPI. The following Box 2. summarizes the two strategies from this perspective.

Box 2. Benefits of PCP and PPI:

Pre-Commercial Procurement:

- Mutual learning of partners
- Development of products that better meet the procurers needs
- Reduction of risks for miss-specified tender
- Shortening of the time-to-market phase for companies
- Improvement of the overall quality and efficiency of public services
- Facilitation of access of SMEs

Public Procurement of Innovation:

- Authorities as first buyers of the innovation signal to the market the new technology
- Authorities find solutions for their problems, and might improve cost efficiency
- Improvement of the overall quality and efficiency of public services
- Suppliers have the chance to apply research outcomes and commercialize their ideas, it also helps them to better understand the public sector, its challenges and priorities

What are the main barriers for effective procurement of innovation? Although, European institutions made steps to create the legal and financial background for public procurement of innovation various issues halt the spread of PPI strategies (Figure 2). First, public authorities have lack of experience and knowledge with PPI. This results in the fact that procurers tend to avoid risks through buying innovative services or technologies from suppliers who they already know and have experience with. This effects against the aim of PPI, which goal is to support new companies to strengthen their position in the market. Besides, public authorities do not support enough the use of PPI or PCP strategies. Another problem is that public procurers are not aware of new technologies and market developments, and have little knowledge on these issues. Procurement is usually considered as a financial administrative task, and not regarded as a tool to reach wider

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policy aims. Furthermore, procurement markets are fragmented, thus it is hard to reach the critical mass that would sustain market attention.

Figure 2 Main barriers for public procurement of innovation

Editing: Csaba Bende, 2018; Source: SMART ICT Tool, 2017

How to find solutions for the above mentioned problems? To resolve these challenges or barriers, the following points should be considered (Box 3.):

Box 3. It is important to keep in mind during the PPI process:

- Clearing roles and responsibilities with the involvement of public authorities, public officers and end users, who might identify the needs and stimulate innovation
- Creation of a coordinating entity is useful since they provide help in identifying PPI sectors, creating innovation plans and support during the project, communication with the suppliers and support knowledge sharing and networking
- Creation of a certification system for purchasers of innovative solutions, and rewards

2.1. Key factors of a successful public procurement of innovation (PPI)

This section aims to provide a brief overview of the knowledge which was gathered in the three smart toolkits in different fields of procurement of innovation. This knowledge is the core of the training package which has to be shared with the future members of the networks.

To have a successful procurement for innovation it has to be planned thoroughly. Thus, it is suggested to divide the entire process of PPI into 5 main steps. First, procurers need to carry out some fundamental activities which will define the framework and structure of the entire project. These are the preliminary activities (1). Second, procurers need to identify what they need to obtain in the market. What kind of innovation they demand, and when. This is the phase of identifying the needs (2). Third, communication with the market players is a must. It has to be done in advance and should involve clear ideas what and when the procurer needs. This phase is called preliminary injunction or PIN (3), which is simply the market consultation. Forth, tender documents should be published and the right candidate should be awarded with the procurement. This is the phase of implementation of the tender documents and contract awarding (4). After contracts are signed, procurement should be implemented and executed (5).

This chapter will discuss all the first four steps of PPI in the followings. It only aims to show the main conclusions from each step, which can be considered as a simple abstract of the learnt knowledge on procurement.

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Box 4. Take away message on preliminary activities:

- Overview, whether national or local innovation strategy exist. If yes, main policy goals has to be collected
- Measure what is the potential of certain sectors (health, energy, ICT…) in reaching the policy goals and define the role of innovation in these sectors
- Define the needs of suppliers and end-users with certain methods. One can use bottom-up, top-down, or mix approaches
- Prepare guidelines for using public procurement for boosting innovation and to reach the policy goals and identified environmental, social and economic issues
- Identify key success factors – such as engagement of actors to the project, responsibilities, technical and financial support etc.
- Set up a project management team. It should include a good project leader, groups responsible for financial and legal issues and expert from procurement. It is essential to have trust and continuous staff.
- Boundaries should be clarified. It means that available internal and external finances should be checked. If finances are scarce, it is advised to participate in national or international network. Besides, overviewing the capacity and availability of the suppliers is necessary.

2.1.1. Preliminary activities

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Box 5. Take away message on identifying needs:

- First, the need for procuring innovation has to be identified. It has to be done in advance and precisely to be capable of understanding the needs correctly.
- Identifying the needs can be done with the use of various methods, for example Voice of the Customer or WIGBI (Wouldn't it be great if…)
- It is important to have open and effective communication with the suppliers, and they have time to react to the needs of procurers.
- Describing of the needs have to be precise and clear for suppliers. In addition, it has to be clear as well, when the procurement will be initiated.
- After identifying and describing the needs, procurers has to overview the best available practices and products for procuring innovation. They might overview the existing literature on the certain issue or hire experts to do that. In some cases, professional interviews might help to get more conscious about the newest available innovations.
- Cost-benefit analysis might be useful as well. It's important since it clarifies whether there is enough economic reason for starting the procurement or not. It also defines key factors for organizing the procurement. Its main role is the provide information on the projects effectivity.
- The technical specifications in terms of functional and performance requirements generally allows that the objective will be achieved in the best possible way (offering the opportunity not to pre-define technical solutions but, at the same time, allowing for anticipating the expected outcomes). Functional and performance-related requirements are appropriate means to favour innovation in public procurement. The functional and performance-oriented description of needs helps in outlining an innovation life-cycle cost method that considers the cost and benefits of the innovative solution over its entire life-cycle.

2.1.2. Needs identification

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Box 6. Take away message on market consultation or preliminary injunction (PIN):

- It is a “dialogue with the market” and means interaction with various actors, including suppliers, experts, advisors, end-users and others who are related to a certain sector.
- It aims to gather information on demands, solutions, development plans and research and development.
- It is also a tool to inform the market about our needs for procurement. Informing might be possible through PIN or in industrial magazines, websites, forums, workshops, and conferences.

2.1.3. Market consultation

2.1.4. Implementation of the Tender documents and Contract Awarding

Box 7. Take away message on implementing tender documents and contract awarding:

- Procurers need to choose the appropriate procurement strategy. When choosing the strategy several factors need to be considered – level of knowledge on the market; availability of research and development; defining of technical criteria; number of potential suppliers and market structure; timing and finances.
- Four main procurement strategies can be differentiated, open, restricted, negotiated and competition dialogue.
- Procurement notices need to follow the European regulations. It defines the object of the agreement, technical aspects, exclusion criteria, selecting criteria and plan of agreement.
- The aim of the selecting phase is to choose those suppliers who can manage the task. While in the evaluation phase they evaluate the best offer.
- Rewarding of a supplier has few basic guides. The lowest price wins or the most economically advantageous tender (MEAT). However, in case of PPI it happens that the lowest price is not possible, since it does not contain innovation.
- Evaluating of the suppliers starts in the implementation phase and it has to fit to the original offer.

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2.2. Transregional study of institutional frameworks

After overviewing the basic principles of procuring innovation and what are the steps of carrying out PPI, it is necessary to understand the national legal frameworks. The policy frameworks provide the context within which the procurement should be done.

The PPI2Innovate project aimed to discover policy frameworks and state-of-the-art of PPI within project partner countries. As a result, an output document has been created. The document is based on the answers of project partner countries and shows the situation of policy frameworks, regulations and directives in 2017 within project partner countries. New members of the network should overview the document to understand within which structure procurement of innovation can be done in their country. The document is an obligatory element of the training, it is available on the projects website[1] and is in the annex of this training package and training session.

2.3. Smart PPI Tools

The PPI2Innovate project put special focus on some key areas where innovation can be supported by procurers. These are the fields of Health, ICT and Energy. As a result, thematic guidelines were prepared and translated to the national languages of the six project partner countries. They aim to support the knowledge transfer within Central Europe. These tools are essential manuals for those who are planning to carry out PPI. Therefore, it is an obligatory part of the training package. These manuals are available on the project website[3] and are in the annex of this document.

2.4. PPI2Innovate pilot projects

2.4.1. Pilot action of Lublin, Poland

The local government of Lublin initiated its pilot project in the field of SMART Energy. Their idea was to execute a project for a mini-amphitheater where innovative lighting solution would be created in the John Paul II. Park, in South Czuby District (Figure 3). The

[3] https://www.interreg-central.eu/Content.Node/PPI2Innovate.html#Publications

park is relatively big (circa 22 ha) and is surrounded by approximately 44 thousand inhabitants. It functions as a meeting place of the local society, concerts, dance shows and other events are organized regularly. The innovative lighting solutions are not deployed on a large scale in the city and by Municipality. Emerging technologies of innovative lighting solutions in Lublin and in Poland received greater interest in recent years, but still rarely implemented. The lighting solution is in the phase of tests by one of the companies taking part in market consultation, not implemented in the market until now. Therefore, the project will resemble to clear PPI method, since the procurer will support a company which is before appearing on the market with its product.

Figure 3 Park Jana Pawła II in Lublin

Source: https://dlalublina.wordpress.com/?s=jana+paw%C5%82a

In the procuring process, they have used the PPI2Innovate tools which guided them step by step through the different stages. They overviewed the Polish institutional frameworks of procurement of innovation with the help of the study on national framework. The tools helped them to create a detailed description of the investment from the original idea what they had before starting the pilot.

2.4.2. Pilot action of Somogy County Government, Hungary

The pilot project of Somogy County Government deals with innovative procurement in the field of SMART Health. They cooperate with the Kaposi Mór Educational Hospital of Somogy County (Figure 4) to procure innovative, intelligent medical devices for monitoring and healing patients suffering from cardiovascular diseases.

Figure 4 Kaposi Mór Educational Hospital

Source: https://www.doki.net/tarsasag/ortoped/hirek.aspx?&nid=82389&cid=32

As the first step, they have identified the need and set a goal for implementing SMART Health devices. One of the leading causes of death in Hungary are the cardiovascular diseases, including stroke and heart attack. It is the direct outcome of high blood pressure, high level of cholesterol, overweight and diabetes. These risk factors are usually divided into subgroups in the treatment and curing process, however, a holistic approach would benefit the patient. Complex treatments of patients is only in embryotic stage among Hungarian general practitioners, but among specialists it is almost not existent. Unfortunately, in the Hungarian healthcare system patients are put on a waiting list and it might happen that the described expertise is not valid any longer when they reach the next specialist for treatment. This leads to unnecessary revisions of patients and to extra costs.

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In the second step, they have identified possible solutions for this problem. They vision complex treatment regarding the curing of cardiovascular diseases. This complex treatment would include complete diagnostics and the implementation of the therapy, besides, it would also serve as a data collection for research purposes. To carry out the complex curing, human resources and space requirements are available at the hospital, only the technical background and equipment are needed.

In the innovative procuring process, they prepared tender documents for procuring special medical devices. These devices are common in todays healthcare. In addition, they would include the personal devices – smart phones – of patients to data collection as well. The results collected would be evaluated with the high-speed computers obtained from the procuring. The innovative idea was to maintain and operate the overlinked system through a newly developed software of the winner supplier.

The innovative procurement of SMART Health will contribute to the better and cost-efficient operation of monitoring systems, to the provision of better healthcare services and would lead to time saving. The collected data and analysis of the results will support decision making of policy makers. The implementation of these devices would also mean a shift from hospital-based treatments to the provision of citizen oriented, personal services.

2.4.3. Pilot action of Piemonte Region, Italy

The Piemonte Region in Italy deals with the implementation of a SMART Energy pilot project. The site for the project is the REA Experimental Botanical Garden (Figure 5).

The Botanical Garden is located in the province of Turin and has long historical background. It was founded by an enthusiastic botanist in 1967. He created the garden with the intention to carry out the acclimatization of Alpine and Herbaceous perennial plants in the area. He experimented with new hybrids for ornamental plants, thoroughly explored Val Sangone searching for rare or little noted plants. In 1989 the Garden was purchased by the Regione Piemonte and became incorporated into the Museum of Natural Sciences of Turin. With the renewal of collections and the broadening of activities, the significant past of the Rea Botanical Garden was fully restored and, by using the tools of

modern museology, now offers a significant means for botanical research, teaching and dissemination. Over 2000 types of plants from all over the world are cultivated in the Rea Garden. The collection of wild Piemonte plants has been considerably increased in recent years, particularly for the study and reproduction of rare species. Many of these plants are located in heated greenhouses.

Figure 5 The REA Experimental Botanical Garden

Source: https://www.facebook.com/Rea.Giardino.Botanico/

The primary goals of the pilot project were to reduce drastically the utility costs of the greenhouses in order to overcome the financial restrictions set by the public administration and to create a self-sufficient energy system based on natural resources. The project also aims to increase the security and safety standards of the site, since it accepts visitors in all season. As a public institution, it provides various activities for visitors, mostly educational events. They believe, the implementation of the project will support the Sangone Valley territory's economic and social life and will raise its environmental quality.

The pilot project is innovative because of several reasons. The energy system of the garden sites will be based on natural resources. The process of implementing the energetic improvement integrates different aspects, such as energy efficiency results and botanical, engineering, educational opinion. It is crucial to do it, since the garden site continues to be an experimental site, therefore a complex approach is needed in the development. In addition, they completed the various approaches with territorial aspects, as they expect to have effect on the entire Sangone Valley area.

The procurers identified two main challenges for the project. First, they believe it is important to strengthen the relationship between local communities and the decision-makers from the Piemonte Region. Second, to procure technologically advanced and innovative solutions available on the market.

2.4.4. Pilot action of Ministry of Public Administration, Slovenia

The Ministry of Public Administration in Slovenia carries out procurement of innovation in the field of SMART Info-Communication Technologies. The objective of public procurement "Semantic analyzer research and development" is to develop the tool for semantic analysis. Semantic analysis will be used as a device for establishment and maintenance of Controlled Central Metadata Dictionary (Centralni nadzorovan besednjak - CNB ontology). Semantic analysis input data are: legal texts, open metadata, reporting formats, formats for procurement of services, data sources and core data models. The goal is to develop tools for metadata analysis in dictionaries and vocabularies with graphical display. The tool will be used by system operators when managing the dictionaries and vocabularies and also by legislators, when evaluating metadata and finding possibilities for simplifications and clarifications.

During the pilot project, they have identified two main challenges that they needed to face with. First, they need to follow the organizational structure and internal rules of the Ministry, when they perform actions within the pilot. Because of the structure and rules of the Ministry, they can not include external experts. Due to their limited capacity and lack of access to external experts, it is hard to manage their daily work and tasks from the project and the pilot. Second, the overview of good practices in the guidebooks were not

time efficient for them, thus they needed to switch to learn from good practices carried out within the Ministry.

2.4.5. Key lessons learnt from pilot projects

Box 8. Take away message from PPI2Innovate pilot projects:

- The case of Lublin pilot project shows that the developed manuals for PPI has the potential to practically adapt them and follow it as a step-by-step guide. Besides, continuous communication with future users increases the acceptance of their PPI project
- The case of Somogy county's pilot shows that in many cases not just the procured products can be innovative but the creation of a new approach in management – in this case the management of the curing process – can be innovative as well
- The case of Piemonte Region pilot project has similar message to the one from Somogy county. Approaches can be as innovative as products
- The pilot action of Ministry of Public Administration in Slovenia shows an example of implementing new procuring procedure within a solid administrative structure. They have identified as a main challenge to find possible ways for PPI within the already developed legal and policy background. Besides, an important help was for them to overview similar actions carried out within Slovenia to tackle the barriers

PART 2) METHODOLOGY

The second part of the training package provides an overview of training methods to support the work of trainers. It starts with a description of learning process, then continues with how to develop a training session and last, it includes various methods that can be used to share and transfer knowledge with newcomers of the network. In general, the second part aims to provide relevant help in how to organize and carry out effective training sessions.

3. Methods for training new members of the network

This chapter aims to introduce the reader of the guidebook to the methods for the training of new members. It primary aims to outline a possible training session scenario, which could be used by project partners to carry out their own trainings on PPI to attract new members to the network. However, the present chapter also introduces some basic principles on learning, to inform partners and future training organizers how knowledge can be transferred effective to trainees. Then this chapter also provides a brief overview of how to plan a training session, which might be also useful for future trainings organized in the competence centres.

3.1. Introduction to the basic principles of learning

To have an effective training session, it is essential to know how people learn. This section aims to provide a short overview of the topic including a key theory on learning and facts about experiencing and learning.

First, it is important to note that learning process includes most of our senses, from tasting through smelling to seeing. Humans experience through sight in 83% of the cases, while only 11% through hearing. The remaining 6% can be divided between smelling, touching and tasting (Sayers, 2006). Thus, it is important to note that an effective training has to build mostly on visual or on the combination of visual and audial components.

Although, experiencing relies mostly on eyes, if we aim to teach individuals, it is important to know which ways of learning are the most effective. People learn in many different ways, but according to scholars (IOSH, 2014), learning is the most effective when it

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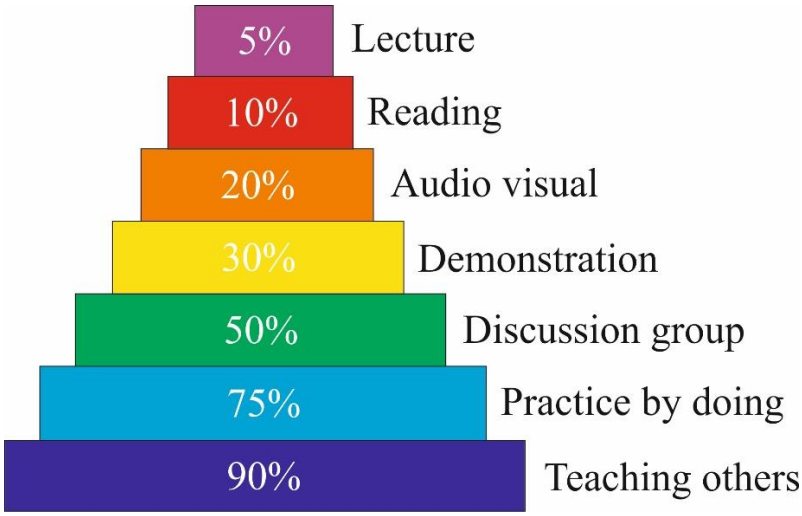
involves different methods, it is interactive and entertaining. The best way to teach people is to involve them in teaching an put them into practice (Figure 6).

Figure 6 How people learn the best



Editing: Csaba Bende; Source: IOSH, 2014

It is useful to overview the theory of experiential learning. The theory was developed by Kolb (1984), who researched the learning process of individuals (Figure 7). One of his examples to explain the learning process of certain individuals is the way how we learn to ride a bike. This example clearly illustrates the four-step experiential learning model. In the stage of "*concrete experience*", the person intends to learn how to ride a bike and physically experiences the bike in the "here-and-now". This experience forms the basis for observation and reflection and the learner has the opportunity to consider what is working or failing. Thus, the learner has a reflection on his first experiences and observations on the issue. This is the second phase, "*reflective observation*". The learning process also includes the stage in which the learner thinks about possible ways to improve on the next attempt made at riding. This is the stage of "*abstract conceptualization*". Every new attempt to ride the bike is informed by a cyclical pattern of previous experience, thought

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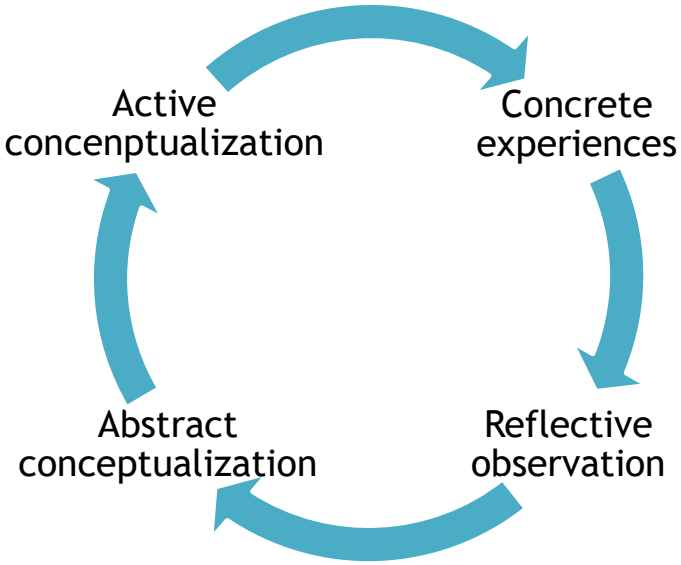
and reflection, which is the "*active experimentation*" (Kolb, 1984). To summarize, learning is the outcome of personal experiences, reflection on the gathered experiences, thinking over the issue and active experimentation.

It is important to note that experiential learning can exist without a teacher and relates solely to the meaning-making process of the individual's direct experience. However, though the gaining of knowledge process occurs naturally, but an original learning experience requires certain elements. According to Kolb (1984), in order to gain knowledge from an experience, the learner must have four abilities:

- The learner must be willing to be actively involved in the experience;
- The learner must be able to reflect on the experience;
- The learner must possess and use analytical skills to conceptualize the experience;
- The learner must possess decision making and problem solving skills in order to use the new ideas gained from the experience.

Figure 7. David Kolb's cycle of experimental learning



Source: Kolb, D. 1984

Box 9. Take away message on learning:

- Experiencing is mostly based on visual components of sensing, although audible elements are important as well
- Learning is a complex process which is the best described by the theory of experimental learning. Accordingly, learning is a process based on personal experiences, reflection on the experiences, creating new ideas how to improve and trying again.
- A successful teaching method combines visual, audible and practical ways of teaching. Learning is the most effective if the learner needs to teach what he or she has already learnt.

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3.2. Developing a training session plan

This section will provide an overview of how to plan a training session. Although, the general aim of the present toolkit is to provide one, and not to describe how a training should be planned, I believe it is necessary to include it. The reason why it is useful is complex. The followings might show a possible way for future Competence Centres to plan other trainings or make modifications on the already existing one. If that is the case, then what should be the priorities and what is a must to consider. Furthermore, it might help partners to evaluate the present document and start a discussion about training methods.

To organize an effective training session, it is essential to plan it carefully. Without detailed planning, it is possible that the training needs to miss some elements of it or shorten lectures and activities. Obviously, if this is the case, it is possible that people attending to the training might not learn what you wanted them to learn or they will feel unsure about the knowledge and information what is received, if they see you unorganized. That is why a training session plan is needed.

What is a training session plan? It is an organized description of the activities and resources trainers or organizers of the training use to guide a group towards a specific learning objective. It details the subject matter that they teach, how long each section should take, the methods of instruction for each topic covered, and the measures they use to check that people have learned what they needed to learn. It can be as simple as a brief outline, or more complex, with scripts, prompts, and lists of questions that you plan to ask.

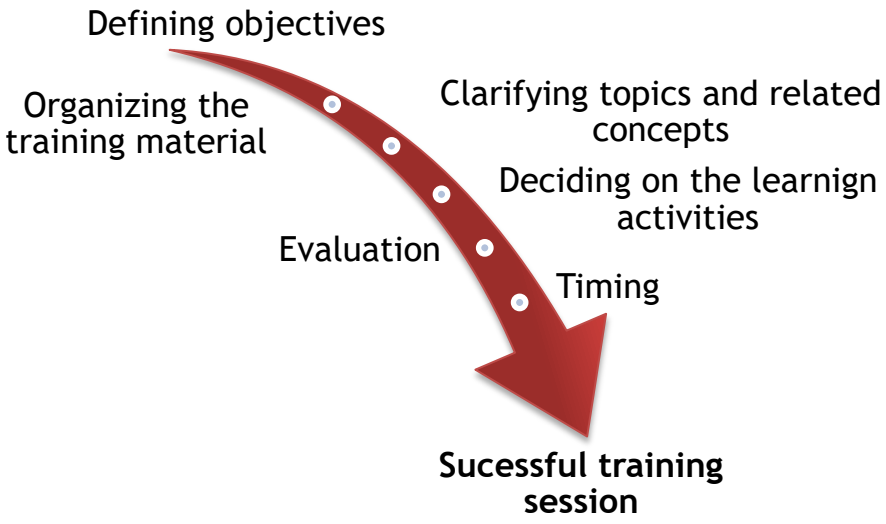
Box 10. A useful training session plan provides the following information:

- a description of the activities and resources of the training
- guideline how to reach the overall objective of the training
- the length of the sections and used methods for transferring knowledge
- tools for evaluation

It takes time to plan a good training session (Figure 8). However, it clearly benefits the entire training. During the planning of the session, organizers should visualize each steps.

This ensures that the session will cover all the necessary topics and information will be presented in a logical order. It also helps to highlight the points that might be critical in learning or might be difficult for understanding. After the session, the visualized plan of the training can be used also for evaluating what went well and what did not. It benefits future training sessions as well and helps to adopt to challenges. However, a training session plan might be useless for those who did not take part in the planning process of it.

Figure 8 Main steps of developing a training session



In the followings, it is discussed how to develop a session plan and a planning template will be presented as well.

3.2.1. Defining objectives

The first step of creating a training session plan is to specify what the trainees or the audience needs to learn, and how the effectivity of the learning is measured. It has to be defined, what are the most important concepts or skills that trainees need to understand and obtain by the end of the course. Besides, it is also useful to explain them why these concepts and skills are important. In addition, as in any learning program, the level of understanding should be measured.

Box 11. Tips:

- 1: ABCD Learning Objective Model can be a useful tool to set a training objective that addresses the learners requirements. ABCD stands for target Audience which needs to identified; the needed Behaviour during the session; Conditions under which knowledge sharing will occur; and Degree or the level of performance or knowledge of trainees after the session.
- 2. It is advised to have only few, maximum 2-3 objectives for the training session. Too much objectives might lead to information overload, too less might make trainees less interested.

3.2.2. Clarifying topics and related concepts

The training of the class usually focuses on a few central ideas or skills. However, it is necessary to explain related concepts and theories to reach the learning objectives. For this purpose useful tools are available, for example an Affinity Diagram or in other cases called K-J method Variation.

Affinity Diagrams help people to organizes a large number of ideas into their natural relationships. This method usually carried out as a team work, however it is possible alone as well. It boosts creativity and intuition. Affinity Diagram is typically helpful in cases when the facts and ideas appear in chaos or they are too complex to grasp them simply. In addition, it is a useful technique to organize ideas after brainstorming.

In this case, it is advised to list key topics and their related concepts first, and then group them together to show how they are connected. If it is done in team, firstly everyone write down on a paper the ideas and concepts, and then try to organize it according to their knowledge. Then, in the second phase, the team discusses possible arrangements and logical links.

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3.2.3. Organizing the training material

Once a general idea of what the training session will cover has been created. An outline has to be drawn. It is suggested to list all of the points that are going to be the part of the session and create an order. After this part is done, it is time to put the information from the outline into the training plan template. Check back against the initial brainstorming document to make sure that it was fully covered and involves everything that needs to be said. Also, it is advised to compare the template with the objectives for the session, to make sure that they will be achieved.

3.2.4. Deciding on the learning activities

To ensure knowledge transfer, it is the best to use several different approaches to keep trainees or learners engaged, and to appeal to people with different learning styles.

It is advised to consider something from the following activities in the training session: Lectures, to introduce a topic; Demonstrations, to present the steps in a process or a task; Discussions and debates are useful after a lecture, they allow trainees to ask questions; Online learning is helpful when trainees need to gain deeper knowledge of a topic; Role plays involve trainees acting out a new skill in a simulated environment, and learning from feedback from other participants; Case studies can help learners to put new information into context.

Once it is decided which training methods are going to be used, note them in the template.

3.2.5. Evaluating

It is essential to get feedback from the effectivity of the session. It allows assessing all the aspects and features of the activity and it helps formulating or proposing improvements for the next time the same activity needs to be implemented. The evaluation happens after the activity and it can be done as a group or individually. It is very important to allow the participants reflect on the questions and answer them truthfully. The evaluation needs to be collected to be consecutively analyzed by the organizers or facilitators.

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The easiest way to measure how well trainees understood the key points or main findings of the session is to ask feedback from them. It helps to understand the weakness and strengths of the activities. There are several methods that can be used to ask for feedback. Feedbacks can be oral, written or visual. 1) Oral feedback is suggested when the number of trainees is relatively low since it takes time. 2) Written feedback include learning checks and questionnaires. Questionnaires can include questions like:

- What are the lessons learnt?
- What can be improved?
- Which activity was successful? Which did not work as expected?
- Did the training meet their expectations?

3) Visual methods of gaining feedback from participants might be done with emoticons to express general satisfaction with the training.

Depending on the target group and time management, facilitators can choose to implement one methods or combining different ones. Considering the framework within the trainings are implemented, it is recommended to collect written feedback in order to produce afterwards a self-evaluation report on the training.

3.2.6. Timing

Finally, the time framework of the session should be decided. Some concepts or skills take more time to master than others. That is why it is suggested to identify these harder tasks before the session and allow students to spend extra time to absorb or practice the material. Time allocated for each section should be recorded or marked on the training plan. It is advised to make sure that for explaining core concepts and ideas, enough time is allocated. If there seems to be no time for that, it is necessary or to run additional sessions, or narrow the learning objectives and reduce the number of topics that is planned to cover.

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3.3. Possible tools and methods for training new members

This section aims to provide a general outline for a training session for sharing knowledge on public procurement of innovation. The section will present some ideas what the training should include, and at the end sketches up an offer or a suggestion as a plan that can be followed by project partners in training the new members.

3.3.1. Ice breakers

An icebreaker is a short, fun activity, often but not always a game, used at the start of the session as a warm-up or sometimes as an activity between sections of the training. It helps the learners to relax, creates a positive atmosphere and helps them to get to know each other. It is a tool for the trainers to observe who are less active and who are dominant. An ice breaker involves all learners, interactive, quick and simple. Ideally it should be linked to the main training objectives but can be a random activity as well. It is essential that once the game is over, learners should set back to original "training" attitude.

There are two types of ice breakers. The so called "pace-changers" and "energisers". Pace-changers might be music, readings, games and quizzes. They are used to speed up or slow down the tempo. Pace-changers change the mood of the session and lighten the atmosphere after a serious discussion. While energisers are short activities aimed to revitalize energy in participants and re-enthuse them for the following sections of the training. Energisers are useful when the team is running out of steam and there is still important material to discuss or the group has been sitting for quite a long time. Energisers can often be physical movement, in this case make sure everyone can participate.

Box 12. Take away message:

- An activity that helps learners get to know each other, relax, changes atmosphere or reactivate people.
- They are helpful in any training – including PPI – when hard materials are discussed but still further discussion is planned and attention of the participiants is needed.

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3.3.2. Brainstorming

Brainstorming is a well-known technique. It is quick and simple used to gather ideas about a topic in a short period of time. The trainer invites the group to think about as many ideas on a certain topic as possible. All ideas are accepted and recorded without changes and should be visible to the rest of the group. Ideas trigger new ideas that contribute to the success. It is a suitable technique in the early part of trainings to test the prior knowledge of learners, stimulate their thinking and generate new ideas.

(Source: https://redbooth.com/blog/team-brainstorming)

To ensure effectivity select the topic and question carefully. The aim is that participants would react instantly and say their ideas, question should be clear and simple. Ideas are usually recorded in large sheets and coloured pens are useful. The activity should not be longer than 5-10 minutes, if participants seem to be bored, it means that are ready. It is necessary to create the link between the brainstorming and the training session, it helps them to realize connections faster. Discussion should not start during the brainstorming, it

Box 13. Take away message:

- Brainstorming is a common tool to generate ideas, but it also serve as a tool to test prior knowledge or trainees on a certain topic. It might be used in PPI trainings to check knowledge as well or generate ideas how PPI could be used more effectively or develop further.
- It is useful to begin with brainstorming at the early phase of the training session.

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interrupts the flow of ideas.

3.3.3. Lecture or presentation

Lecturing is a common method mainly because it can accommodate to a wide range of audience sizes, takes less time to design, and gives the trainer assurance that the trainees complete the training. A good presentation consists of introduction where questions and the relevance of the topic is explained. It continues with the explanation of the core issues and ends with a summary. Summaries refer to the questions and key findings. Presentations are good tools to share a great number of information and ideas. It is more appropriate for larger groups. Keep in mind that good visualization strengthen your claims and helps memorizing, although too much visualization is a disadvantage. Always give some time for the audience to rest.

(Source: https://www.sodapdf.com/blog/how-to-prepare-professional-powerpoint-presentation/)

The main criticism of the lecture method is the lack of interaction it is passive, not social, and disconnected from real practice, resulting in less than optimal learning. Consequently, lecturing should be used where standardized learning is desired (Martin et al. 2014).

Box 14. Take away message:

- Lecturing is effective when a huge load information should be transferred to the learners.
- In the case of PPI, basic concepts, ideas, strategies and methods ideally can be explained to the new members through presentations.

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3.3.4. Case studies

A case study is an example of a situation which can be set as a starting point to explain lessons learnt. Thus, usually it involves a problem solving part. Cases studies enhance the interest of trainees and has positive impact on their motivation. Usual elements of case studies are the description of a situation, questions that might lead learners to the solution of a problem, and discussion that learners can give feedback on the solutions. Case studies improve analytical skills, helps decision making and communication. This method is used when learners have knowledge but could benefit from the applied nature of the training.

(Source: https://stock.adobe.com/ee/images/case-study-illustration/115264856)

Case studies can be used in two different ways. A case study presentation is similar to a lecture, although it aims to educate learners through the describing of a certain situation and its problem and means how it was solved. In another case, it is a group work where the case study should be prepared well, it should include a description of the case, instructions for completing the task, usually through a discussion.

Box 15. Take away message:

- Case studies are useful to present a situation in which a problem araised and had to be solved.
- It improves analytical skills, decision making and communication.
- In relation to PPI it can be the description of a successful case with presenting challenges and solutions.

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3.3.5. Project and group work

Group work is and active and interactive method for learning and strengthening knowledge. The group processes the provided information together and assesses and applies it. It is usually considered as an activating element in trainings. A useful method when the task utilizes the different views, experiences and knowledge of the trainees. It is especially effective when learners differ significantly in their skills. Project works are also good means for improving responsibility, leadership abilities, teamworking skills and group dynamics. On the other hand, sometimes it is not too effective in knowledge sharing since tasks are usually divided among the group members, thus only the leader will follow the whole project process others will understand only fragments.

(Source: www. http://amweb.nl)

Box 16. Take away message:

- Project work is useful when a group of people with different skills should work together to solve an issue or carry out a task. It improves various skills of individuals which makes it even more useful.
- In relation to PPI an option would be to give a simple task for the new members to build up a procurement of innovation for their own authority.

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3.3.6. Discussion

Discussion is a training method in which a group examines or explores a topic by means of verbal exchange of views. It can be linked to case study or presentation. Discussion is one of the most useful as it enables a group to exchange ideas and opinions informally about a specific subject. It can start with a simple question related to the topic of the training session, although keep in mind that it has to be straightforward and carefully worded and avoid closed questions. For example, how a certain issue could be improved to function better or what do they like and dislike about it. Learners should be encouraged to be open and comment on the question. In discussions, the aim is to stimulate a conversation thus questions should be prepared and asked after certain stages of the conversation is reached. It is necessary also to plan how the trainer will give feedback. Usually, trainers should be prepared to intervent in certain cases. Ensure that all learners are participating in the talk. Trainers should mediate between different opinions, give positive feedback to contributors, expand comments where needed.

(Source: www.freepik.com/free-vector/business-group-meeting)

Box 17. Take away message:

- Discussions are essential tools for exchanging views and experiences and finding new solutions for a certain problem. A moderator is necessary with simple questions that can stimulate the discussion.
- In relation to training new members of competence centres it is a useful tool as well.

4. Suggested training session plan for training new members of the PPI network

Draft of the virtual training session:

- *8:00 – 8:10 Welcome speeches*
- *8:10 – 8:30 Project and training presentation* – explaining the project and the training outline
- *8:30 – 9:40 Lecture 1* – (1 h presentation, 10 mins short discussion), Smart Health tool
- *9:40 – 10:50 Lecture 2* (1 h presentation, 10 mins discussion), Smart Energy tool
- *10:50 – 12:00 Lecture 3* (1 h presentation, 10 mins discussion), Smart ICT tool
- *12:00 – 12:45 Lunchbreak*
- *12:45 – 13:00 Icebreaker* – energizer (10-15 mins), aims to re-activate participants
- *13:00 – 13:30 Pilot 1* – (25 mins presentation, 5 mins short discussion)
- *13:30 – 14:00 Pilot 2* – (25 mins presentation, 5 mins short discussion)
- *14:00 – 14:15 Coffee break*
- *14:15 – 14:45 Pilot 3* (25 mins presentation, 5 mins short discussion)
- *14:45 – 14:15 Pilot 4* (25 mins presentation, 5 mins short discussion)
- *14:15 – 14:45 Transregional study of institutional frameworks* (25 mins presentation, 5 mins short discussion), country specific
- *14:45 – 15:00 Evaluation* (written with the use of questionnaire)
- *15:00 – 15:10 Closing of the event*

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Literature

Institution of Occupational Safety and Health (2014): Training guidence book. https://www.iosh.co.uk/Site-Search.aspx?terms=training%20guidance [accessed: 2018.07.27.]

Kolb, D. A. (1984): *Experiential Learning: Experience As The Source Of Learning And Development*. Prentice Hall Publisher, Englewood Cliffs

Martin O.B., Kolomitro, K. and Lam T.C.M (2014): Training Methods: A Review and Analysis. Human Resource Development Review, 13 (1), pp. 11-35.

Sayers, R. (2006): *Principles of Awareness-raising: Information literacy, a case study*. UNESCO Bangkok, 124. p.

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