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**Training plan**

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***Abstract***

The key objective of the training task is to build knowledge and skills on the use of PII's federated testbed services among the target audiences.

The project will hold 4 hands-on, face-to-face seminars at the sites of the 4 core innovation clusters (phase 1) and 4 seminars at the sites of the 4 satellite innovation clusters (phase 2). The seminars will be generally open, but the PII consortium reserves the right to select participants in order to ensure a homogeneous group which can optimally benefit from the seminars.

The training events will be delivered in a series of 2-day, face-to-face seminars by members of the training team and other experts from the project.

The face-to-face training seminars will be complemented by Web-Based Training (WBT), including online tutorials and interactive knowledge transfer via a Learning Management System (LMS).

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## **Executive summary**

The key objective of the training task is to build knowledge and skills on the use of PII's federated testbed services among the target audiences. It is central for reaching PII's project goals to enable testbed users and new providers to use the federated testbed services. Thus, the training measures will focus on giving testbed users and providers the required skills for making the most effective use of the federated testbed facilities.

In the first phase, the training activities will be concentrated on the 4 core innovation clusters Berlin, Brittany, Oulu, and Patras. In the second phase, training activities will also include the 4 satellite innovation clusters in Italy, Ireland, Spain, and Sweden.

The project will hold 4 hands-on, face-to-face seminars at the sites of the 4 core innovation clusters (phase 1) and 4 seminars at the sites of the 4 satellite innovation clusters (phase 2).

The seminars will be generally open, but the PII consortium reserves the right to select participants in order to ensure a homogeneous group which can optimally benefit from the seminars.

The training events will be delivered in a series of 2-day, face-to-face seminars by members of the training team and other experts from the project. The seminars will be held in the timeframe from month 21 (February 2010) to month 29 (October 2010), when mature technical results are available. The seminars will be highly interactive, focusing on directly usable knowledge and skills in regard to the federated testbed services.

The face-to-face training seminars will be complemented by Web-Based Training (WBT), including online tutorials and interactive knowledge transfer via a Learning Management System (LMS).

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## **Abbreviations**

LMS	Learning Management System
PII	Pan-European Laboratory Infrastructure Implementation
WBT	Web-Based Training

## Definitions

Training	Acquisition of knowledge, skills, and competencies as a result of the teaching of vocational or practical skills and knowledge
Web Based Training	Teaching of vocational or practical skills via the Internet or an Intranet, either as asynchronous self-learning or as synchronous online presence learning

# **1 Introduction**

In this introduction we explain the objective of this document and provide a definition of training as we understand it in the context of PII. The consortium partners involved in the training task are referred to as the “training team”.

## **1.1 Objective of this document**

The purpose of this document is to inform targeted readers and the interested public about the training activity within PII. We will provide an outline of the training concept and a detailed account of the work done so far within the training activity.

## **1.2 Definition of training**

According to the definition by Wikipedia, “Training refers to the acquisition of knowledge, skills, and competencies as a result of the teaching of vocational or practical skills and knowledge that relates to specific useful skills” (see <http://en.wikipedia.org/wiki/Training>).

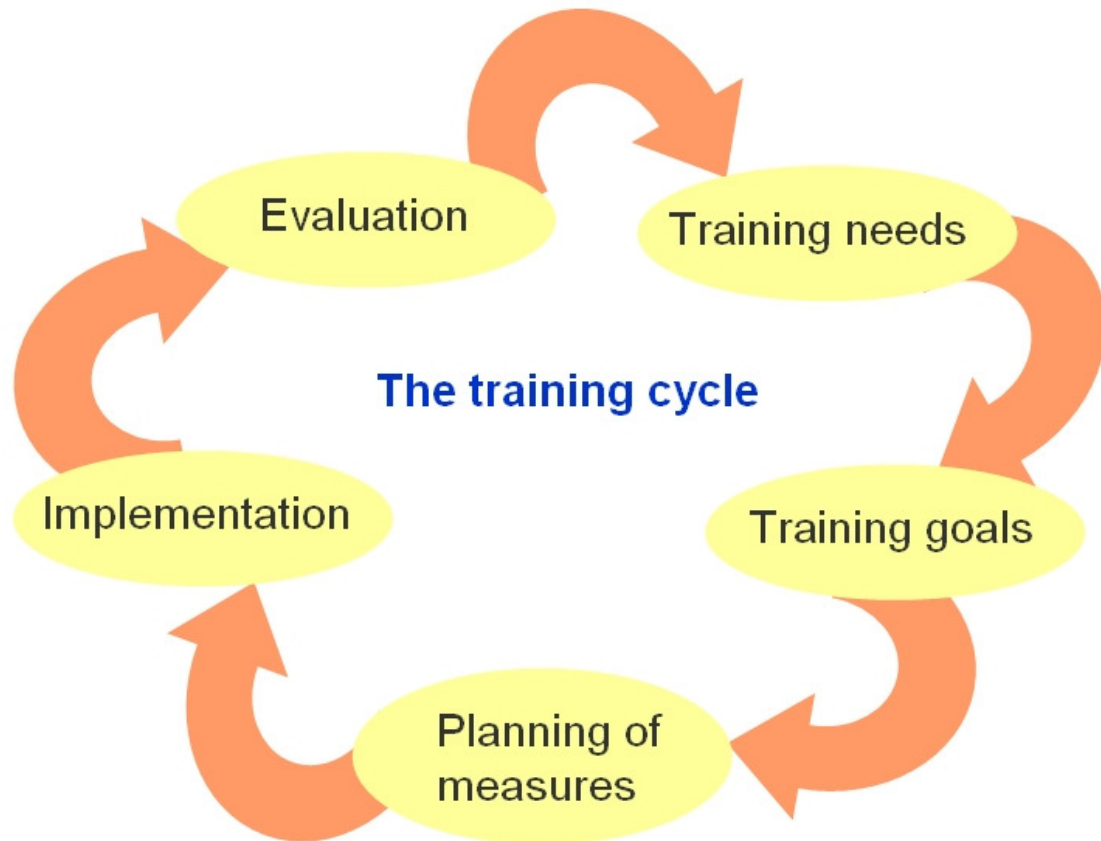
In the context of PII, training is seen as a systematic process designed to transfer knowledge and skills in a sustainable way to project-internal and external target audiences. In PII, we started with planning internal training measures first, because they can have a significant positive impact on the performance of project partners throughout the execution of the project.

## **1.3 Approach**

The general approach of the training task is to deliver the training in to the target-audiences in an effective and open way that is oriented towards the practical needs.

The planning and performance of the PII's training activities follows a step-wise approach, in which each step builds on the previous one.

The training activities are based on the concept of the training cycle, as shown in Figure 1.



**Figure 1: The training cycle**

This guarantees that the quality and effectiveness of the training are permanently improved and that the training stays focused on the needs of the target audiences.

The prime method for conveying knowledge and skills about PII's federated testbed services will be face-to-face seminars that will be complemented by web-based training (WBT).

The training activities will be based on the results of PII's technical work packages and will be performed in two phases: phase 1 will concentrate on the 4 core innovation clusters and phase 2 on the 4 satellite innovation clusters.

Each training measure will be evaluated by the training team based on the systematically collected feedback from the participants of the training measures.

## 2 Training concept

In this chapter we describe the PII training concept, its objectives, the planned training measures, and the evaluation procedures.

### 2.1 Objectives

The key objective of the training task is to build knowledge and skills on the use of PII's federated testbed services among the target audiences. It is central for reaching PII's project goals to enable testbed users and new providers to use the federated testbed services. Thus, the training measures will focus on giving testbed users and providers the required skills for making the most effective use of the federated testbed facilities.

#### 2.1.1 Target audiences

##### Primary target audiences:

- Prospective users of PII's federated testbed services in the 4 core innovation clusters Berlin, Brittany, Oulu, and Patras. The focus will be on SMEs.
- Prospective users of PII's federated testbed services in the 4 satellite innovation clusters in Italy, Ireland, Spain, and Sweden. The focus will be on SMEs.

##### Secondary target audiences:

- Prospective users of PII's federated testbed services outside of the 8 innovation clusters, particularly SMEs and European R&D projects.
- Prospective providers of testbed facilities in Europe.

#### 2.1.2 Objectives related to core innovation clusters

In order to use the federated testbed services, users from the core innovation clusters will need the knowledge and skills for doing so. The main objective of the training activities for users within the 4 core innovation clusters is just this. The core innovation clusters play a central role for exploiting the results of PII, as they are closest to the research and the first to use PII's federated testbed facilities.

#### 2.1.3 Objectives related to satellite innovation clusters

The objectives towards the satellite innovation clusters are similar to the ones for the core innovation clusters: enabling users in these 4 clusters to effectively use PII's federated testbed facilities.

#### 2.1.4 Objectives related to other users and providers of federated testbeds

Although the focus of the training activities is on the 8 innovation clusters, these clusters are only the starting point for spreading the Europe-wide use of PII's federated testbed facilities. In order to increase the reach of the training measures, PII aims to involve from the first seminar also potential users and providers of the federated testbeds who are outside of the innovation clusters.

## 2.2 Broad schedule of training activities

The training measures will be performed in two phases. The first phase from month 18 to 23 will focus on the core innovation clusters, and the second phase from month 24 to 30 on the satellite innovation clusters.

In the first phase, the training activities will be concentrated on the 4 core innovation clusters Berlin, Brittany, Oulu, and Patras. In the second phase, training activities will also include the 4 satellite innovation clusters in Italy, Ireland, Spain, and Sweden.

The project will hold 8 hands-on, face-to-face seminars at the sites of the 4 core innovation clusters (phase 1) and 8 seminars at the sites of the 4 satellite innovation clusters (phase 2).

There will be 2 face-to-face seminars per innovation cluster in order to increase sustained effect of the training activities.

The seminars will be generally open, but the PII consortium reserves the right to select participants in order to ensure a homogeneous group which can optimally benefit from the seminars.

The training events will be delivered in 2-day, face-to-face seminars by members of the training team and other experts from the project. The seminars will be held in the timeframe from month 18 (November 2009) to month 29 (October 2010), when mature technical results are available. The seminars will be highly interactive, focusing on directly usable knowledge and skills in regard to the federated testbed services.

The face-to-face training seminars will be complemented by Web-Based Training (WBT) measures, including online tutorials and interactive knowledge transfer via a training section on the project website.

### **2.3 Description and timing of training measures**

In order to achieve the above-mentioned objectives, PII will carry out a number of training measures, as shown in Figure 2. The schedule deviates in two instances from the Task description in the Technical Annex.

Firstly, due to the dependency on relatively mature technical results, e.g. on Teagle and other technical contents of the training, the first seminar had to be moved from month 18 (November 2009) to month 21 (February 2010). Thus, the respective WP6 milestone also needs to be moved to month 21.

Secondly, the number of training events had to be reduced. There is a critical dependency on a limited number of experts for being available as tutors in the seminars, availability problems lowering the quality and impact of each seminar would have been inevitable. Furthermore, the relatively low person-month budget allocated to the training task (11 person months) would have made it unrealistic to hold 16 seminars. In fact, even holding 8 seminars is already requiring a very high level of efficiency and synergies between the seminars. Finally, the need for having two seminars per cluster is not given, as the Web-Based Training accompanying the face-to-face seminars will ensure sustainable training results.

#	Training measure	Venue	Delivery date *	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	Setup of web-based training facilities	online	01-Jan-10	■	■	■	■	■											
2	1st training seminar for core innovation clusters (M6.2)	to be decided	01-Feb-10	■	■	■	■	■	■	■									
3	2nd training seminar for core innovation clusters	to be decided	01-May-10								■	■							
4	3rd training seminar for core innovation clusters	to be decided	01-Jun-10									■	■						
5	4th training seminar for core innovation clusters	to be decided	01-Jun-10										■	■					
6	1st training seminar for satellite innovation clusters	to be decided	01-Sep-10												■	■	■		
7	2nd training seminar for satellite innovation clusters	to be decided	01-Sep-10												■	■	■		
8	3rd training seminar for satellite innovation clusters	to be decided	01-Oct-10														■	■	
9	4th training seminar for satellite innovation clusters	to be decided	01-Oct-10														■	■	
10	Final evaluation of all training activities	–	01-Nov-10																■

\* Dates need to be specified yet.

**Figure 2: GANTT chart of training measures**

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The training measures will be performed in two phases, according to the different focus on the 4 participating core innovation clusters in phase 1 and the 4 satellite innovation clusters in phase 2.

### **2.3.1 Phase 1 (month 15 to 26)**

- Setup of web-based training facilities for accompanying phase 1 and phase 2 training seminars (month 19/ December 2009)
- Planning of phase 1 training seminars (month 15-20/ August 2009 - January 2010)
- 1st training seminar for core innovation clusters (month 21/ February 2010)
- Evaluation of 1st training seminar for core innovation clusters (month 22/ March 2010)
- 2nd to 4th training seminars for core innovation clusters (month 22 - 25 / March - June 2010)
- Evaluation of all training seminars for core innovation clusters (month 26/ July 2010)

### **2.3.2 Phase 2 (month 26 to 30)**

- Planning of 1<sup>st</sup> phase 2 training seminar (month 25-27/ July - August 2010)
- 1st training seminar for satellite innovation clusters (month 28/ September 2010)
- Evaluation of 1st training seminar for satellite innovation clusters (month 29/ October 2010)
- 2nd to 4th training seminars for satellite innovation clusters (month 29/ October 2010)
- Final evaluation of all training activities(month 30/ November 2010)

### **2.3.3 Training seminars**

#### **Format**

The 8 face-to-face training seminars will follow a common scheme. Within the 2 days of their duration, PII will enable a sustainable learning experience for the target audiences.

#### **Methods**

In order to make the training as effective as possible for the target audiences, PII will use a mix of interactive and engaging training methods, including scenario-based training and

#### **Content**

Topics to be covered include organisational, technical, and legal aspects of testbed federation relevant to the target audience.

Training topics identified so far include:

- Customer management in TEAGLE
- Testbed design and creation in TEAGLE
- Testbed provider management in TEAGLE
- Legal aspect of testbed federation – IPR, contractual issues, conflict management
- Organisational aspects – working procedures in testbed federation
- Business aspects – business model and financial transactions in testbed federation

The exact topics will be specified in preparation of each seminar, adapted to the requirements of the respective audiences per cluster.

### **2.3.4 Description of Web-Based Training (WBT)**

#### **Format**

Web-Based Training (WBT) is instruction delivered via the Internet or a corporate Intranet to learners equipped with a browser. There are two primary WBT formats: synchronous instruction, which is instructor-facilitated, and asynchronous instruction, which is self-directed.

PII will use both WBT formats, synchronous and asynchronous instruction, which will both be delivered via a Learning Management System (LMS), which provides a closed online learning

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environment that facilitates learning and interaction between instructors and learners as well as learners and learners. In addition to content for asynchronous self-learning (text-based tutorials, recorded webinars, etc.), PII will provide Web-conferencing for synchronous instruction.

### Content

Topics to be covered include organisational, technical, and legal aspects of testbed federation relevant to the target audience. The exact topics will be specified in line with the preparation of each seminar, adapted to the requirements of online learners. The content will be presented in a way suitable for learners who have attended a face-to-face seminar and would like to deepen their knowledge, but also for others who will only participate in WBT.

Training topics identified so far include:

- Customer management in TEAGLE
- Testbed design and creation in TEAGLE
- Testbed provider management in TEAGLE
- Legal aspect of testbed federation – IPR, contractual issues, conflict management
- Organisational aspects – working procedures in testbed federation
- Business aspects – business model and financial transactions in testbed federation

## 2.4 Evaluation of effectiveness

The partners involved in the training task will evaluate the effectiveness of the training measures through a mix of quantitative and qualitative methods.

All participants of internal and external PII measures will be asked before the closing of each training seminar to fill out a feedback form, through which they can express their level of satisfaction.

The analysis of the responses will be the basis for the evaluation by the partners in the training task. In addition, regarding the sustained effectiveness of the training measures, the training partners will interview the cluster participants 4 weeks after each training event, if and how the training measures had a positive effect in regard to conveying knowledge and skills on PII's federated testbed facilities.

## 2.5 Resources and contributing partners

There are altogether 11 person months assigned for training.

8 partners are directly involved in planning and implementing training activities – see Figure 3.

#	Partner	Country	Person months
1	Eurescom	Germany	2.0
2	DIMES	Finland	1.5
5	EICT	Germany	1.5
8	Media and Network Cluster	France	1.5
11	ISI	Greece	1.5
15	TSSG / WIT	Ireland	1.0
17	Telefonica I+D	Spain	1.0
19	Italtel	Italy	1.0
			<b>11.0</b>

**Figure 3: Partners and resource in the training task**