



**INNOSEE PROJECT**  
European Commission - Lifelong Learning Programme



RESEARCH DRIVEN CLUSTERS

**TRAINING CONTENT**  
***(SYLLABUS)***

BARCELONA, OCTOBER 2012

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# 1. GENERAL TRAINING DESCRIPTION

## 1.1 Methodological Approach

The training process will be composed by a total of 9 modules, consisting in the following:

TRAINING PROGRAMME OVERVIEW
RDC STRATEGIC PLANNING
RDC PROJECT MANAGEMENT
RDC MARKET INTELLIGENCE
RDC TECHNOLOGY TRANSFER
RDC OPEN INNOVATION
RDC INTERNATIONAL NETWORKING AND COOPERATION
IPR AND PATENTING ISSUES
RDC INNOVATION FUNDING

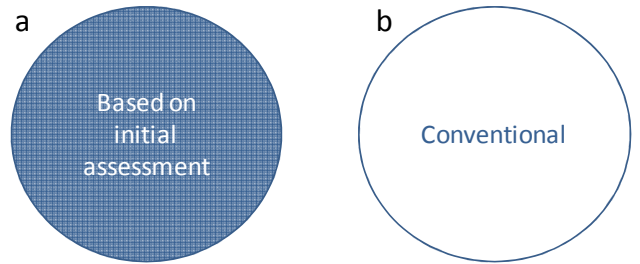
The training methodology will be based on a mix of online training and a number of trainer-led sessions aimed at reinforcing and monitoring the knowledge gathered via the training sessions.



The trainer-led sessions (as described below) will provide assistance to trainees in the completion of the modules-based training and will monitor, assess and certificate the progress achieved.

## 1.2 Learning approach

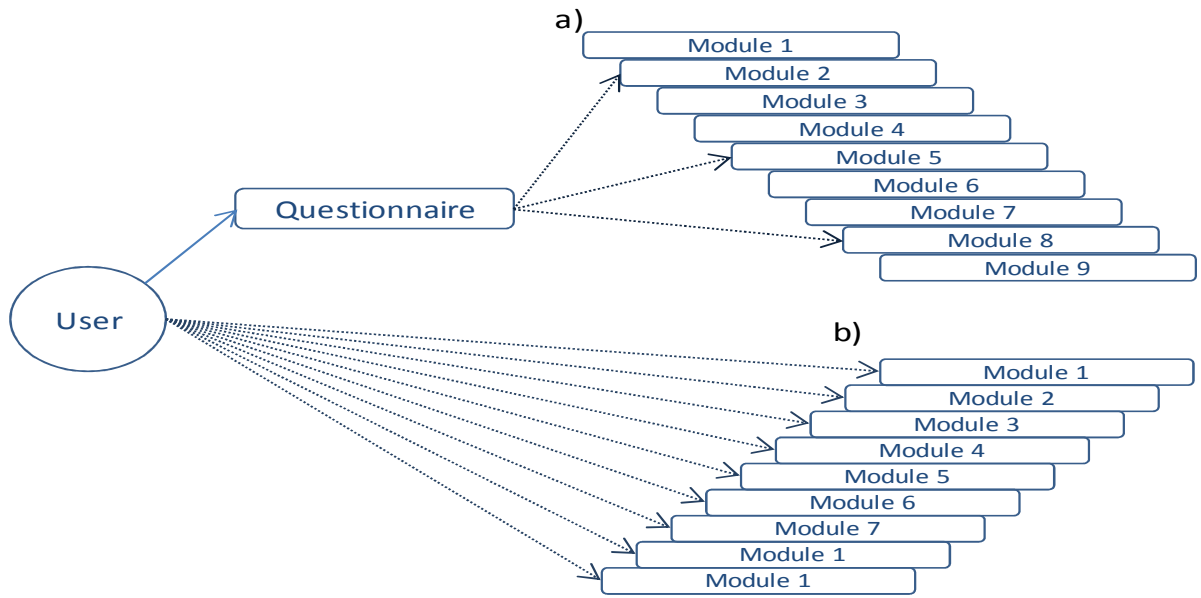
As agreed during the Barcelona meeting the consortium decided to offer two optional training frameworks. One based on an initial assessment process and another following a more conventional approach.



Thus, at the beginning of the training process the users will be offered the possibility to follow a self assessment process highlighting those areas in which specific training appears to be more convenient to them.

This will be an optional feature of the training material since the trainees will still have the possibility to follow the conventional training course in which all the content will available from the start and where users will be allowed to complete the whole training sessions.

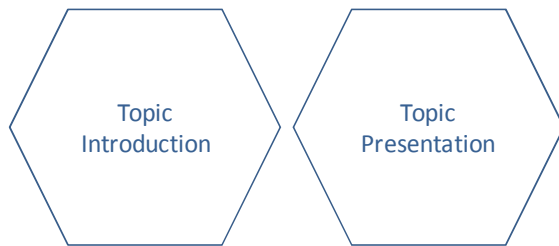
Whereas the conventional training format will allow the trainee to go through the 9 module list and to complete each of the training topic, the assessment based methodology will allow the trainee to go through a simple questionnaire (with around 6 questions) that will indicate users what are the areas in which they should pay particular attention (and will redirect them to specific modules and sessions).



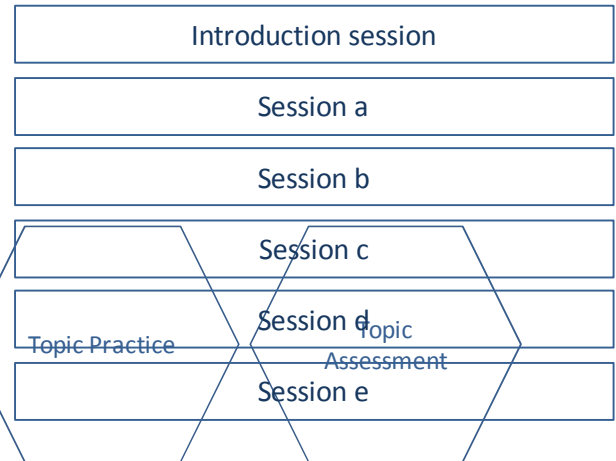
## 2. TRAINING MODULES DESCRIPTION

### 2.1 Main contents

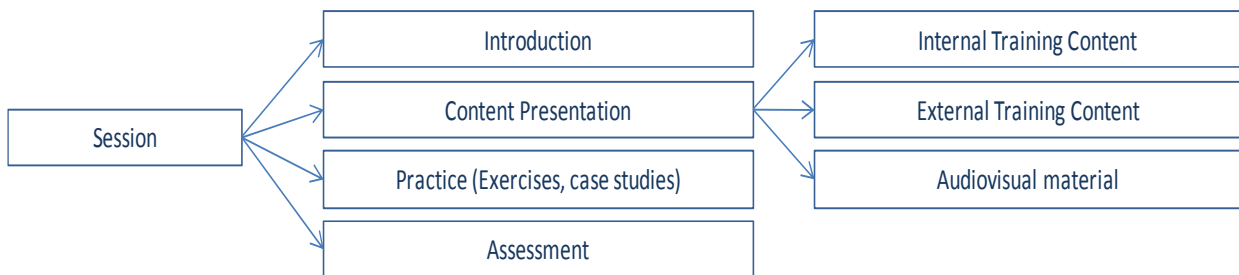
As agreed during the Barcelona meeting each module will need to address a minimum set of pedagogical standards that would include the following sections:



Each module will be subdivided into 6 sessions with the initial session consisting in an introductory presentation on the topic dealt with the module.



At the same time each session will include the following elements:



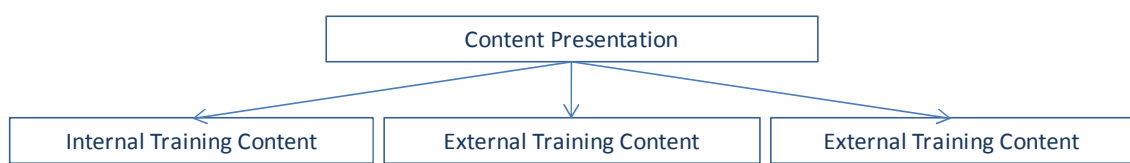
Elements of the training sessions:



The introduction section will provide an overview of the session contents, main concepts and purpose. The format can be of a single slide containing the most relevant information.

This section / slide will also include some external references, to be

understood as a type of “read more about” information that will redirect the users to external literature, documents, websites, etc. This introductory section intends to generate some curiosity among the users and must drive them to check related content before initiating the session training.



The content presentation section will include the bulk of the training information. This section will include several slides including internally produced materials (ppt. presentation, adobe professional slides, etc.), audiovisual elements (most of them integrated into the internally produced materials, such as the adobe professional presentation) and the adaptation of some external content.

Practice (Exercises, case studies)

The practice and exercises section will allow the user to put into practice the knowledge received in the previous materials. The content to be included in this section can be based on basic exercises, specific case studies, role situations, etc.

Assessment

The final part of each session must include a self assessment methodology that will allow the trainees to evaluate to what extent they have apprehended and assimilated the information received during the training session. This last stage will be based on a simple questionnaire comprising the main the main topics dealt with in the session.

### 3. TRAINING CONTENT

#### 3.1 MODULE 0. Training Programme Overview \*

\* *As introductory module, M0. RDC Programme Overview will not be developed, as the other modules, in different sessions.*

Module title: **Training Programme Overview**

Module ambition/aim: The purpose of this module is to present a programme overview to the participants; identifying learning modules and each methodology. At the end of this introductory module, participants will be the opportunity to follow a self assessment process highlighting those areas in which specific training appears to be more convenient to them.

Module duration: Approx. 60 mins.

Objectives/outcomes: After completing this session the participant should be able to;

- Identify the purpose of training course
- Know the key issues of each module
- Understand the methodology of the training course.
- Access to specific more convenient training to them, if desired.

Framework references: All

Associated Sessions All

### 3.2 MODULE 1. Strategic Analysis

Module title: **RDC Strategic Planning**

Module ambition/aim: The purpose of this module is to provide participants with the theoretical and practical knowledge needed to define an RDC strategy; this will be done by raising awareness on how to analyse the RDC environment, how and where to invest resources and how to gain knowledge on the internal nature of the RDC. The module contents must allow RDC managers to make informed strategic choices and to monitor their strategy implementation.

Module duration: Approx. 5 hours with all sessions implemented (5 x 50)

Objectives/outcomes: After completing this session the participant should be able to;

- Describe the key issues of strategic planning
- Identify and understand the internal and external factors influencing the RDC strategic decisions.
- Define the major stages of an RDC strategy definition and planning process
- Identifying the main requirements for the successful implementation of their strategic choice
- Define the major steps in monitoring the implementation of the strategy implementation

Framework references: RDC Clusters → RD Cluster management → Strategy implementation

Associated Sessions





## **M1- SESSION 1**

**Title: Key concepts of Strategic Planning**

**Duration:** Approx. 50 minutes

### **Summary description:**

This session will provide an overview of the key concepts related to strategy definition and planning. It will provide a selection of the main literature and theories on strategic planning and will illustrate how they fit and adapt in the context of research driven clusters.

### **Session activities:**

This session includes the following activities:

- PPT-based presentation on the principles of strategic planning
  - Description of what is strategic planning and why is it important
  - Strategic planning key concepts definition
  - Main theories and approaches to strategic planning
  - Key responsibilities of the managerial cadres in strategic planning
  - Strategic management and RDCs
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- Strategic planning principles
- Strategic planning and the role of RDC managers.

### **Success criteria for the session:**

- Successful completion of Module 1 – Session 1 self-assessment questionnaire and exercises on the strategic planning and management issues.

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or
- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information
- Available literature

## M1- SESSION 2

**Title:** RDC Strategic Analysis

**Duration:** approx. 50 minutes

**Summary description:**

This session will provide partners with the necessary knowledge to analyse the strength of the RDC's position and to understand the external factors that may and will influence that position. This knowledge will be fundamental for highlighting the cluster's relevance and viability and to enhance the managers' capacity to identify keys for future success.

**Session activities:**

This session includes the following activities:

- PPT-based presentation of the principles of strategic analysis and the key issues to be identified
  - Description of what is strategic analysis process
  - Understanding the external environment and the factors that will influence the RDC's performance
  - Techniques on how to audit the environmental forces
  - Ways and methods for identifying competitive forces
  - Processes of identification and management of the RDC internal resources
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation and case studies to be completed by the participants)

**Reference documentation and topics:**

- xxx

**Success criteria for the session:**

- Successful completion of Module 1 –Session 2 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M1- S1

**Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)

- Links to external sites and theoretical information
- Available

literature

## **M1- SESSION 3**

**Title:** Strategic planning and choice

**Duration:** approx. 50 minutes

**Summary description:**

This session will allow trainees to identify the most appropriate strategic options based on their understanding of the nature of the RDC's stakeholders' expectations. The tools and information provided in this session must allow RDC managers to foresee and overcome RDC management uncertainties.

**Session activities:**

This session will include the following activities:

- PPT-based presentation of the principles of strategic choice
  - How to set appropriate and realistic objectives
  - Techniques and methods to identify both opportunities and threats for the cluster development
  - Tool to evaluate the most convenient strategic options
  - How to craft the strategy
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation and case studies to be completed by the participants)

**Reference documentation and topics:**

- xxxx

**Success criteria for the session:**

- Successful completion of Module 1 – Session 3 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M1- S1 and M1-S2

**Available instructional materials:**

- M1-0 presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)
- Links to external sites and theoretical information
- Available literature

## **M1- SESSION 4**

**Title: Implementing the strategy**

**Duration:** approx. 50 minutes

### **Summary description:**

This session will provide trainees with the necessary tools to translate a strategic choice into an organisational action. This session will show RDC managers how to set up the organisational structures and to identify the role and competences of all the agents involved in the process. In addition the session will provide information on the motivational and leadership traits required from the cluster manager.

### **Session activities:**

This session will include the following activities:

- PPT-based presentation on the successful implantation of a cluster strategy
  - How to set up the most appropriate organisational structures
  - Skills and competences required from the agents involved in the project
  - Leadership and motivational skills of the cluster manager
  - Leveraging competences and aligning strategies
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation and case studies to be completed by the participants)

### **Reference documentation and topics:**

- xxx

### **Success criteria for the session:**

- Successful completion of Module 1 – Session 4 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M1- S1, M1 – S2 and M1-S3

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)
- Links to external sites and theoretical information
- Available literature

## **M1- SESSION 5**

**Title: Assessing and evaluating the strategy**

**Duration:** approx. 50 minutes

### **Summary description:**

This session should provide trainees with the tools and knowledge requires monitoring whether the various strategies adopted by the RDC are helping its internal environment to be matched with the external environment, and therefore helping it reaching its goals and objectives.

### **Session activities:**

This session will include the following activities:

- PPT-based presentation methods, techniques and tools to evaluate and assess an RDC strategy
  - How to define a strategic audit
  - Assessing the organisational capacities of a research cluster in terms of its strategic approach
  - Identifying unsuccessful strategies
  - Advancing and implementing corrective measures
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation and case studies to be completed by the participants)

### **Reference documentation and topics:**

- xxx

### **Success criteria for the session:**

- Successful completion of Module 1 – Session 4 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M1- S1, M1 – S2, M1-S3 and M1 – S4

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)
- Links to external sites and theoretical information
- Available literature

### 3.3 MODULE 2. Project Management

Module title: **RDC Project planning**

Module ambition/aim: The purpose of this module is to provide participants with the theoretical and practical knowledge needed to develop, execute and close a project in RDC; this will be done by learning to formulate, to plan a project, to manage it during the executing phase in terms of activities and resources, to establish internal and external communication and to close the project efficiently. The module contents must allow RDC managers and employees to develop an interorganisational project and to coordinate it throughout the project period.

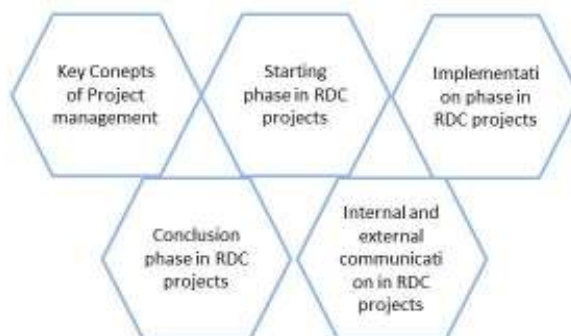
Module duration: Approx. 5 hours with all sessions implemented (5 x 1 hour)

Objectives/outcomes: After completing this session the participant should be able to;

- Formulate and plan a interorganisational project
- allocate activities and resources in interorganisational project
- monitor an interorganisational project
- coordinate an interorganisational project
- establish and interorganisational communication structures efficiently
- close a project and be able to exploit the project outcomes

Framework references: RDC Clusters → RD Cluster management → Project management

Associated sessions



## **M2- SESSION 1**

**Title: Key concepts of Project management**

**Duration:** Approx. 45 minutes

### **Summary description:**

This session will provide an overview of the key concepts of project planning, implementation, monitoring and concluding. It will provide a selection of the main literature and theories on project management and will illustrate how it will work and be adapted in the context of research driven clusters projects.

### **Session activities:**

This session includes the following activities:

- PPT-based presentation on the principles of project management
  - Description of what is project management and why it is important
  - Project management key concepts definition
  - Main theories and approaches to project management
  - Project management and RDCs
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- Project management principles and tools
- Project management and the role of RDC managers.

### **Success criteria for the session:**

- Successful completion of Module 2 – Session 1 self-assessment questionnaire and exercises on project management principles and the relation to RDC.

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative format (i.e. Adobe professional)
- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information
- Available literature



## **M2- SESSION 2**

**Title:** The starting phase in RDC projects

**Duration:** Approx. 1 hour

### **Summary description:**

This session will provide trainees with relevant knowledge to plan and formulate an interorganisational project in RDCs. It will offer theoretical background and efficient application of tools to be used in the pre-project phase. Participants learn how to understand the needs of stakeholders, customers and RDC members and know the capacities of the institutions involved in the project and to develop a project plan with allocation of resources and time.

### **Session activities:**

This session includes the following activities:

- PPT-based presentation on the starting phase of an RDC project:
  - How to determine the basic project mission, its field of work and necessary resources in the RDC
  - Tools and techniques to develop and formulate an RDC project
  - Convincing RDC partners to contribute to the project
  - Creating an interorganistional project organisation
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- Xxx

### **Success criteria for the session:**

- Successful completion of Module 2 – Session 2 self-assessment questionnaire and exercises on planning and formulating an RDC project.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M2- S1

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative format (i.e. Adobe professional)

- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information
- Available literature

### **M2- SESSION 3**

**Title: The project implementation phase in RDC projects**

**Duration:** Approx. 1 hour

**Summary description:**

In this session training participants learn how to execute an RDC project most efficiently. They learn tools and concepts of time management, resource management, and risk management in RDCs. Furthermore the module provides theoretical and practical knowledge about project controlling in interorganisational projects.

**Session activities:**

This session includes the following activities:

- PPT-based presentation on the project implementation phase in RDC projects
  - How to make use of tools and concepts of time and resource management in RDC projects
  - Be aware of the different tasks in risk management in RDC projects
  - Composition of interorganisational project team and its role in the success of the project
  - Project controlling tools in RDC projects
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

**Reference documentation and topics:**

- xxx.

**Success criteria for the session:**

- Successful completion of Module 2 – Session 3 self-assessment questionnaire and exercises on project management to RDC.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M2- S2

**Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative format (i.e. Adobe professional)
- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information
- Available literature

## **M2- SESSION 4**

**Title:** Project conclusion phase in RDC projects

**Duration:** Approx. 1 hour

### **Summary description:**

This session will provide an overview of characteristics of the project conclusion phase and how to find an adequate approach to close a project. It also provides knowledge about claim management in RDC projects. Learners will get to know how to conduct project reporting most efficiently in interorganisational teams. The session will provide knowledge on coping with defects of the project results and analyse the project regarding the quality of the results and the environmental analysis.

### **Session activities:**

This session includes the following activities:

- PPT-based presentation on RDC project closure phase
  - Characteristics of the project conclusion phase
  - Identifying an adequate approach to finish a project
  - Efficiently conducting interorganisational project reports
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- xxxx

### **Success criteria for the session:**

- Successful completion of Module 2 – Session 4 self-assessment questionnaire and exercises on project management principles and the relation to RDC.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M2- S3

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative format (i.e. Adobe professional)
- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information
- Available literature

## **M2- SESSION 5**

**Title: Communication and coordination in an interorganisational project**

**Duration:** Approx. 1 hour 15 min

### **Summary description:**

This session deals with coordination as well internal and external communication in an interorganisational project. With regards to internal communication and coordination the session covers leadership in an RDC project, methods of problem solving and virtual cooperation. With regards to the external communication participants learn how to involve stakeholders and target groups of the project.

### **Session activities:**

This session includes the following activities:

- PPT-based presentation on communication and coordination in an interorganisational project:
  - Dealing with leadership in RDC projects
  - Applying effective methods of problem solving and virtual cooperation.
  - Make use of external channels to maximise RDC project outcomes
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- xxx.

### **Success criteria for the session:**

- Successful completion of Module 2 – Session 5 self-assessment questionnaire and exercises on .
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M2- S4

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative format (i.e. Adobe professional)
- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information
- Available literature

### 3.4 MODULE 3. Market Intelligence

Module title: **RDC Market Intelligence**

Module ambition/aim: The purpose of this module is to provide participants with the theoretical and practical knowledge needed to understand the current consumption and innovation market trends. Successful clusters, in fact, mostly distinguish by their in-depth knowledge of their customers and competitors. The careful assessment of the reference market is a critical aspects for the success of a RDC. The module content allows the manager to learn how to define the characteristics and the size of their reference market, the positioning of the RDC products/services, analyze buying trends, allowing confident decision-making on sales and R&D strategies.

Module duration: Approx. 5 hours with all sessions implemented (5 x 50 min.)

Objectives/outcomes: After completing this session the participant should be able to;

- Describe and apply the different techniques/methodologies of analysis to the RDC's market.
- Match the excellence of their RDC with the market opportunities, select projects, define R&D policies and sales strategies.
- Evaluate the positioning of RDC products/services and adapt them to the changing characteristics of the market.
- Identify the main competitors of the RDC and their potential emerging ones.

Framework references: RDC Clusters → RD Cluster management → Market Analysis

Associated Sessions





### **M3- SESSION 1**

**Title: Key concepts of Market Analysis**

**Duration:** Approx. 50 minutes

**Summary description:**

This session will provide an overview of the key concepts related to market investigation. It will provide a selection of the main literature on the issue, a series of links to deepening materials and videos and will illustrate how the market research can fit and adapt to the context of research driven clusters.

**Session activities:**

This session includes the following activities:

- PPT-based presentation on the principles of market research:
  - Description of what is market research, as a tool to track business opportunities and minimize the risk.
  - Market research key concepts definition.
  - Types of market analysis.
  - Main approaches to market analysis.
  - Market research for RDCs.

**Reference documentation and topics:**

- Market research principles.
- Market analysis and the role of RDC managers.

**Success criteria for the session:**

- Successfully completion of Module 1 – Session 1 self-assessment questionnaire and exercises on the market analysis and management implications.

**Available instructional materials:**

- Presentation in conventional PowerPoint format or
- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information
- Available literature

## **M3- SESSION 2**

**Title: Identify your positioning and customers**

**Duration:** approx. 50 minutes

### **Summary description:**

This session will provide the RDC managers or innovative companies' managers with the necessary knowledge to analyse their reference market. Each RDC Business plan should, in fact contain a Market Analysis section aimed to determine the attractiveness and the dynamics of a market, in order to guide the investment decisions and define the RDC success. Conducting an attentive analysis on this issue represents a key factor for future decision making.

### **Session activities:**

This session includes the following activities:

- PPT-based presentation of the principles of strategic analysis and the key issues to be identified
  - Description of the different dimensions composing market analysis.
  - Company identity and market position.
  - Target market identification.
  - Market size and growth.
  - Distribution channels.
  - Identification of the competitors.
  
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- xxx

### **Success criteria for the session:**

- Successfully completion of Module 3 –Session 2 self-assessment questionnaire on the strategic analysis issues.
- Successful completion of the practical sections of M3- S1

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)
- Links to external sites and theoretical information
- Available literature

### **M3- SESSION 3**

**Title: Techniques of Market Research**

**Duration:** approx. 50 minutes

**Summary description:**

This session will present the most used techniques and methodologies used for Market Research. Starting from the definition of a clear research's Objective, the trainees are called to identify the type of information needed, the sample of customers to be contacted, the approach and the specific method to use. Finally, the methods of analyzing the obtained data will be illustrated, leading to the elaboration of a final report.

**Session activities:**

This session will include the following activities:

- PPT-based presentation of the main techniques of Market Research
  - Identify the research objective.
  - Identify the sample.
  - Choose the best approach of market investigation.
  - Methodologies and techniques of market research.
  - Evaluate and analyze the obtained data.
  
- Introduction of optional self-assessment questions and exercises (based on the theoretical information)

**Reference documentation and topics:**

- XXXX

**Success criteria for the session:**

- Successfully completion of Module 3 – Session 3 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the exercises provided in the session.
- Successful completion of the practical sections of M3- S1 and M3-S2

**Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)
- Links to external sites and theoretical information
- Available literature

## **M3- SESSION 4**

**Title: Implementing the Market Analysis**

**Duration:** approx. 50 minutes

### **Summary description:**

This session will give the opportunity to the trainees to deepen the received training, getting in contact with real case studies of ICT and consumer goods companies using market research to support decision making for launching new products or qualifying existing products/ services.

These example of excellence demonstrate how it is possible to conduct a successful market research even for RDC or belonging SME, which generally don't have sufficient resources to dedicate, showing how this preliminary step is crucial for the good outcome of a development strategy.

### **Session activities:**

This session will include the following activities:

- PPT-based presentation on some successful implementation of Market research. For each case history, we will present:
  - Objective of the research.
  - Choice of the of research approach.
  - Information gathering process.
  - Selection and analysis of the results.
  - How to use the obtained data for solving the initial problem.
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation and case studies to be completed by the participants)

### **Reference documentation and topics:**

- xxx

### **Success criteria for the session:**

- Successfully completion of Module 3 – Session 4 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M3- S1, M3 – S2 and M3-S3

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)

- Audiovisual material (videos, slide shows, etc.)
- Links to external sites and theoretical information
- Available literature

## **M3- SESSION 5**

**Title: Assessing and evaluating the market analysis**

**Duration:** approx. 50 minutes

### **Summary description:**

This session let the trainees to self asses and evaluate their knowledge and concrete competences on the issue, by an assessment questionnaire which gives the learner a precise feedback on his learning outcomes and on the arguments still to deepen.

### **Session activities:**

This session will include the following activities:

- PPT-based presentation methods, techniques and tools to evaluate and assess an RDC Market analysis. In particular, the topics assessed will be:
  - How to define a market research.
  - Organisational benefits of a research cluster conducting a market analysis.
  - Identify the most suitable approach and method for RDC objectives.
  - Perform the market analysis.
  - Analyzing the obtained results.
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation to be completed by the participants)

### **Reference documentation and topics:**

- xxx

### **Success criteria for the session:**

- Successfully completion of Module 3 – Session 4 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M3- S1, M3 – S2, M3-S3 and M3 – S4

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)
- Links to external sites and theoretical information
- Available literature

### 3.5 MODULE 4. Technology Transfer

Module title: **Technology Transfer**

Module ambition/aim: The aim of the module is to provide understanding of the RDC as a knowledge community, to acquaint RDC managers with the opportunity technology transfer provides for the internal RDC development and for outward cooperation, to assess the financial and non-financial benefits of technology transfer, and to develop the knowledge and skill for technology exploitation via spin-off development or licensing as well as the services that Technology Transfer Office (TTO) can deliver.

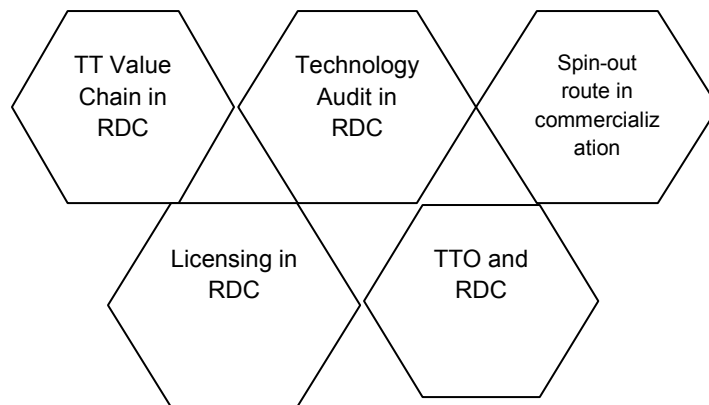
Module duration: Approx. 5 hours for all the sessions (5 x 50)

Objectives/outcomes: The participants will acquire knowledge and skills to:

- Assess the values of technology transfer between research- industry and industry-industry partners in the cluster and its impact on RDC cluster growth and opportunities for internationalization. Motivate the RDC managers to look for technology transfer options in their strategies.
- Master the identification of ideas with commercial potential and new opportunities for generating income from research activities, skills, knowledge and facilities.
- Learn to differentiate technology transfer forms through company creation and develop awareness of the needs of the RDC company formation rules and regulations. Supporting and nurturing the newly created companies.
- Understand the commercialization process of technology transfer through licensing, the obligations of the contracting parties, payment forms, termination
- Know how to overview the process and the documentation: disclosure, assignment of rights, initial assessment of the technology opportunity, and tech-assessment to evaluate route to market
- Estimate the impact of technology transfer office services for RDC development and growth.

Framework references: RDC Clusters → RD Cluster management → Intellectual property rights management → Technology Transfer

## Associated Sessions





## **M4 - SESSION 1**

**Title: Technology Transfer Value Chain in RDC**

**Duration:** Approx. 50 minutes

### **Summary description:**

The session will provide an overview of the technology transfer benefits and the technology transfer flows within the RDC: research organisation (university) – industry; industry-industry and RDC-external. It explores the sequence in the TT value chain from research to business.

### **Session activities:**

This session includes the following activities:

- PPT-based presentation on the technology transfer benefits and the value chain
  - Definition of technology transfer in the RDC, the financial and non-financial returns and major TT flows from academia to business and B2B.
  - Description of the RDC technology transfer value chain as transformation of research into invention, patent, license and profit.
  - Disclosure and Due Diligence Process
  - Development of Technology Assessment Scorecard: Ownership Criteria; Development Criteria; Protectability Criteria and Commercialization Potential.
  - B2B technology transfer approaches.
- Self-assessment exercises and success stories examples

### **Reference documentation and topics:**

- Technology transfer value chain descriptions
- RDC as a knowledge community

### **Success criteria for the session:**

- Successfully completion of Module 4 – Session 1 Self-assessment exercises on technology transfer value chain and B2B technology transfer options

### **Available instructional materials:**

- Power Point Presentation or
- Integration of audiovisual material by using Adobe professional or alternative
- Links to appropriate websites
- Links to articles, guides and toolkits

## **M4 - SESSION 2**

**Title:** Technology Audit in RDC

**Duration:** approx. 50 minutes

**Summary description:**

The aim of the session is to provide knowledge on the technology audit importance for the innovation management and technology transfer decisions of RDC business partners. It reveals the mechanism (levels and scope), and the impact of technology audit on innovation strategy in general and technology transfer as an option for RDC business partners.

**Session activities:**

The session encompasses the following activities:

- Understanding technology audit content, common features of technology and innovation audit. Maximizing the technology and innovation capabilities of the companies in the RDC.
- Developing knowledge on framework of technology audit. Major steps in technology audit process – from decisions to the final report. Levels, scope and responsibilities in technology audit.
- Managing technology audit barriers and elaboration of strategies and tactics to surmount them.
- Analysis of business cases in which technology audit has an increased priority.
- Self-assessment exercise based on close-ended questionnaire

**Reference documentation and topics:**

- Technology Audit Procedure and Checklist
- Technology Audit Questionnaire

**Success criteria for the session:**

- Successfully completion of Module 4 –Session 2 Self-assessment exercise based on close-ended questionnaire on technology audit
- Relevant comments to Module 4 –Session 2 case

**Available instructional materials:**

- Power Point Presentation or
- Integration of audiovisual material by using Adobe professional or alternative
- Links to appropriate websites
- Links to articles, guides and toolkits

## **M4 - SESSION 3**

**Title: Spin-out Route of Commercialization**

**Duration:** approx. 50 minutes

### **Summary description:**

This session will assist the RDC managers to consider spin-out as an option in cluster growth. It explores the rationale of company creation from the R&D base in the RDC. It provides knowledge on the advantages of spin-out and the need of the rules and regulations for spinout formation: general provisions, conflict of interest, equity division, culture change, and control.

### **Session activities:**

This session will include the following activities:

- PPT-based presentation on the spin-out commercialization process:
  - Why should RDC be interested in supporting spin-outs? What are the potential differences in spin-out, spin-off and start-ups?
  - Who should develop regulations and rules for spin-out formation in RDC?
  - What are the options for equity share formation and division?
  - Major challenges in spin-outs: conflict of interest, IP pipeline and sustain academic motivation.
- Introduction of optional self-assessment questions and exercises (based on the information provided in the presentation and case studies to be completed by the participants)

### **Reference documentation and topics:**

- Spinout route exploitation documents
- Rules and regulations for spin-outs in public research organisations and RDC
- National programmes for university spin-out support

### **Success criteria for the session:**

- Successfully completion of Module 4 – Session 3 self-assessment questionnaire on the benefits and challenges of spin-outs in RDC.
- Successful understanding of the exercises on spin-out components and resources.  
Relevant to the session topic comments on a case study

### **Available instructional materials:**

- Power Point Presentation or
- Integration of audiovisual material by using Adobe professional or alternative
- Links to appropriate websites
- Links to articles, guides and toolkits.

## **M4- SESSION 4**

**Title:** Licensing in RDC

**Duration:** approx. 50 minutes

### **Summary description:**

The session aim is to broaden the trainees' knowledge and skills in technology transfer among RDC partners through licensing. The major benefits of licensing will be discussed as well as when it can be considered as the optimum commercialization route in RDC. The opportunities for cross-licensing will be examined and the forms of payments.

### **Session activities:**

This session will include the following activities:

- PPT-based presentation on the licensing route of commercialization:
  - Comprehend the appropriateness, the benefits and the restraint of licensing and cross-licensing in RDC. Licensing options in different stages of the technology life-cycle.
  - Distinguish licencing options in terms of obligations, territory, duration and payment in RDC and outside the cluster.
  - Develop of licensing checklist of major decisions and steps in the licensing process and avoidance of licensing pitfalls.
- An exercise on licensing option for technology transfer in RDC and to an outside the cluster business partner.

### **Reference documentation and topics:**

- Handbook of Intellectual property management, Q.Lime
- Isis Innovation, University of Oxford

### **Success criteria for the session:**

- Successfully completion of Module 4 – Session 4 self-assessment questionnaire on the licensing technology transfer option
- Successful understanding of the case study provided in the session materials.
- Successful completion of the practical sections of M4 - S1, M4 – S2 and M4-S3

### **Available instructional materials:**

- Power Point Presentation or
- Integration of audiovisual material by using Adobe professional or alternative
- Links to appropriate websites
- Links to articles, guides and toolkits.

## **M4 - SESSION 5**

### **Title: Technology Transfer Office and RDC**

**Duration:** approx. 50 minutes

### **Summary description:**

The session goal is to augment trainees' knowledge on the services technology transfer office can provide to RDC partners, its position in or outside the cluster. It enhances the understanding that technology transfer does not happen on its own and should be supported by policy framework and patience in obtaining successful results.

### **Session activities:**

This session will include the following activities:

- PPT-based presentation about technology transfer offices activities:
  - Develop knowledge on the major technology transfer office services: legal advice on the exchange of confidential information, assistance in decision-making about patenting and valuation when out-licensing patents, business strategies development, market analyses, business plans, formation of spin-off companies, and getting access to financial instruments for product development.
  - Understand the need and impact of Proof of Concept programs/grants.
  - Realize the advantages and limitations of different TTO structures: separate company or part of the University/Public research organization; inside and outside the RDC.
- A list of self-assessment questions for the TTO functions and impact.

### **Reference documentation and topics:**

- Best practice examples of TTO: Isis Innovation, ipHandbook of Best Practices, ch.6.3

### **Success criteria for the session:**

- Successfully completion of Module 4 – Session 5 self-assessment questionnaire on TTO functions and structure..
- Relevant to the session answers to a case study.
- Successful completion of the practical sections of M4- S1, M4 – S2, M4-S3 and M4 – S4.

### **Available instructional materials:**

- Power Point Presentation or

- Integration of audiovisual material by using Adobe professional or alternative
- Links to appropriate websites
- Links to articles, guides and toolkits.

### 3.6 MODULE 5. Open Innovation

Module title: **RDCs and Open Innovation**

Module ambition/aim: The purpose of the module is to train RDC managers in the rationale, strategies and methods of open innovation and how opening the innovation process within and outside cluster limits.

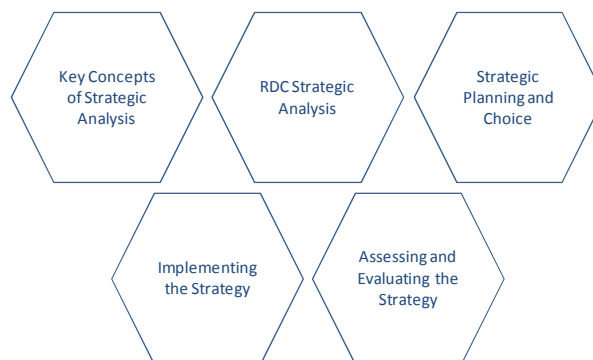
Module duration: Approx. 5 hours with all sessions implemented (5 x 50)

Objectives/outcomes: After completing this session the participant should be able to:

- Conceptualise open innovation ecosystems
- Define benefits and risks when opening the innovation process
- Formulate strategic positioning of RDC for open innovation
- Associate social media in open innovation processes
- Involve living labs in open innovation processes
- Draw an implementation roadmap for open innovation

Framework references: RDC Clusters → RD Cluster management → Strategy implementation

Associated Sessions



## **M5- SESSION 1**

**Title:** Understanding Open Innovation

**Duration:** Approx. 50 minutes

**Summary description:**

This session will provide an overview of the concepts of open innovation in relation to value chain, trends and applications.

**Session activities:**

This session includes the following activities:

Presentation with the following content:

- Understanding open innovation
- Evolution towards open innovation
- Open innovation landscape
- The future of open innovation; applications of open innovation

Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

**Reference documentation and topics:**

- Interview: Henry Chesbrough – Open Innovation or Ideas for Change- Chesbrough on Open Innovation
- State of global open innovation: Global State
- Critique: Jim Ditmore (2012) Why IT Outsourcing Often Fails
- Overview slideshow: Henry Chesbrough (2009) Open Innovation Seminar 2009 – Brazil
- Web: Open Innovation Community
- OECD (2008) Open Innovation in Global Networks
- Eric Von Hippel (2006) Democratizing Innovation
- Oliver Gassmann, Ellen Enkel and Henry Chesbrough (2010) “The future of open innovation”, R&D Management 40.3.
- InnoCentive Whitepaper (2012) State of Global Open Innovation
- Program in Open Innovation – What is Open Innovation?
- Exnovate network for open innovation, <http://www.exnovate.org>

**Success criteria for the session:**

- Successful completion of Module 5– Session 1 self-assessment questionnaire and exercises on understanding open innovation.

**Available instructional materials:**

- Presentation in conventional PowerPoint format or
- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information



- Available literature

## **M5- SESSION 2**

**Title: Open innovation and Research Driven Clusters**

**Duration:** Approx. 50 minutes

### **Summary description:**

The session overviews the typologies of clusters and RDCs, open innovation within RDCs and strategy building for open innovation.

### **Session activities:**

The section includes a presentation with the following topics:

- Concepts of clusters and Research-driven clusters
- Typologies of clusters
- Extending the RDC to open innovation
- Competitive advantages of cluster
- Trends towards research and knowledge intensive clusters;
- Capacity building in clusters for open innovation

Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- Monitor Group (2009) Cluster Development, Open Innovation and Innovation Policy
- Monitor Group (2009) Cluster Development and Innovation Policy for Competitiveness
- INNOSEE Project (2012)-Clusters -Typology and Training Needs
- Jiang He and M. Hosein Fallah (2011) The typology of technology clusters and its evolution
- ESCAP (2010) Fostering Innovation in High Tech Clusters
- Sautter and Clar (2008) Strategic Capacity Building in Clusters to Enhance Open Innovation
- Leitao (2006) Open Innovation Clusters Case study
- European Cluster Observatory – Cluster Mapping
- France Clusters
- Innovation, entrepreneurship, regional clusters

### **Success criteria for the session:**

- Successful completion of Module 5– Session 2 self-assessment questionnaire and exercises on understanding open innovation with RDCs.

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or
- Integration of audiovisual material by using Adobe professional or alternative

- Links to external sites and theoretical information
- Available

literature

## **M5- SESSION 3**

### **Title: Open innovation and Social Media**

**Duration:** Approx. 50 minutes

### **Summary description:**

The session overviews the the social media in the open innovation process, the use of social media with RDCs and the value of crowdsourcing

### **Session activities:**

The section includes a presentation with the following topics:

- Social media value in open innovation
- Types and usages of social media
- Social media process toward crowdsourcing
- Crowdsourcing and open innovation

Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- Stefan Lindegaard: Open Innovation, <http://www.youtube.com/watch?v=W2UXXSPGOI4>
- Howard Schultz Interview on open innovation and social media, <http://www.youtube.com/watch?v=CdU49EnvquU&feature=related>
- Interview Gregory Asmolov 'Social Media Crowdsourcing Change', <http://www.youtube.com/watch?v=CbxCLMda4Is>
- Crowdsourcing and Crowdfunding Explained, <http://www.youtube.com/watch?v=-38uPkyH9vI>
- Open Innovation Meets Social Media By Stefan Lindegaard, [www.15inno.com](http://www.15inno.com)
- "Open Innovation Meets Innovation Media Concepts, Aspects and Future Trends of Creative Processes and Innovation Ecosystems" , <http://www.innovationjournalism.org/ij6ac/papers/lnkinenKaivoojaOpenInnovationdraft.pdf>
- A Guide to Open Innovation and Crowdsourcing: Advice From Leading Experts, edited by Paul Sloane, [http://www.amazon.com/Guide-Open-Innovation-Crowdsourcing-Leading/dp/0749463074/ref=la\\_B00364XA5E\\_1\\_1?ie=UTF8&qid=1346337523&sr=1-1](http://www.amazon.com/Guide-Open-Innovation-Crowdsourcing-Leading/dp/0749463074/ref=la_B00364XA5E_1_1?ie=UTF8&qid=1346337523&sr=1-1)

### **Success criteria for the session:**

- Successful completion of Module 5– Session 3 self-assessment questionnaire and exercises on understanding how social media may facilitate the open innovation process in RDCs

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or
- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information

Available literature

## **M5- SESSION 4**

### **Title: Open innovation and Living Labs**

**Duration:** Approx. 50 minutes

### **Summary description:**

The session overviews the mode of co-creation and the mixed mode of social transformation and innovation to open innovation through living labs.

### **Session activities:**

The section includes a presentation with the following topics:

- The role of living labs in open innovation
- Involving innovative communities in the RDCs open innovation process
- Co-creation and living labs

Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- Helsinki living lab, <http://www.youtube.com/watch?v=1CzIN4dw5z4>
- Future Logistics Living Lab, <http://www.youtube.com/watch?v=dpWha6zU3jo>
- Living Labs for user-driven open innovation, Directorate-General for the Information Society and Media Unit F4 New Infrastructure Paradigms and Experimental Facilities, European Commission, January 2009 , [http://ec.europa.eu/information\\_society/activities/livinglabs/docs/brochure\\_jan09\\_en.pdf](http://ec.europa.eu/information_society/activities/livinglabs/docs/brochure_jan09_en.pdf)
- Kviselius N., Ozan H., Edenius M, Andersson P., The Evolution of Living Labs – Propositions for Improved Design and Further Research, [http://www.pucsp.br/icim/ingles/downloads/pdf\\_proceedings\\_2008/77.pdf](http://www.pucsp.br/icim/ingles/downloads/pdf_proceedings_2008/77.pdf)
- Ebbesson E., Virtual Settings for Co-Creation in a Living Lab University of Gothenburg
- [http://gupea.ub.gu.se/bitstream/2077/20525/1/gupea\\_2077\\_20525\\_1.pdf](http://gupea.ub.gu.se/bitstream/2077/20525/1/gupea_2077_20525_1.pdf)

### **Success criteria for the session:**

- Successful completion of Module 5– Session 4 self-assessment questionnaire and exercises on understanding how living labs may facilitate the open innovation process in RDCs

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or
- Integration of audiovisual material by using Adobe professional or alternative

- Links to external sites and theoretical information
- Available literature

## **M5- SESSION 5**

**Title: Open Innovation for Research Driven Clusters: A roadmap**

**Duration:** Approx. 50 minutes

### **Summary description:**

The session overviews the creation of roadmap for open innovation planning within the RDCs.

### **Session activities:**

The section includes a presentation with the following topics:

- Open innovation strategies
- Action planning for open innovation
- Tools for open innovation
- Making a decision for the open innovation mix and deciding upon a course of action.

Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation).

### **Reference documentation and topics:**

- Nicos Komninios (2008) Globalisation of innovation and open innovation systems policy
- 
- How to approach open innovation, <http://www.15inno.com/2011/03/09/how-to-approach-open-innovation/>
- Clar, Sautter and Hafner-Zimmermann (2008) Strategic Cluster Development
- Larry Selden and Ian C. MacMillan (2006) Manage Customer-Centric Innovation -Systematically, Harvard Business Review.
- Nine Sigma, <http://www.ninesigma.com>
- Clar, Sautter and Hafner-Zimmermann (2008) Strategic Cluster Development
- Larry Selden and Ian C. MacMillan (2006) Manage Customer-Centric Innovation -Systematically, Harvard Business Review.

### **Success criteria for the session:**

- Successful completion of Module 5– Session 5 self-assessment questionnaire and exercises on drafting a open innovation strategy and roadmap, including knowledge gained in M5-1 through M5-5.

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or
- Integration of audiovisual material by using Adobe professional or alternative

- Links to external sites and theoretical information
- Available

literature

### 3.7 MODULE 6. International Networking and Cooperation

Module title: **International Networking and Cooperation**

Module ambition/aim: The aim of the module is to give theoretical and practical knowledge for the international market and technological environment in which the RDC operates, to help RDC managers to take the right decisions concerning the RDC internationalisation, to provide the cluster with resources and capacity that are international, to assess the importance of the RDC for regional development and to understand the importance of the knowledge-intensive services for the RDC development.

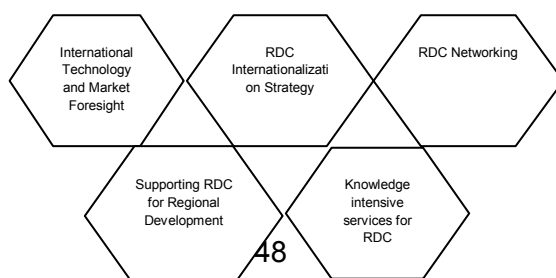
Module duration: Approx. 5 hours for all the sessions (5 x 50)

Objectives/outcomes: The participants will acquire knowledge and skills to:

- Assess the market and technological environment of the RDC and to analyze the effects of the international environment on the development of the RDC. The assessment of the factors of the international environment affecting the RDC cluster growth, development and profits is also an objective of this module.
- Determine the factors that lead to the decisions of the RDC to internationalize and to understand and adapt to the conditions leading to the decisions of the RDC to internationalize.
- Understand the networking between RDC that are internationalized as well as the networking and cooperation between internationalized RDC and other international public and private bodies.
- Know the importance of the RDC for regional development, for the development of Regions of knowledge and regional public-private partnerships with the participation of the regional RDC.
- Estimate the importance of the knowledge intensive services for the RDC development and growth.

Framework references: RDC Clusters → RD Cluster management → Internationalisation, Networking and Cooperation

#### Associated Sessions





## **M6 - SESSION 1**

**Title:** International Technology and Market Foresight

**Duration:** Approx. 50 minutes

**Summary description:**

The session will provide an overview of the international market and technological environment in which the RDC operates and will provide participants with the opportunity to analyse the effects of the international environment on the development of the RDC.

**Session activities:**

This session includes the following activities:

- PPT-based presentation on the International Technological and Market Foresight regarding:
  - Definition of international market environment in which the RDC operate;
  - Description of the international technological environment in which the RDC operate;
  - Analysis on how the international environment of the RDC affects cluster growth
  - Assess how internationalisation of the RDC affects their proximity to resources.
  
- Cases presenting good practices of RDC that are successfully internationalised

**Reference documentation and topics:**

- Models for analysis of the international environment of the internationalised RDC (SWOT, PEST)
- Factors of the international environment

**Success criteria for the session:**

- Successfully completion of Module 6 – Session 1: assessment of the case on international business environment, affecting the development of the RDC

**Available instructional materials:**

- Power Point Presentation or
- Audio-visual material
- Links to appropriate websites
- Links to articles, guides and toolkits

## **M6 - SESSION 2**

**Title:** RDC internationalisation strategy

**Duration:** approx. 50 minutes

### **Summary description:**

The aim of the session is to provide knowledge on planning, attracting and managing internationally attracted resources (material, financial, human, and the knowledge as a resource) necessary for the development of a successful RDC as well as to anticipate and evaluate the effects of conditions that lead to the decision of the RDC to internationalise and to adapt (as much as possible) the cluster to these conditions (including regulation in some particular sectors, etc.)

### **Session activities:**

This session includes the following activities:

- PPT-based presentation on RDC Internationalization strategy:
  - The process of planning, attracting and managing internationally attracted resources (material, financial, human, and the knowledge as a resource) necessary for the development of a successful RDC;
  - Analysis on the effects of conditions that lead to the decision of the RDC to internationalize and to adapt (as much as possible) the cluster to these conditions (including regulation in some particular sectors, etc.).
- Cases presenting good practices of RDC that are successfully internationalised

### **Reference documentation and topics:**

- Basic aspects of strategic analysis of internationalisation of RDC, key concepts
- Implementation of the RDC internationalisation strategy

### **Success criteria for the session:**

- Successfully completion of Module 6 – Session 2: assessment of the case on RDC internationalisation strategy

### **Available instructional materials:**

- Power Point Presentation or
- Audio-visual material
- Links to appropriate websites
- Links to articles, guides and toolkits

## **M6 - SESSION 3**

**Title: RDC Networking**

**Duration:** approx. 50 minutes

### **Summary description:**

This session will assist the RDC managers to understand better the Networking between RDC that are internationalized as well as the Networking and Cooperation between internationalized RDC and other international public and private bodies.

### **Session activities:**

This session includes the following activities:

- PPT-based presentation on RDC Networking:
  - maximization of benefits for the RDC from the networking and cooperation activities and communication of successful partnerships and their results to the clusters stakeholders;
  - successful networking and cooperation activities between internationalized RDC and other international public and private bodies and examples of communication of successful partnerships and their results to the clusters stakeholders.
- Cases presenting good practices of RDC that are successfully internationalised

### **Reference documentation and topics:**

- Key characteristics of successful partnerships
- Key aspects of networking and cooperation activities

### **Success criteria for the session:**

- Successfully completion of Module 6 – Session 3: assessment of the case on RDC networking

### **Available instructional materials:**

- Power Point Presentation or
- Audio-visual material
- Links to appropriate websites
- Links to articles, guides and toolkits

## **M6- SESSION 4**

**Title:** Supporting RDC for Regional Development

**Duration:** approx. 50 minutes

**Summary description:**

The fourth session objective is to increase the trainees' knowledge on understanding the regional public-private partnerships with the participation of regional RDC as well as on the development of Regions of knowledge, supported by regional RDC.

**Session activities:**

This session includes the following activities:

- PPT-based presentation on supporting RDC for Regional Development:
  - understanding the regional public-private partnerships with the participation of regional RDC;
  - successful development of Regions of knowledge, supported by regional RDC.
- Cases presenting good practices of RDC that have contributed to the regional development of the regions where cluster members come from.

**Reference documentation and topics:**

- Regional Development Programs and Strategies
- The Regions of Knowledge as a concepts

**Success criteria for the session:**

- Successfully completion of Module 6 – Session 4: assessment of the case on supporting RDC for Regional Development

**Available instructional materials:**

- Power Point Presentation or
- Audio-visual material
- Links to appropriate websites
- Links to articles, guides and toolkits

## **M6 - SESSION 5**

**Title:** Knowledge intensive services for RDC

**Duration:** approx. 50 minutes

**Summary description:**

The session goal is to increase trainees' competences on Knowledge intensive services for the RDC, offered by business incubators, information centers, joint research centers, etc.

**Session activities:**

This session includes the following activities:

- PPT-based presentation on Knowledge intensive services for the RDC:
  - Knowledge intensive services for the RDC, offered by business incubators, information centers, joint research centers, etc.
  - RDC that have found new markets for their products (or new markets for the innovations they have generated)
- Cases presenting good practices of RDC that have used knowledge intensive services and have experienced cluster expansion or cluster growth.

**Reference documentation and topics:**

- Best practice examples of business incubators, information centers, joint research centers, offering knowledge intensive services

**Success criteria for the session:**

- Successfully completion of Module 6 – Session 5: assessment of the case on Knowledge intensive services for RDC

**Available instructional materials:**

- Power Point Presentation or
- Audio-visual material
- Links to appropriate websites

Links to articles, guides and toolkits

### 3.8 MODULE 7. IPR and Patenting Issues

Module title: **IPR and Patenting for RDC**

Module ambition/aim: The purpose of this module is to provide participants with the theoretical and practical knowledge needed to understand and strategically manage the assets and properties the RDC venture is using as its foundation for value creation. The module contents helps RDC managers to perceive strategic implications of IPR management decisions.

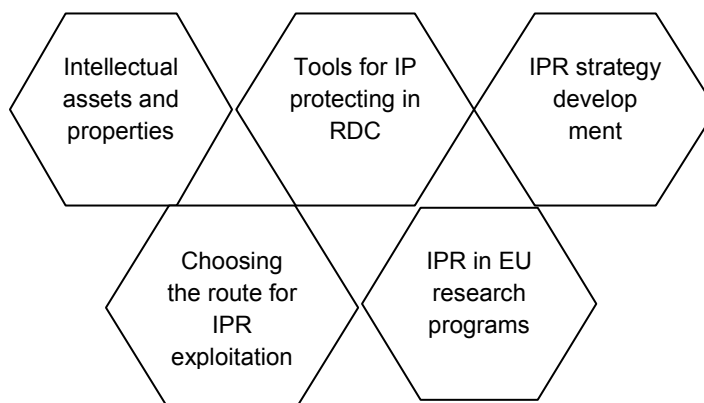
Module duration: Approx. 5 hours with all sessions implemented (5 x 50)

Objectives/outcomes: After completing this session the participant should be able to;

- Describe intellectual phenomena that are the value creators in the RDC
- Mastering the tools RDC managers have at their disposal when it comes to propertizing intellectual assets under different property regimes
- Define the major stages of an RDC intellectual property strategy definition and policy development
- Identifying the main requirements for the successful IPR exploitation in the RDC
- Recognize implications of IPR agreements on dissemination and exploitation of joint research and technology development results under EU programmes

Framework references: RDC Clusters → RD Cluster management → Intellectual property rights management

Associated Sessions



## **M7- SESSION 1**

**Title: Intellectual assets and properties**

**Duration:** Approx. 50 minutes

**Summary description:**

This session will provide an overview of the key concepts related to intellectual property definition as the intellectual capital of the organization that can be documented and protected. It will provide a selection of the literature on intellectual property rights protection in the context of research driven clusters.

**Session activities:**

This session includes the following activities:

- PPT-based presentation on content and scope of intellectual assets and properties
  - Description of intellectual assets as value creators in RDC and why it is important to turn assets into properties
  - Structure of the RDC intellectual capital. Unique and complementary assets.
  - Complexity of the strategic management of RDC intellectual assets and properties (administrative, judicial and business issues)
  - Key communicative and strategic skills of RDC managers in the propertizing process (e.g. claiming property over joint research)
  - Assessing intellectual assets and properties in the RDC
  
- Introduction of optional self-assessment questions and exercises (based on the information provided in the presentation).

**Reference documentation and topics:**

- Framework for Analyzing Intellectual Property Structures

**Success criteria for the session:**

- Successfully completion of Module 1 – Session 1 self-assessment questionnaire and exercises on the intellectual assets and properties and management issues.

**Available instructional materials:**

- Presentation in conventional PowerPoint format or
- Integration of audiovisual material by using Adobe professional or alternative
- Links to external sites and theoretical information

- Available literature

## **M7- SESSION 2**

**Title: Tools for intellectual property rights protection in the RDC**

**Duration:** approx. 50 minutes

### **Summary description:**

This session will provide partners with the knowledge and skills to master the tools for protecting intellectual phenomena. They have to know the opportunities and to understand and manage the weaknesses of claiming property under different property regimes. Good command of IPR protection mechanisms contributes to wealth generation in RDC industry and it enables value creation and value extraction of research work.

### **Session activities:**

This session includes the following activities:

- PPT-based presentation on pros and cons of tools of IP protection in RDC and the key issues to be identified
  - Description of main IPR protection mechanisms used in research industry (e.g. copyright and neighbouring rights, patenting, trademarks)
  - Managing individual, collective and shared intellectual property in RDC
  - Effective usage of trade secrets and non disclosure agreements in RDC
  - Opportunities for IPR protection in the EU (e.g. Community Trade Mark, European Patent)
  - Applying IPR protection mechanisms in RDC context
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation and case studies to be completed by the participants)

### **Reference documentation and topics:**

- Intellectual Property Rights for Clusters, Innovation Norway

### **Success criteria for the session:**

- Successfully completion of Module 1 –Session 2 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M1- S1

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)



- Audiovisual material (videos, slide shows, etc.)
- Links to external sites and theoretical information
- Available literature

## **M7- SESSION 3**

**Title: IPR strategy development**

**Duration:** approx. 50 minutes

### **Summary description:**

This session will assist the RDC managers in establishing intellectual property strategy based on identified common needs and different views of cluster members and elaborated guidelines of intellectual property policy. The tools and information provided in this session must allow RDC managers to foresee and overcome challenges and opportunities of using intellectual property as a business asset.

### **Session activities:**

This session will include the following activities:

- PPT-based presentation of the principles of IP strategy development
  - Why should RDC create intellectual property policy and strategy?
  - Techniques and methods to identify both opportunities and threats for the RDC intellectual property strategy development
  - Tool to evaluate the most convenient intellectual property strategic options for RDC
  - The process of intellectual property policy and strategy development
- Introduction of optional self-assessment questions and exercises (based on the information provided in the presentation and case studies to be completed by the participants)

### **Reference documentation and topics:**

- Developing an IP Strategy and Integrating IP in Your Business Plans

### **Success criteria for the session:**

- Successfully completion of Module 1 – Session 3 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M1- S1 and M1-S2

### **Available instructional materials:**

- M1-0 presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)

- Links to external sites and theoretical information
- Available literature

## **M7- SESSION 4**

**Title: Choosing the best route for IPR exploitation**

**Duration:** approx. 50 minutes

### **Summary description:**

This session will provide trainees with the necessary tools to translate an IP strategy into an organisational action for IPR exploitation. This session will show RDC managers what methods can be used to identify opportunities in the industry and manage risks by claiming IP and creating viable business models.

### **Session activities:**

This session will include the following activities:

- PPT-based presentation on the successful implantation of RDC intellectual property strategy
  - Understand the advantages and the limitations of IP exploitation options
  - Skills and competences required for designing/developing IP exploitation route for RDC or its member
  - Supporting services for starting a business based on protected research results
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation and case studies to be completed by the participants)

### **Reference documentation and topics:**

- Handbook Quality in Licensing and IPR Management Education Q.Lime

### **Success criteria for the session:**

- Successfully completion of Module 1 – Session 4 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M1- S1, M1 – S2 and M1-S3

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)

- Links to external sites and theoretical information
- Available literature

## **M7- SESSION 5**

**Title:** IPR in EU research programmes

**Duration:** approx. 50 minutes

### **Summary description:**

This session should provide trainees with the tools and knowledge about the various issues and potential pitfalls regarding IPR that participants may encounter when preparing and participating in research and technology development projects funded by EU. IPR issues can affect both the way a project is conducted, and the exploitation of results after the end of a project

### **Session activities:**

This session will include the following activities:

- PPT-based presentation about IPR protection in EU funded projects
  - Foreground and background results, generated in joint project
  - Principles of protecting intellectual property in EU funded projects
  - Licences and user rights to foreground or background project results owned by another participant in the project
  - Eligibility of IPR costs
- Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation and case studies to be completed by the participants)

### **Reference documentation and topics:**

- Guide to Intellectual Property Rules for FP7 projects

### **Success criteria for the session:**

- Successfully completion of Module 1 – Session 4 self-assessment questionnaire on the strategic analysis issues.
- Successful understanding of the case studies and exercises provided in the session.
- Successful completion of the practical sections of M1- S1, M1 – S2, M1-S3 and M1 – S4

### **Available instructional materials:**

- Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)
- Audiovisual material (videos, slide shows, etc.)

- Links to external sites and theoretical information
- Available literature

### 3.9 MODULE 8. Innovation Funding

#### MODULE 8. Innovation Funding

Module title: **Innovation Funding**

Module ambition/aim: The purpose of this module is to provide participants with the theoretical and practical knowledge needed to understand opportunities for innovation funding. The module contents helps RDC managers to perceive strategic implications of funding through risk capital. In a competitive free market perspective RDC members need to better understand how to attract investors and to be familiar with the stages of the investment process.

Module duration: Approx. 5 hours with all sessions implemented

Objectives/outcomes: After completing this session the participant should be able to:

Describe the local innovation policy framework

Take advantage of the latest innovation policy developments

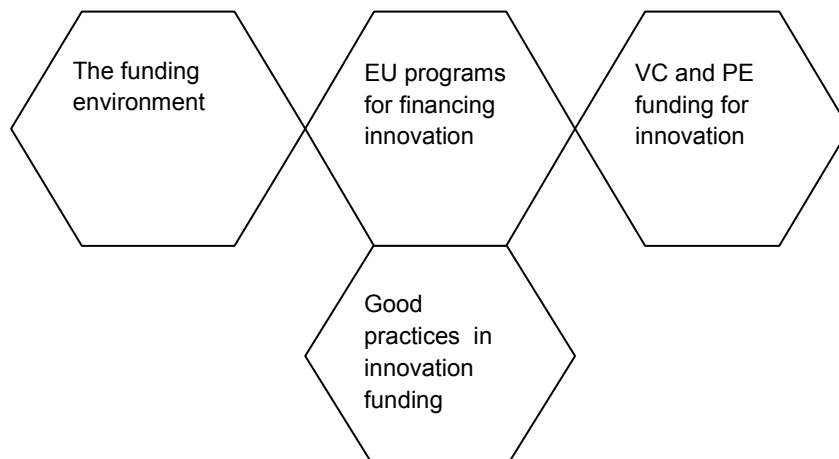
Know the national contact points of the EU programs for financing innovation

Tell the advantages and disadvantages of internal VS external sources of financing

Draw on past successful experiences of RDC managers, venture capitalists and other stakeholders in innovation funding

Framework references: RDC Clusters → RD Cluster management → Innovation funding

Associated Sessions



## **M8- SESSION 1**

**Title:** Getting to know the local innovation funding environment

**Duration:** approx. 50 minutes (also possible to extend to 2x50: innovation system, and innovation policies)

**Summary description:**

This session motivates the need to improve performance in innovation financing on both the cluster level and the country level. Taking part in this training module enables the RDC representatives to get to know their national innovation system stakeholders, and who can help them in financing their innovations. Knowing how innovation policies have been developing in the last few years helps entrepreneurs position themselves within the objectives of the national innovation policy. This would also make financing easier as the goals of the RDC are in line with the goals of the national innovation policies.

**Session activities:**

This session will include the following activities:

A description of the recent trends in innovation performance and competitiveness of the local economy vs. the EU. Will also detail in general the costs and benefits of external financing vs. internal financing of innovation.

A presentation on who is responsible for innovation funding within the country; who are the key stakeholders in the process of financing innovation, and what their responsibilities are. Finally, they get a systematic view over the sources of innovation funding and applying for innovation funding locally.

A concise information on the key objectives of the national innovation policy, its recent developments, and allows the entrepreneurs to get more information on the innovation policy events in the RDC financing area.

**Reference documentation and topics:**

The course content materials prepared earlier  
The references listed in the course content materials

**Success criteria for the session:**

The trainee is able to understand the difficulties related to obtaining risk financing in the aftermath of the financial crisis

Knowledge who the key players in the national innovation system are

The trainees are aware of the key developments in the national innovation policies, especially those directed at clusters

**Available instructional materials:**

Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)

Audiovisual material (videos, slide shows, etc.)

Links to external sites and theoretical information

Available literature and handouts

## **M8- SESSION 2**

**Title:** The EU programs for financing RDC innovation

**Duration:** approx. 50 minutes

**Summary description:**

In this session RDC representatives complete their understanding of the EU financing opportunities. Thus, they get additional information on the sources of innovation funding and applying for innovation funding internationally. The session builds a systematic overview of the EU programs for innovation funding, their key objectives and their operation.

**Session activities:**

This session will include the following activities:

Stresses the importance of international cooperation in RDC activities for an easier access to EU innovation funding.

Details the key requirements for obtaining EU financing under the innovation programs, gives further information sources to obtain additional information.

Finally, describes the importance of building partnerships to obtain innovation funding.

**Reference documentation and topics:**

The course content materials prepared earlier

The references listed in the course content materials

**Success criteria for the session:**

The trainees know how to obtain support for their research, innovation and entrepreneurial ideas

The trainees know how to position their ideas within the relevant funding sources (“getting through the financing maze”)

The trainees know whom to contact at the national and regional authorities in the process of innovation funding

The trainees are able to build and use a checklist for a successful innovation funding

The trainees are able to name a few EU programs known to support innovative projects at the RDC level

The trainees are able to tell briefly the main goals of the Competitiveness and Innovation Framework Programme (CIP)

They know the usefulness of the New Practical Guide to EU funding opportunities for research and innovation

**Available instructional materials:**



Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)

Audiovisual material (videos, slide shows, etc.)

Links to external sites and theoretical information

Available literature and handouts, especially the course content handout

### **M8- SESSION 3**

**Title:** Venture Capital and Private Equity funding for innovation

**Duration:** approx. 50 minutes

**Summary description:**

This session should provide trainees with the tools and knowledge about the various issues and potential pitfalls in securing substantial funding through risk financing to delivering high growth and innovation within the RDC. Equity financing issues including formal and informal investment, Venture Capital (VC) or Private Equity (PE) funding will be explained. In a competitive free market perspective RDC members need to better understand how to attract investors and to know what the investment process is all about.

**Session activities:**

This session will include the following activities:

PPT-based presentation about VC and PE funding;

Investors in risk capital. Formal and informal risk capital;

Innovation projects stages and types of VC and PE financing;

RDC innovation funding opportunities - available instruments in the scope of the European Investment Fund (EIF);

Understanding the investment process.

Introduction of optional self-assessment questions and exercises (based on the theoretical information provided in the presentation and case studies to be completed by the participants)

**Reference documentation and topics:**

Website of the EIF

**Success criteria for the session:**

Successfully completion of self-assessment questionnaire on funding RDC with risk capital through VC and PE.

Successful understanding of the case studies and exercises provided in the session.

Successful completion of the previous practical sections

**Available instructional materials:**

Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)

Audiovisual material (videos, slide shows, etc.)

Links to external sites and theoretical information

Available literature

## M8- SESSION 4

**Title:** Learning from good practices in RDC innovation funding

**Duration:** approx. 50 minutes

**Summary description:**

RDC members need to obtain hands-on information on how others commercialized their successful ideas. Thus, in this session they will learn how to motivate investors to take a part in their innovative ideas from their inception. Based on previous successful examples of RDC innovation funding, this module presents several success stories of innovation finance. Specifically, building on the information on the EU programs, a number of video sources have been developed to help entrepreneurs within RDCs obtain innovation funding.

**Session activities:**

This session will include the following activities:

Watching videos of the success stories and of the stakeholders involved: the developer of the project, the RDC itself, and, depending on who financed the RDC innovation, the national body, or the EU representative of the financing program, or the venture capitalist or angel investor.

In addition, videos will be presented of entrepreneurs who chose to finance internally. Those videos will deliver more viewpoints on the advantages and disadvantages of the internal vs. external financing at the RDC level.

**Reference documentation and topics:**

EU clusters observatory video materials  
Youtube sources of strategies to obtain finance  
Purposefully recorded material  
Course content handout

**Success criteria for the session:**

Awareness of the EU cluster observatory

Awareness of the specific ways the EU cluster observatory can help the RDC managers obtain financing

Willingness to try selling an idea to known venture capital (VC) schemes and angel investors in the local economy

Willingness to seek partners internationally and try selling the idea to big VCs on an EU/US level

Willingness to contact a successful RDC manager who sold at least one idea to a VC and benefit from their advice, and why not team up them to take the innovation further

Contacting a local contact point and requesting information on success stories, and learning from their experiences

Giving feedback to policy makers on what would make the innovation policies more RDC-friendly

**Available instructional materials:**

Presentation in conventional PowerPoint format or alternative (i.e. Adobe professional)

Audiovisual material (videos, slide shows, etc.)

Links to external sites and theoretical information

Available literature and handouts, especially the course content handout

## 4. THE TRAINERS ROLE

### 4.1 Methodological Description

The training programme is based in two separate processes: **a)** one based on the trainees completion of the training materials and **b)** another based on the supervision of the programme selected trainers.

The **seminar sessions** will be coordinated by selected trainers that, based on their expertise, will be responsible for one or several modules in each region.

The different seminars that will take place during the pilot project implementation could be:

**Session 1:** Familiarisation with the training tool kit

**Session 2:** Assessment of the level of competences and needs

**Session 3:** Feedback provided through the development of the InnoSee forum.

**Session 4:** Feedback provided through the development of the InnoSee forum.

**Session 5:** Feedback provided through the development of the InnoSee forum.

**Session 6:** Assessment of the trainees' achievements.

**Session 7:** Validation and certification of the trainers' achievements.

Some of these sessions will be aimed at the follow up of specific exercises and case studies to be completed by the trainees. It will be important to identify the process by which the practices will be developed.