



## **Training for Science and Technology managers (3G-STPs)**

Final Report

Public Part

## Project information

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## Executive Summary

Starting from their roots decades ago, Science and Technology Parks (STPs) have grown into globally recognized tools for the effective offering of various innovation support services to their main clients – start-ups and SMEs. This has been accompanied by permanent modification and enrichment of the role of STPs as bridging institutions between universities and other R&D bodies, business entities, governmental offices, and the wider public community. A STP has two main objectives; the first is to act as a catalyst for regional economic development, while the second relates to facilitating the creation and development of new technology-based companies and knowledge transfer from universities to companies. From this perspective, STPs play a central role in the European innovation system, pushing new knowledge-based economy and improving the relation between all elements in the system.

Based on the “*European Economic and Social Committee on European Technology Industrial and Science Parks in the crisis management*” – opinion paper drawn on 14<sup>th</sup> of July, 2010 the following problems became evident:

- Companies, jobs, knowledge, and economic and innovation capacity located in STPs are hidden assets of the EU which need to be better capitalized and exploited.
- The excellence of the parks’ management is a key factor for ensuring the outstanding quality of the park operation. Managers’ continuous training for professional development is important to maintain the quality of services.
- Structured programmes should be available so as to build the necessary capacities in the STPs park manager organizations.

Based on this paper and the experience of several of the consortium partners, the consortium recognized that better trained STP managers can provide better support services to the start-ups and spin-offs. The consortium had the knowledge and expertise to develop a comprehensive and structured 3<sup>rd</sup> generation STPs training programme (3G-STPs) which enhances necessary capacities in the STP management teams.

Drawn from an IASP paper on “*Key challenges for Science Park Managers*” (IASP Learning by Sharing Series, 2009) a number of STPs are facing challenges and struggle to meet growing needs of their tenants. The main barriers identified are:

- Interactivity (networking)
- Branding (identity and promotion of the park)
- Technology transfer
- Internationalization
- Services (ability to provide added-value and tailor made services for tenants).

All those aspects can be improved through professionalization of the STP management and this is exactly what the consortium intended to do with the 3G-STPs project. The training programme will equip the STP management team with a set of skills, which will enable them to exploit the full potential of the parks, better

facilitating the needs of the existing and future tenants, bridging the gap between worlds of science and business.

Taken into account the parameters set above, the consortium started this project with an European wide Training Need Analysis in order to fully comprehend the challenges in STP management. Based on the needs and gaps in knowledge from this analysis, the training package started to take form with several modules perfectly fitted for STP management. Once the training package was ready, it was carefully tested by a Pilot Testing Session and a Quality Control Session. Once again external experts but also the selected target groups were invited to share their feedback on the training. The target groups were invited to enter into the project through many different dissemination actions and events. In the end, after the final implementation of comments and feedback, the training package is ready to be exploit. An exploitation strategy and plan was created to last beyond the project lifetime.

Within this public part of the final report, the entire project lifetime is explained. The consortium envisions the 3G-STPs programme to lead to higher satisfaction levels of tenants, to higher quality of the performance of the STP managers in day-to-day operations and lead to higher quality of services delivered by STP managers training in relation of tenants declared needs. Eventually, once the project will be fully implemented, it will lead to higher economic grow within the STPs region.

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# 1. Project Objectives

Science and Technology Parks (STPs) provide the necessary nurturing environment to generate spin-off and start-ups, increasing their survival rate through a set of services and facilities offered. Their support to knowledge based companies generated from research activities of universities is a core issue and concern for the European community in the transformation to the Innovation Union. The consortium took a joint approach in tackling this issue through professionalization of skills of STP managers, who have direct access to start-ups, spin-offs and support of those fragile entities in their growth and development to viable business. In addition, the knowledge spill-over effects possible between tenants of STPs and brought together by the STP manager can enhance economic development of entire regions.

In order to enhance the level of professionalism of the STP management team, the following objectives were set:

## **a) During the lifetime of the project:**

- To identify the main needs, knowledge gaps, skills and resources required by STP managers in order to perform effective management, to meet the needs and requirements of its tenants (universities, VET Centers, SMEs, BICs, etc), and to foster new entrepreneurial activities (including self-employment, spin-offs and start-ups).
- To help STP managers to tackle the identified problem areas through a set of skills and tools necessary, as the training programme developed under this project will not only cover the main transformation aspects of science park management but also focus on "soft skills" development which is needed to build the capacity within the science park management team.
- To develop an enhanced training for the identified target groups that would improve their skills and enable them to carry out their work efficiently (the quality check will be performed via pilot testing session and evaluation of the external expert, which will enable the consortium to test the relevance of the training and fine-tune it based on the feedback provided).
- To develop suitable methods and techniques of training that fit the target groups needs and requests (including the modular e-course with virtual support coach).
- Setting up a Training Faculty (from personnel and expertise of partners) who will become potential facilitators once the training programme is fully developed, tested (during the project lifetime) and delivered (after the project lifetime).
- To engage STP managers, policy makers and key stakeholders in Europe in the project through dissemination activities (workshops, invitations to events, direct emailing).
- To create an online networking platform (via LinkedIn) which will facilitate communication, knowledge sharing and support to all STP managers in Europe (the consortium will put all efforts necessary to keep the platform active, relevant and useful for the users, therefore, encouraging them to take an active part in the group).

- To facilitate mobility of start-ups and SMEs by adding internationalization services to STPs, resulting in 30 movements (short stays of 2-3 days to identify potential on the market).

**b) Ultimately:**

- To commercialize the project results and to provide the training programme to STP managers in Europe on yearly basis (through the efforts which consortium members are willing to put in sustaining the results of the project).
- To keep the online dissemination alive (through the website, moodle platform and the LinkedIn group) and use these tools as a great networking opportunity for STP managers.

**c) On the long run:**

- To support entrepreneurial spirit and development of start-ups, generating employment opportunities in successfully managed science parks. The project will impact STP managers, ultimately contributing to the growth and development of start ups and spin-offs in Europe.

The consortium members are confident that objectives set are specific, measurable, attainable and can be achieved in the using available resources (financial and human) and timeframes set in the proposal.

The project will benefit the following target groups in the 3G-STPs project:

**Direct target groups:**

- Experienced managers and staff of the STPs;
- Newcomers into the STP management field (STP managers with little to no experience).

Besides the direct target group, the following **indirect target groups** are specified:

- Practitioners in the field of innovation support;
- Policy-makers at national / regional levels;
- Regional Development Agencies;
- Consultancy Agencies;
- Business support organizations;
- Start-ups, spin-offs and SMEs located at the premise of the STP.

In the long-term, the consortium believes that the training programme will also be beneficial for policy makers, regional development agencies and others as they are all related to the innovation policy area and can benefit from the training programme.

The consortium was able to reach and involve the target groups during multiple work packages in the project lifetime:

- The Training Needs Analysis (TNA phase) has resulted in direct involvement of 77 representatives of the STP management team who have filled-in the questionnaire (which was send out to 222 STPs);
- Besides the questionnaire, 20 STP managers where interviewed directly by the consortium partners;
- The IASP e-members have been reached with news and updates of the project throughout the project lifetime. Via this network at least one STP managers per STP in Europe, leading to involvement of about 222 STP managers;
- The EBN network has led to the involvement of 240 practitioners in the innovation field through dissemination activities;
- The pilot testing and evaluation phase has reached 180 STP representatives in Europe by sending the invitation of the pilot testing session through the 3G STPs LinkedIn page. In total 52 STP representatives attended the pilot testing session.
- Quality Assurance was checked by the 2 external experts whom were representatives of the target groups (STP manager and innovation practitioner in the field).

The project was carefully disseminated by providing several project brochures (and in some cases even a project stand, poster and/or presentation was held) during the following events:

- The 22<sup>nd</sup> EBN annual conference which attracted 350 participants.
- An IASP European Division workshop called: "SEED: Smart Eastern Europe Development - Collaboration opportunities for Western and Eastern European STPs" in which 60 attendees participated.
- A seminar organized by Spanish and Portuguese STPs in which 70 managers were present.
- The IASP 30<sup>th</sup> world conference which reached over 1000 attendees.
- The Baltic Dynamics 2013, which was visited by 290 attendees.
- The UKSPA May Conference where 80 members participated.
- The IASP European Division Workshop where 59 attendees where present.
- A Horizon 2020 meeting especially for funding opportunities for Science Parks in March 2014. A total of 40 STP representatives attended this event.
- The Swedish Incubators & Science Parks Association (SISP) 2014 where a group of 250 attendees was targeted.
- The UKSPA 30th Anniversary Summit 2014 were 400 attendees visited this event.
- The Baltic Dynamics 2014 which reached 150 visitors.

Besides the offline promotion, online promotion was done by making use of several tools which were updated with regular posts, discussions and links:

- The 3G-STPs website ([www.stp-training.eu](http://www.stp-training.eu)) which reached 36.786 visitors.
- LinkedIn Group in which 187 members joined and the consortium have posted 61 different posts.

As becomes clear, the objective of the project is to create an innovative training package which matched the needs and requirements of the STP managers and innovation practitioners in the field. By making use of the different dissemination tools described above, the consortium is confident in the fact that this objective is reached during the project life time and will continue to do so beyond its life time. The target groups will potentially be impacted by improving their knowledge, providing skills and creating awareness of opportunities that lie in STP management. As mentioned before, the professionalization of the STP management team can lead to more economic development of the STP region, but can potentially also impact the European economy as a whole.

## 2. Project Approach

In order to reach the project objectives stated in chapter 1, several approaches were implemented. These included methodologies, surveys, analysis and tests carried out. The 3G-STPs project entails a total of seven work packages (WPs). Some of them had endured only a few months while others ran during the entire project lifetime. These WPs were created in order to structure the development of the training material and to include as many representatives of the target groups as possible.

### **WP1: Project coordination**

The aim of this WP was to ensure that the project is implemented and completed successfully and within the parameters determined during the planning stage. The most important parameters referred to the time schedule, quality of the outcomes and budget. In addition, this WP included overall and day-to-day coordination and management by one consortium partner. This coordinator guaranteed the correct implementation of the project and the accomplishment of the planned objectives and milestones at the appointed dates. It was necessary to implement mechanisms to gather continuous feedback and involvement of the entire consortium. In order to have fruitful project management, the following methods were used:

- 4 coordination partner meetings were held in which particular project phases and outputs were discussed. Careful peer-feedback was provided by the consortium partners and new milestones were set. The meetings were scheduled after important WPs were about to finish. In addition, it gave the consortium the chance to have face-to-face meetings which was important with projects with a magnitude like 3G-STPs.
- A project information package was provided during the first partner meeting which gave the outline of the entire project and included: the partners' agreement, a roadmap and methodology, deadlines, partners' contribution, milestones and control mechanisms.
- Quarterly TO DO lists were provided to WP leaders which were followed up by Skype conference calls to monitor the progress and overcome any problems when necessary.
- A semi-annual partners' progress reports was created in order to have a good overview of the financial expenditure, tasks performed, and dissemination activities done during the project lifetime.
- The WP leader was also responsible for the communication with the EACEA when applicable and also created the final report of this project.

This WP was led by the project coordinator whom made sure the project stayed on track by ensuring overall and day-by-day management. This WP had a duration of 24 months and was finalized after completing this report.

## **WP2: European STP managers training needs analysis**

The aim of this WP was to develop a methodology and tools to carry out the training needs analysis (TNA) homogeneously among the target groups. Secondly, the information gathered was analyzed and used as input for the subsequent WP. The target groups profiles and existing needs, knowledge gaps and training delivery methods preferred were clarified based on this WP. The following methods were used:

- Guidelines and templates for the TNA, which included instructions on the research methods:
  - o Primary research which included an online questionnaire which was sent to 222 STP managers in Europe. In addition, in-depth interviews were held with 20 STP managers.
  - o Secondary research (desk-research) was performed by searching for available publications and materials resulting in national TNAs.
- An European TNA report was created which summarized the results and findings of the research specified above.
- A workshop and meetings were held at national and European levels to present the TNA outcomes to target groups, policy makers and stakeholders;

This WP had a total duration of four months and was completed successfully. The results of this WP were used as input to the development of the actual training material.

## **WP3: Development of the training material**

As explained above, using the main outcomes from the TNA phase the next phase started; the development of the training material. As became evident from WP2, there was a high need for practical training in which as many cases studies (best practices) as possible would be implemented in daily STP management practices. In order to ensure a homogenous training package, the following methods were used:

- Creation of templates for the selection of best practices and conversion into modules by making use of theory. In addition, templates were created for the lay-out of the modules.
- The best-practices selected were tested by experts from IASP on their general applicability to STP management;
- Based on this assessment, the partners started to develop the actual modules which were converted in the draft training toolkit which was used as input for the pilot testing phase (WP4).
- In addition, a modular e-course with virtual coach support was created in this WP. This entailed a web-based tool where trainees can get access to: entry level test, tailor-made training, the training package in downloadable form; and interactive tools with the possibility to post questions to the trainers.
- Finally, a Training Faculty was set-up which included the identification and selection of relevant trainers and facilitators for the training programme.

Once the modules were finished, the contents and quality was evaluated by the partners using a cross-reference matrix. This entailed that each partner will check two modules (other than their own) and provided peer feedback. For this WP the consortium had a time span of twelve months which also implies the importance of this WP (the duration is half of the total duration of the project).

#### **WP4: Pilot testing and evaluation**

In order to validate the relevance and coherency of the training programme, the pilot testing phase included the target groups of this project in order to test the training package created so far. In total, 182 LinkedIn members received the invitation directly. In addition, the consortium used the stakeholder's lists (317 STP representatives) to send an invitation. During the pilot testing session 52 representatives of the target groups were chosen to participate. The following tools were used in this phase:

- Pilot testing guidelines and templates, a set of instructions for the partners conducting the pilot test;
- Pre-training assessment which was done by the consortium partners, in order to create a post-training questionnaire.
- The post-training questionnaire evaluated the participants' expectations, the quality and applicability of the training programme;

This WP was very important as to check whether the created training package actually match the TNA results and expectations. This WP had a duration of three months in which all tool set above were executed in full. The results of the pilot testing session were used as input for the subsequent WP.

#### **WP5: Quality assurance and fine-tuning**

In addition to the pilot test were representatives of the target group assessed a part of the training package, the consortium also asked 2 external experts (outside the consortium) to check the entire content of the training programme. With this feedback a high quality programme is ensured. The methodology used during this WP was:

- A questionnaire was created for the experts in order to guide them on what the consortium expected feedback.
- Based on the results of the pilot test and the feedback from the experts an evaluation report was created and sent to the consortium.
- Based on this evaluation report, the consortium has fine-tuned the entire training programme which made for the final version of the training toolkit.

The quality control has been guaranteed through a double mechanism with on the hand the internal quality control focused on partner cooperation and achievements, and on the other hand the external quality control focused on quality and relevance of the final outputs. The total duration of WP5 was three months, and as mentioned before, a high volume of involvement of the target groups was ensured during multiple WPs (TNA, Pilot Test, external Experts whom were representatives of the direct and indirect target group).

## WP6: Dissemination of results

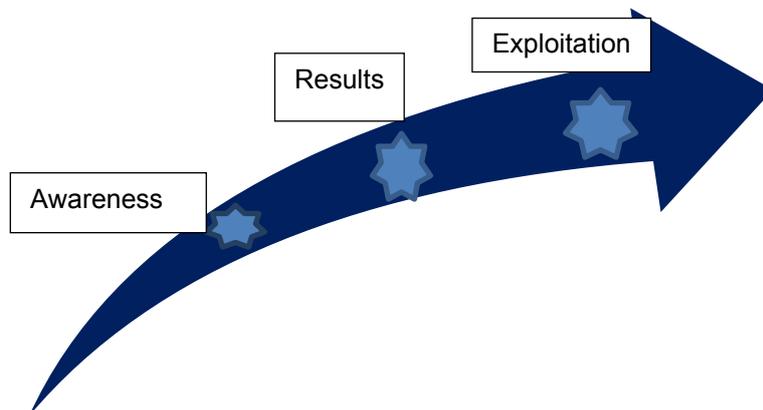
In order to create awareness among the target groups and to be able to engage as many stakeholders as possible in the project, this WP dealt with the dissemination of results. This ensured that the project results met the needs of the target groups. Eventually, the involvement and updating of the target groups will lead to higher chances of successful commercialization after the project lifetime. The dissemination activities were designed to reach a broad audience Europe wide. The consortium stimulated and encouraged the target groups to provide constructive feedback and actively participate in various forms of interaction in order to set-up the best possible training programme for them.

Dissemination activities have covered the lifetime of the project, ensuring continuous dissemination of all relevant project information, activities and events during the following three phases:

**1) Awareness-oriented phase:** in which awareness was raised among the project and the target groups were engaged from all over Europe to participate in testing and exploitation of results. This involved activities such as: announcing the project objectives, starting online presence (e.g. website, social networks), etc.;

**2) Result-oriented phase:** this phase promoted the results of the projects, informing interested parties about the achievements and the related benefits of the project, and build new contacts and relations for the involvement of European stakeholders in the activities;

**3) Exploitation-oriented phase:** to exploit project results successfully. This stage will mostly take place after the project lifetime and is related to the promotion and sustainability of the project with activities as announcing final results and achievements of the project, presenting the advantages of materials and services developed and identifying stakeholders willing to promote the results in the future.



The dissemination of the three stages was achieved by utilizing various communication tools and channels, including website, LinkedIn group, flyers, presentations, brochures, publications, as well as events and workshops. The Dissemination Plan was created with detailed guidelines and tools which helped the consortium to:

- Understand the scope and objectives of dissemination and communication within the project.
- Understand the importance and crucial moments of internal communication between partners to implement well-coordinated dissemination and communication activities during the project
- Have access to an organized and harmonised set of tools that can be used for external dissemination and communication purposes.
- Have a clear idea of the different types of activities that will be implemented, the timing, the target groups and the expected impact (indicators).
- Have an overall communication and dissemination strategy for the implementation of activities including a regular review system and update of the proposed strategy.
- Outline how results will be used and exploited by the consortium and how the results will be made known and accessible to the community.

The promotion and dissemination activities which will achieve the objectives of the 3G-STPs project are based on the following innovative dissemination instruments and approaches:

- Multi-channel and two-way communication flows: Target group communities have been reached through a combination of web-based and face-to-face dissemination channels in order to maximize the dissemination results. 3G-STPs dissemination tools and activities enabled a two-way communication flow with the stakeholders; on one hand, they will deliver information about the project, on the other hand they will allow feedback and input from stakeholders to participate actively in the project development.
- Integration of different Web 2.0 tools: The project used Web 2.0 tools including a professional social network (LinkedIn) and GoToWebinar Tool, in order to allow communication with project stakeholders.
- Effective dissemination monitoring system: the WP leader harvested inputs from other partners regarding the dissemination activities and summarized the dissemination results.

This WP resulted in an impressive list of dissemination activities and results. In total 31 events were visited or organized by the consortium partners in which more than 6.000 participants were targeted. In addition a total of 70 actions were conducted by the consortium in which they posted discussions online, added content to the website or promoted the project in newsletters. The entire WP took 23 months to complete, and looking at the results, this WP was completed successfully.

## **WP 7: Exploitation of results**

This WP aimed on providing sustainability to the project as well as creating opportunities for the target group to access the material created. A strategy was formed in which maintaining and mainstreaming of the results becomes evident after the project lifetime. In addition, a memorandum of understanding was signed by all

the project partners in order to overcome any IPR issues to be expected with a project like this.

The approaches described above were chosen in order to reach the main objectives of the project which was to create a training package which actually complemented the needs and requirements of the STP managers. The consortium took two different perspectives which added value to this training programme:

- Pedagogical perspective: The project aims to increase the professionalism and skills of the managers of STPs through the exchange of practices, methods and pedagogical approaches. Therefore, the thorough TNA analysis was conducted among target groups to determine the gaps in knowledge and skills. Furthermore, the definition of the Training framework to match the needs of the target groups, by providing a suitable training programme, was developed.
- Organizational perspective: Existing training offers and programmes are normally designed and organised from the point of view of larger companies. They simply don't fit into the organisational needs of smaller companies, given the complexity of their nature. Therefore, the consortium created an innovative training programme, which matches the target groups needs not only from the content point of view but also from the training delivery approach taken, making the training more accessible, attractive and useful.

It is difficult to state that this WP was completed successfully as most of the work is to be done after the project lifetime. Nevertheless, the tools (exploitation plan and strategy) were created and leave the consortium with guidelines on how to proceed.

To conclude, this chapter has shown the methodology used for each WP which has lead to a coherent and high quality training package which is highly applicable for the target groups.

### 3. Project Outcomes & Results

The subsequent table shows the project outcomes and results delivered during the 3G-STPs project lifetime. In addition, the impact of these outcomes on the target groups is briefly described. As mentioned in the previous chapter, the project consisted of work packages (WP) in which outcomes had to be delivered. These deliverables are explained below:

<i>Results</i>	<i>Description</i>	<i>Availability</i>
<b>WP1. Roadmap, Coordination and Monitoring</b>	To ensure that the project is implemented and completed successfully and within the parameters determined during the planning stage, a project information package was created. Within this plan, the management system was set up in consultation among the partners. The consortium agreed upon a work method for the duration of the project.	
<i>Deliverable 1: Project Information Package.</i>	The project coordinator created roadmaps, coordination and monitoring parameters which the consortium used as basis for running the work packages. This also included deadlines, milestones, controls, communication procedures, etc. During the project 4 partner meetings were held in order to keep the project running smoothly and to ensure successful completion of the training programme.	The impact of these outcomes remained confidential between the 7 partners in the consortium. The outputs and results are confidential and only available as annexes in the confidential report.
<b>WP2. SMEs Training Needs Analysis (TNA)</b>	This part of the project allowed the consortium to gather sufficient information regarding the characteristics of the target groups. A desk research was performed in several European countries (Spain, the Netherlands, Italy, Belgium, the UK and the Baltic countries). Furthermore, questionnaires and interviews were held which resulted in the first engagement and involvement of the target groups in the project. As a result the consortium has found the training needs, the level of knowledge on the subject and the training method preferred amongst the target groups. This phase of the project ensured matching between the needs of the target groups and the training material developed. As this was an important part of the project the following outputs were developed:	Within the TNA 222 STP managers were targeted. 77 Questionnaires were filled-in and 20 STP managers were interviewed. The impact of this phase was considerable.
<i>Deliverable 2: Guidelines and Templates for TNA</i>	These guidelines and templates provided instructions and tools for the consortium on how to carry out the TNA, this included: <ul style="list-style-type: none"> <li>- Guidelines on how to carry out the TNA;</li> <li>- Definition of methodology;</li> <li>- Templates for in-dept interviews with STP managers throughout Europe.</li> </ul>	This deliverable is available on ADAM.
<i>Deliverable 3: European STP managers TNA report</i>	This summarizes findings of the primary desk-research, the questionnaires and the in-dept interviews. Based on this report and the additional input of the meetings and	The outputs and results are confidential and only available as annexes in the confidential report.

	workshop, the training material will be developed.	
<i>Deliverable 4: 7 meetings "Role of STPs in regional development"</i>	Each partner has organized a regional meeting with representatives of STP stakeholders. In this meeting the results of the TNA report were discussed and additional feedback was generated.	30 participants in the meetings. This deliverable is available on ADAM.
<i>Deliverable 5: Workshop "Role of STPs in regional development"</i>	During the EBN Congress in May 2013, a workshop was held with STP representatives to discuss the TNA report and the role of STPs in regional development.	7 participants in the workshop. This deliverable is available on ADAM.
<b>WP3. Development of Training Materials and Tools</b>	Using the main outcome of WP2, the training materials and tools were created. First a collection of best-practices were created and tested by experts. Based on these practices, the training modules were developed.	The training development was performed by the 7 partners and several experts who tested and provided comments on the drafts.
<i>Deliverable 6: Draft Training Toolkit</i>	For this output, guidelines and templates were created for best-practices selections as well as lay-out preferences. In addition, preferences from the target groups regarding duration, method of delivery of the training were taken into account.	A draft training toolkit was created which was enhanced by the feedback and comments given under WP4 and WP5 what led to the final Training Toolkit.
<i>Deliverable 7: Modular e-course with virtual coach support</i>	In order to create an innovative training programme, the e-course option was implemented by creating a Moodle platform accessible for trainees and trainers. Within this platform users will find the training package, additional material to the webinars, options as for trainees to interact, and a virtual environment to ask questions to a coach.	The Moodle platform can be accessed through the website <a href="http://www.stp-training.eu">www.stp-training.eu</a>
<i>Deliverable 8: Training Faculty</i>	The consortium partners have created a list of individuals who have the knowledge and expertise to give training as was developed under the 3G STPs project.	The output is confidential and only available as annex in the confidential report
<b>WP4. Pilot Testing and Evaluation</b>	In order to validate the content of the training material, a pilot testing and evaluation phase was included. The consortium envisioned a suitable mix of trainees in this phase of 50 participants in order to check the actual match created between the TNA and the material developed.	
<i>Deliverable 9: Pilot testing guidelines and templates</i>	These guidelines provided instructions on how to carry out a pilot test in order to ensure a coherent set of feedback by the target group. It included information on the pilot session set-up and method of feedback collection. In addition, a questionnaire was developed for the pilot testing session.	The output is confidential and only available as annex in the confidential report.
<i>Deliverable 10: Pilot Testing Session</i>	Pilot Testing was done through an online mechanism called GoToWebinar. This made it possible for 52 participants all over Europe to go online and follow the webinar simultaneously. The consortium asked 2 external experts to deliver the content in order to prevent for any internal bias. One webinar of about an hour was given by these experts. The webinar consisted of parts of all the modules developed. The participants had to fill in a	The output is confidential and only available as annex in the confidential report.

	questionnaire ex post. These comments and feedback were the input for WP5.	
<b>WP5. Quality Assurance and Fine-Tuning</b>	The results of the pilot test were analyzed and used to enhance the training materials. However, as stated above only a part of the training material was tested during the pilot. For this reason 2 external experts were asked to provide their feedback on the entire training programme. With the feedback provided by the target group a full circle was met, starting with the TNA report, creating the training material on this report and testing whether the match was reached.	
<i>Deliverable 11: Evaluation Report</i>	The inputs of the pilot test and the feedback from the experts were combined in the evaluation report. With this report the draft training toolkit was enhanced as well as the website and the e-learning platform.	The output is confidential and only available as annex in the confidential report.
<i>Deliverable 12: Final Training Toolkit</i>	Using the evaluation report, necessary changes were made which resulted in final versions of the training toolkit as described in Deliverable 6. This part of the project ensured the quality assurance and finalized the development of the training material.	The final training toolkit is available on the Moodle platform to be found via the website <a href="http://www.stp-training.eu">www.stp-training.eu</a>
<b>WP6. Dissemination of Results</b>	Dissemination of the project was done during the total lifetime of the 3G STPs project. At the beginning of the project the aim was to create awareness among the target groups of the importance of proper STP management. Afterwards the visibility of the project and its aims and objectives to enhance this management became apparent. And finally it ensured the sustainability and commercial ability of the developed training programme in the long term.	In total about 6.000 representatives of the target groups were reached. A stakeholders list was created with 317 members.
<i>Deliverable 13: Dissemination plan</i>	A dissemination strategy was created in this plan in order to schedule promotional outputs and requirements from the partners to be achieved in the dissemination part of the project. This plan included the project graphical identity (logo), online and offline promotional actions. These actions are described below.	This output is confidential and to be found in the annex of the confidential report.
<i>Deliverable 14: Project website</i>	The project website was created during the beginning of the project in order to create awareness among the target group. It includes information on the project, the main results, the partnership and relevant news and events on the internationalisation of SMEs. The main language on this website is English in order to reach a wide audience. Nevertheless, some of the content is also presented in Spanish, French, Italian, Dutch and Estonian (the national languages of the partners).	Visit <a href="http://www.stp-training.eu">www.stp-training.eu</a> for more information. The website had over 36.000 views and hits.
<i>Deliverable 15: Offline promotion material: Project</i>	Two project brochures were created to disseminate the project during participation of events. On the first brochure key information about this project is displayed. The second brochure had more information on the content of the	This deliverable is available on ADAM and in the annex of the confidential report.

<i>Brochure</i>	training programme. The brochure was translated in English, Spanish, French, Italian, Dutch and Estonian.	
<i>Deliverable 15: Offline promotion material: Project presentation</i>	As an offline tool, a project presentation was created in order to disseminate the project on events. This presentation entails the aims and objectives of the project as well as teasers of the specific module contents.	This deliverable is available on ADAM and in the annex of the confidential report.
<i>Deliverable 16: Professional group on LinkedIn</i>	A LinkedIn professional group was created and serves as online support tool to encourage exchange of practices, experience as well as create a community of practice. The members are invited to participate in discussions and were frequently update on project results.	Visit <a href="http://www.linkedin.com/groups/3GSTPs-Training-Science-Technology-Park-4819831">http://www.linkedin.com/groups/3GSTPs-Training-Science-Technology-Park-4819831</a> The group has 188 members.
<i>Deliverables 17 and 18: Events</i>	Several regional, national and/or European events were used for the dissemination of the project. In these workshops and events the project was always disseminated via brochures, and in some cases stands and presentations were given on the 3G STPs project.	A total of 31 events were visited by the consortium during the project lifetime. A full list and reports of the dissemination activities can be found as annex in the confidential report.
<b>7. Exploitation of Results</b>	Once the training material was finished, the consortium wanted to sustain the results after the project lifetime. In addition, it had to be available for the target groups for which the partners needed a commercialization agreement.	
<i>Deliverable 19: Exploitation plan</i>	For the reasons set above an exploitation plan was created in which all partners agreed on organisational, financial, legal and marketing issues. All partners agreed upon this exploitation plan in a memorandum of understanding to last 5 years beyond the project lifetime.	This output is confidential and to be found as an annex in the confidential part of the report.

## 4. Partnerships

The formation of the project consortium is an important factor in the 3G-STPs project. This partnership provides a combination of resources, knowledge and experience required to carry out the project. The added value of our European partnership is that the consortium is not only capable of preparing a high quality training programme but also capable of delivering and disseminating the developed practices and bringing that knowledge to the market as an exploitable product. The benefits of this European partnership are described below:

- *Experience sharing*: Involvement of a wide range of organizations working directly or indirectly within vocational education and training, which will add high level of expertise and different training methodologies. The partnership provides a combination of resources, knowledge and experience required to carry out the project and as it includes practitioners in the field (Zernike, Meta and Funditec), professional bodies (IASP and EBN) as well as representative of the target groups (Tallinn Science Park and Coventry Technology Park).
- *Effective use of past experience* will avoid unnecessary waste of time, resources and finances. All consortium members have previous experience in EU-funded projects, including LDVs and LLPs, and are involved directly in every stage of the 3G-STPs project, contributing to proper management and implementation.
- *Geographical coverage*: The extensive European TNA among STPs was conducted by making use of the IASP network, through this network the consortium was able to identify the needs and requirements of the STP management teams. Given that the consortium had a large geographic coverage representing different parts of Europe, the partners were able to conduct a thorough market research and gather valuable findings. In addition, the pilot testing session was conducted online which again allowed for a broad European coverage. This resulted in a comparable and homogeneous representation of the target groups. To amplify the geographical coverage, the consortium as a whole was the following composition:
  - o European wide (EBN and IASP)
  - o Western Europe (NL – Zernike, BE – EBN, UK - CUE)
  - o Southern Europe (IT – Meta, ES – Funditec & IASP)
  - o Baltic States (EE- Tehnopol)
- *Languages*: Even though the working and professional language was English (for both communication between partners as to the target group) some of the information was translated. For instance, the project website shows different language options for Spanish, Dutch, Italian, French and Estonian. In addition, the brochures were also translated into the languages explained above. Nevertheless, the consortium believes that the training programme itself should not be translated as management today will be more than able to follow and communicate in English.
- *Cross-fertilization* between transnational partners of ideas, procedures, personnel, and systems has added value to project activities by providing a

wider base of information and expertise. It led to knowledge spillovers which indicate an innovative and considerable high level quality of outputs.

- *Broader dissemination and exploitation* of the project results, ultimately reaching and impacting a larger target group. All partners belong to international professional networks and have direct access to the target group, which is a key element in the valorization and the dissemination of results. Moreover, IASP and EBN, as network organizations, served as excellent dissemination platforms for engaging the target group into the project.

During the project lifetime it became evident that this consortium benefitted from this European partnership. In the first place, due to the knowledge spillovers which were obtained by combining experience and expertise from different organizations. Secondly, as the geographical coverage the target groups is very broad, this project will have very good exploitation changes. And finally, when this project is exploited and the training is actually provided, the broad array on possible trainees could lead to networking possibilities of the target groups.

This amalgamation of different factors is a result of the partnership of this consortium. It has resulted in a coherent management of the project, high quality of training materials and a wide array of dissemination possibilities. The project objectives were met because of the approaches chosen by this partnership. In fact, this partnership resulted in a successful 3G-STPs project outcomes and results which will be exploited beyond the project lifetime.

## 5. Plans for the Future

As this is the final report, the plans for the future emphasize on the exploitation of results beyond the project's lifetime. For this reason, the consortium has signed a memorandum of understanding. This MOU provides objectives which are set after completion of the project and has a duration of 5-years. Within these years, the consortium partners may cooperate with other entities and their extensions; technology parks, technology centers, interested regional and local agencies, universities, private industries, non-profit organizations and foundations or publically interested groups. All partners shall manage their own activities and utilize their own resources, including the expenditure of their own funds, in undertaking any commercial activities related to the use of the 3G-STPs project results, training materials and resources that have been produced. The most important responsibilities within the MOU which reflect on the plans in the future are displayed below:

- *Provide the training programme to European STP managers.* In the MOU, the consortium agreed on the right of first refusal. This is a result of the training programme which is delivered online through GoToWebinar and the Moodle platform. As it is online, it is hard to determine country rights and divide the IPR within these countries. The consortium now agreed on this right on first refusal with the mandatory responsibility to inform the project coordinator before conducting any commercial exploitation of the materials.
- *To foster economic development in STP regions and strengthen the regional identity through successful STPs.* The consortium strongly believes that with providing this training the knowledge and expertise of the STP managers will be enhanced. With this professionalization of the STP management will enable them to exploit the full potential of the parks, better facilitating the needs of the existing and future tenants and bridging the gap between the worlds of science and business.
- *To support entrepreneurial spirit and developments of start-ups, generating employment opportunities in successfully managed science parks.* At this moment, this objective is hard to meet. The project results have not yet been exploited but the exploitation strategy is ready and written in the MOU. The support of entrepreneurial spirit and development of start-ups was provided during the numerous dissemination events, but a direct result can not be mentioned as this is a process which will take a considerable amount of time. Nevertheless, the consortium did post many discussions on the LinkedIn Group showing their interest in the above mentioned fields. Also the website will be maintained by the consortium.
- *To improve the managerial perspectives and results of all involved regions in the project.* Several dissemination activities took place in the particular regions of the partner countries. Here the consortium actively promoted the benefits and advantages of 3G STPs project. In addition, as a result of the exploitation plan, the partners plan to go to additional regional meetings in order to exploit the project results.
- *To inform local stakeholders in regions outside the consortium about the benefits of the project.* Several main dissemination activities and events have

already taken place during the project. Nevertheless, as mentioned before, the exploitation plan asks for commercialization of the project results and therefore the partners have agreed to visit additional local events/meetings.

- *To explore the possibility of utilising the project results as commercially viable products.* During the project lifetime certain results and outcomes were created (see chapter 3 of this report). These results are thus available for exploitation now that the project is completed, following the MOU the consortium will explore the possibilities of commercialization of the training programme.

This strategy will be supported by all partners and includes:

- Commitment of partners to follow up on the exploitation of the project results by attending local and regional meetings specifically for the target groups audiences.
- Actively using the network of partners and disseminated by using this network. Also using the project websites and LinkedIn group.
- The quality of the training material was checked and validated ex-ante by peer reviews conducted by the consortium, ex-post by experts in the partner's network and ex-post by conducting an international pilot testing session. Therefore, the consortium believes that the training package is of a high quality and other outputs as the Training Faculty, E-learning Platform, brochure and website.
- Extensive dissemination mechanisms were used during the project life-time. The passwords to the e-learning platform of the 3G STP project are provided in the confidential report. In addition, the dissemination activities are described in section 8 of the confidential part.

For additional information how the consortium ensures the sustainability of the projects results, please see the exploitation plan as annex 50 in the confidential report.

## 6. Contribution to EU policies

Within the LLP priority area, new skills for new jobs, self employment, job creation and entrepreneurship support, bridging the worlds of education and work, are key factors in crisis economy.

The 3G-STPs project will support this priority area because the innovative milieu on STPs lead to a significant higher firm growth in terms of sales and jobs compared to similar off-park firms. STPs create excellent environments and form an ecosystem to foster innovation and entrepreneurship, ultimately contributing to job creation and transfer of knowledge from universities to the market (spin-offs). According to the IASP facts and figures there are 125.000 companies located at the premises of STPs worldwide and 50% of STPs host 100 companies on average.

In addition, the European Union acknowledges that SMEs are the driving force for the economic growth and sustainable development of Europe. The “Small Business Act”, which was released by the European Commission in 2008, is a comprehensive SME policy framework, emphasizing the key role and political importance of SMEs for the European economy - after all the SME is the engine of the economy. The need for supporting SMEs was also documented in the Lisbon strategy and has been further confirmed as one of the main objectives of the “Europe Horizon 2020 Strategy”.

The project will encourage internationalization and better linkages between STPs. The training programme and dissemination activities have ensured collaboration and exchange of practices as well as transfer of knowledge among the target groups.

Mobility of SMEs (tenants of the STPs) will be introduced in the project, facilitating the exchange of tenants among the parks as a measure to foster growth and development within SMEs.

The 3G-STPs project is in-line with the respective EU policies, as the project has address the main challenges of the STP management team and support the development of start-ups and spin-offs which will result in developing SMEs. Given the high complexity of the profession and lack of time for training, the consortium has introduced innovative learning elements as the webinar based training and the e-learning platform. In addition, the entire training programme is based on many practical examples (in the form of best practices in Europe) which show how other STPs tackle certain problems or implement approaches and strategies.

To conclude, the 3G STPs project contributed to the EU policies as mentioned above and improve the management of STPs which play a central role in the European innovation system, pushing a new knowledge-based economy and improving the relation between all elements in this system.

## 7. Conclusion

The 3G-STPs project has resulted in an innovative training programme for STPs managers and innovation practitioners in the field. Using the objectives and approaches set above, the project was able to meet all the outcomes and results which were projected in the beginning of the project. This was only possible because of the strong relations present in this partnership. As mentioned before, the project results are met but the commercialization and exploitation are planned for the future and this consortium aims at meeting the responsibilities of the MOU. To conclude, this project contributed to EU policies in several ways.

This is the end of the public part of the final technical report. If you are interested in reading more on outcomes and products of the project, the impacts of the project on the target groups, the actual involvement of partners, the project management and dissemination and exploitation plans, please read the confidential part of the report.

Finally, the consortium would like to thank you for your interest in our project, if you would like to learn more, please visit our website ([www.stp-training.eu](http://www.stp-training.eu)) or our LinkedIn Group (3G-STPs).