Output factsheet: Trainings

<table>
<thead>
<tr>
<th>Project index number and acronym</th>
<th>CE318 - NUCLEi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead partner</td>
<td>CRIT srl</td>
</tr>
<tr>
<td>Output number and title</td>
<td>OT1.2 Transnational matchmaking training to size CE companies posture vs EU industrial challenges</td>
</tr>
<tr>
<td>Responsible partner (PP name and number)</td>
<td>1 - CRITsrl</td>
</tr>
<tr>
<td>Delivery date</td>
<td>October 2016</td>
</tr>
</tbody>
</table>

Summary description of the implemented training measure(s), explaining the specific goal(s) and target groups
The “Transnational Matchmaking Training” was organized in Modena on September 27th 2016, with the aim to support the development of the participants skills in the field of open innovation management. The vision, coherently with the overall NUCLEI objectives, is to stimulate a change of mindset, within key-industrial players in the Central European Area, from the traditional “local-based” innovation management model to a transnational pool of knowledge supporting innovation beyond own regional borders. 15 selected companies (testimonials) from NUCLEI regions were invited in Modena, in the premises of Case New Holland Industrial (CNH), a global leader in the capital goods sector that, in its Modena plant, designs and produces and sells agricultural and construction equipment.

The training consisted of 3 modules:
1. Open innovation models and industrial practices.
2. Visit to CNH Modena Plant.
3. Key emerging technological trends in advanced manufacturing

12 of the 15 companies took part at the event, and actively participated in the training.

Participants belonged to the following companies:
- Tetra Pak Packaging Solutions (Modena, Emilia-Romagna, Italy)
- SACMI Imola SC (Imola, Emilia-Romagna, Italy)
- CNH Industrial (Modena, Emilia-Romagna, Italy)
- Zoppas Industries (Treviso, Veneto, Italy)
- Bluewind Embedded Systems Design (Castelfranco Veneto, Veneto, Italy)
- BNP (Cittadella, Veneto, Italy)
- SPINEA (Presov, Presov, Slovakia)
- CEIT (Zilina, Zilina, Slovakia)
- Enders Ingenieure (Ergoling, Bavaria, Germany)
- TGS (Holoubkov, Pzeln, Czech Republic)
- Mühle Ebert (Dielheim, Baden-Wurtenberg, Germany)
- ATANVO AG (Stuttgart, Baden-Wurtenberg, Germany)

The training combined interactive participation with open discussions on different open innovation approaches (module 1), practical insights that were provided mainly during the plant visit in CNH (module 2), and frontal lessons on key technological trends (mainly related to module3).

**NUTS region(s) where training(s) have been conducted (relevant NUTS level)**

| ITH5 | Emilia-Romagna |

**Expected impact and benefits of the trainings for the concerned territories and target groups**
First of all, the training highlighted the importance of external R&D institutions contributions to the internal R&D department of a company. In the concerned regions, this has confirmed the relevance of the NUCLEI approach, where R&D and industries will be stimulated in their interactions though both online tools and personal contacts.

The second conclusion of the training is that most, if not all, involved companies are strongly based on the quality of the people and their identification with the company. The human factor in managing open innovation is fundamental, and the collaborative and interactive training development was for sure beneficial to the open innovation skills of participants, and will multiplied when they will operate in the respective territories.

The third aspect is the fact that innovation implies some level of risk, typical of any change or new product introduction. The acquisition of risk management practices in the companies will also benefit the competitiveness, and thus the skills available in the territories where such companies operate.

Sustainability of the training(s) and developed training material(s) and their transferability to other territories and stakeholders

Sustainability may be differentiated according to the modules:

1. **Open innovation models and industrial practices.**
   More trainings could be organized, where participants could learn from industrial experiences, practices and lessons learned regarding the management of open innovation within different companies (both large industries and SMEs), active in different sector.

2. **Visit to CNH Modena Plant.**
   The “practical” aspect of a training should always be included, and it should be focused on the design infrastructures (i.e. Virtual Rooms...), the prototyping area, and the testing facilities. In this way, participants could interact with managers in their work environment.

3. **Key emerging technological trends in advanced manufacturing.**
   In times of rapid technological change, it is fundamental to train companies’ technical staffs on the most recent developments and studies, such as the Linz Centre for Mechatronics on “Future trends in advanced manufacturing”.

The developed training material consists of:

- Initial theoretical introduction to open innovation and the open innovation model
- Model slides for the company open innovation model - this is the flexible section of the training, to be customized according to the participants, since this is interactive learning
- Slides and paper of “Future trends in advanced manufacturing” from LCM

In a replication scenario, one must consider that, since this is an interactive training module, confidentiality issues must be treated. For instance, in the Modena training, before accepting to disclose their innovation model, participating companies requested for the profiles of other participants, in order to make sure that no competitors were going to be trained.

Lessons learned from the development and implementation of training measures and added value of transnational cooperation
The Transnational matchmaking training has been organized in order to improve the participants’ skills related to Open Innovation management.

The core idea of the open innovation model is the opening up of the innovation process to the outside world. From the very beginning open innovation was understood as a concept with economy-wide potential, as a company innovation strategy and business model, not only related to R&D and high-tech. The more open innovation is successfully embraced by firms and others, the more this will reshape and alter existing regional innovation systems.

Based on the all presented approaches during the training, it’s possible to highlight that the involved companies are close to the main Open innovation ideas and that there are not so strong differences in the innovation process due to the country or area in which the company is located. This means that it is possible to identify common elements that could be applied to all companies across the CE area and merge small networks in a single large cluster where all companies could benefit from the same services. Even if it can be assumed that the impact of these elements to the innovation process at the national level will be slightly different.

Furthermore, innovation achievements in terms of development of new products or lean manufacturing process, can be strongly supported by cooperation. And the cooperation with other companies has to be supported by a clear and shared idea of innovation.

It appears from this the importance of the Nuclei Project to widely interpret and propagate the Open innovation concept.

The above-mentioned results (or lessons-learned) of the Transnational matchmaking training will be the basis for the preparation of the future NUCLEI activities.

Each point indicated as a need from the companies will be studied both from the point of view of what is currently available and from the point of view of what could be necessary in the future. Several partners (both Research institutions and consultancy companies) within the NUCLEI project offer support services to innovations. The challenge is to eliminate the distance between the services offered and the actual companies’ needs, setting up shared methods for the development of new processes and the following implementation.

References to relevant deliverables and web-links
If applicable, pictures or images to be provided as annex

The main training report, presentations and contents are included in DT 1.3.2 (Report on transn. matchmaking event in Modena to size CE companies posture vs EU industrial challeng)