

Industrial Engineering and Management of European Higher Education



## IE3\_5th Skype Meeting 29.05.2020



Co-funded by the Erasmus+ Programme of the European Union

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| Agenda   | Participants   |
|--|--|
| <ul> <li>Feedback and comments on R1.3 Report<br/>on education &amp; training convergences and<br/>divergences and company good practices<br/>in IE&amp;M</li> <li>Analysis of the number of answers received<br/>from the target groups on the different<br/>surveys</li> </ul> | <ul> <li>PoliBa, represented by Giovanni Mummolo,<br/>Francesco Facchini, Giorgio Mossa and<br/>Salvatore Digiesi</li> <li>PUT, represented by Agnieszka<br/>Stachowiak and Joanna Oleśków-Szłapka</li> <li>LIU, represented by Janerik Lundquist</li> <li>UPM, represented by Joaquin Ordieres</li> <li>TDIT, represented by Felice De Stena,<br/>Carmine Vox and Vincenzo Ciannamea</li> <li>IMPLEMA, represented by Eskil Rehme</li> <li>VALUEDO, represented by Alessandro<br/>Guadagni</li> <li>INFOTECH, represented by Gianluigi De<br/>Pascale</li> <li>ALCOMOT, represented by Hanna Golas</li> </ul> |

Stachowiak (PUT) inform the partners that the *R1.3 Report on education & training convergences and divergences* is at an advanced stage. PUT received comments from UPM and Poliba, but before considering them, they would like to hear from the partners what they think. Salvatore Digiesi (PoliBa) shows the draft of R1.3 Report and Agnieska Stachowiak presents it. The full document is available <u>here</u>.

Stachowiak and Oleśków-Szłapka explain the process they followed: the first step was a literature review (the research background was based on the work plan agreed by the partners); then the analysis of the syllabi presented by all the Universities follows. PUT identified universities that offered programs for IE&M connected to I4.0 scope. The analysis was increased including other countries than the ones encompassed in the project.

Joaquin Ordieres (UPM) suggests identifying not only convergences but also divergences in the comparison between the literature review and syllabi analyzed.

Mummolo (PoliBa) adds that, to make the work done so far even more useful for the project's progress, PUT could identify convergences and divergences in terms of contents, so to guide the analysis of the next step. Oleśków-Szłapka (PUT) proposes to analyze the number of times in which the key word for I4.0 are mentioned in the syllabi, so to understand if there are any gaps.

Lundquist (LIU) believes that the report is excellent as it is capable of summarizing the results and making them easily understandable. This feature also makes it possible to clearly identify how the new program that the partners aim to implement with the IE3 project should be developed. In his opinion, the report should bridge more WP1 to WP3.

Stachowiak (PUT) specifies that thanks to the analysis made on questionnaires, they expect to obtain information about the convergences to the contents included in the program and to the evaluation of the students. This would also create a link between WP2 and WP3.

Next deadline:

• PUT to complete R1.3 Report on education & training convergences and divergences and company good practices in IE&M by 05.06.2020

## Analysis of the number of answers received from the target groups on the different surveys

Facchini (POLIBA) presents the updated numbers of answers received from the 4 target groups involved on the surveys (Academics, Alumni, students, companies). In the number for the Alumni there is a mistake, as one respondent filed multiple answers that will be deleted.

|   | -   |   |   |
|---|---|---|---|
| Date  |   | 29/05/20  | ESTIEM  |
|   |   |   |   |
| Qu  | estionnair  | e for Profess   | ors   |
|   | Answers   | Minimum   | Progress (%)  |
|   | Answers   | Target  | Progress (%)  |
| Italy   | 18  | 15  | 120   |
| Poland  | 12  | 15  | 80  |
| Spain   | 13  | 15  | 87  |
| Sweden  | 0   | 15  | 0   |
| Other (AIM - ESTIEM)  | 7   | 40  | 18  |
| TOTAL   | 50  | 100   | 50  |
|   |   |   |   |
| (   | Questionna  | ire for Alum  | ni  |
|   |   | Minimum   |   |
|   | Answers   | Target  | Progress (%)  |
| Italy   | 11  | 15  | 73  |
| Poland  | 2   | 15  | 13  |
| Spain   | 10  | 15  | 67  |
| Sweden  | 15  | 15  | 100   |
| Other (ESTIEM)  | 30 43   | 60  | 72  |
| TOTAL   | 81  | 120   | 68  |
|   |   | Minimum   |   |
|   | Answers   | Target  | Progress (%)  |
|   |   |   |   |
| Italy   | 91  | 100   | 91  |
|   | 91<br>17  |   |   |
| Poland  | 17  | 100<br>100  | 17  |
| Poland<br>Spain   |   | 100<br>100<br>100   | 17  |
| Poland<br>Spain<br>Sweden   | 17<br>28  | 100<br>100  | 17<br>28<br>4   |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)   | 17<br>28<br>4   | 100<br>100<br>100<br>100  | 17<br>28<br>4<br>8                                      |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)   | 17<br>28<br>4<br>30   | 100<br>100<br>100<br>100<br>400   | 91<br>17<br>28<br>4<br>8<br>21                          |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)<br>TOTAL  | 17<br>28<br>4<br>30<br><b>170</b>                                   | 100<br>100<br>100<br>100<br>400<br><b>800</b>                                       | 17<br>28<br>4<br>8<br>21                                |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)<br>TOTAL  | 17<br>28<br>4<br>30<br>170<br>estionnaire                           | 100<br>100<br>100<br>100<br>400   | 17<br>28<br>4<br>8<br>21<br>nies                        |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)<br>TOTAL  | 17<br>28<br>4<br>30<br><b>170</b>                                   | 100<br>100<br>100<br>400<br>800<br>e for Compar<br>Minimum                          | 17<br>28<br>4<br>8<br>21                                |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)<br>TOTAL<br>Qu  | 17<br>28<br>4<br>30<br>170<br>estionnaire                           | 100<br>100<br>100<br>400<br>800<br>e for Compar                                     | 17<br>28<br>4<br>8<br>21<br>nies                        |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)<br>TOTAL<br>Qu<br>Italy   | 17<br>28<br>4<br>30<br>170<br>estionnaire<br>Answers                | 100<br>100<br>100<br>400<br>800<br>e for Compar<br>Minimum<br>Target                | 17<br>28<br>4<br>8<br>21<br>Nies<br>Progress (%)        |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)<br>TOTAL<br>Qu<br>Italy<br>Poland   | 17<br>28<br>4<br>30<br>170<br>estionnaire<br>Answers<br>6           | 100<br>100<br>100<br>400<br>800<br>e for Compar<br>Minimum<br>Target<br>6           | 17<br>28<br>4<br>8<br>21<br>Nies<br>Progress (%)<br>100 |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)<br>TOTAL<br>Qu<br>Italy<br>Poland<br>Spain                                    | 17<br>28<br>4<br>30<br>170<br>estionnairo<br>Answers<br>6<br>7      | 100<br>100<br>100<br>400<br>800<br>e for Compar<br>Minimum<br>Target<br>6<br>6      | 17<br>28<br>4<br>8<br>21<br>100<br>100<br>117<br>117    |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)<br>TOTAL<br>Qu<br>Italy<br>Poland<br>Spain<br>Sweden                          | 17<br>28<br>4<br>30<br>170<br>estionnaire<br>Answers<br>6<br>7<br>7 | 100<br>100<br>100<br>400<br>800<br>e for Compar<br>Minimum<br>Target<br>6<br>6<br>6 | 17<br>28<br>4<br>8<br>21<br>100<br>100<br>117           |
|   | 17<br>28<br>4<br>30<br>170<br>estionnaire<br>Answers<br>6<br>7<br>7 | 100<br>100<br>100<br>400<br>800<br>e for Compar<br>Minimum<br>Target<br>6<br>6<br>6 | 17<br>28<br>4<br>8<br>21<br>100<br>100<br>117<br>117    |
| Poland<br>Spain<br>Sweden<br>Other (ESTIEM)<br>TOTAL<br>Qu<br>Italy<br>Poland<br>Spain<br>Sweden<br>Other (AIM - ESTIEM - | 17<br>28<br>4<br>30<br>170<br>estionnaire<br>Answers<br>6<br>7<br>7 | 100<br>100<br>100<br>400<br>800<br>e for Compar<br>Minimum<br>Target<br>6<br>6<br>6 | 17<br>28<br>4<br>8<br>21<br>100<br>100<br>117<br>117    |

**Report IE3 Survey** 

Mummolo informs the partners that PoliBa and ValueDo had a meeting with ESTIEM representatives for discussing the corrective measures to adopt in order to reach the overall numbers. ESTIEM staff committed to contact different stakeholders throughout Europe that work in the field of I4.0 and industrial management.

The partners discussed about some countries that would be relevant for this purpose: Germany, France, Austria, Portugal and others.

De Pascale (INFO) says that an option to reach the overall number for students could be posting the news of the number on the different Facebook groups of students on IE&M topics. It could be an effective channel for reaching the target group. Mummolo agrees on this additional channel to disseminate the questionnaire to students. He also explains that the new approach to be adopted by ESTIEM will be more personal: Mr Duarte will have personal contacts with the ESTEIM National representatives so to involve them in gathering other feedback.

Oleśków-Szłapka (PUT) informs that they are spreading the information in their National networks and also contacting other Universities in Germany, Slovenia and Finland.

Joaquin (UPM) is always in contact with his colleagues; he keeps motivating them to answer and diffuse the questionnaire with their students.

Lundquist (LIU) informs the partnership that they sent yesterday the emails to the Swedish students, so in the next days the numbers should increase significantly. Also professors (even from other countries) were reached yesterday with an email.

Joquin (UPM) suggests sharing the results every two days. The partners agree on receving the updates results on Monday 01.06.2020, Wednesday 03.06.2020 and Friday 05.06.2020. Then, on Friday 05.06.2020 the partnership will take a decision if they need to take more time for concluding the research. The decision will be taken by email.

Mummolo asks companies to share the link of the questionnaire to the suppliers, so to involve them in the process. The point of view of companies is strategical for aligning the contents of Master Courses to the actual needs of employers. De Stena (Bosch) agrees on the proposal and he will share the questionnaire internally in Bosch Bari. Giovanni Mummolo will provide a text for introducing the project and the link to the website, so to ease the work of reaching target companies also outside Bosch group and for the other companies.

Ordieres (UPM) will also try to get Madrid Network more involved.

Eskil (IMPLE) states that they will share the questionnaire with at least 50 seniors of the company, so to contribute in reaching higher targets.

Gianluigi De Pascale (InfoTech) reminds that each staff member should send a picture and the description of her / his role into the organization. Infotech is renewing the website that will include also a more specific area with the description of all the people involved in the project.

Ordieres (UPM) suggests creating folders with empty entries addressed just to those that have not provided yet the information. Gianluigi De Pascale will send another email just to the partners who haven't provided yet the needed information.