



Linking the Skills Pillar and the Qualifications Pillar of ESCO Pilot for testing

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The potential of linking qualifications to skills

Enrich information on qualifications by linking their learning outcomes to skills allowing to directly identify relevant qualifications for missing skills

Employers grasp qualifications' labour market value in a cross-border context thus increasing transparency of qualifications in the EU.

Individuals improve chances on labour market through better matching

Background

- 2018 study recommended testing an automated approach based on Natural Language Processing with an initial degree of human intervention
- COM presented the study outcomes during the last EQF AG/MSWG joint meeting and proposed to pilot the proposed approach.
- COM presented the general lines of the pilot and invited MS to express their interest in participating during the 9th ESCO MSWG meeting.
- 4 Member States (Greece, the Netherlands, Poland and Slovenia) decided to participate in the pilot, while two Member States (Romania and Latvia) joined the pilot as observers

Objectives of the pilot

- Testing the suitability of the linking approach for different actors/institutions, different types of qualifications and different publication processes across Member States.
- Testing the linking in different EU languages of qualifications with different EQF levels and different subjects.
- Defining potential requirements and building a user-friendly IT tool to support the linking process.
- Assessing the required effort from awarding bodies/competent authorities to create these link
- Getting feedback on the ESCO skills pillar

Pilot features

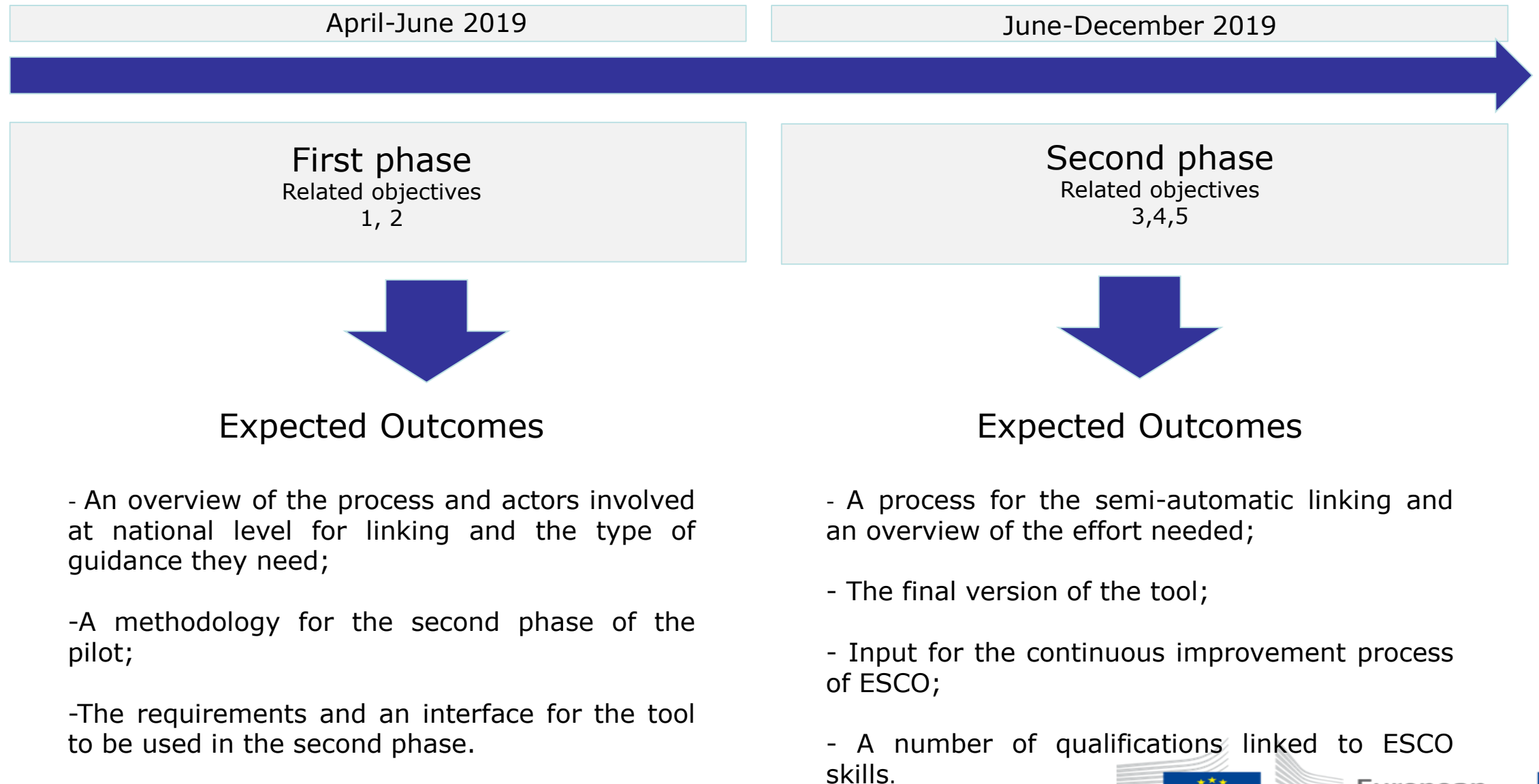
Examine limited number (10/15) of diverse qualifications in different national databases

Different description styles in different languages

VET and Higher Education qualifications with different EQF levels

Linking can be done with ESCO skills or skills from a national classification, if the latter is mapped to ESCO

Implementation



Technical Solution

Machine Learning Algorithm

Expected Output:

Ranked suggestions of ESCO skills based on the input text

Challenges:

- Input texts in several languages
- Input text variations: broad vs. detailed descriptions
- Relevant segmentation of the text
- Word ambiguity
- Concepts “compatibility”

Results of the pilot

- An approach mixing automation and human component ensures reduction of the resources needed and a competent review and validation of the results
- Level of granularity and sectoral coverage of ESCO skills can lead to different results according to the field and type of qualifications tested
- Data quality and availability of information in different languages are key factors for the functioning of the translation algorithm
- Linking learning outcomes to ESCO skills allows for an indirect link with occupations, thus further enriching the information associated to a qualification.