On the need of new educational curricula in the field of space technologies and their applications

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EGU 2021-16133
What

• No official academic courses are presently offered covering all the aspects of Space Technologies from the mission design up to the applications developments

• No specific skill are identified by ESCO in the sector of development of space-technologies and applications

• To fill such curricula/professional gap the Salzburg protocol (2013) promoted the constitution of a GMES (today Copernicus) Academy Network (CAN)

• Now CAN is recognized as a pillar of the EC strategy for the Copernicus user uptake.

• The EO4GEO project took the initiative calling worldwide experts to design the Body of Knowledge (BoK) to be at the base of new education curricula and well identified skills in the field.
EO4GEO is a Sector Skills Alliance gathering 25 partners from 13 countries from academia, private and public sector active in the education and training fields of the space/geospatial sectors.

The Consortium is supported by a strong, growing group of Associated Partners (mostly consisting of associations or networks active in the same fields) and an Advisory Board of individual experts. This network of networks has been established in view of the Erasmus+ Sector Skills Alliance call and reflects the complex space/geospatial ecosystem.

The EO4GEO outcomes will be sustained also after the project ends. This is part of the commitment of the EO4GEO Alliance, which will guide the path for future actions on skills and workforce also in the long-term.
The EO4GEO Body of Knowledge (BoK) for the Earth Observation and Geographic Information (EO/GI) sector is an inventory of knowledge, skills and competencies in the EO/GI domain. The BoK gathers around 1000 concepts, identified and elaborated by a network of experts from private businesses, public organisations and academia.

EO4GEO is developing an ecosystem of software tools based on the knowledge and skills available in the BoK. These tools are designed for training and educational providers, companies and organisations as well as individuals working in the EO/GI field. EO4GEO designs the following end-user tools:

- **Occupational Profile Tool**: to create occupational profiles;
- **Job Offer Tool**: to create job offers;
- **Curriculum Design Tool**: to assist training designers in creating curricula;
- **BoK Annotation Tool**: to annotate existing resources (e.g., a CV, a scientific article);
- **BoK Matching Tool**: to compare two BoK-annotated resources.

The EO4GEO strategy is aimed to provide the workforce with the right skills, in the right place, at the right time. In support of this vision, EO4GEO designs educational offers in the context of the Copernicus Programme ranging from base modules, via specialized modules to framework curricula for full programmes. State-of-the-art tools and platforms are used to create training material on concepts and skills that are in demand.

The case-based learning approach stimulates the uptake of space services and data and provides the relevant stakeholders with insights into what can be done.