"From Data to Open Knowledge implementation: efforts to grow the value chain" – Geo Week Cape Town - 6-10 November 2023 . Dominique Tilmans Chair of Eurisy.

Good morning, everyone. It's a great pleasure to be here today in this amazing city of Cape Town.

I would like to thank the organizers for this opportunity to better understand the ongoing process of transforming data into actionable knowledge.

Today our society accumulated an ever-growing amount of data coming from many different sources and becoming fundamental to take informed decision at many different levels, basically for navigating the everyday life in this digital times.

However, data *per se* could be easily incomprehensible to most, and anyways not functional to many.

To enable this transformation, to make this data useful, usable, and used and therefore contribute to the achievement of a broader open knowledge we need to focus on this process of adding value along the entire research and operations as well as research to operations chain.

Fortunately, the cloud has facilitated the large-scale storage of considerable volumes of data collected by satellites, advances in data processing thanks to artificial intelligence have made it possible to automate data cleaning and reduce the time devoted to their interpretation.

But before going into the details of the presentation let me introduce myself and my association Eurisy, my name is Dominique Tilmans and I am here as President of Eurisy.

Eurisy is a non-profit association of space agencies working together to bridge the gap between space and society. We are a matchmaker, and an advisor, to connect civil space applications with downstream users for societal benefit and society.

The space sector is growing at a very fast pace, Euroconsult estimated its global growth of 8% in 2022 and is expected to almost double in a decade.

It also indicates that most of the value of the sector, about 83%, lies in applications, an area of the space economy particularly booming

According to the socio-economic study developed by PWC for European Commission, the industrial space workforce is highly skilled, 69% of employees have a higher level of education but unfortunately only 20% of women are employed. In this domain further efforts are/have to be made.

The average age in the sector is 44,4, the employment distribution by age exhibits an important proportion of staff within the 48-58 age range which represents 28% of the volume of employees. (Euroconsult 2022).

Consequence, we'll observe a large number of retirements during this decade and therefore an urgent need for industry to recruit young qualified graduates!!

Moreover, the space downstream sector is also facing a fundamental mismatch between

- the skills required for a job
- the skills that the workforce offers,

crucially meaning that employers have difficulty recruiting the workforce they need to thrive!

The problem today, it's not the lack of jobs, but a shortage of skilled staff quickly employable.

Therefore, partnerships across educational programmes and between academia and industry are instrumental to build bridges between disciplines, to assess the main gaps and to offer new training opportunities, both for students and professionals.

This growing demand for skills is supported by the EU's data strategy, which aims to maintain a strong data economy over the long term, paving the way for a range of new jobs.

To actively contribute to this reflection Eurisy is one of the funding members of the SPACE4GEO large scale partnership on Space Data, Services and Applications.

The partnership will focus on 3 actions:

- 1 promote the collaboration between the space industry, training centres, academia and other partners. The aim is to monitor the occupational supply and demand to identify the skills and competences required and provide feedback on the evolving sector needs
- 2 attract young professionals. The aim is to help and guide candidate learners in their skilling, upskilling and reskilling efforts, supporting them to access quality training
- develop new and existing regional initiatives and contribute to other training programmes such as the Copernicus Academies, Copernicus Relays and other activities performed under the CASSINI initiative. The aim is to facilitate and stimulate a more integrated and inclusive approach on skills development across different value chains and at different levels, including local and regional level

I also encourage the inclusion/recognition of downstream space and the value of geoinformation applications in everyday aspects of life, also attracting new talent to current and emerging space geospatial professions.

In addition, to training the trainers in transferring a transversal knowledge to the pupils Eurisy joined the GEO-Academy, an Erasmus+ funded project GEO-Academy aiming at offer a comprehensive teacher training and development program for pre- and in-service teachers

The material and the trainings developed will empower teachers with knowledge and skills to incorporate:

- Geographic Information Systems (GIS),
- Remote Sensing (RS),
- Earth Observation (EO),
- Geospatial Storytelling technologies within Education for Sustainable Development

Unfortunately, I have no time to explain a very interesting initiative taken in Belgium/ with the support of all the Belgian universities and all the space sector.

Its event is called "Switch to Space". We organize it every 2 years and invite all university students and young professionals interested in space

Our aim is:

to explain/ the numerous domains and jobs in the space sector/ thanks to more than 50 experts/

- to raise awareness of the Belgian space industries and their know-how
- and to establish closer relationship between the students and the professionals.

If you are interested feel free to come back to me. www.switchtopace.org

## My conclusion

Skills means more and better jobs because a skilled workforce is a key driver of growth enhancing the innovation power and competitiveness of all European companies in particular SME's.

The problem today, it's not the lack of jobs but a shortage of skilled staff quickly employable.

That's why Space4Geo is a great initiative to help industry address its urgent need for a highly skilled workforce!