

Ladies and gentlemen, Senators, Ministers and other distinguished guests.

It is a pleasure for me to be back at the European Interparliamentary Space Conference and I would like to especially thank Senator Dominique Tilmans for her invitation to be with you today, and for the work she is doing as Chair of the EISC.

As a Member of the European Parliament and a professor of physics, I know of the opportunities science gives to our societies. I know that in order to meet the challenges we face, creating innovative societies by fostering youth involvement in science and technical education programmes is crucial. All too often we hear that more can be done. In the international media and in discussions with stakeholders it is highlighted that around the globe economies are facing a serious shortfall of science, technology, engineering and mathematics, or STEM, graduates.

A global talent race has begun. All major industrial powers are making significant investments in research and development programmes, ushering in a new wave of industrial policies and this is especially true for the space sector. This will require high qualified workers who will have to be trained and educated.

A report by the European Commission in December of 2012 entitled the 'EU Skills Panorama' shows that the supply of STEM skills is worryingly insufficient due to:

- Declining numbers of STEM graduates
- Continuing low achievement in science at schools
- Negative perceptions about STEM related careers (such as lower pay) compared to other sectors who employ those with strong number skills i.e. finance
- On top of the increasing global competition for STEM graduates

The EU, though, has a problem in attracting and retaining talent.

The role of the European space sector in combating this important challenge cannot be underestimated. I note that today's conference is focused on the supply side of this problem; with questions such as enhancing the interest of graduates in space, and promoting a greater synergy between industry and education systems. I would like to take a slightly different approach.

If we want to encourage science, technology, engineering and mathematics as real opportunities for our graduates, not only do we have to foster interest in these fields at a young age, but we have an obligation to ensure that quality jobs in these fields with globally competitive remuneration exist in Europe. This is to foster the demand side of the

equation by combating negative perceptions of career paths, and increasing the attractiveness of Europe for the world's best.

As the representative of the EU institutions on this panel I would like to briefly talk about what the EU is doing to help build a resilient European space sector to inspire generations. It is here that the EU has the most influence having been granted shared competency for the drafting European space policy under the Treaty of Lisbon.

An important element to note about the European Space sector is that four large EU industrial groups are directly responsible for more than 70% of the total space industry employment. Moreover the European institutional market represents more than half of European space manufacturing industry's final sales in 2011. The public and private spheres are therefore intricately linked.

The ability of our space sector to offer high quality jobs and employ our STEM graduates relies heavily on the actions taken by the EU to deploy space-based infrastructures and other flagship programmes, and support the sector to achieve more internationally. It is to this end that in 2013 the EU began to finalise its new European Space Industrial policy. It is leading efforts to ensure that Europe further develops a balanced space industrial base by bringing more SMEs into this sector, promoting further technological leadership, and by remaining non-dependent in strategic sectors like launchers.

In the European Commissions communication on this topic there were also specific actions foreseen on institutional frameworks and funding to ensure the availability of necessary skills. The EU will:

- Develop and provide to industry a long term and clear vision of the institutional market at EU level, providing predictability for industry on EU projects.
- It will carry out and update a mapping of the supply chain to ensure the right level of European independence, expertise and competitiveness – This will have downstream effects of ensuring high tech design and manufacturing stays in Europe.
- Moreover we will support the development of the skills demanded by the space sector by promoting the establishment of mutually recognised academic space qualifications in Europe. This includes a plan to initiate and coordinate between Member States, the development of dedicated space academies – linking supply with demand and equipping graduates with the skills they need to succeed.

- Finally in the new R&D framework programme Horizon 2020 the EU will take steps to ensure that when it funds space research, PhD candidates must do a part of it. This already had a demonstrable effect in other research initiatives such as in air traffic management,

As rapporteur for the Copernicus programme I would briefly suggest to our young talents that from the time Star Wars and Star trek captured the imagination of a whole generation towards space explorations space research has evolved enormously to include new dimensions and new challenges for our planet's sustainable development. From the deployment of satellites and sensors to control climate change effects to other components that make a functioning digital space possible, to the monitoring system that allows us to face all space risks and challenges like space collisions and its dangerous consequences. It is time to gather this young generation talent's and put it to good use for our collective development and enhancement.

Thank you.