

# **16th European Interparliamentary Space Conference Toulouse 14th – 15th April 2014**

**Better interaction  
Universities/Industries**

Dominique Tilmans, Senator



Toulouse – 14<sup>th</sup>-15<sup>th</sup> April 2014  
Dominique TILMANS







Toulouse – 14th-15th April 2014  
Dominique TILMANS

# YOUR REACTION ?

# Average age in Space sector - Europe

- Employment (2013) = **+/- 35 000 jobs** <sup>(1)</sup>
  - +/- 20 % larger than in 2006 !
  - 20 % change in the 5 years !
- 52 % industry Workforce **> 45 years** <sup>(2)</sup>
- By moreover 2030, we will have to fill **+/- 12 000/15 000 free jobs !!**  
+ Development of Applications = **≥ 1000 students/year !**

(1) Workforce Policy in the European Sector (2009) – Astropolitics

(2) The Space report – Space Foundation (2013)

# MANY POSITIVE INITIATIVES :

- Regional
- National : France, Germany, Great Britain, ...
- Esa : Education Service, Internship ...
- Europe : Commission, Nereus ...

# BUT

## FEW INTEREST IN SCIENTIFIC AND SPACE STUDIES !

### WHY ?

- **Communication about studies** : «Long and difficult...only for engineers, mathematicians » - No information about Space options at the university <> Education
- No information about **numerous Space jobs** : jurist, agronomist, geographer, doctor, welder, biologist, computer graphist designer, computer scientist, electro-technician, ...
- **Education/industry, 2 worlds with insufficient interactions** = Students don't know the Space sector and how they can commit themselves

## How to face up to this lack of interest ?

# **A NEW CHALLENGE !**

**Build a strong « Spirit » in Spatial  
education in Europe**

**=**

**Support students all along their  
studies**



# HOW TO BUILD THIS STRONG SPIRIT IN SPATIAL EDUCATION?

**A. National level** : Improve the interactions between the Educational and the Spatial sectors - Be pragmatic !

1. Better **exchange of informations about Master thesis and doctorates and high qualified skills**

- = Industry can suggest research subjects of interest
- = University can share informations about of their researches/works

2. Set up a minimum of **6 months internships** > Government

3. **Increase the number of internships in the industry**

- = to involve earlier the students in the sector
- = to get the students more operational
- = a win-win approach for enterprises and students

## **National level** : Improve the interactions between the Educational and the Spatial sectors (Continued)

4. Support the students by providing **mentors** to improve skills transfer
5. Intensify contacts and **organize debates** between the students and the industry in/out of universities
6. **Incentives** from Governments/Institutions...
7. Inform on **hundreds of jobs** in the Space sector other than civil engineers and astrophysicists
8. Pay a **compensation** to the students (National Space Agency + industry)
9. Use all the **networks** of young students & young professionals
10. Promote young scientific **talents** and skill workers (Space Price)

# HOW TO BUILD THIS STRONG SPIRIT IN SPATIAL EDUCATION?

## B. European level : Coordinate national efforts !!

- **Harmonize the length of internship** - 6 month ? – 1 year ?
- Provide a specific **booth for “YOUNG” at Aeronautics and Space events** in Berlin, Paris or London with all European industries :
  - To organize conferences, debates
  - To exchange jobs, internships, CVs
  - To find mentors
  - To give them the opportunity of high level meetings
- Set up a **minimum 6 months internship** during the studies  
→ Launch a « **Space Erasmus** » of 6 months
- Horizon 2020 : Foster the development of **common research subjects between industries and PHDs**

# CONCRETELY

Space sector in Europe → more  
attractive if we :

- Create a strong “**spirit**” for Space education and careers
- Intensify **contacts** and organize debates between the students and the Industry
- Set up a team to define a **key programme**
- Work with the companies and universities **interested in the target**
- **Succeed in our goal** and then **enlarge** the action to more industries/universities/countries



**The future of humanity is in the head of the students !!**

**Let's intensify the changing of generation !!**

