

Polish innovations in aerospace industry – opportunities and threats

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Potential of European aerospace industry

European aerospace industry is growing – in 2012 it achieved a turnover of 171.5 billion Euros, an increase of higher than 5 % in comparison with 2010 (162.9 billion Euros), **mainly pushed by civil aeronautics** (+10 billion Euros)

The aerospace industry in the EU is in political terms an important sector, in economic terms its relative importance is less outstanding. However, **it creates spillover effects for other high-tech-sectors in terms of innovations.**

Polish aerospace industry and hope for innovations

- Polish **national** aerospace industry is over
 - PZL Rzeszów → Pratt&Whitney 1976
 - PZL Mielec → Sikorsky Aircraft Corporation 2007
 - PZL Świdnik → Augusta-Westland 2010
- *Aviation Valley* (2007) and promotion of **SMEs** based activities for *General Aviation*. + *INNOLOT program by NCBiR*
- Polish participation to the Clean Sky program (EU FP7 and Horizon2020)
- **Polish SMEs enter ESA program, 2014 (liberal financial rules)**
- **New NCBiR calls dedicated to SMEs 2015**

SMEs as a driver of the EU economy, but currently in poor condition

According to the Annual Report on European SMEs 2013/2014 21.6 million SMEs in the non-financial business sector employed 88.8 million people and generated 3,666 EUR trillion in value added. Expressed another way, **99 out of every 100 businesses are SMEs**, as are 2 in every 3 employees

“Manufacturing”, “construction”, and “professional, scientific and technical activities” – these three can contribute significantly to the performance of the European aerospace industry.

The most important conclusion of the Innobarometer 2014 is that **lack of financial resources is the main problem encountered in the commercialisation of innovative goods or services (68%)**

Threat of Polish poor innovativeness

Polish companies both SMEs and “big industry” do not cooperate with research institutions. According to the Central Statistical Office of Poland (2014) the rate of innovative enterprises cooperating with other companies as well as research institutions (i. e. universities, Polish Academy of Sciences) has been systematically decreasing. In 2006 the percentage of industrial enterprises participating in innovation activities cooperation amounted to 11,3%, in 2013 it was only 5,2%

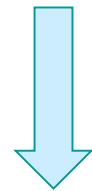
WHY?

- **agressive scientometric evaluation in *Academia* stimulating pure basic research**
- **overestimated demand for SMEs’ financial participation in NCBiR projects**

Opportunities for improvement

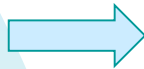
- Correction of scientometric evaluation rules in *Academia*
- liberalization of financial rules (cf rules applied by ESA for SMEs) by the NCBiR agency in programs dedicated to SMEs, especially in the sector of *General Aviation*

MNiSW Ministry of Science & High Education



*Action needed:
modification of scientometric evaluations*

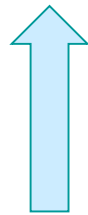
„Academia”



**Aerospace Eng.
General Aviation**



„Industria”
SMEs



*Action needed: reduction of financial
contribution to NCBiR projects for SMEs*

NCBiR agency supporting R&D