

**Self-evaluation Report**  
**about completing a short-term research visit to Institut Aéronautique et Spatial**  
**by undergraduate Ivanov Mark**

1. Hosting country: *France*
2. City/town: *Toulouse*
3. Dates of staying: *from May 21<sup>th</sup> 2013 till July 13<sup>th</sup> 2013*
4. Visit details:
  - 4.1. Official name of the hosting University/institution: *Institut Aéronautique et Spatial*
  - 4.2. Name of Hosting Faculty/Department: *Space industrial modules*
  - 4.3. Aims of visit: *to obtain practical knowledge about the methods, standards and technology for elements design of the spacecraft which are used by the European Space Agency*
5. Initial plan of visit: *To study common principles of spacecrafts design at European Space Agency. To study the design of spacecraft on-board control complex at the European Space Agency. To study the characteristics of the spacecraft on-board control complex at Thales Alenia Space. To make new expanding professional and study networks contacts*

6. Results of visit

*The course of lectures at Institut Aéronautique et Spatial was learnt. The course of lectures consisted of five modules which were devoted to space industrial environment, european industrial organization, project management, assurance, quality and standardization, supply chain. As a result of lectures a Multi Choice Questions Exam was passed.*

*Practical work was done in Thales Alenia Space. Practical work included preparing a response to a request for information for the spacecraft Telkom-3S.*

*Production of spacecraft in Thales Alenia Space in general was got to know. There were some excursions in Thales Alenia Space and Astrium devoted to spacecraft platform and spacecraft payload assembling and testing.*

7. Evaluation of the visit efficiency

7.1. evaluation of training suggested at the host institution (if applicable)

*Training suggested at the host institution was successful. Results of this training – increasing of technical grounding level, receiving complex view to spacecrafts design at European Space Agency*

7.2. teaching staff efficiency (if applicable)

*Efficiency of teaching staff was good. During the training students can greatly improve English language skills, receive theoretical knowledge and apply it in practical exercises*

7.3. new knowledge and competences

*During visit had been received following knowledge: space industrial environment, european industrial organization, project management, assurance, quality and standardization, supply chain, creation of response to a request for information for the spacecraft Telkom-3S.*

7.4. involvement into multicultural and multinational environment/ awareness about other social systems

*During visit period undergraduate received good experience multicultural and multinational environment, which can be used in future relations with foreign people in work or study area.*

7.5. awareness of innovative approaches to solving professional problem

*Most of approaches to solving professional problem are standard and are using today, but for Russian aerospace industry it can be innovative. There are a lot of historical differences between Russian and European approach to work organization in aerospace industry.*

7.6. new contacts/expanding professional network

*During visit was made few new contacts, which really expand professional and study network – it's contacts in general with people in Institut Aéronautique et Spatial and less – in Thales Alenia Space.*

8. Percentage of completing the initial plan of visit

*70% of initial plan of visit*

9. How much the visit contributed to your future professional/research activities?

*Knowledge and contacts, obtained during the visit will be used in professional and research activities for creation foreign articles, for discuss research problems with foreign colleges, and for comparison and analysis of methods and technologies of work organization and spacecraft designing in ESA and RSA. Technical English skills can be used for professional activities with commercial projects of JSC "ISS".*

10. List of documents confirming your successful completion of the research visit (should be attached)

*As a result of the visit at Institut Aéronautique et Spatial a training certificate related to space industrial modules was received.*

11. Overall evaluation of the visit

*Overall visit was successful, although not all initial aims had been achieved during internship period, because obtained experience is useful and will be used in professional and research activities. Besides main goals were achieved some additional aims: improving technical and colloquial English, involvement into multicultural and multinational environment – it can be used*

*for successful communication with colleges from Thales Alenia Space, which is partner of JSC “ISS” today.*

12. What changes would you have made if you were preparing for the next visit of a similar kind?

*For next visit of a similar kind I would made some changes in program of internship: First of all, I will discuss aims and structure of internship period at Thales Alenia Space – for providing meetings with people who designing appropriate parts of spacecrafts at TAS. Second – discuss availability of visits all TAS departments, which can be useful for professional and research activities of undergraduates.*

Date of report

30.09.2013

Signature