The newest available statistics data (Eurostat, last updated: 30.06.2011) shows that there are stable gendered patterns and persistent horizontal segregation at ISCED 5&6 level of education. Within the EU-27, female graduates outnumbered male graduates by a ratio of approximately three to two (e.g. in the field of ‘social science, business and law’); this ratio reached three to one in health and welfare fields of education. Male graduates outnumbered female graduates slightly in agriculture and veterinary fields and by a ratio of approximately three to two in ‘science, mathematics and computing’ fields, and by close to three to one in ‘engineering, manufacturing and construction’ fields. The outlined ‘big picture’ (EU-27 averages) varies across the different EU Member states and will be analyzed in details in the paper.

Against this background of segmentation of education by gender in natural sciences and technology in tertiary education (ISCED 5&6) the paper aims to discuss the following questions:

- Why gender matters in the study fields of ‘science, mathematics and computing’ and ‘engineering, manufacturing and construction’?

- Why female students do not opt for studies in S&T areas at the tertiary level of education (ISCED 5&6) and related with them career trajectory? (identification of the problem)

- Examination of reasons behind the problem: findings from several on-going and completed research-oriented large-scale international projects as well as from several EU, UNESCO and UN reports.

- Policy of gender equality in education.