## IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) Enabling the Future - Developing the Space Workforce (5)

Author: Dr. Eleonora Zeminiani Thales Alenia Space, Italy

## Ms. Birgit Hartman European Space Agency (ESA), France

## FUTURE WORKFORCE AND FUTURE WORKPLACE: A WIN-WIN APPROACH TO THE DEVELOPMENT OF BOTH

## Abstract

The International Project/Programme Management Committee (IPMC) has been established by the International Astronautical Federation (IAF) in 2010. Its goal is to promote individual, team, and organisational excellence in programme/project management, systems engineering and engineering disciplines. It does so by sharing experiences, best practices and new techniques among space agencies, companies, universities and professional societies throughout the world.

Since 2012, the IPMC Young Professionals Workshop has been held annually, in connection with the International Astronautical Congress (IAC). Its purpose is to gather ideas and recommendations from early career employees in the international space community and to provide the IPMC and IAF with greater insights to better develop and empower the next generation workforce. It also enables young professionals to experience the challenges of working on innovative topics as members of delocalized heterogeneous international teams. They need to extend the boundaries of their core competences while dealing with differences in professional background, culture and personality. They get a chance to experiment project management in a demanding and time-constrained context. The value of the workshop stems from providing hands-on training and learning partnerships with expert mentors.

Results from previous workshops have already been presented in previous publications at the IAC. This paper briefly recaps the initiative, and then focuses on areas of novelty. It presents new findings and recommendations from topics researched in 2018 and 2019: Fostering Project Management in the World of Diversity, Space 4.0 and the Evolution of the Aerospace Sector, Challenges Faced by Multidisciplinary Teams Working on Space Projects Between Emerging and Legacy Space Economies, Knowledge Management Practices, Earned Value Management in Project Management of Large Space Projects, and Project Management Practices for Encouraging Rapid Prototyping and Short Fused Product Life Cycle for Space Projects.

The paper introduces a retrospective on quality of the collaboration of multi-disciplinary teams and diverse team dynamics. It takes into account both the perspective of the delegates, i.e. the young professionals actually involved in the research activities, and that of the Workshop Organizing Committee, i.e. the group of alumni-delegates, often still young professionals themselves, who manage the workshop on behalf of the IPMC.

The dissertation closes highlighting lessons learned and benefits of this initiative: a program to inspire and develop the future space workforce, a tool to tap into young ideas to rethink and innovate the space sector, a platform for senior and junior project managers to better leverage the next generation workforce.