

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Interactive Presentations - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (IP)

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NURTURING SPACE WORKFORCE THROUGH INTERNATIONAL COLLABORATION: NEXT  
GENERATION'S PERSPECTIVE

**Abstract**

Due to the overarching impacts of advancements in space on all aspects of life across the planet, the space sector is inherently global and requires extensive international coordination at every step. Multinational teams and projects such as the International Space Station have proven how diverse perspectives are needed to address the unique challenges faced by the space sector today. To achieve effective international cooperation between Industries, Agencies and Academies we need to set common goals serving the different interests and to establish long term economic and scientific trusted relationships. Diverse perspectives and skills can be leveraged in many ways to contribute towards advancements in space. The International Astronautical Federation highlights three main aspects of diversity: Gender, Generation, and Geography i.e. the 3Gs. Positive outcomes in the space industry will only be achieved if diversity is acknowledged. Language and cultural barriers should also be considered. Three major contributors to the space sector are considered: academia, agencies, and industry. Each institution has a different structure, resources, goals, and workforce. These contrasts create gaps that increase the friction for cooperative opportunities, for instance, a great number of natural catastrophes could have been prevented with a cooperation between companies and governmental agencies. What could be suggested to find

common ground between all groups and nurture space workforce development. Under the auspices of the Space Generation Congress 2021 in Dubai a working group of 24 delegates representing 19 countries discussed and suggested solutions to International Space Development Cooperation. Three cooperation cases were studied : Industry\*Academia, Industry\*Agency, and Industry\*Industry. Between Industry and Academia, ideas were classified under 4 perspectives : Technology, Politics, Economy, and Humanities. One of the ideas was to encourage professionals to get more contact with students for them to gain a real understanding of the field. For Industry and Agency, the main highlighted points focused on Data Sharing, Procurement, Government-Industry Relations, Industry Association and Target Areas. For instance data sharing is essential in a way that it makes the development lean and very efficient, avoiding challenges that others overcame. With the Industry x Industry case; Global Collaboration, Education, Policy and Agency Facilitation were the subsections of the analysis. A suggestion was that this type of collaboration in emerging countries could be highly beneficial for the development of space capabilities within them. The results of this working group serve as a roadmap for industry leaders who want to support global workforce development.