#### The Space Generation Project Groups: Perspectives from University Students and Young Professionals in the Space Sector



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#### Basic Facts on SGAC



- Is a non-profit organisation that represents university students and young professionals (18-35 year olds) in international space policy
- Started as a result of the 1999 UNISPACE-III conference
- Have become a permanent observer in UN COPUOS since 2001 and a member of the UN Economic and Social Council since 2003
- Has today a volunteer professional network of about 4,000 members in 90 countries

"To create, within the framework of the Committee on the Peaceful Uses of Outer Space, a consultative mechanism to facilitate the continued participation of young people from all over the world, especially young people from developing countries and young women, in cooperative space-related activities..." -Vienna Declaration, 1999

#### SGAC Project Groups' Purpose



- To give members a way to discuss pertinent space topics year round
- To hone the analytical skills of the next generation of space leaders
- To produce quality outreach, educational, and analytical output
- To develop perspectives and recommendations from university students and young professionals to share with:
  - Agencies
  - Industry
  - Academia
  - The United Nations



#### YGNSS: Origin & Purpose

- Youth for Global Navigation Satellite Systems (YGNSS) was initiated in April 2008
- YGNSS educates the public of the benefits of GNSS from different perspectives:
  - Social Impact
  - Economy
  - Education
  - Technology Development
- We are the "users" of GNSS and the "beneficiaries" of GNSS cooperation
- Our responsibility, too, to ensure these benefits for future generations of people around the globe

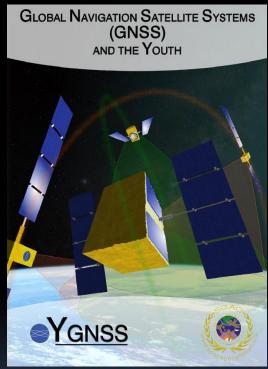




#### YGNSS: Output



- **Conference participation** 
  - **Space Generation Congress (SGC)**
  - **International Astronautical Congress (IAC)**
  - **International Space University Symposium**
  - 16th Asia Pacific Regional Space Agency **Forum**
  - 2010 Galileo Application Days
- **Outreach and education** 
  - YGNSS Brochure
  - **International Opinion Poll**
  - **Geo-Caching**
  - Model simulating benefits of interoperability & compatibility



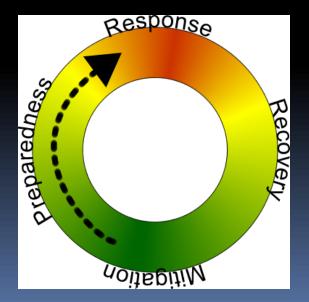
Continually provided inputs at various UN forums since its inception including UN COPUOS, ICG, & ECOSOC



## Space Technology for Disaster Management: Origins & Purpose



- Created in June 2009
- Main objectives:
  - Create awareness of space assets & applications for disaster management
  - Convey the views of youth to major players





# Space Technology for Disaster Management: Output



- High-level brief on the 2010 earthquake in Haiti
- High-level brief on the 2010 earthquake in Chile
- Technical poster contest for winner to attend the 2009 conference on disaster management in the Caribbean with UN-SPIDER
- Space Generation Congress topic development
- International Astronautical Conference
- Informational outreach via its website

Contributing to space applications for disaster management outreach efforts of UN



### Near Earth Object Working Group: Origins & Purpose



- Created in 2008 to be the voice of the youth to the UN on matters of planetary defense
- Has become a platform for university students and young professionals to engage with planetary defense experts on subjects of research, education & outreach



### Near Earth Object Working Group: Output

- Move an Asteroid Technical Paper Competition
- Conference advertisement for young adult participation (e.g., IAA Planetary Defense Conference)
- New media productions
- Public outreach events











Continually provided inputs at various UN forums since its inception including UN COPUOS & AT-14



# Space Safety & Sustainability Working Group: Origin & Purpose



- Created in fall 2010
- •Examines the safety and long-term sustainability of outer space activities in all aspects, taking into account the interests of all countries
- Proposes measures to establish uniform procedures, standards and regulations for a safe, fair and sustainable use of space from youth perspective

#### •Focus areas:

- Space debris mitigation and removal
- System safety design
- Space weather effects on space missions
- Space Situational Awareness
- Collision risk assessment





## Space Safety & Sustainability Working Group: Output



- Appointed an Advisory Team from specialist organisations
- Partnered with International Association for the Advancement of Space Safety (IAASS)
  - Created a scholarship competition
  - Contributed to a workshop on a certification in space safety
- •Linked with Analytical Graphics, Inc. to utilize the STK® space modeling software to create 'real-world' outputs
- Completed a comprehensive SSS literature review
- Has plans to participate in SGC, IAC, and IAASS's annual event

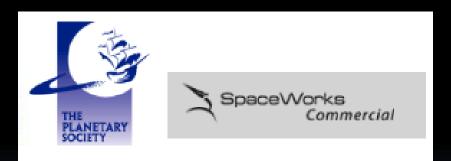
Will contribute to the on-going UN discussions on the long-term sustainability of outer space & partner with other permanent observers

## Partners and Supporters of SGAC's Project Groups

















### Thank You

