

The Youth Space Vision for the Next Decade: Looking Back to Look Forward

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THE SPACE GENERATION
ADVISORY COUNCIL

IN SUPPORT OF THE UN PROGRAMME ON SPACE APPLICATIONS



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Basic Facts about SGAC



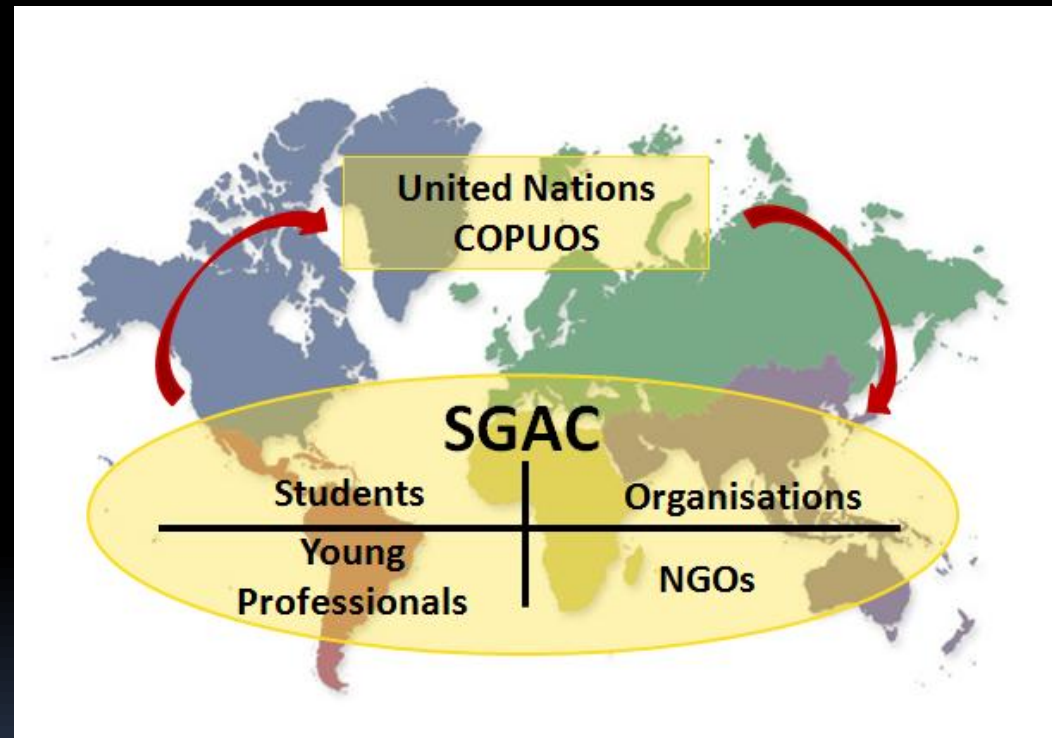
- **SGAC is a product of UNISPACE III**
- **SGAC has a volunteer network of ~4,000 university students and young professionals**
- **Over 90 countries are represented**
- **SGAC been a permanent observer in UN COPUOS since 2001 and has had UN ECOSOC status since 2003**
- **SGAC headquarters are in Vienna, Austria – hosted by the European Space Policy Institute**



SGAC Purpose



- **Creates a global volunteer base of advanced students and young professionals in the space sector**
- **Provides a forum for the international youth to debate space topics**
- **Connects the youth to each other and to top space professionals and organisations**
- **Gives the youth a voice in global space policy**



Conference Overview



- **What: SGAC 10 Year Anniversary Conference**
- **When: June 6 & 7, 2009**
- **Where: The European Space Policy Institute, Vienna, Austria**
- **Conference structure: 3 sessions with a panel and working groups per session**
- **Purpose:**
 - **To celebrate the past ten years of SGAC**
 - **To analyse historic and future trends in the development of the “spacescape”***
 - **To lay out role for the youth in the next decade**

*Spacescape = the overview of the organisations conducting space activities such as launching vehicles, owning satellites, or purchasing space-based services



Profile of Conference Attendees



- More than 70 attendees
- Mix of old SGAC members, current SGAC members, and various international delegates and SGAC supporters

6 continents and 21 countries
represented

- Australia
- Austria
- Brazil
- Colombia
- Croatia
- France
- Georgia
- Germany
- India
- Iran
- Japan
- Mexico
- Nigeria
- Netherlands
- Pakistan
- Poland
- Romania
- Spain
- Tanzania
- UK
- USA



The Key Questions When Addressing the Coming Decade



- What is the **historic context** and where are we now in space development?
- What are the **global challenges** of the next decade?
- **What will it take to overcome** these challenges given the current state and trends in space development?
- What role can the **youth** play?
- What role can **SGAC** play?



Development of the “Spacescape” Trends



- **Increase in uses of space**
 - Military & exploration
 - Telecommunication
 - Climate & weather monitoring
 - Tele-health
 - Tele-education
 - Tele-medicine
- **Increase in use of space to bridge the gap between developed and developing countries**
 - Embrace of space applications to improve infrastructure and quality of life
 - Education, agriculture, transportation, healthy, and communication are areas of focus
- **Increase in players in space**
 - Number of countries
 - Types of players (States, commercial, private, NGOs, etc.)



Global Challenges and Goal for the Next Decade



Global Challenges for the Next Decade

- Climate change
- Resource (e.g., water, food, mineral, energy) management
- Pandemics
- Population growth
- Wars/conflicts
- Improved access to technology, education, and healthcare

International Space Goal for the Next Decade

To optimise use of space through properly integrating these new space players – technically and politically



Technical and Political Integration



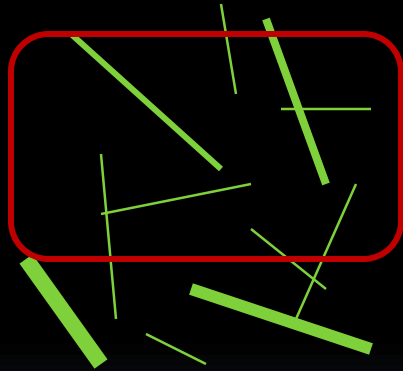
- **Technical** : ensuring proper systems in place to handle increased traffic and ensuing debris
- **Political**: working towards the “new global vision”
 - Sustainability of space for the benefit of all humankind – developing and developed, spacefaring and non-spacefaring States alike
 - Regional space agencies for developing regional space programs – an emerging need in developing States to allow for a complementary bottom-up approach to international space policy
 - Regulation of the orbital environment for the fair and responsible use of space, including special consideration for private space policy
 - Improvement of coordination by the UN system and its stakeholders against threats of manned origin and mother nature



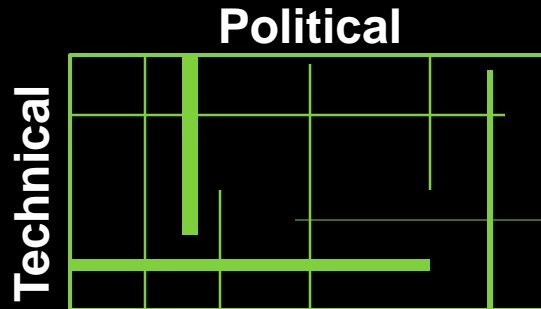
Visualisation of the Issue



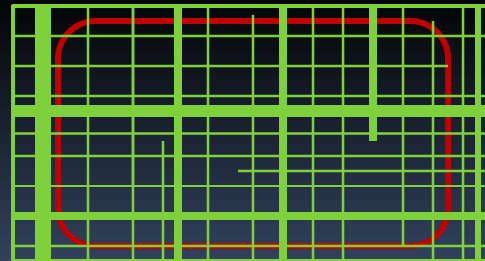
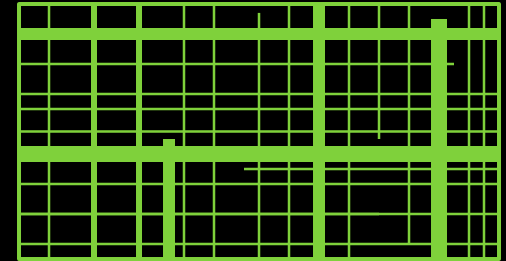
**Current and Trending
State of the Diverse
Spacescape = Unable to
Cover Global Challenges**



**Framework for
Integration of New
Space Players**



**Eventual Weaving
of an Organised
System**



**Integrated System of Space Players Is More
Effective in Covering Global Challenges**



The Role of the Youth in the Next Decade of Space Development



- **Being a part of bridging the gap between developed and developing States**
 - Starting discussions among tomorrow's leaders today
 - Developing space leaders with international mindsets
- **Reaching out to the new sectors joining space**
 - Promoting space to other public sectors (e.g., agriculture, energy, health, etc.)
 - Connecting to analogous youth groups in other sectors
- **Advocating for improved science, technology, engineering, and math (STEM) education**
 - Campaigning for long-term commitment to education
 - Working towards STEM education in both developed and developing countries



How Will SGAC Contribute?



- **Inspiring and integrating the up-and-coming space sector leaders, particularly those in developing and/or non-spacefaring States**
 - continue to shape the lives of space students and young professionals through its activities, the strength of its network, and the leadership possibilities it affords
- **Providing the youth input for space solutions to global problems**
 - continue its role as the voice of the youth in space policy through its work with the United Nations, States, and various space agencies and organisations
- **Exciting other non-space sectors as well as the public about the benefits of space**
 - facilitate outreach for the space sector and demonstrating the value of space solutions



Conclusions



- The **global community stands at a crossroads** in its development of space for humans with a growing and diversifying “spacescape”
- The youth feels that there is **room for development in the technological and political structure to regulate this change** and would like to contribute to the development
- In the next ten years, the youth would like to play the role of **laying bridge foundations between different States and sectors**. At the same time, the youth would like to be advocates of **building educational foundations through improved STEM education** to ensure continued, strong space development



Let Us Engage the Youth!



www.SpaceGeneration.org

