Background and Report
by
Ademir Vrolijk & Michael Bergmann
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Part I

Background
International Space University (ISU) and the Space Studies Program 2011 at TU Graz, Austria

The Guidebook on Small Satellite Programs (Go SSP) was developed under the ISU team project framework.

Go SSP was conducted in cooperation with UN OOSA under the Basic Space Technology Initiative of the UN Programme on Space Applications.

The guidebook:
- Provides principal considerations necessary for such a program
- Is written as a primer for decision-makers
The Team

- 39 participants, 24 countries
- Majority were non-native English speakers
- Diverse professional backgrounds
- Many participants were experienced with small satellites
Main challenges faced:
- Organizational structure
- Final product
- Keeping team on track

Main lessons learned:
- Overcome language barriers early
- Maximize off-hours
- Parallel vs. serial tasks
Work Flow

Listen to experts…
Work Flow

Brainstorm and develop ideas…
Work Flow

Present ideas and receive feedback…
Work Flow

Rework ideas and develop into concrete solutions...
Work Flow

Compile solutions into the final products…
Work Flow

Finally…
Part II

The Guidebook on Small Satellite Programs
To create a guidebook aimed at decision-makers in academia, government, and industry interested in developing space capabilities using small satellite programs.
Go SSP Contents

- Provides a broad overview of initial considerations
- Demonstrates to the reader the usefulness of small satellites:
  - Fulfills similar role as larger counterparts in areas such as remote sensing, disaster monitoring, vessel tracking
  - Innovative and cost-effective space based capabilities
- Includes recommendations, best practices, lessons learned
- Four small satellite missions analyzed throughout the report
- Impresses upon the reader that a significant commitment is required, but the payoff is similarly significant
Go SSP Layout

- Why small satellites?
- What can be accomplished?
- Who is involved?
- What legal and regulatory issues exist?
- How is the program concept envisioned?
- How is the mission concept implemented?
e.g. BRITE Austria Case Study

- Rationales: education and national prestige purposes
- Application: space science (star observations)
- Partners: numerous national and international partners are detailed
- Legal: Austria has created a national legal framework to support its satellite activities
- Implementation details: ground/user segment, launch, and orbital parameters detailed
Go SSP Future

- Go SSP website: gossip.isunet.edu
- Go SSP follow up:
  - A revision of the report is being planned
  - Other projects being explored
- Subsequent Go SSP activities might take on a different form than the ISU framework
Closing Remarks

- Despite challenges, the Go SSP experience enriched the team.
- The Guidebook is starting point for developing an improved and more detailed document.
- Team members are still interested in carrying the work forward.
Thank You
Project Members

TP Co-Chair Werner Balogh
*United Nations Office for Outer Space Affairs*

TP Co-Chair Wiley Larson
*Stevens Institute of Technology*

TP Teaching Associate Joshua Nelson
*University of North Dakota*

- Alonsoperez, María Victoria *URUGUAY*
- Bai, Guangzhou *CHINA*
- Bergmann, Michael *AUSTRIA*
- D’Souza, Brian *CANADA & UNITED KINGDOM*
- Hasanbegovic, Anz *NORWAY*
- Jurado Gallardo, Maria de los Angeles *SPAIN*
- Kumar, Nelanuthala Sudheer *INDIA*
- Labzovsky, Ilia *ISRAEL*
- López Telghe, Alejandro Ignacio *CHILE*
- Arslantas, Yumus Emre *TURKEY*
- Ballenahalli Krishnamurthy, Niveditha *INDIA*
- de Crombrugge, Guinec *BELGIUM*
- Ghadaki, Parmaz *CANADA & IRAN*
- Haylock, Thomas *CANADA*
- Koide, Takahiko *JAPAN*
- La Torre, Simone *ITALY*
- Li, Dong *CHINA*
- Luft, Michael *ISRAEL*
- Matveenko, Vera *RUSSIAN FEDERATION*
- Pandya, Jigar *INDIA*
- Reid, Tyler *CANADA*
- Rocha, Mauricio Teixeira *BRAZIL*
- Saether, Erik *SOUTH AFRICA*
- Su, Jinxin *CHINA*
- Terakado, Daiki *JAPAN*
- Tsoukala, Sotiria *GREECE*
- Urbanowicz, Maciej *POLAND*
- Vrolijk, Ademir *CANADA & NETHERLANDS*
- Zhai, Zhengan *CHINA*
- Morris, Trevor *CANADA*
- Qedar, Ran *ISRAEL*
- Ressler, Gerhard *AUSTRIA*
- Romano, Patrick *ITALY*
- Soares Henriques, Rui Filipe *PORTUGAL*
- Sundström, Tale *NORWAY*
- Timofeev, Evgenii *RUSSIAN FEDERATION*
- Unterberger, Manuela *AUSTRIA*
- Vinmand, Mart *ESTONIA*
- Wolf, Nadja *GERMANY*
Experts

Fernando Aguado-Agelet
*University of Vigo*

Philomena Bonis
*International Space University*

Andy Bradford
*Surrey Satellite Technology Ltd.*

Angie Bukley
*International Space University*

Carol Carnett
*International Space University*

Pascale Ehrenfreund
*Space Policy Institute*

Rick Fleeter
*Brown University*

Joel Herrmann
*International Space University*

Rei Kawashima
*University Space Engineering Consortium*

Carol Larson
*International Space University*

William Marshall
*National Aeronautics and Space Administration*

Milind Pimprikar
*CANEUS*

Jordi Puig-Suari
*California Polytechnic State University*

Klaus Schilling
*University of Würzburg*

Tom Segert
*Raumfahrtinitiative Berlin-Brandenburg*

Fabian Steinmetz
*University of Stuttgart*

Kirk Woellert
*Space Policy Institute*

Eddie van Breukelen
*Innovative Solutions in Space*

Oliver Zeile
*University of Stuttgart*