# **New Global Framework**

for Sharing of Space Technology and Data StandardsTo serve Nation's Disaster Management Needs



## CANEUS WORKSHOP THIRD UN WORLD CONFERENCE ON DISASTER RISK REDUCTION

Sendai-Japan March 17h, 2015, 9:00 – 12:00



Concept of UN Global-Sat For commitment to the post-2015 framework for disaster risk reduction



## **CANEUS Workshop**

(Canada-Europe-US-Asia-Africa) International Organization invites you to participate in an exciting and unique Workshop at the upcoming 3rd UN World Conference on Disaster Risk Reduction to be held at Sendai-Japan, on March 17h 9:00 – 12:00.

This focused workshop is mandated to create a UN led Global common platform, UN Global-Sat, that allows sharing of space and data segments with its ability to serve as a strong tool for nation's disaster management and development needs, and will be launched with Keynote by Ms. Simona Di Pippo, Director, United Nations Office for Outer Space Affairs, UN-OOSA.

### BACKGROUND

Since the UNISPACE III held on July 19-30, 1999, the world has witnessed tremendous developments in different branches of space technology and its applications. Not merely those applications of space have expanded, but significantly, several more countries too have begun to participate in space endeavors and derive benefits from space technology, in particular with the affordable small satellite developments.

Successful efforts of UN, Government agencies, Corporations and NGO's worldwide in the application of satellite technologies for the management of numerous disasters had notable outcomes in terms of saving human lives and resources. In particular, the UN-SPIDER program of UN-OOSA have been active in deploying disaster and environmental monitoring capabilities on satellites; however, there currently exists no global partnership to coordinate and organize all the disparate efforts – especially one that ensures the availability of these capabilities to otherwise underserved countries.

By creating common data and access standards across communities and by working together as one disaster response system of systems, agencies and emergency management teams can improve their level of preparedness before a natural disaster occurs. Such an approach also allows them to enhance the efficiency and effectiveness of their response during recovery and, by analyzing a combination of remotely sensed satel—lite and in-situ data, better mitigate natural hazard risks for the future.



#### NEED & APPROACH



The need for the UN driven global initiative is responsive to the national/ regional and globally interconnected disaster and environmental management efforts, which involves every country and knows no geographic boundaries. No single country can afford to develop such complete set of sensors and satellite system needed for forecasting, monitoring and mitigating disasters like floods, drought, typhoons, earthquakes, wild fires, windstorms, tidal events etc.

Today, small satellites have been playing important roles in new technology demonstration and providing cost effective tools for disaster risk reduction. The key findings from related CANEUS initiatives and lessons learned reveal that space based remote sensing tools covers multi-sectors and require multi-disciplinary approach to address the diverse multi-stakeholders disaster risk management needs.

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### **VISION & GOALS**

Vision for the proposed CANEUS initiated and UN led Global-Sat constellation is to create a common platform that allows sharing of space and data segments with its ability to serve as a strong tool for nation's disaster management and development needs.

Collaborating and sharing information mutually enhances nations' disaster management capability and economic prosperity of their territories. The UN OOSA played a key role in the establishment of international space cooperation frameworks and the proposed initiative now calls for the establishment of a new global framework for the free exchange of disaster and climate monitoring information.



The UN Global-Sat is an opportunity for constructive engagement in space technology with partners that will increase partner nations' capacity tailored to specific disaster management requirements.

CANEUS, a global non-profit organization, is proposing to define technical, policy, and financial issues, and to frame an implementation plan for the UN Global-Sat constellation. The eventual goal is to establish a public/private partnership that would create a low-cost, internationally shared data collection and distribution backbone in space with no barriers to entry for participating nations.

### **EXPECTED OUTCOME**

This workshop attempts to define technical, policy, and financial issues, and to frame a public/private partnership implementation plan for the UN Global-Sat constellation contributing to the post-2015 framework for disaster risk reduction.

### **ABOUT CANEUS**

The CANEUS (CANada-EUrope-US-Asia-Africa) network, founded in 1999, serves to bridge the gap between the "haves" and "have-nots" to develop common platform for space technology solutions for natural and man-made disaster management.

Over past 15 years, CANEUS has created international Consortia covering public-private-partnerships of stakeholders within Asia, Africa, Americas and Europe for developing, integrating and testing affordable space technology solutions through sharing of cost and risk for forecasting, monitoring and mitigating disasters.

CANEUS has assisted governments help set up early earning warning systems and disaster preparedness by undertaking "Limited Objectives Demonstration" pilot projects to develop data standards and determine implementation barriers. CANEUS has been accorded special accreditation as "International Organization" by the UN for both the 2015 UN World

Conference and the 2013 UN Global D R R Platform.



### **PROGRAM:March 17h 9:00 – 12:00**

#### 1. Setting the Stage

- 09:00 9:10 Workshop Overview: Welcome from CANEUS, Workshop Goals, Structure & Expected Outcome, Dr. Milind Pimprikar, Chairman, CANEUS
- 09:10 9:20 Raison d'être: "Need for the UN-Global-Sat Initiative", Dr. Marco Villa, Director, CANEUS
- **09:20 9:40** Workshop Keynote: "New global framework for sharing space technology & data standards for disaster management", Ms. Simona Di Pippo, Director, United Nations Office for Outer Space Affairs, UN-OOSA

#### 2. End-User Needs Assessment

09:40 – 10:10 Invited Panelists to contribute their experience related to space based data management (collection, post-processing and distribution), and data standards to serve disaster management needs and lessons learned perspective:

 a) UN-ISDR: Office of Ms. Margareta Wahlström, the Special Representative of the Secretary-General (SRSG) for Disaster Risk Reduction

b) UN SPIDER: Dr. Shirish Ravan and Dr. 'Juan-Carlos Villagran, UN-SPIDER

c) UN-ESCAP: Dr. Shamika N. Sirimanne, Director, Information and Communications Technology and Disaster Risk Reduction (Invited)

#### 3. Satellite Technology Assessment

- **10:10–10:40** Invited Panelists to provide an overview of existing and planned Satellite technology solutions perspective:
  - a) Global perspective: UN-OOSA Space Technology Division: (Invited)
  - b) Space Agency perspective: JAXA (Invited)
  - c) University / Industry: Consortium partners (Invited)



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#### 4. Programmatic Issues

- 10:40 11:10 Invited Panelists to address policy, financial issues, and present successful Global / regional partnership / collaboration models perspective
  - a) Financial Issues: World Bank Expert (Invited)
  - b) Policy and Legal Issues: GFDRR / Price Waterhouse Coopers (PwC), International Organization
  - of Supreme Audit Institutions (INTOSAI) (Invited)
  - c) Global and Regional Partnerships Models: GFDRR (Invited)

#### 5. Proposed Global Framework

**11:10 – 11:40** Discussion covering proposed Scope, Stakeholders, Core Team, and Implementation Mechanism through public/private partnership and Success Criteria

Moderators: GFDRR and UN ISDR Public Private Partnership (Invited) Contributors: Panellists, speakers and participants

#### 6. Workshop Outcome & Wrap up

- **11:40 11:55** Proposed new global framework for sharing of space technology and data to serve nation's disaster management needs, Chairman and Director of CANEUS
  - a) Summary of technical, policy, and financial issues for the UN Global-Sat Initiative
  - b) Public/private partnership implementation plan
- **11:55:12:00** Closing Remarks, Presentation of Mementos