

my planet. my future.
SPACE for **SUSTAINABILITY**



Milind Pimprikar, CANEUS and Joachim Post, DLR (Presenter) | 14 November 2018, Bonn, Germany

Strategic Importance of Space for the Sustainability

- UN has set up target of achieving **Sustainable Development Goals** by 2030 for building resilient societies.
- UN Member States are committing themselves to this united vision of the world.
- Space Science and Technology must align with these goals and showcase how space exploration and innovations are playing significant role in this endeavour.
- It will ensure continued patronage & support of governments and people at large to this exciting domain of 'space'.
- Thus **CANEUS & UNOOSA** have taken up a major initiative as a part of their co-operation agreement.



My Planet, My Future (MPMF) - Space for the Sustainability

- MPMF is a **walk-through exhibition** to illustrate how space tech can be used to build sustainable and resilient societies.
- MPMF is a mesmerizing **showcase of real case studies** with contributions from stakeholders worldwide.
- MPMF is designed and developed using graphic panels, models and AV to illustrate the **Impact of Space Technology on SDG Goals 6, 7, 11, 12, 15 and 17** the focus areas for UN 2018 High Level Political Forum HLPF.
- MPMF's core idea is to dedicate the exhibition to the children of this world who would be responsible citizens by 2030.



MPMF @ UN HQ during HLPF 2018

> Launch at UN HLPF 2018:

- The MPMF Exhibit was aligned with the **theme of the 2018 UN High-level Political Forum**.
- Showcased at the Lobby of the **United Nations Headquarters (UNHQ)** in New York from **10 July to 5 September 2018**. MPMF was inaugurated by UN Deputy Secretary General and visited by diplomats and ministers, captains of the industry, NGOs, space enthusiasts and wider public, attracting over 100,000 footfalls. MPMF was rated as one of the best exhibits ever in UN HQ.
- The MPMF exhibition was organized by **CANEUS International** with the support of the **United Nations Office for Outer Space Affairs (UNOOSA)**, and designed by CANEUS partner **MM Activ Sci-Tech Communications**.
- It was sponsored in partnership with the European Commission, European Global Navigation Satellite Systems Agency (**GSA**) and the German Aerospace Center (**DLR**).



MPMF @ UN HQ



Some of other Case Studies featured in MPMF

UNOOSA-JAXA KiboCUBE programme



The United Nations Office for Outer Space Affairs (UNOOSA) has partnered with the Japan Aerospace Exploration Agency (JAXA) on the KiboCUBE initiative to offer developing countries the opportunity to deploy cube satellites from the International Space Station for tasks like environmental monitoring.

(Source: JAXA)

UN-SPIDER: UN Platform for Space-based Information for Disaster Management and Emergency Response



UNOOSA works closely with countries like China and Germany to implement the UN-SPIDER program, which helps developing countries access and use space technology for disaster risk management and response.

(Source: NASA)

G-Motit: An electric scooter sharing service for sustainable urban mobility



Vehicle sharing services benefit from Global Navigation Satellite Systems (GNSS) to track the vehicles and solve mobility problems in major metropolitan areas.

(Source: GNSS)

Global trends in satellite-based emergency mapping



The steep increase in the use of satellite emergency mapping confirms the usefulness of satellite imagery for disaster damage assessment. The illustrations above present several Earth observation initiatives and programmes. One of these is the Copernicus Emergency Management Service (EMS) managed by the European Union (bottom right), and another is a flood delineation map, Mantes-la-Jolie, France (bottom left).

(Source: Europa)

EDEN ISS: Ground demonstration of plant cultivation technologies for safe food production in space



Greenhouse and bio system model project to address the issue of food production in climatically unfavorable areas such as the desert, arctic regions, and in possible future habitats on the Moon and Mars.

(Source: DLR - International Space Station ISS)

An Internet of Trees (IoT) application improves the measurement of key parameters in forest areas



Forest managers need to regularly assess a forest's status to efficiently manage and monitor the rapidly changing forest environment. Historically, this required significant manual effort and the associated costs made it more difficult to receive a high-quality assessment of a forest's status. IoTrees is a solution which uses satellite data and sensors to regularly monitor forest areas without the need for human intervention.

(Source: ESA)

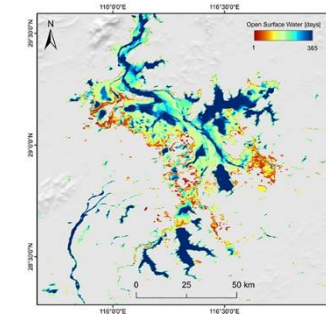


UNOOSA and DigitalGlobe

UNOOSA has partnered with DigitalGlobe Corporation to provide high-resolution satellite data to UN entities like UNDP, which has used it for post-conflict reconstruction in Mali.

(Source: UN Photo/Sylvain Liechti)

Global Waterpack



An Important Initiative part of CANEUS-UNOOSA Cooperation Agreement

> CANEUS-UNOOSA Cooperation Agreement

- CANEUS (Canada-Europe-US-Asia-Africa) is a worldwide non-profit organization dedicated to **fostering emerging space technology based solutions** through coordinated / shared approach to benefit socio-economic needs of all countries
- CANEUS and UNOOSA **share common objectives and missions** with regard to the SDGs and other key global agendas
- CANEUS and UNOOSA have **agreed to cooperate** to enhance the effectiveness of their development efforts in **areas of common interest**, including earth observation and space-based technologies and applications that can address the SDGs.
- The MPMF Exhibition constitutes an **important initiative under CANEUS's cooperation agreement** with UNOOSA.



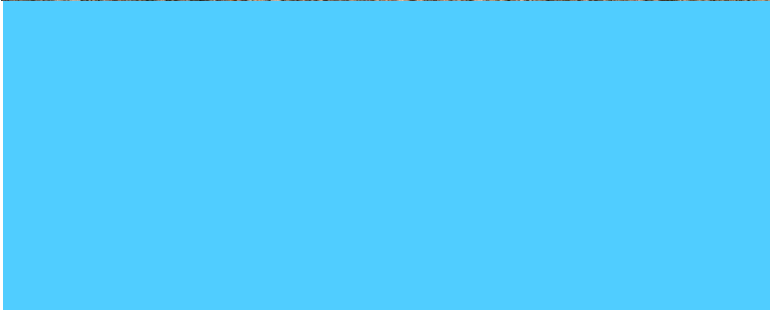
Unique opportunity to UN Member States, Private Sector, Industry and NGO's

> Way Forward

- We propose to produce the MPMF as a **Travelling Exhibit** covering Africa, Americas, Asia, MENA and Europe regions.
- Additionally, the MPMF will be **showcased at the Vienna International Centre (VIC)** Rotunda during the COPUOS Session.
- CANEUS, UNOOSA, MM Activ and DLR proposes to continue our partnership and invite other stakeholders worldwide.

> Unique Hosting Opportunities

- **Leveraging the MPMF contents** produced through the global expertise and extensive resources at the United Nations Headquarters.
 - The **Intellectual Property of this content is available to partners** worldwide and will be customized for the host institution / country / region.
 - Produce the Exhibit that draws upon and **support the host institution / country's mission** to develop and disseminate information about space science and technology applications to sustainable development.
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Thank You

