JAXA’s Effort to Establish Platform for Private Sector, Academia and Government Partnership in Japan

Yuko Nakamura, JAXA
CEOS SIT-38
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Consortium for Satellite Earth Observation
- Establishment of Platform for Industry, Academia, Government Partnership in Japan -

✓ Purpose
✓ Gathering players from industry, academia and government, the Consortium will envisage the future of Satellite Earth Observation and realize it through co-creation.

✓ Vision
- For prosperous global future in harmony with the Earth -
✓ Safe, secure, sustainable and prosperous society realized through creating innovation, enhancing space industry and acquiring scientific knowledge

✓ Mission
The Consortium led by industry, academia and government will
1. Deliver recommendations of the overall strategy of Earth observation satellite for Japanese society;
2. Install outcome from Satellite Earth Observation to the society, establish an ecosystem supported by industry, academia and government and promote co-creation among them;
3. Share the value of Satellite Earth Observation to gain support from the public for its promotion.

✓ Membership
✓ Executive Committee: Consists of 24 experts from industry, academia and national institutes
✓ Members: 173 Corporations/Organizations, 30 Experts, 14 Groups of Ministries (As of 22 February)

✓ JFY2022 (Sept 2022 to March 2023)
- Study the overall strategy (recommendation) of the Earth satellite observation.

✓ JFY2023 onwards (April 2024 -)
- Facilitate industry-academia-government collaboration promotions
CONSEO Community – Players from Diverse Field

<table>
<thead>
<tr>
<th>Corporate/Organization Member</th>
<th>Expert Member</th>
<th>Observer (Ministries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>173 entities</td>
<td>26 persons</td>
<td>14 entities</td>
</tr>
<tr>
<td>(Time of Establishment)</td>
<td>(13 persons)</td>
<td>(11 entities)</td>
</tr>
<tr>
<td>173 entities</td>
<td>26 persons</td>
<td>14 entities</td>
</tr>
<tr>
<td>(Time of Establishment)</td>
<td>(13 persons)</td>
<td>(11 entities)</td>
</tr>
<tr>
<td>Private sector/Municipality/Research institute etc.</td>
<td>Individual membership</td>
<td>Ministries/Agencies, etc.</td>
</tr>
<tr>
<td>(8%)</td>
<td>Assembly [4]</td>
<td></td>
</tr>
<tr>
<td>Manufacturer [29]</td>
<td>Communications [4]</td>
<td></td>
</tr>
<tr>
<td>(17%)</td>
<td>Infrastructure [3]</td>
<td></td>
</tr>
<tr>
<td>Research Institute/Academic Association [34] (20%)</td>
<td>Public incorporated foundation [2]</td>
<td></td>
</tr>
<tr>
<td>(26%)</td>
<td>Event support [2]</td>
<td></td>
</tr>
<tr>
<td>Dada Application [44]</td>
<td>Real estate [1]</td>
<td></td>
</tr>
<tr>
<td>(26%)</td>
<td>Public sector [1]</td>
<td></td>
</tr>
<tr>
<td>(8%)</td>
<td>Major construction [1]</td>
<td></td>
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<tr>
<td>(8%)</td>
<td></td>
<td></td>
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<tr>
<td>Municipality [6]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others [20]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(12%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trading company [6]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Incorporated Association [6] (3%)</td>
<td></td>
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</tr>
</tbody>
</table>

(Time of Establishment) (107 entities) (13 persons) (11 entities)
Vision of the Future Society – Aiming to Realize with Satellite EO towards 2040

Solving Global Challenges and Providing Information Essential for DX/GX Enable to “Envision the Future” led by Satellite Earth Observation

Shift of Socio-economics from “Finding Issues” to “Solving Issues”, from “Analyzing the Situation” to “Projecting the Future”, from “Partial Optimization” to “Overall Optimization”

Envision Nature and Socio-economics

- By highly accurate projection Effcient Agriculture and Optimization of Agriculture Products/ Energy Imports
- By highly accurate projection Rational Policy Decisions in Food Security and Climate Change Measures
- By continuous and rapid observation Quickly Grasp and Respond to Disaster Sign and Damage
- Trial of automatic driving for car/flying car/vessel/aircraft by building AI learning environment in Earth digital twin Toward Society with Few Accidents
- Automated agricultural machinery and fishing vessels by digitalization of experience and observation data Toward Sustainable Society with Reduced Succession Issues
- By continuous and rapid observation Quickly Grasp and Respond to Changes in Security Environment and Economic Trends
- Visualizing valuable information on carbon credits and natural capital Enable New Socio-Economic Activities
- By building Earth digital twin Try to Verify New Activities (Typhoon control etc.)

Envision Surroundings and Work Automatically by Robots and AI

- Visualize (Envision) New Value
  - By continuous and rapid observation Quickly Grasp and Respond to Changes in Security Environment and Economic Trends
  - Trial of automatic driving for car/flying car/vessel/aircraft by building AI learning environment in Earth digital twin Toward Society with Few Accidents
  - Automated agricultural machinery and fishing vessels by digitalization of experience and observation data Toward Sustainable Society with Reduced Succession Issues

Enable New Socio-Economic Activities
Leveraging Regional Forum in Asia-Pacific
- Collaboration with APRSAF -

✓ What’s APRSAF
✓ The Asia-Pacific Regional Space Agency Forum (APRSAF) was established in 1993.
✓ The largest space-related conference in APAC participated by governments, space agencies, international organization, universities and industries from over 40 countries and regions.

✓ Goal
✓ Aims to realize the socio-economic development through solving a wide range of social issues in APAC.
✓ Contributes not only to activities by space agencies but also to the growth of the space business. Function as a platform for co-creation of space innovation through partnerships between various players.

✓ APRSAF-29 (2023): Indonesia
✓ APRSAF-30 (2024): Australia
Summary

- CONSEO was established as a Platform for gathering players from industry, academia and government to envisage the future of Satellite Earth Observation and realize it through co-creation.

- CONSEO community consists of diverse players with various strength.

- JAXA plays a central role in this community. As the secretariat, works like the hub to connect the various players. Also works as a player which implements national space policy.

- Through discussion in JFY2022, future society to realize by satellite EO, “Envision the Future”, was envisaged by the CONSEO community.

- In JFY2023, CONSEO shifts to promotion of co-creation/partnership to foster space business.

- APRSAF is considered for an opportunity to engage with international partners.
Thank you for your attention.