

16th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND
DEVELOPMENT (D3)Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and
Development (1)

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BENEFITS OF A JAPAN-AUSTRALIA ALLIANCE WITHIN A PROPOSED INTERNATIONAL
GOVERNANCE STRUCTURE FOR A FUTURE MOON BASE**Abstract**

In January 2018, the Global Exploration Roadmap demonstrated the growing consensus of “moon first” on a journey to Mars. Similarly, the European Space Agency (ESA) has been promoting “Moon Village” – a place where various countries co-exist peacefully on the lunar surface and potentially share some resources or capabilities. Peaceful and efficient collaboration through a strong governance framework is paramount to realizing a moon base. Primary concerns include developing a framework that preserves the interests of all actors, even minor, and the respective roles of business, science, and politics.

The authors established a working group at the University of Tokyo to examine the role of Japan in a potential moon base paradigm. Two key questions emerged: (1) what role can strong secondary space players like Japan play within this framework and who should Japan’s partners be? (2) how could the major international space actors balance efficient and peaceful cooperation, a good governance framework, and the needs of emerging space nations?

Having limited resources to initiate a full program on the moon, Japan should look for collaboration opportunities with emerging and existing space nations. A promising prospect is Australia which announced its plan to create a space agency in 2017, making an intentional entrance into the international space community. Japan should seize this opportunity to initiate a mutually beneficial relationship supporting the fledgling agency while working towards a synergistic partnership in space mining. Australia’s experience in the terrestrial mining industry and recent interest in space mining would complement Japan’s expertise in space and similar interest in space mining.

For governance, the balanced focus of the European Organization for Nuclear Research (CERN) model between science and politics provides a positive example of a large international scientific endeavor. Similarly, the International Telecommunication Union’s commitment to providing a path for emerging technical needs of countries provides inspiration for this proposed moon base model. Here, the potential of modeling a moon governance structure after CERN and the International Telecommunication Union is explored, and Australia is identified as a strong potential partner to Japan.