## IAF SPACE EXPLORATION SYMPOSIUM (A3) Space Exploration Overview (1)

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## VISION AND CHALLENGES OF EMERGING SPACE AGENCIES WORKING GROUP IN ISECG (INTERNATIONAL SPACE EXPLORATION COORDINATION GROUP)

## Abstract

As the new era of space exploration unfolds – stimulated also by the launch of Artemis program, an increasing number of space agencies worldwide are becoming unprecedently engaged in space exploration. This also led to an expansion of the ISECG (International Space Exploration Coordination Group) membership to 27. The ISECG is an agency coordination forum created in 2007 to advance individual and collective efforts in space exploration. The agencies agreed to further encourage an increase of the ISECG membership, in particular reaching out to emerging space countries, culminating in creating a new working group, namely the Emerging Space Agencies working group (ESAWG). The increased opportunities arising from the enlarged programs like the Artemis program and the Aurora programme of established agencies make it feasible for the emerging agencies to get access to space exploration by providing scientific payloads with commercial transportation services, sharing of scientific data, building micro rovers or cubesats. On the other hand, these agencies' added missions and investments could complement those of established agencies and create business opportunities for industries, contributing to the creation of sustainable global space exploration. However, it is a reality that especially the emerging agencies are faced with technological, budgetary, and institutional challenges. Given the limited resources and expertise, it is not easy for the emerging agencies to carry out programs or missions of their own or to determine how best they could contribute to the global exploration effort in a coordinated manner. Hence international collaboration is more than critical. The ESAWG was organised to share and resolve facing dilemmas among the emerging agencies toward space exploration and to identify common interests and areas of potential collaboration in space exploration and position current capabilities of emerging agencies as a pathway towards exploration. In this session, the vision and goal of the ESAWG will be introduced with the motto "Exploring Together" as well as annual activities will be reported by compiling and updating sharing on each agency's activities to identify common interests and areas of potential collaboration; developing new ideas and approaches to promote collaboration in space exploration and to explore partnerships as on-going/planned space exploration programs evolve by research and internal discussion; expanding networking with entities involved in emerging space countries. In addition, the growing activities endeavored by emerging countries in space exploration are also surveyed whatever engaged or not engaged to the big space exploration program.