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GLOBAL GOVERNANCE OF LUNAR EXPLORATION IN A NEW ERA: A RECOMMENDED FRAMEWORK

Abstract

The world is entering into a new era of lunar exploration, which is quite different from the era of Moon Race in terms of both scale and motivation. The scale of lunar exploration activities in the new era is unprecedented and still expanding rapidly. The motivation has gone far beyond politics. Sustainability, part of which is long-term presence on the moon, is the most prominent feature of the new lunar exploration era, while diversity of actors, variety of types of activities, innovation, as well as internationalization and commercialization, are some other distinct features. As the humankind is unfolding the great prospects of lunar exploration, new requirements and issues are arising. A global governance of lunar exploration is needed more than ever in order to enhance common interests for the humankind as a whole. A forward-looking framework of rules for lunar exploration governance, constituent elements of the framework, and potential new cooperation/coordination mechanisms for making and implementing the rules, are proposed. The current rule-making status on lunar exploration in four different types of platforms, which are intergovernmental international organizations, regional cooperation/coordination mechanisms, major international cooperation programmes as well as inter-agency and non-governmental cooperation/coordination mechanisms, are reviewed. The already proposed frameworks of rules for lunar exploration governance are also analyzed. A new framework of rules, which includes 4 general principles as well as more than 50 specific aspects that can aggregate into 9 categories, is proposed. The 9 categories proposed are authorization and supervision, design and operation of spacecraft, exploration activities and safety, support of ground- and space-based infrastructure, application of exploration results, collateral effects of exploration activities, international cooperation, non-militarization, and socio-economic development. Based on the framework of rules, a study of cooperation/coordination mechanisms is conducted to identify gaps. Some potential areas that may enable new mechanisms are proposed. It is also proposed that different levels of mechanisms, which may include international, regional, major international cooperation programmes, inter-agency and non-governmental as well as domestic ones, are needed in order to make global governance of lunar exploration function well.