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Author: Mr. Djordje Andrijasevic ASI - Italian Space Agency, Italy

Dr. Silvia Ciccarelli Italian Space Agency (ASI), Italy Ms. Cristiana Cirina Agenzia Spaziale Italiana (ASI), Italy

EUROPE AND CIS-LUNAR INFRASTRUCTURE DEVELOPMENT IN A POST-ISS CONTEXT – PROSPECTIVES FOR INTERNATIONAL COOPERATION

Abstract

The aim of this paper is to assess possible models of governance and international cooperation for a cis-lunar outpost, which has been identified as the ultimate mission to succeed the ISS, scheduled to be abandoned by 2024. A solid model of governance fostering cooperation amongst all space actors is doomed crucial in order to evade space becoming a theater of conflict rather than a model of solid collaboration aimed at a peaceful exploitation of outer space.

The present work reaffirms the necessity to expand human presence from Low Earth Orbit to cis-lunar space in order to develop and test high-tech space hardware needed for further Martian missions as well spur technological progress. As we argue, this can sustainably only be achieved through an inclusive model of cooperation which will eliminate aspects of a security dilemma that are currently emerging as a result of lack of trust amongst the major spacefaring nations. We will try to develop a series of approaches towards a model of governance, which will guarantee that cooperation in space exploration will take precedence over – potentially catastrophic – rivalries. A scientific rationale has been identified as an ideal starting point to approximate a cooperation in space exploration.

A common docking standard is being further singled out as a very effective Transparency and Confidence Building measure in the context of building common industry standards. Furthermore will we evaluate also an economic approach, as a commercial approach will be needed to ensure the growth of the human exploration and development of Space. As its involvement in the development of a cis-lunar space will be detrimental for the future of European Space Exploration, we aim to particularly asses the possible role of Europe in having a potential leadership role in this context considering Europe's s longstanding tradition and experience in cooperating with all major spacefaring nations.