IAF SPACE EXPLORATION SYMPOSIUM (A3) Moon Exploration – Part 3 (2C)

Author: Mr. Burak Yaglioglu TUBITAK Uzay, Space Technologies Research Institute, Türkiye

Mr. Mohammed Khesroh Kuwait Ms. Neda Senturk Space Generation Advisory Council (SGAC), Türkiye Mr. Mucahit Tasdemir ROKETSAN Roket Sanayi ve Ticaret A.S., Türkiye Dr. Reut Sorek Abramovich The Dead Sea and Arava Science Center, Israel Mr. Tuva Atasever ROKETSAN Roket Sanayi ve Ticaret A.S., Türkiye

SPACEFARING FUTURE OF THE MIDDLE EAST: THE ROLE OF MOON MISSIONS

Abstract

Regional cooperation in the space sector can lead to several positive impacts. It raises awareness through the public to witness the importance of having space industry, pushes governments and private sector to invest, motivates the young generation to study, work, and shapes their future, and provides international collaboration opportunities across the region. There is a gap in the Middle East (ME) for regional cooperation and advancement in this field. Therefore, the young generation shall take the initiative and prepare platforms to bring up new ideas and redirect their knowledge into practical peaceful applications. First Middle East Space Generation Workshop (ME-SGW), organized by Space Generation Advisory Council (SGAC), was held in Turkey, on 14-15 December 2019. It was the realization of 7 years of effort to bring bright minds together to think and provide solutions for a better future. Students and young professionals from ME countries participated and they were guided by professionals and subject experts. ME-SGW was a unique opportunity to unify the next generation of the region to brainstorm on the current challenges and provide recommendations for future actions. The main aim is to promote the voice of the next generation of space leaders in the ME region. The secondary objective is to connect the region to the main goals of the Space Generation Advisory Council (SGAC) and consolidate connections regionally and globally. The workshop included 3 working groups with the following topics: CubeSats Applications in the ME, Space Applications in the ME Region: Cooperation vs. Competition, and Spacefaring Future of Middle East: The Role of Moon Missions. This paper is a report on the third working group, which was focusing on the spacefaring future of ME. The key objectives of this working group are developing a cooperation framework, capacity building in the region through lunar exploration, and initiate missions that would add value to the regional and global scientific community. Therefore, the working group considered several aspects in terms of technology, policy, law, regional and international cooperation, scientific values, and commercial prospects towards reaching the Moon and establishing a sustainable presence on the Moon. The working group provided solutions and answers to questions, which resulted in a set of recommendations for SGAC, the United Nations (UN), and sponsors. These recommendations include but not limited to facilitate clear bidirectional communication, design, and guidelines for the regional activities to bypass language barriers and attain a regional shared framework of operations.