HUMAN SPACE ENDEAVOURS SYMPOSIUM (B3) Overview Session (Present and Near-Term Human Space Flight Programmes) (1)

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EUROPEAN SCENARIO FOR UTILISATION OF LOW EARTH ORBIT POST 2020

Abstract

For over a decade the International Space Station (ISS) has been the focus of European human utilisation activities in low Earth orbit (LEO). ISS utilisation communities include life and physical sciences, Earth observation and space science communities. The ISS represents a substantial international investment in both science and technology to exploit the space environment for pure and applied research purposes, as well as advancing European industrial capabilities in human space flight and in space transportation. The Station can also play an important role as a testbed for the advancement of technologies needed for deep-space human exploration missions. Currently the ISS space agency partners plan to operate the Station through 2020. Beyond 2020 a number of potential utilisation scenarios can be envisaged. making it essential that users and stakeholders involved in human LEO utilisation activities establish their long-term goals and priorities in a timely manner. A European consortium led by Space Applications Services has carried out a study commissioned by the European Space Agency (ESA) to define and analyse two user-driven reference scenarios for European human spaceflight activities in LEO post 2020. The results were based on an assessment of potential long-term European utilisation interests as well as an analysis of the international context, and included the definition of a roadmap detailing the approach for the realisation of European utilisation interests. A key feature of the study was a workshop providing a platform for diverse user and stakeholder requirements to be addressed and analysed. This paper will present the preliminary findings and recommendations of the study.