IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3)
Flight & Ground Operations aspects of Human Spaceflight - Joint Session of the IAF Human Spaceflight and IAF Space Operations Symposia (4-B6.4)

Author: Dr. Gabriele Mascetti
Italian Space Agency (ASI), Italy, gabriele.mascetti@asi.it

Dr. Dario Castagnolo
Telespazio S.p.A., Italy, dario.castagnolo@telespazio.com
Mr. Massimo Calabrese
Italian Space Agency (ASI), Italy, massimo.calabrese@asi.it
Dr. Marino Crisconio
Italian Space Agency (ASI), Italy, marino.crisconio@asi.it
Dr. Marta Albano
Agenzia Spaziale Italiana (ASI), Italy, marta.albano@asi.it
Mr. Giovanni Valentini
Italian Space Agency (ASI), Italy, giovanni.valentini@asi.it
Mr. Valerio Di Tana
Argotec, Italy, valerio.ditana@argotec.it
Mr. Gianni Truscelli
Argotec, Italy, gianni.truscelli@argotecgroup.com
Dr. Pietro Camponeschi
Telespazio S.p.A., Italy, pietro.camponeschi@telespazio.com
Dr. Francesco Cerone
Telespazio S.p.A., Italy, francesco.cerone@telespazio.com
Dr. Franco Turchi
Telespazio S.p.A., Italy, franco.turchi@telespazio.com
Dr. Giuseppe Di Costanzo
Telespazio S.p.A., Italy, Giuseppe.DiCostanzo@telespazio.com
Mr. Simone Simonetti
Argotec, Italy, simone.simonetti@argotecgroup.com
Mr. Simone Simonetti
Argotec, Italy, simone.simonetti@argotecgroup.com
Mr. Simone Simonetti
Argotec, Italy, simonetti@argotecgroup.com

ASINET: THE ITALIAN SPACE AGENCY INFRASTRUCTURE FOR ISS DATA UTILIZATION

Abstract

The “ASINet Program”, is a “networking/telecommunication operating services structure”, transverse point of reference to the ASI different missions/programmes and is able to make available its range of services at different geographical levels (local, national, international), as required. This paper deals with the services this infrastructure provides for the utilization of the International Space Station. The main services are video , voice and data communications between Italian and NASA centres for the support

to real time operation of the ISS Astronauts, and for the real time and dump downlink of payload data endtoend from the ASI payloads on board ISS to the final University Home Base in Italy.

The attention is focused on the services for a number of payload recently operated during the Beyond mission, these payloads being funded and coordinated by ASI, and resulting from a public call open to the industrial and scientific research communities. ASI, in the frame of its national mission of promoting and fostering the culture of space across the Country, has been providing access to the ISS as a laboratory in space. The utilization support services have been provided thanks to a contract, awarded by ASI, to ARGOTEC/Telespazio (UTISS Team). This team has also been involved for the safety evaluation and payload manifesting and qualification processes leading towards a safe and efficient delivery, utilization, integration on board the ISS and recovery of the payload on ground, allowing scientists to access and retrieve experimental data and instruments after they return to Earth.

Finally, UTISS team manage and support the implementation of a specific database aimed at collecting all the information and the related publications of these ASI experiments since early 2010. The paper provides some figures of the statistic of the utilization data even in terms of publications as outcome of the Italian experiments on board ISS

Keywords: ASI, Argotec, Telespazio, Utilization, ISS, UTISS, BEYOND, ASInet