

Giorgio, Boscheri

Advance Life Support Engineer, Thales Alenia Space



Category B – Indirect Exploitation of Exploration results in other sectors

Workshop on "Commercialisation and Utilisation of Space Exploration Technologies" Turin, 15-16 March 2018

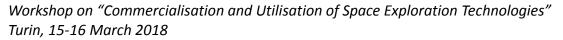




Category B – Indirect Exploitation of Exploration results in other sectors

EDEN ISS Mobile Test Facility (1) deployed in Antarctica Neumayer III station, RUCOLA system (2), Future Exploration Greenhouse (3)

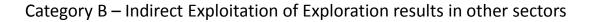












Given the different challenges of the space environment, such as tight control of the product quality and low availability of in situ resources, the study of the EDEN ISS space greenhouse prototype led to the development of innovative solutions in fertigation strategies, illumination, microbial control as well monitoring technologies, all applicable also in terrestrial controlled environment agriculture.

EDEN ISS technologies, mainly optimizing product quality, have already been developed aiming at terrestrial technology transfer for high value crops and plants production as well as scientific activities. The advantage is the possibility to reduce resources consumption as well as use of harmful chemicals while providing more controlled quality The potential customers are identified as private as well as public sector organizations all around the world.

The technologies are being currently tested in Antarctica analog environment.

Once the set of technologies will be validated, **teaming up with companies related to earth controlled environment agriculture will be necessary** to industrialize the developed products.

The main potential **benefit for the citizens** are the availability of **crops of higher quality** with respect to both nutritional contents as well as harmful chemicals presence.

Workshop on "Commercialisation and Utilisation of Space Exploration Technologies" Turin, 15-16 March 2018