

## ULISSE Project Consortium



The User Support and Operations Centres (USOCs) are a network of centres engaged by ESA in various EU countries to provide support to the International Space Station (ISS) utilization.

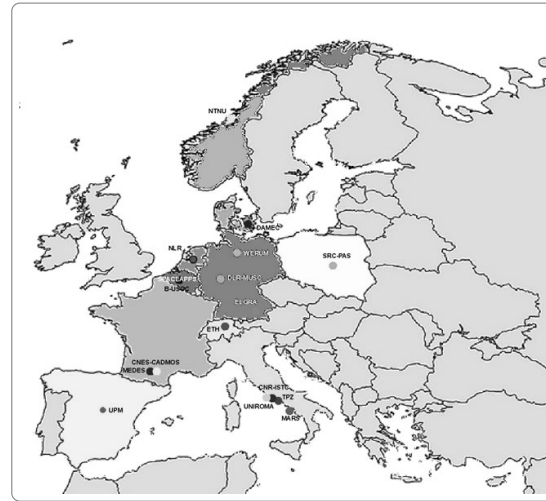
The USOCs and the involved agencies are also the focal points for archiving science data resulting from the national space activities as well as European utilization of the ISS.

The ULISSE project is aimed at complementing the present USOCs functions to enhance the exploitation of ISS science data. The ULISSE project exploits this network of competences and resources to complement the on-going activities of payload operations on the ISS with new initiatives aimed at increasing the return of scientific space activities.



### Contact Info

- Ulisse web page:  
<http://www.ulisse-space.eu>
- European Commission web page  
<http://ec.europa.eu>



### User's needs analysis

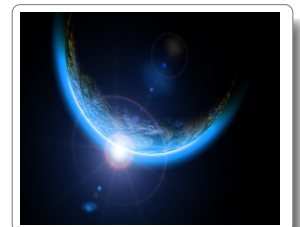
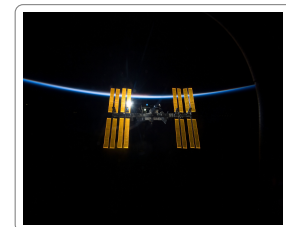
Throughout filling User Questionnaire, you can help us in definition of user needs and development of future services.  
Please visit web page:

[www.cbk.waw.pl/~ewa/ulisse/](http://www.cbk.waw.pl/~ewa/ulisse/)

and fill the questionnaire.

Thank you for your help.

# USOCs knowLedge Integration and dissemination for Space Science Experimentation



## The ULISSE Vision

A relevant part of the project foresees that data, services and tools are integrated through the ULISSE middleware platform, developing a distributed infrastructure for the distribution of the scientific data coming from space experiments.

It is intended to have a service-oriented approach, assuming that data need to be complemented by services in order to gain value and become effective for the users community.

Services in the ULISSE project:

- Data formatting services.
- Data access services.
- Data archiving services.
- User management services.
- Knowledge Sharing service.
- Support services for scientific planning.
- Specific data analysis services.
- Specific data dissemination services.

*Science + Broadcast =  
Science-cast*

To increase the exploitation of scientific data from space experiments, can be achieved by creating an active and interested community around a science broadcast service that will adopt techniques and methodologies from the Web 2.0 model.

The International Space Station is one of the largest human enterprises in space; its laboratories have started to and will, in the future, provide us with unprecedented amounts of scientific data that will provide profound insights in many science disciplines, such as Life and Physical Sciences and of course Space Science, proper. The ULISSE project is aimed at ensuring an effective exploitation of the data, including the archived data from previous experiments on the ISS and other platforms, as Space Shuttle, Spacelab and sounding rockets. This exploitation, although primarily for scientific purposes will also include dissemination of scientific and technical knowledge and its transfer to educational entities. The project includes specific dissemination activities: scientific as well as divulgative publications, public events, educational activities on space research.

A special effort is devoted to standardize the representation of the huge amount of information to generate a common knowledge among the communities having interests in space science experimentation. The ULISSE project is aimed at providing the users with tools for improving data valorization and exploitation of European space science experimentation. The activities are aimed at increasing the involvement of specialized communities and the awareness of general public. ULISSE services are oriented toward different typologies of users, mainly in the framework of scientific community, but also taking into account space industries, space agencies, decision-makers, educational bodies and general public.

### ULISSE objectives

ULISSE intends to pursue the exploitation and valorization of scientific data from previous and future space science experiments on ISS and on other space platforms, through :

- making available scientific data and knowledge
- increasing information exchange among different components of the scientific community, Space Agencies and public bodies
- implementing services to maximize the exploitation of space experimentation results.

### ULISSE products

- Development of applications (services) to archive, access, analyse space data from different sources based on the user needs analysis.
- Definition and implementation of a demonstrator of the upgraded capability of the network also in support of actions for the dissemination of space culture for educational purposes and public outreach.
- Design and implementation of a distributed environment (Middleware platform) for knowledge sharing and cooperation improvement.

### ULISSE expected benefits

- Maximise the scientific return from space missions by maximizing the exploitation of available data.
- Promote possible applications derived from space experiments results and technologies.
- Increase the public awareness about space research results and benefits involving a wider community.
- Contribute to formation activities in space field also including educational bodies.