

51st IAA SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE  
ACTIVITIES (D5)

Knowledge management for space activities in the digital era (2)

Author: Dr. Gianluigi Baldesi  
European Space Agency (ESA), France

Mr. Andrea Vena  
European Space Agency (ESA), France

Ms. Roberta Mugellesi-Dow  
European Space Agency (ESA), United Kingdom

Mr. Ronny Houben  
ESA, The Netherlands

FROM LIBRARIES TO ESA KNOWLEDGE AND LEARNING CENTRES: KEY FEATURES AND  
STATUS OF IMPLEMENTATION

**Abstract**

One of the major assets, if not the key asset, of large space agencies is knowledge acquired in managing complex RD activities and large aerospace programmes. In the last years, the European Space Agency has been investing large amount of resources in reinforcing a corporate approach to reinforce knowledge management practice, in particularly in capturing, sharing and exploiting the core knowledge acquired by the organisation. In today's digital age, in line with the digitalisation of ESA operations undertaken through the ESA Digital Agenda for Space (EDAS), ESA libraries need to evolve and move towards learning and knowledge centres aiming at enhancing the access to resources. The initiative of transforming ESA libraries into ESA Knowledge centres is based on the concept of making them the place where "people and ideas can interact in both the real and virtual environments to expand learning and facilitate the creation of new knowledge." The ESA knowledge centres will be located on the premises of existing ESA libraries and will be open and transparent places where people working at ESA can access, share and exploit knowledge. They will become the reference location for knowledge-related activities across the Agency, providing not only meeting rooms and working places, but also ESA Knowledge Labs, technical-driven environments for advanced knowledge and data technologies (e.g. artificial intelligence, machine learning, speech recognition, etc.) as well as a state-of-the-art library service, including personalized and permanent access to information and networking facilities. ESA Knowledge centres will encompass and provide awareness on activities not only of ESA Corporate Knowledge Management, but also of Directorates knowledge, of Long-Term Data Preservation (LTDP+), of Space Records Management and of TEC Competence Domain 09 (Digital Engineering for space missions). This paper will present more in detail the basic pillars of the Knowledge centres and how these concepts are currently being customized and planned in ESA main sites.