



InterPARES 3 Project

International Research on Permanent Authentic Records in Electronic Systems

TEAM Italy

TEAM Italy – Case Study Abstract/Summary (2011)

TEAM Italy – Case Study 01

Test-bed name: ICCROM Archives

Test-bed type: Archives of an intergovernmental organization

Topic/Title: Design and Implementation of a records management system at ICCROM

Case study type: Records, Systems, Policy, Preservation

Starting Date: February 2008

Current working phase: September 2011

At present, we are developing project phase 3, which consists of identifying and adopting records management software. First steps of this phase were:

- Defining the software functional requirements, both archival and technological, based on international standards and specifications (ISO 15489-1/2:2001, InterPARES 2, MoReq2), and also national technical documents (those produced by the Italian national entity for information technology in the public administration).
- Carrying out a market survey to select software that accomplishes the established functional requirements. The main critical parameters for the software selection were as follows:
 - o Open-source, as opposed to proprietary software.
 - o Records management, as opposed to document management software.

The selection was to Alfresco, a commercial open-source software, which offers a free downloadable version and a commercial one with additional technical support.

- Identifying a software company to customize Alfresco's free version. During an Alfresco Road Show, some Italian software companies presented experiences and applications of the software with different projects in Italian institutions. This meeting became an opportunity to know companies with specialized knowledge of Alfresco. We contacted some of these companies, which presented a feasibility study according to our specific functional requirements, and a cost estimate. We finally selected one company and the selection was approved by ICCROM's Management.

Current step: Software customization

The software customization project foresees the following phases:

1. Analysis
2. System development

3. Release and testing
4. Final test
5. Staff training

Currently, we are in phase 3: Release and testing, even if some system developments are still being carried out.

Methodology:

- During the analytical phase, the company requested the following:
 1. To answer a basic questionnaire with around 30 questions related to records registration and classification, type of records, descriptive metadata, workflows to be implemented, user groups and permissions, and hardware platform. The company then produced a document with the system requirements.
 2. To identify the access levels of user groups in relation to our records classification scheme.
 3. To produce registration metadata. Metadata were then identified for incoming, outgoing and internal records, and also for media material.
- After having this documentation, a first prototype was presented. Many tests and modifications have been carried out since the first prototype, and the final system version is still not ready.

Setbacks

The customization project has been considerably delayed due to different setbacks encountered:

- Initial inadequate allocation of human resources by the software company. Even though the customization process was initiated in November 2010 and was supposed to end in March 2011, the software company could only allocate specific human resources to this project in February 2011. At the same time, the software company also changed its project coordinator.
- Underestimation of the project complexity and costs by the software company. A critical period for the project was reached in July 2011, when the system was apparently released, but during testing, the prototype didn't fit totally our needs and had major technical problems, such as:
 - o The incoming registration workflow for paper records was not working as desired. In fact, this workflow was not analyzed in detail from the beginning and this blocked our work. The company did not want to make more customization.
 - o Two bugs: CIFS and IMAP. During the testing phase, we discovered that two main functional requirements were bugs of Alfresco's open-source version: CIFS (integration of Alfresco with operating systems, such as Windows, Open Office, etc.), and IMAP (integration of Alfresco with our e-mail system). Fortunately, Alfresco released a fix for CIFS, but to solve the IMAP bug we needed to allocate more financial resources to allow the company to hire an Alfresco expert programmer to work on the core source code.
- Unforeseen functionalities were encountered during the system tests, such as the possibility by Head of Departments of delegating registration and classification actions to their administrative staff.

Lessons learned

- Functional requirements should not be too generic, and should in particular include an in depth analysis of records workflows.
- Pay attention to the software company marketing. In our case, Alfresco open-source was marketed as having the same functionalities as the commercial version. This was not totally true because we actually found critical bugs that we verified not being present in the commercial version (IMAP, CIFS).
- If it is your first experience with implementing a records management system, choose a software company with experience on the same type of projects. For example, in our case, the software company had experience with the Alfresco document management module, and not with the records management one.
- Plan a surplus of 20% of the total project budget for unforeseen functionalities that can come out during the system customization.

Manual for records management

During June-July 2011, an ICCROM intern was producing our Manual for records management, which contains a records management policy and records management procedures. This document is available within Alfresco, under the online Help. Help will include also the Alfresco user manual. The production of a digital preservation and access policy would need to be produced and added to this manual.

Next steps

After customization, targeted strategies for staff training need to be planned to strengthen the system use. The system implementation success needs to be carefully studied and developed.