

Development of an ontology of functional activities for records management and archival systems



Project Aim

The aim of this project is to create an ontology representing the main functions and activities performed in records management and archival environments. The ontology is based on an analysis of the most relevant international standards. The project's aim is at providing a comprehensive and systematic picture of the functions and activities that are performed throughout a record's life-cycle.

Research Method

The development of the ontology is based on three steps:

- Identification of the relevant and most commonly used standards to cover every aspect from recordkeeping to preservation (e.g. ISO series 15489, 16175, or 23081)
- Systematic analysis of the selected sources to identify and extract any content related to functions and activities. This includes:
 - Modelling of subject-predicate-object statements
 - Adaption and refinement of the statements. Thus, the final statements are the result of controlled and consistent interpretation
- Development of a graphical representation. The ontology is represented in form of a mind map that is built on the statements

ISO Series 15489

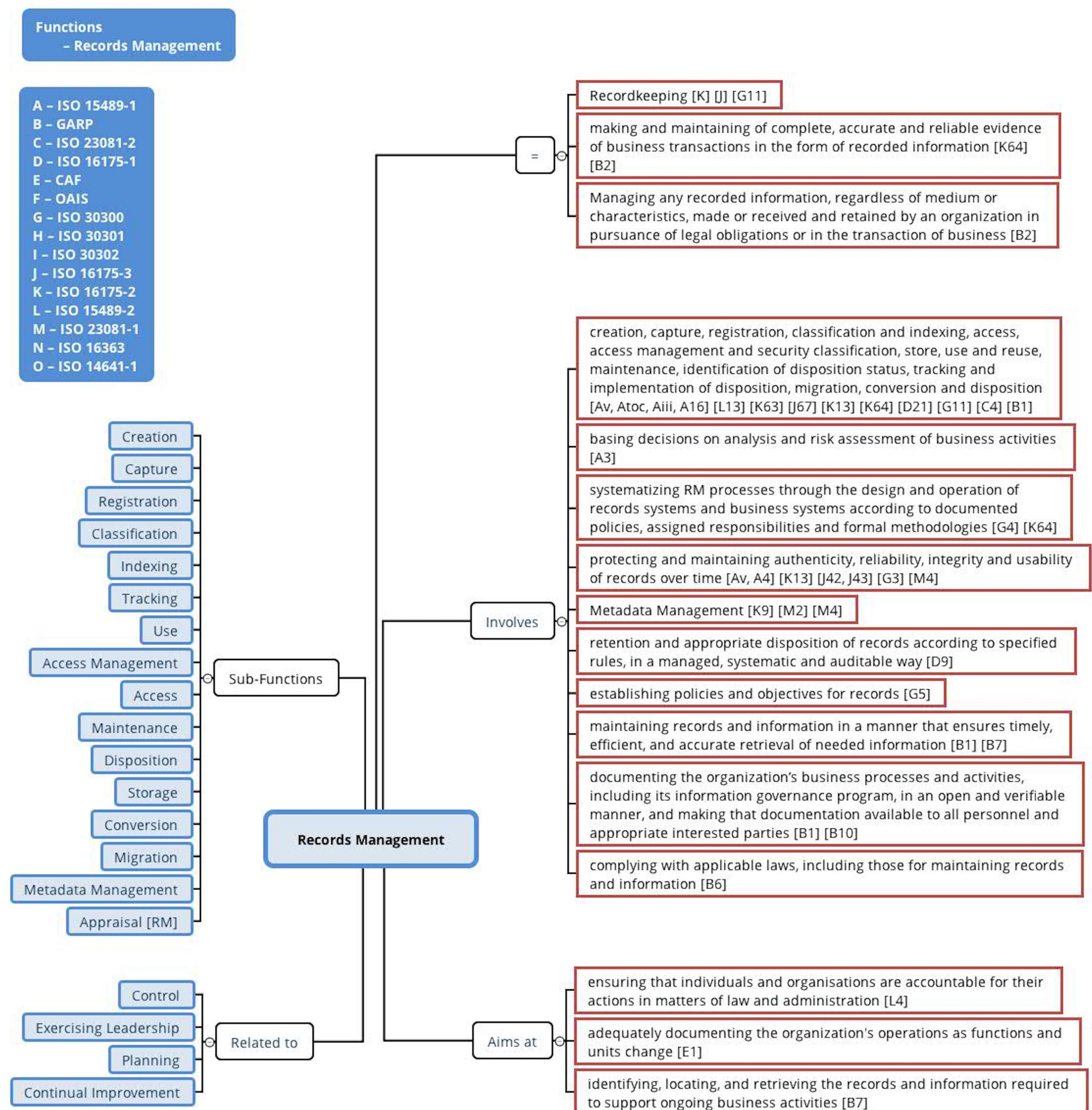
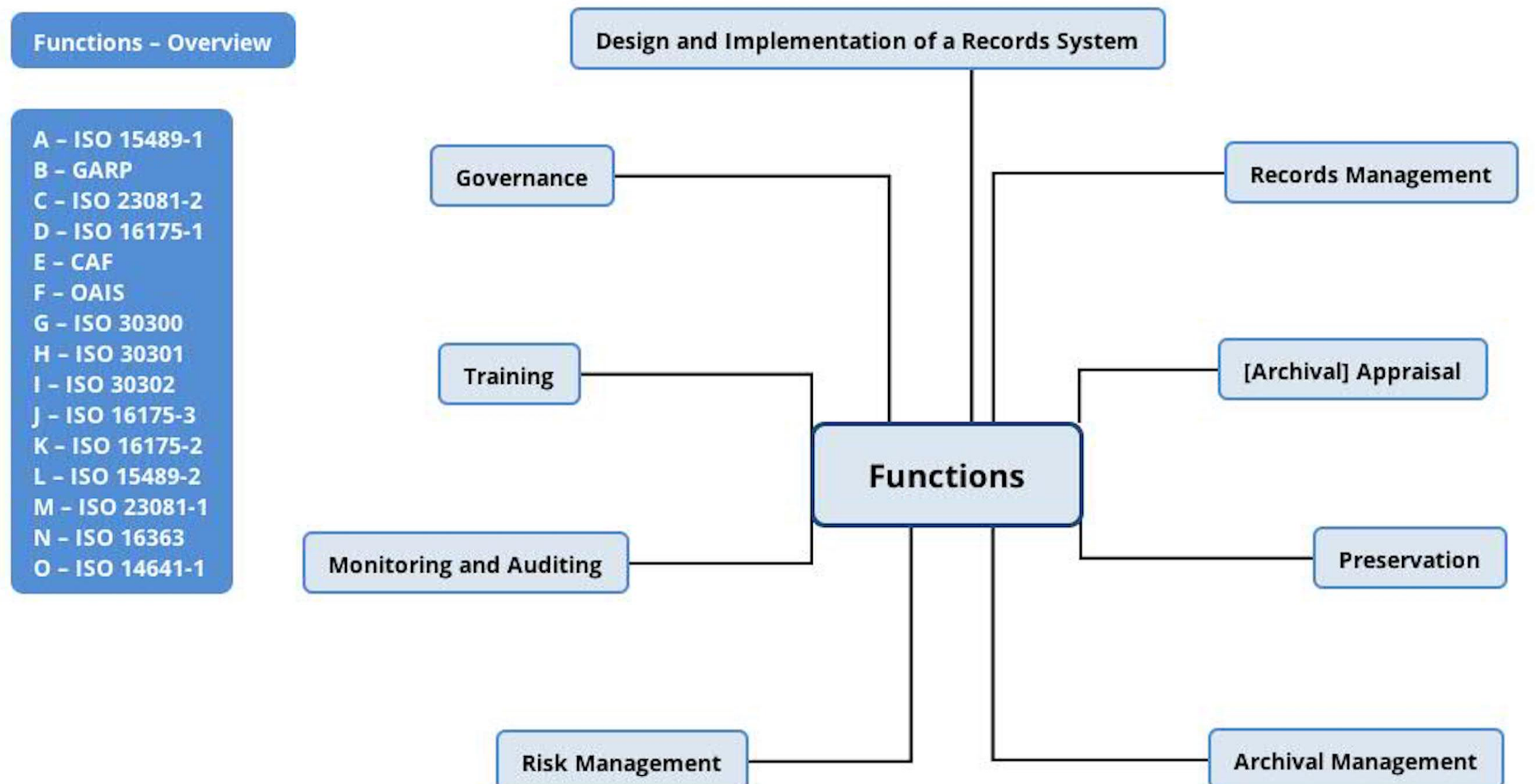
| | |
|-----------------|---|
| RM | Involves creation, capture, registration, classification and indexing, access, access control and security classification, store, use and reuse, maintenance, identification of disposition status, tracking and implementation of disposition, migration, conversion and disposition [Av, Atoc, Aiii, A16] [L13] |
| RM | Involves basing decisions on analysis and risk assessment of business activities [A3] |
| RM | Involves protecting authenticity, reliability, integrity and usability of records over time [Av, A4] |
| RM | Aims at ensuring that individuals and organisations are accountable for their actions in matters of law and administration [L4] |
| Risk Assessment | = assessment of an organisation's exposure to risk, if records are not created and kept [L4] |
| Risk Management | Involves development of a disaster recovery plan that defines an organized and prioritized response to the disaster, planning for the continuance of regular business operations during the disaster and making appropriate plans for recovery after the disaster [L18] |
| Maintenance | = classification, indexing, access control, store, migration, conversion [A3] |
| Creation | Involves the creation of content and metadata that document the circumstances of their creation [A16] |
| Capture | = receipt [A3] |

Results

The outcome of this project is an ontological representation of the functional activities performed in records management and archival environments. The ontology would serve various purposes:

- Provide any stakeholder, including records professionals and users with a clear image of the functions and activities that need to be implemented and performed in records management and archives
- Support records professionals in the analysis and review of their management systems
- Support software and system development
- Support system auditing and re-engineering

Graphical Representation



Next Steps

- Finalize the ontology and its graphical representation
- Test the ontology
- Ask for feedback – review the ontology
- Elaborate forms of representation (e.g. interactive document, website or Semantic MediaWiki)
- Disseminate