



One consolidated view of information management references

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Information Management Reference Documents

- ISO/TC TC46/SC11 – Archives/records management
 - ISO 13008 – Digital records conversion and migration process
 - ISO 13028 – Implementation guidelines for digitalization of records
 - ISO 15489 Series of Standards – Records Management
 - ISO 16175 Series of Standards – Principles and functional requirements for records in electronic office environments
 - ISO 17068 – Trusted third party repository of digital records
 - ISO 18128 – Risk assessment for records processes and systems
 - ISO 23081 Series of Standards – Metadata for records
 - ISO 26122 – Work process analysis for records
 - ISO 3030x Series of Standards – Management systems for records



Information Management Reference Documents

- ISO/TC 20/SC 13 – Space data and information transfer systems
 - ISO 14721 – Open archive information system (OAIS) – Reference model
 - ISO 16363 – Audit and certification of trustworthy digital repositories
 - ISO 20652 – Producer-archive interface – Methodology abstract standard
- **Other References**
 - MoReq2010
 - NOARK (Norway)
 - EAD/EAC
 - e-Arq (Brasil)
 - SAHKE2 (Finland)



Motivation

Using reference documents:

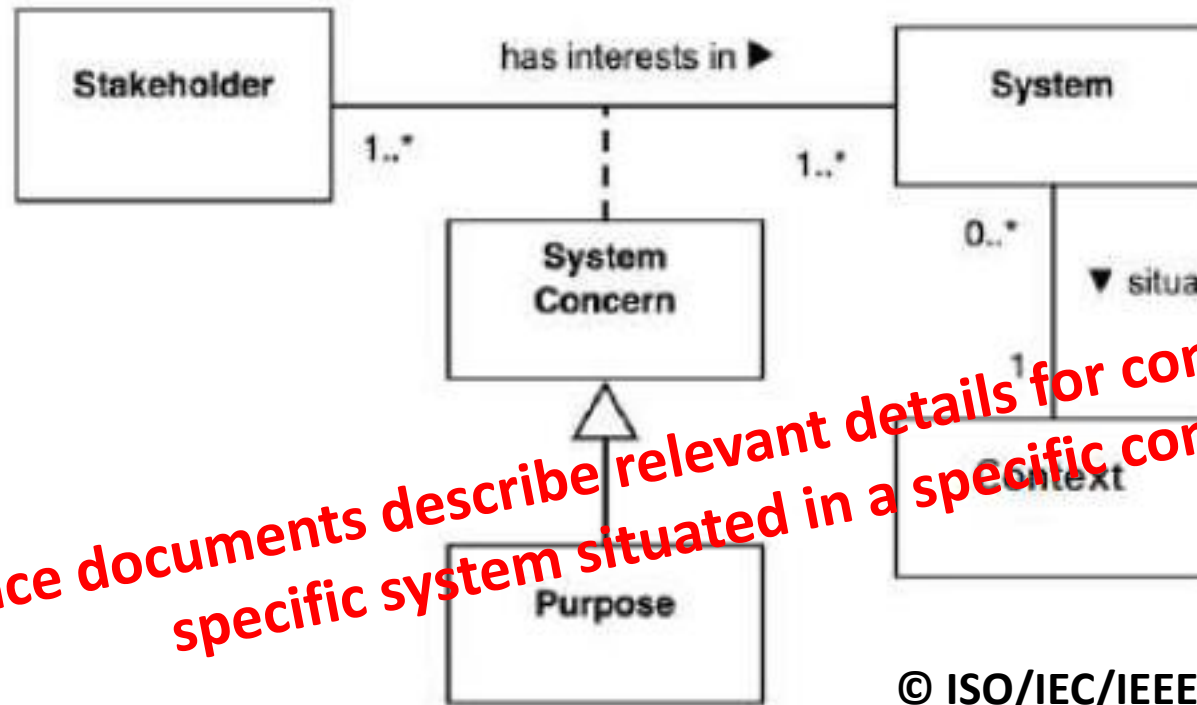
- ✓ Relevant knowledge for the subject in study
- ✓ Provide a common understanding of the subject
- ✓ Support safety, reliability and interoperability among products, services and systems

However:

- ✗ Which references should be considered?
- ✗ For what purpose?



Systems and Context, Stakeholders and Concerns



Reference documents describe relevant details for consultation about a specific system situated in a specific context

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Records Management Stakeholders and Concerns (1/2)

- **Organizations Managers [ISO 15489; ISO 3030x]**
 - Records Management Policy...
 - Alignment
 - Definition
 - Documentation
 - Communication
 - Monitoring
 - Review
 - RM Responsibility and Authority
 - RM Resource Allocation



Records Management Stakeholders and Concerns (2/2)

- **Records Managers [ISO15489; ISO30x]**
 - RM Policy Implementation >> System implementation methodology
 - Monitor and control of RM processes
 - Reliability, authenticity, usability and integrity of metadata [ISO23081]
- **IT Managers [All, specially MoReq2010 and ISO16175]**
 - Reliability, authenticity, usability and integrity of records system
- **Risk Managers [ISO18128]**
 - Risk Assessment for records processes and systems
- **Auditors [ISO15489; ISO30x]**
 - Ensure the compliance of the records management policy



The “Archive” Context (1/2)

- **Producer [OAIS; PAIMAS]**
 - Information is preserved according to their specific requirements

- **Consumer [OAIS]**
 - Access to information



The “Archive” Context (2/2)

- **Management [OAIS; TRAC]**
 - Archive Policy....
 - Alignment
 - Definition
 - Documentation
 - Communication
 - Monitoring
 - Review
 - Archive Responsibility and Authority
 - Archive Resources Allocation

- Technology and Infrastructure Support
- Communication between stakeholders
- Information Preservation
- Access to Information



Preliminary conclusions

- Similarity of ISO 15489 and ISO30300 Series of Standards
 - To what extent?
- ISO 16175 and MoReq2010 share goals and concerns
 - To they also share requirements?
- OAIS and TRAC share concerns but have different goals
 - Clear map of relation between standards needed?



An unified view – Disclaimer

- From Business Motivation Model from OMG
 - Ends – “desired results and visions of what the system can and should be to their stakeholders”
 - Means – “the devices, capabilities, regimes, techniques, restrictions, agencies, instruments, or methods that may be called upon, activated, or enforced to achieve Ends”
- In references such as ISO15489, ISO30300 SoS ↔ Means and Ends
- MoReq2010, ISO16175, ISO26122 ↔ Only Means



An unified view – How RM and Archives references relate?

- Considering only the used terms?
 - They do not relate!!
 - Stakeholders are different. Stakeholders definitions do not exist!
- However, if we look to the concerns of the stakeholders
 - They do overlap!!
 - In fact in the majority of concerns the only thing that changes are the object of focus: a) Records, b) Information (IP)
 - Records is “information created, received, and maintained as evidence and information by an organization or person, in pursuance of legal obligations or in the transaction of business”

Related View	Inferred practices from the analysed references documents	Reference Documents
<i>Project Management</i>	<ul style="list-style-type: none"> • Policy Design and Implementation • Assignment of Responsibilities • Resource Training • Allocation of Resources 	<ul style="list-style-type: none"> • ISO 29383:2010 – Terminology Policies – Development and implementation • ISO 21500:2012 – Guidance on Project Management • Project Management Body of Knowledge (PMBOK) by the Project Management Institute • Projects IN Controlled Environments, version 2 (PRINCE2)
<i>Process Maturity and Compliance</i>	<ul style="list-style-type: none"> • Goal-Process Alignment • Process Monitor • Process Quality 	<ul style="list-style-type: none"> • Capability Maturity Model Integration (CMMI) • ISO 9000 – Quality Management Series of Standards • ISO 15504 – Information Technology – Process Assessment • ISO 19011:2011 – Guidelines for auditing management system
<i>Risk Management</i>	<ul style="list-style-type: none"> • Risk Assessment 	<ul style="list-style-type: none"> • ISO/Guide 73:2009 – Risk Management – Vocabulary • ISO 31000:2009 – Risk Management Series of Standards
<i>IT and Management</i>	<ul style="list-style-type: none"> • Ensure the reliability, usability and integrity of systems 	<ul style="list-style-type: none"> • All standards from the ISO subcommittee ISO/IEC JTC 1/SC 40 – IT Service Management and IT Governance • Information Technology Infrastructure Library (ITIL)
<i>Data Management</i>	<ul style="list-style-type: none"> • Ensure the reliability, authenticity, usability and integrity of metadata • Data capture, preservation and access 	<ul style="list-style-type: none"> • Data Management Body of Knowledge (DMBOK) by DAMA International



Conclusions

- The analysis performed allowed an overall understanding of existence references and their relations
 - There is a need for an reference architecture, i.e.
 - There is a need for terminology mapping (or clarification)
 - There is a need for a referential that allows us to position the purpose and goal of existing reference documents
- Future work: E-ARK Project





Thank you!



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