

Scale of Standards Dynamics in JTC1

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Problem of standards dynamics

- lack of transparency
- costs of update & loss of investments
- interoperability is not self-evident

Research question

- *How stable are standards?*
 - Which types of dynamics are there?
 - How often do changes occur?
 - What is the average age of a standard?
 - Is standards dynamics technology-specific?

Focus

- Standards dynamics refers here to : *post-hoc changes*, i.e.
 - *changes which a standard undergoes after it has been developed and published, including its withdrawal, replacement and its possible after-life*
- Formal international IT standards (ISO/IEC JTC1)

Scope: JTC1 Maintenance

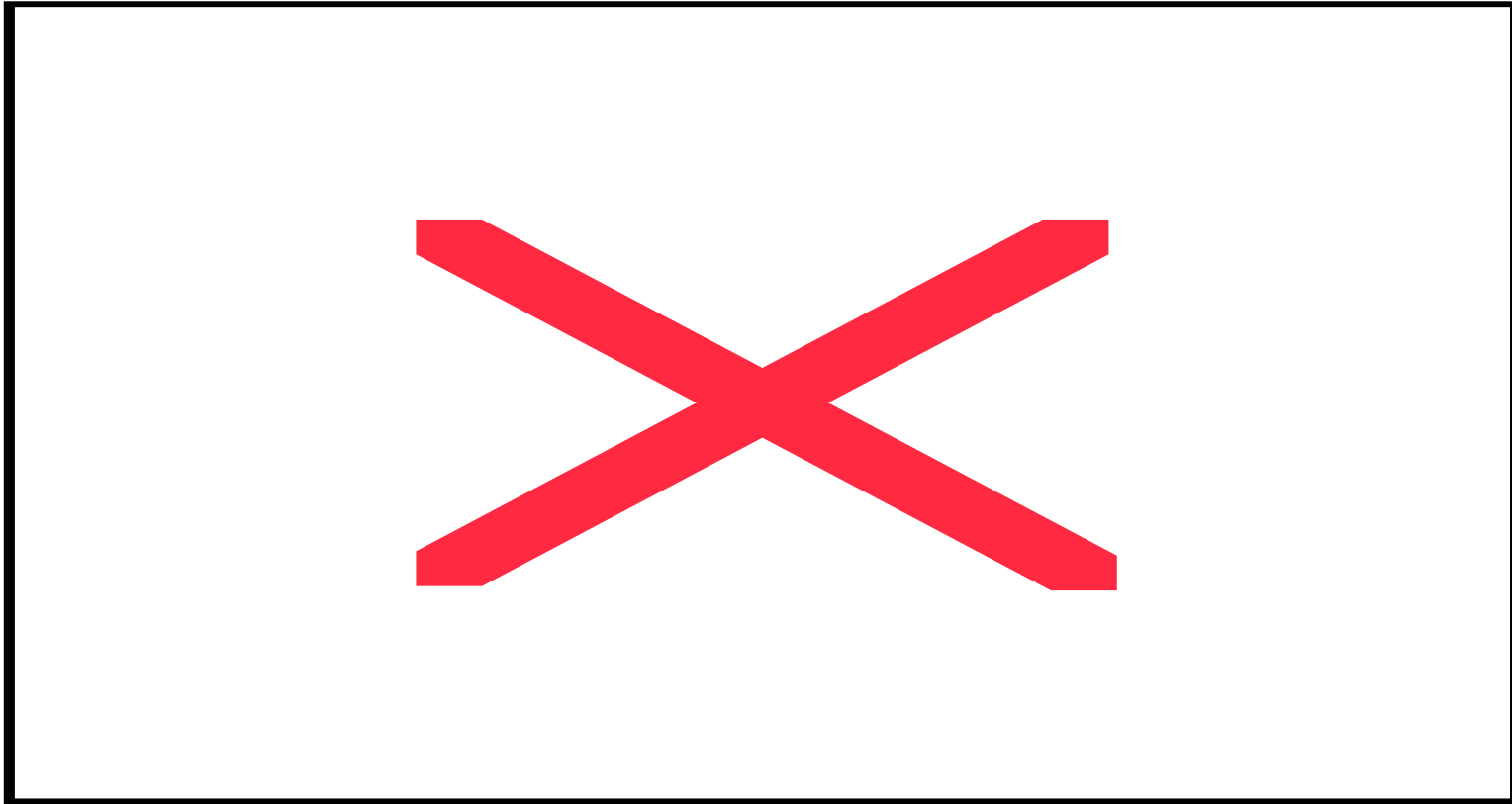
Periodic review 5 years maximum

- Confirmed
- Revised
 - *Technical Corrigendum*
 - *Technical Amendment*
 - *next Edition*
 - *Replacement*
 - *Change of document type*
- Declared as stabilized
- Withdrawn
- Provisionally retained edition*

Methodology

- Qualitative: document analysis
- Quantitative
 - Database subset
 - All documents
 - Select data fields
 - Analyses:
 - Explorative (descriptive statistics)
 - Hypothesis testing (variance analyses & post-hoc tests)

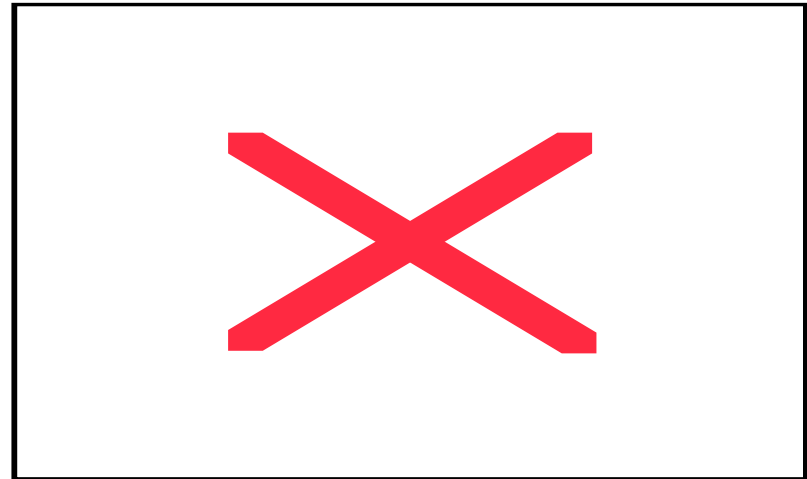
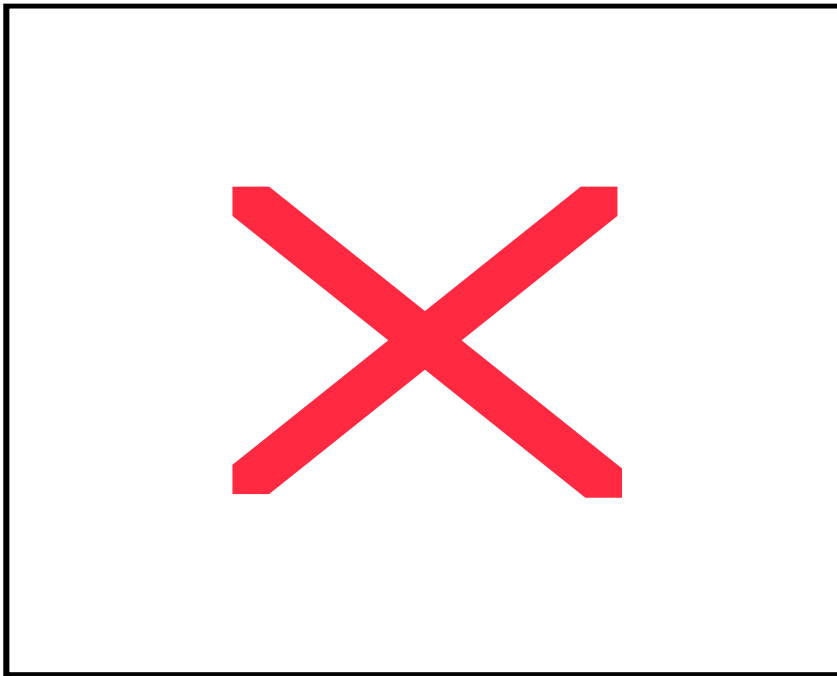
R1.1: Published standards (N=2752)



R1.2: # changes per dynamic feature

Features of standards dynamics	Sub-category	N
Withdrawals		99
Revisions	Is revised by	0
	Revises	99
		9
Replacements	New number/ same document type	55
		9
	Same number / new document type	10
		9
Supplements		23
		70
Editions 2-6		8
		46
		0

R1.3: comparison changed and stable



R2.1: Main documents

- N=1527 main documents
- 60% is stable
- 2158 changes
- 27% (410) responsible for 90% of changes

Conclusions

1. Maintenance work outruns initial standards development work
 - 27% main standard documents undergo 90% of changes, causes? Technology/ market dynamics, standards development, standards, standards implementation?
 - Hypothesis to be tested: Supplements are systematically used as a post hoc measure for correcting errors (two-step process)
 - Trend in JTC1 maintenance strategy: Is proportional use of editions overtaking supplements? If so, policy question: are new editions or supplements the lesser problem of standards dynamics?
2. Equilibrium between JTC1 & consortia emerging?