




ITU Kaleidoscope 2014
**Living in a converged world - impossible
without standards?**

**Standardization:
A Primer**

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Standardization Books

- Standards and Standardization. Norman F. Harriman, 1928
- Standardization: a new discipline. by Lal C. Verman, 1973
- Tracks across continents, paths through history. The economic dynamics of standardization in railway gauge. Douglas J. Puffert, 2009

Three Questions

- Are standards necessary?
- Is standardization desirable?
- Is academic education in standards desirable?

Technical Order

Established by	How order occurs		Term for order
Physical laws	Inherent		Nature
Convention	<i>Kosmos</i>		Reference
Standardization			
Private entity	Commercial		Specification
Government	Required	<i>Taxis</i>	Regulation
Formal stds. body	Consensus		De jure standard
Consortium	Consensus?		Standard
Market	<i>Kosmos</i>		De facto standard

Standardization of Measurement

- Egyptian cubit
- 790 ACE Charlemagne
- 1215ACE Magna Charta
- “Weigh” houses
- Scientific Societies

Standardization of Similarity

- 1300ACE Venetian galley's components
- 1600ACE The production of dead eyes for sailing ships
- 1700ACE The industrial revolution begins

Standardization of Compatibility

- Late 1700s Railway track gauge
- 1800 Utility companies
- 1904 Gillette razor and blade
- 1950 The information age begins
- 1980s The patent wars begin

Positive Economic Effect of Standards

Standard succession

- Measurement
- Similarity
- Compatibility

Self-reinforcing effects

- Increase trade
- Increase efficiency
- Increase transfer

Public Good and Private Gain

- Society through its institutions attempts to balance public good and private gain. Standardization is one such institution.

Succession of standards	Public good	Means for private gain
Measurement	Increased trade	Commerce
Similarity	More efficient (mfg., dist., use)	Patents
Compatibility	Increased transfer	Utility company

The Way Forward

- Standardize identification, negotiation and selection, not the communications process.

Succession of standards	Public good	Means for private gain
Adaptability	Communications	Trademarks

Three Answers

Question

- Are standards necessary?
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Answer

- Absolutely
- Increasingly
- Increases awareness but a common core is lacking