

WSC Academic Week 2010

Education needs

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Standards Hierarchy

Relation between all these Standards

Standards phases

Why work in Standards

Skills required in standardization

Conclusion

Global (International Treaty) Standardization Committees

ITU-T - International Telecommunication Union - Telecommunication Standardization Sector (Geneva)

ITU-R - International Telecommunication Union – Radiocommunication Sector (Geneva)

ITU-D - Telecommunication Development Sector (Geneva)

ISO - International Organization For Standardization (Geneva)

IEC - International Electrotechnical Committee (Geneva)

Regional Standardization Committees

ETSI - European Telecommunications Standards Institute

CEN: European Committee for Standardization

CENELEC: European Committee for Electrotechnical Standardization

ANSI - American National Standards Institute

ATIS: Alliance for Telecommunications Industry Solutions (US)

TIA: Telecommunications Industry Association (US)

TSACC: Telecommunications Standards Advisory Council of Canada

TTA: Telecommunication Technology Association (Korea)

TTC: Telecommunication Technology Committee (Japan)

ARIB: Association of Radio Industries and Businesses (Japan)

ACIF: Australian Communications Industry Forum

CCSA: China Communication Standards Association

Associations & Fora Committees

IEEE: Institute of Electrical and Electronics Engineers

IETF: Internet Engineering Task Force

BBF: Broadband Forum

DVB: Digital Video Broadcasting

FTTH: Fibre To The Home Council

OIF: Optical Internetworking Forum

MEF: Metro Ethernet Forum

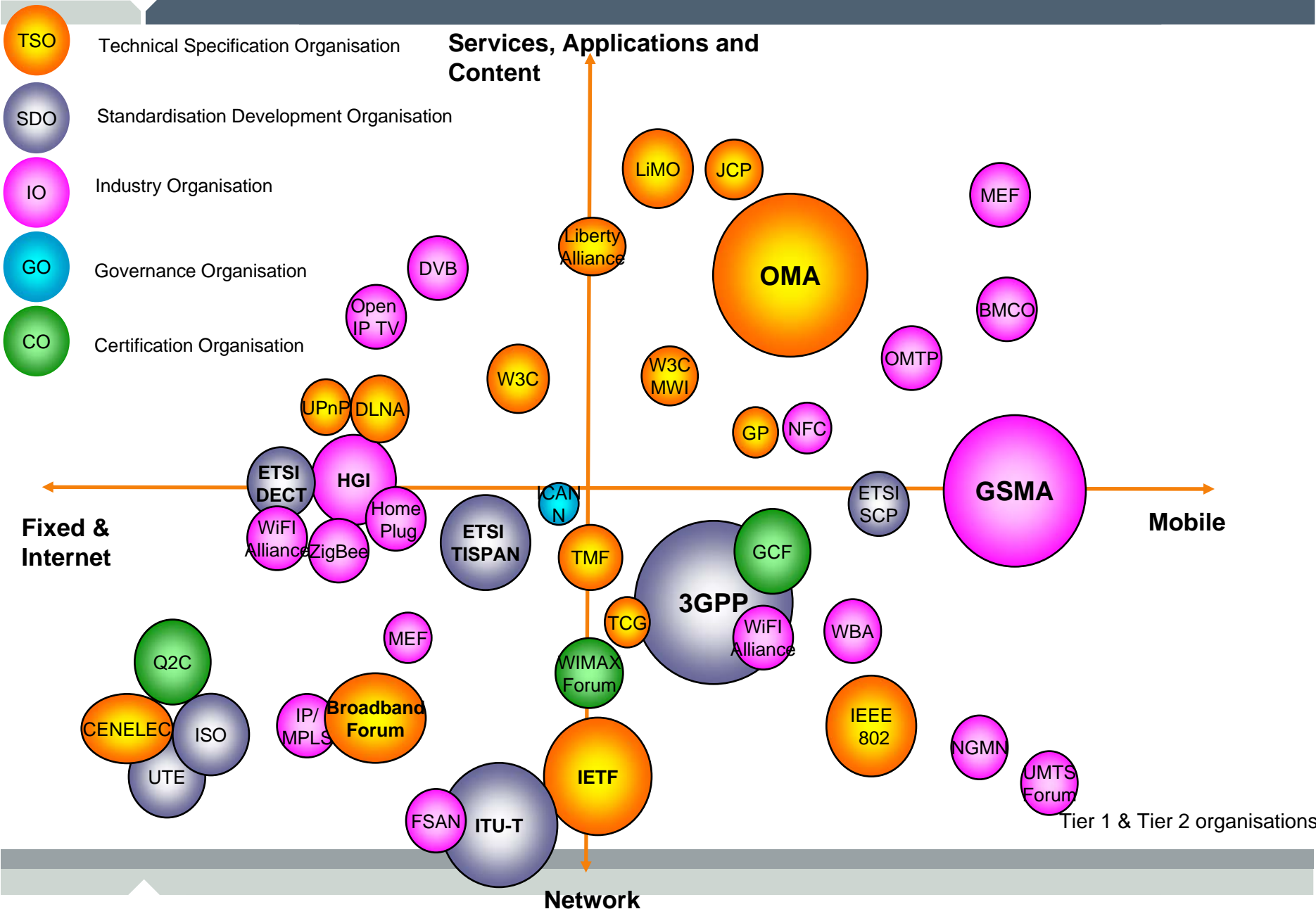
HGI: Home Gateway Initiative

UPnP Forum

DLNA: Digital Living Network Alliance

ZigBee Alliance

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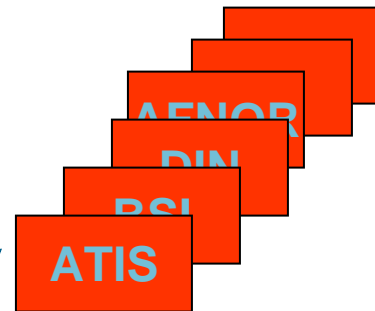
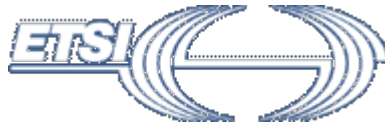


Standards Development Orgs

Global
(Int'l treaty)



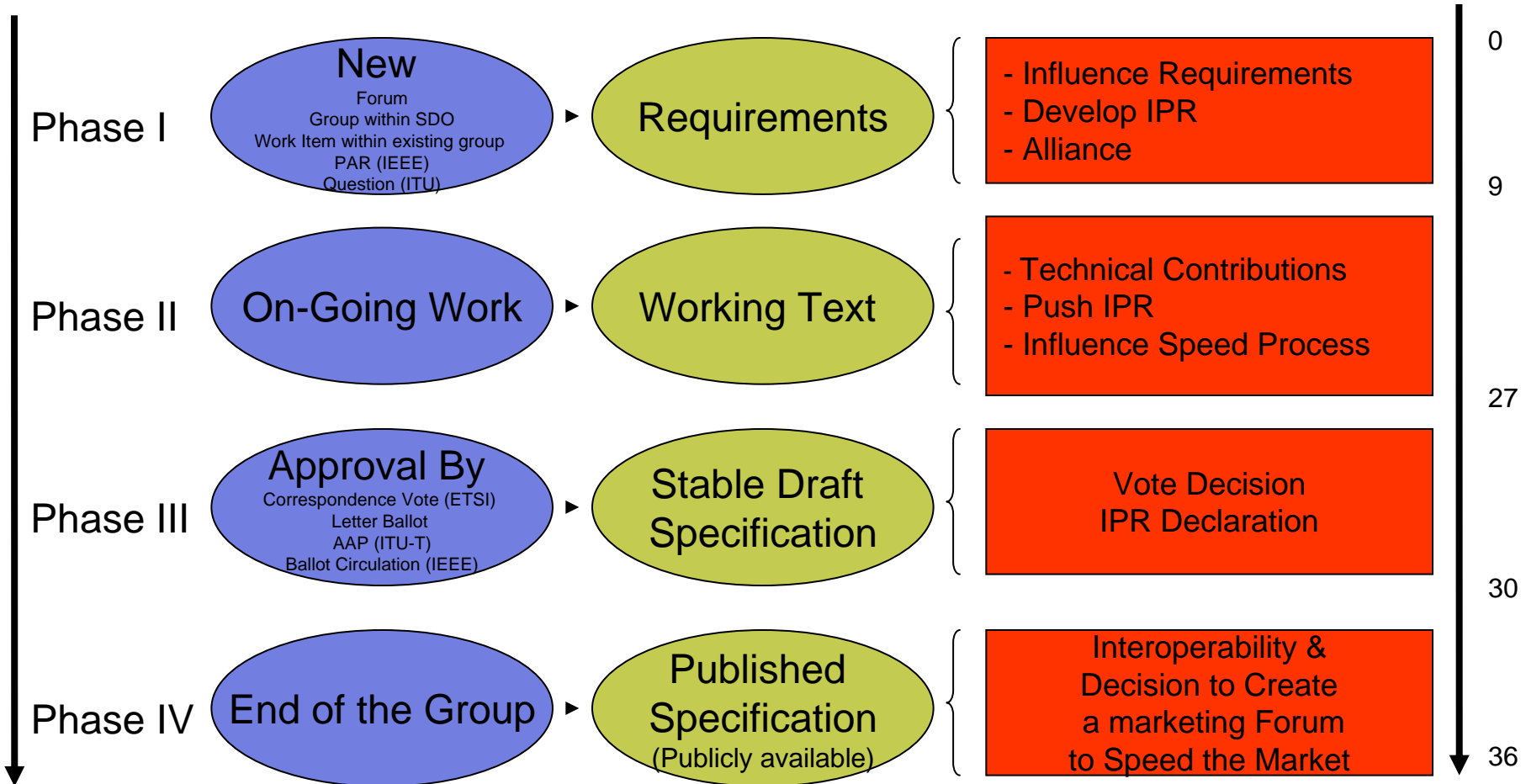
Regional



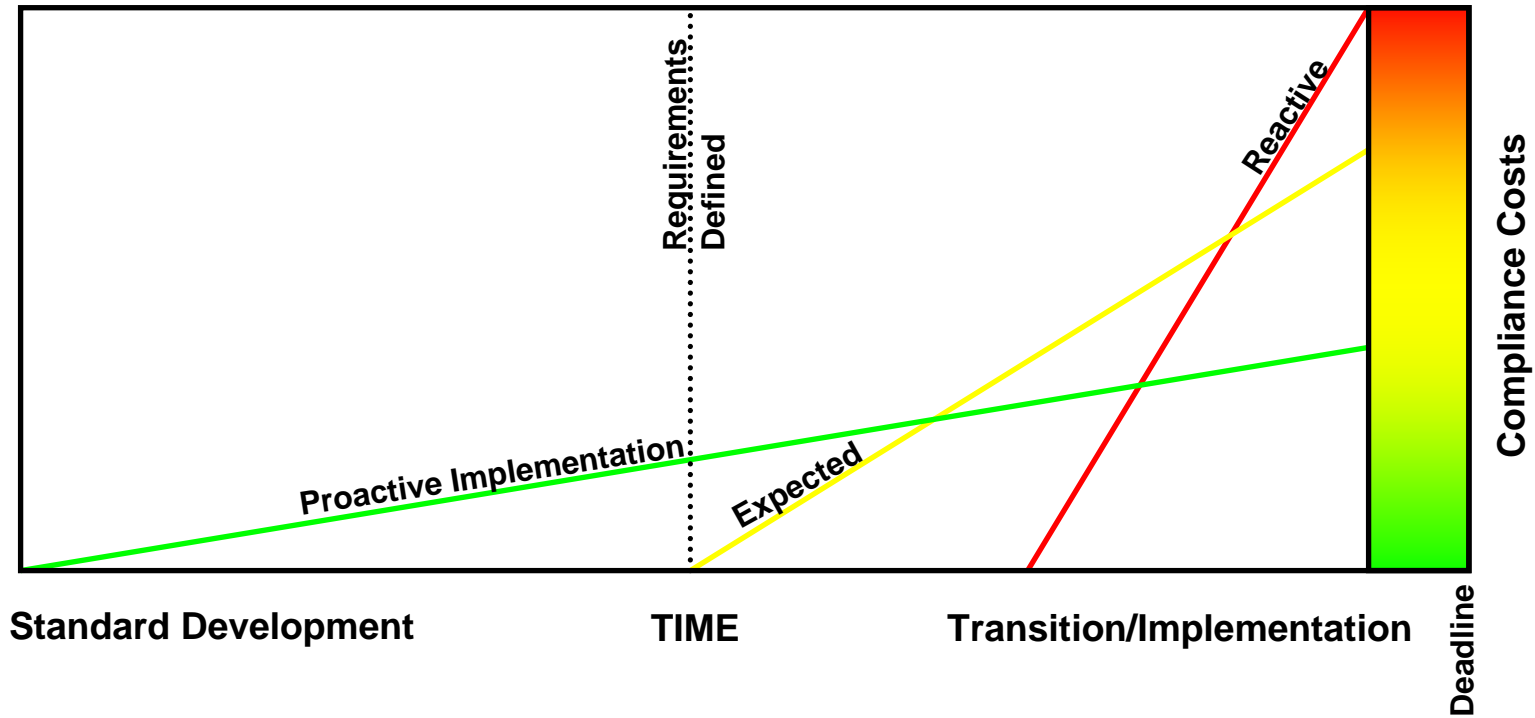
National

Consortia/Fora

Standards Specification Phases



Proactive Approach Cuts Compliance Costs



Distribution of Costs for Proactive vs. Reactive Approaches

Source: Silicon Valley Group

Why Work in Standards



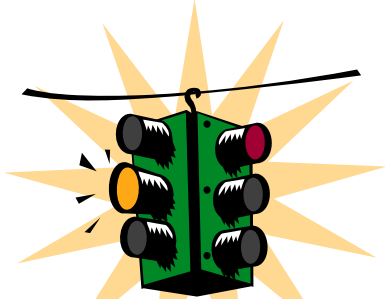
Understand risks associated with standards



Save money and avoid wasted R&D



Build credibility with customers



Control evolution of market



Be seen as a leader



"Open the box"

Professional skills required in standardization

Continuity

Contributing

Consensus

Coordination

Engineer skills required in standardization

Deep technical knowledge in your domain

Knowledge management to respect:

- Rules of your company
- Rules of the Standards committee
- e.g.: generating, keeping, and/or releasing information

Understand the environment in which your standard will take place

- Regional – Worldwide ?
- Regulated – Unregulated ?
- Competition between Standards committees ?

Decision making capability

ICT industry and the way it creates its standards

The ICT industry serves global markets

ICT standardization is largely done in non-traditional, less formal, Standards Developing Organizations (SDOs) with less overhead (e.g. direct participation rather than National delegations)

- This was a reason in 1988 to create ETSI as an equal partnership between Administrations, Operators, Manufacturers, etc.
- ITU-T works with the same rules
- Proliferation of Fora
- Use SDO/Fora business models that encourage the wide availability of standards to propagate the industry's work globally and encourage its adoption and use (e.g. freely or inexpensively available standards)
- Cross relation between all these committees are mandatory

Need an “Open Mind” attitude

How ICT standardization is changing today

The key characteristic of almost all economic activity today is that ICT is becoming increasingly pervasive:

- As a part of the delivery of both physical goods and services
- As a mechanism to deliver virtual goods and services

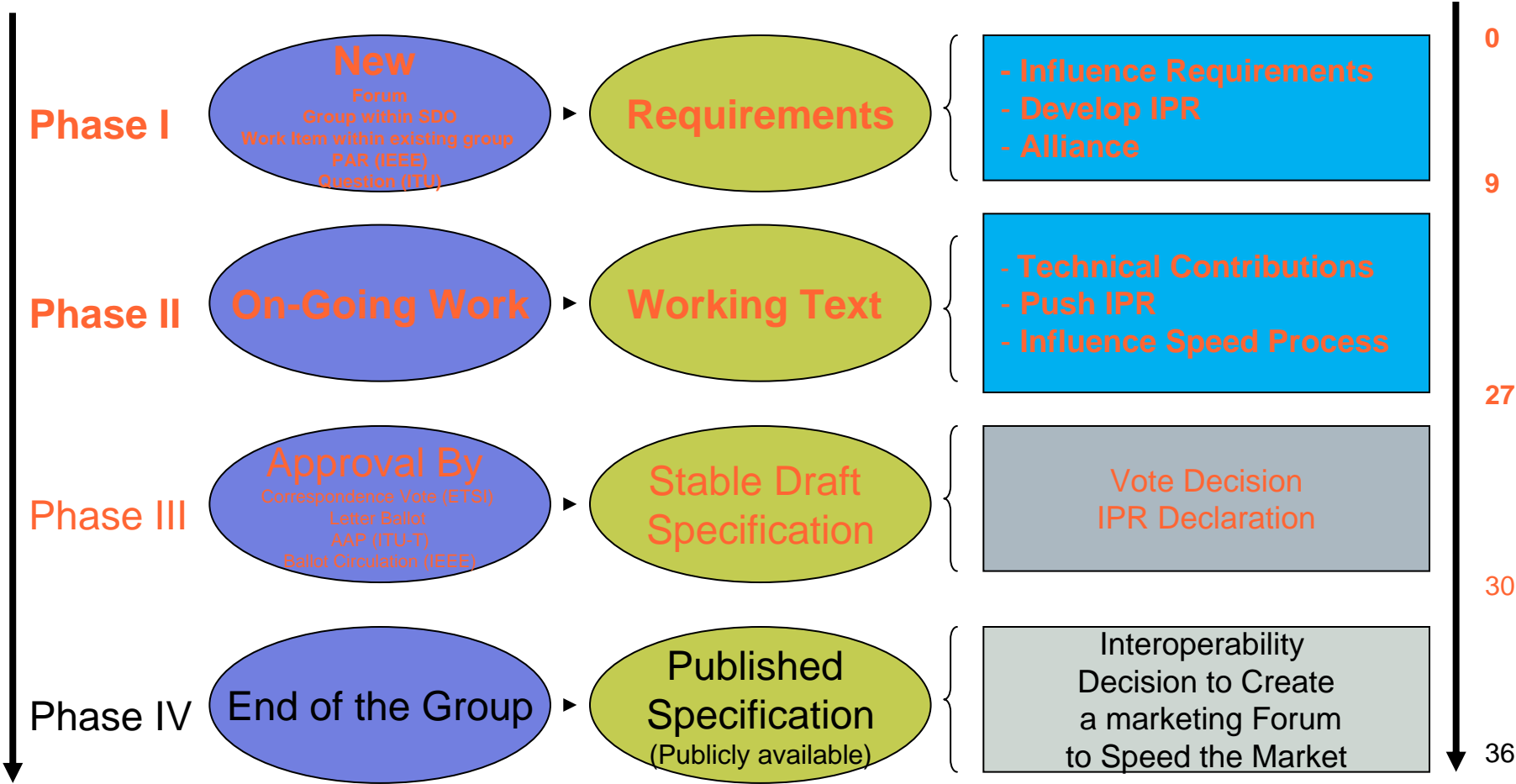
Interoperability standards are needed (*“as opposed to quality standards”*) to deliver value to citizens and so drive economies

- End-to-end interoperability is what the world’s citizens need

Interoperability is required across complete service delivery systems rather than just between individual products

“End to End” system knowledge
Coordinated and cooperative attitude

Standards and Research



Standardization is part of our life

Plethora of Standards/Fora/consortium

- Need a clear analysis skills to choose the most appropriate to your need

End to end interoperability is the ultimate goal of standards

- Need a broad range of technical & regulatory knowledge
- Understand the ecosystem
- Good evaluation skills to determine timescale of your standard

The four C concept is mandatory to succeed in Standards

Continuity – **C**ontributing – **C**onsensus - **C**oordination

Questions ?

