ISO 39001 – Road traffic safety (RTS) management system standard

RTS from Vision Zero to ISO 39001

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Outline:
- Introduction: standardization
- Background Road traffic safety
   – numbers and statistics
- ISO committee on road traffic safety
- ISO 39001 – a management system standard
- Conclusion
- Q & A

Peter Hartzell
(SIS, Swedish Standards Institute)

- ISO/TC 241 Secretary
  - Road traffic safety management systems
- Project manager Swedish mirror committee to ISO/TC 176
  - Quality management and quality assurance
- 20 years international experience of management systems
- Business degree (Sweden and USA)

SIS -
Swedish Standards Institute

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Standardization in Sweden

- 332 standardization projects
- 1 602 member organizations
- 5 000 experts
- 190 international secretariats
- 120 000 products at www.sis.se
- Training courses for 4 500 persons
- 1 410 new och revised standards
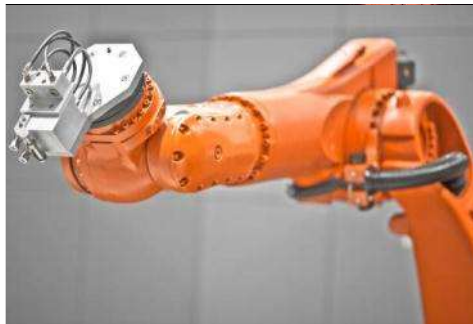- 99 % of all new Swedish standards – European or international

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Money doesn't make the world go round

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Standards do

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Everywhere we are surrounded by standards

SoRSA Birmingham 2013 Peter Hartzell SIS

Standards – The Great Wall of China

- Easier and faster to build with standardized bricks (size and weight)

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Standards – trains and tracks

- The Romans used two-wheeled chariots with 4 ft ½ inch wheel-base (1.435 m)
- Stephenson's rocket, in an 1829 English competition, had the same wheel-base
- Today's standardized track size is 1.435 m

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Standards – the pallet

- The measurements of a standardized pallet is 0.8 m x 1.2 m
- A truck is 2.6 m wide, standardized for 2 pallets in width

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Standards – mobile/cellphone chargers

- The standard was published in January 2011

- Micro-USB charger

- Mobile/cellphone producers have worked together with the EU

- Minimize waste of resoures and to make it easier for the consumers

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Promotes success and growth

Standardization contributes:

- SEK 25 billion a year to the Swedish economy

- Standards boost annual productivity in United Kingdom by 13 % and contribute GBP 2.5 billion to the country's GNP

And conversely:

- USA loses export revenues of USD 20-40 billion a year through its failure to adopt global standards to the same extent as in Western Europe

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Value growth and savings
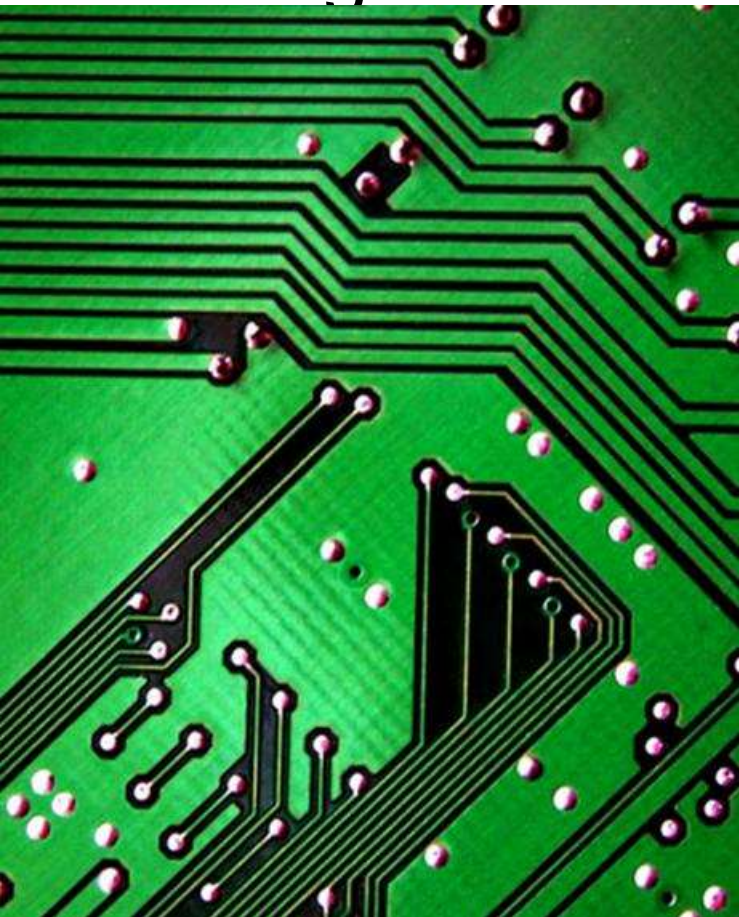
80% of world trade depends on standards and related activities

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""Influence over and participation in the development of standards is essential in satisfying society's demands with respect to safety, efficiency and sustainable development."

Ewa Björling
Swedish Trade Minister

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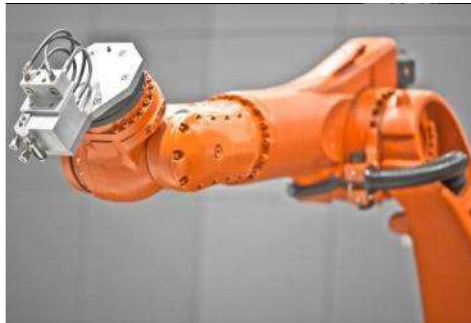
How to develop
a standard

To develop a standard

Idea

- Anyone can take the initiative
- The suggestion is discussed with the NSB/National Standardization Body and ISO
- National or international work

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To develop a standard

- Members vote to decide whether to start the project
- At a national level, the project members vote
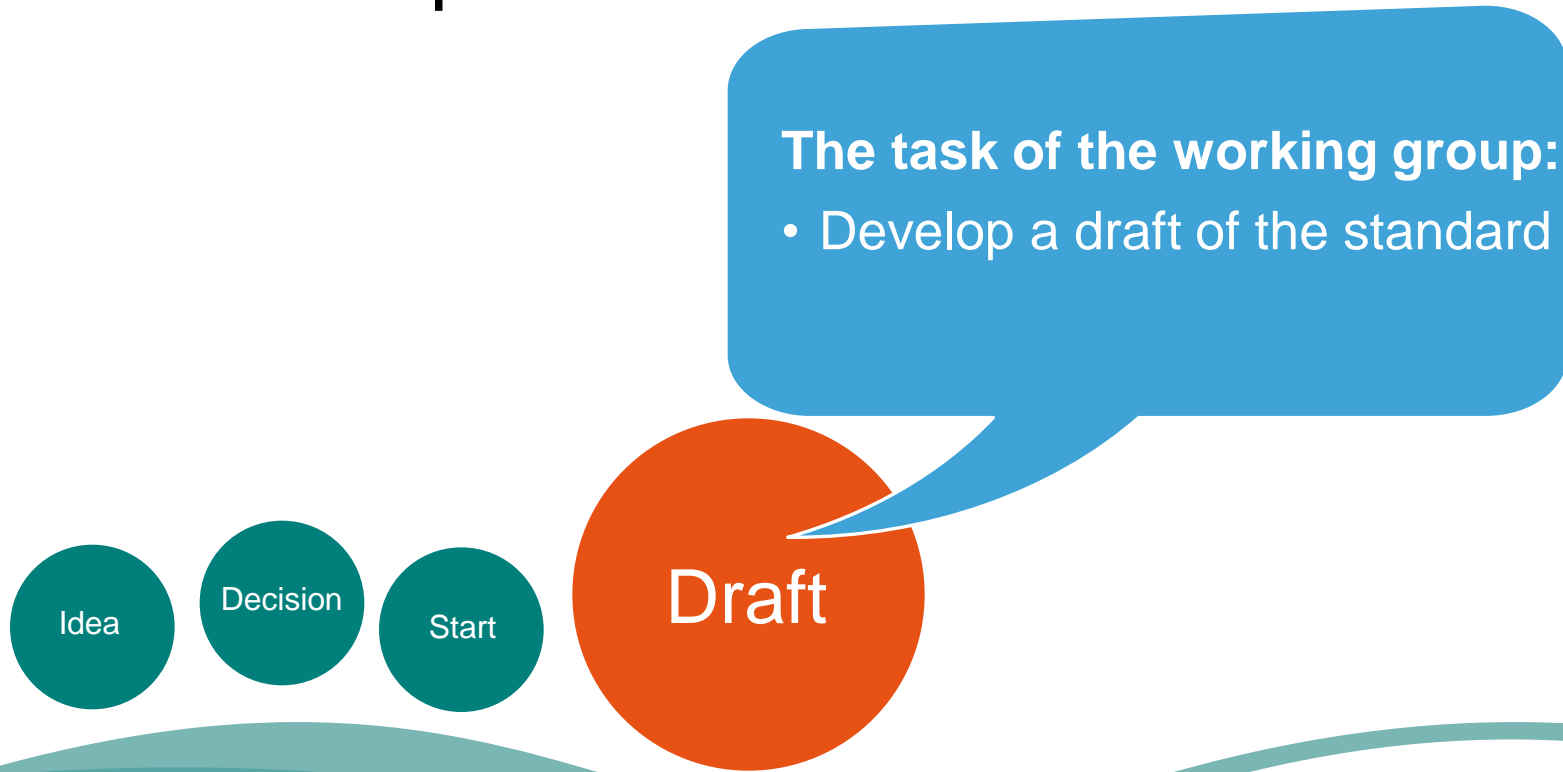
Decision

Idea

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To develop a standard

- Develop a work plan
- Working group with leaders and members from all around the world

Start

Idea

Decision

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To develop a standard

The task of the working group:
- Develop a draft of the standard
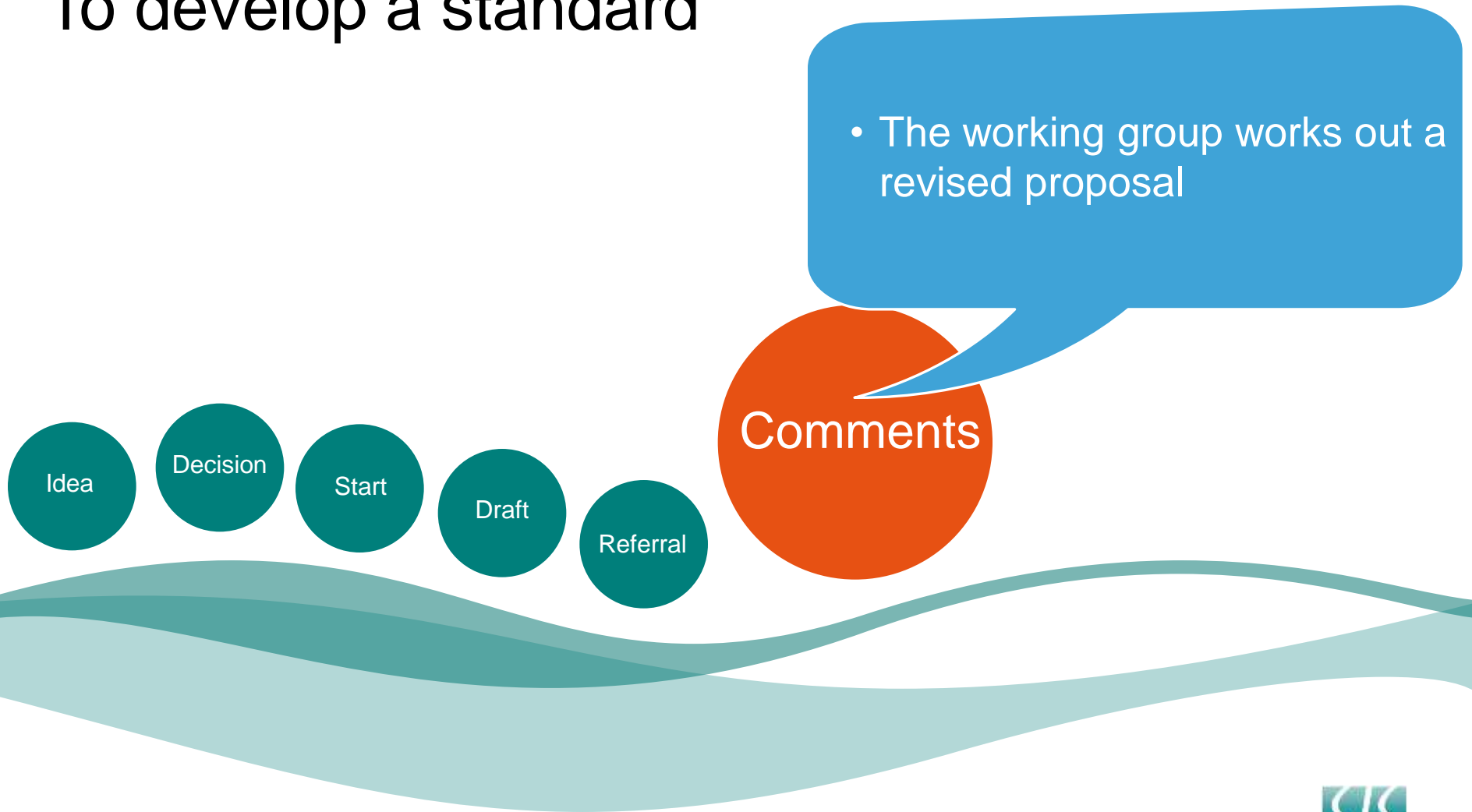
Idea

Decision

Start

Draft

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To develop a standard

- The draft is sent for referral
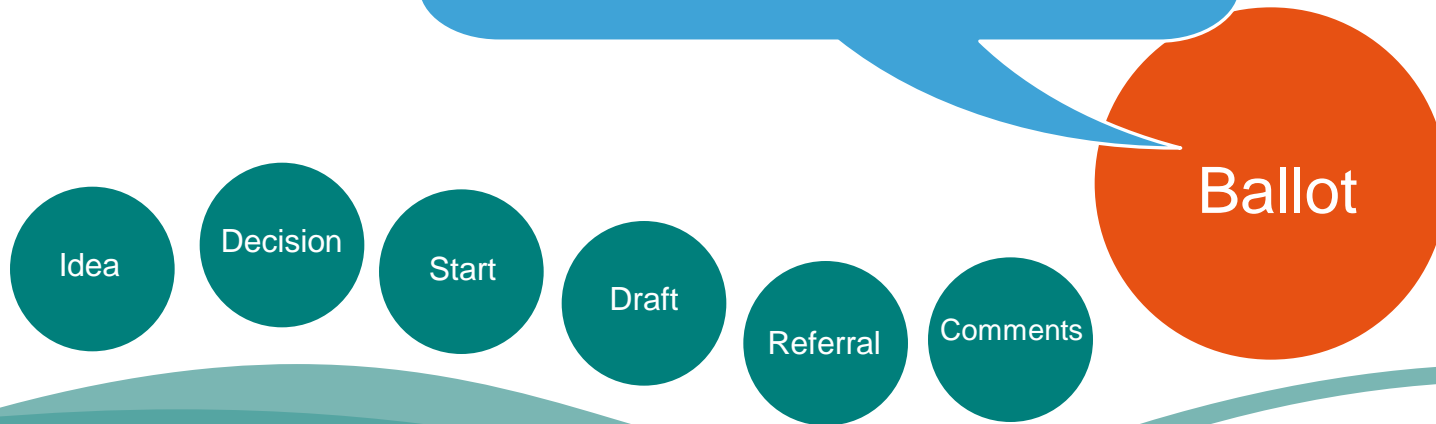- Comments are collected from project members and experts outside of the project

Idea

Decision

Start

Draft

Referral

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To develop a standard

Idea → Decision → Start → Draft → Referral → **Comments**

- The working group works out a revised proposal

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To develop a standard

International standard draft
- ISO members ballot

Ballot

Idea

Decision

Start

Draft

Referral

Comments

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To develop a standard

- The standard is approved by ballot
- The international standard is often approved as a national standard
- EU countries are required to approve a European standard as a national standard

Approval

Idea

Decision

Start

Draft

Referral

Comments

Ballot

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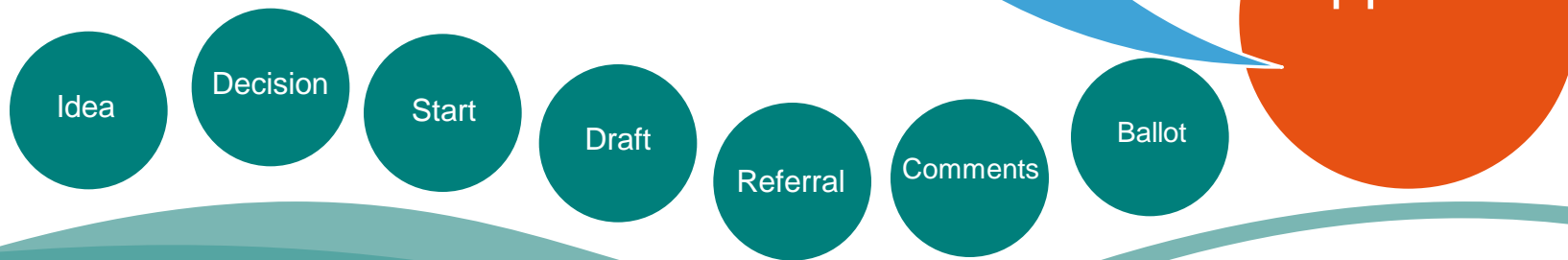
To develop a standard

- The standard is published and made available by ISO and the NSBs/
National Standardization Body

Idea

Decision

Start

Draft

Referral

Comments

Ballot

Approval

Publish

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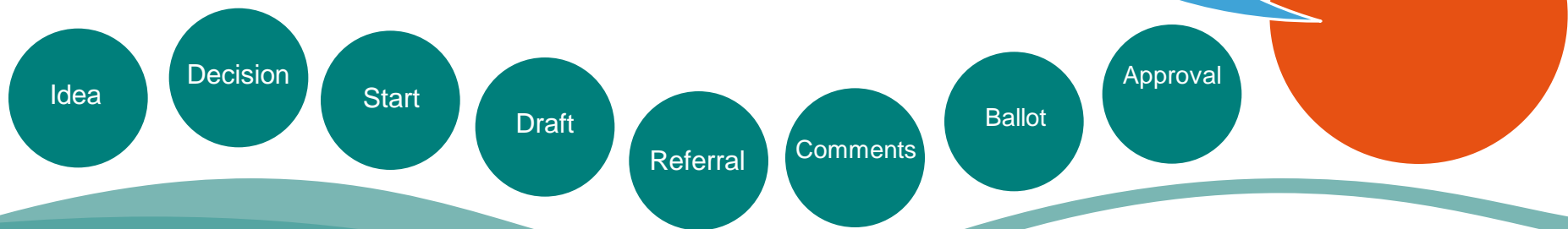
Solve challenges and create a platform for opportunity

Do it once

Do it well

Do it internationally

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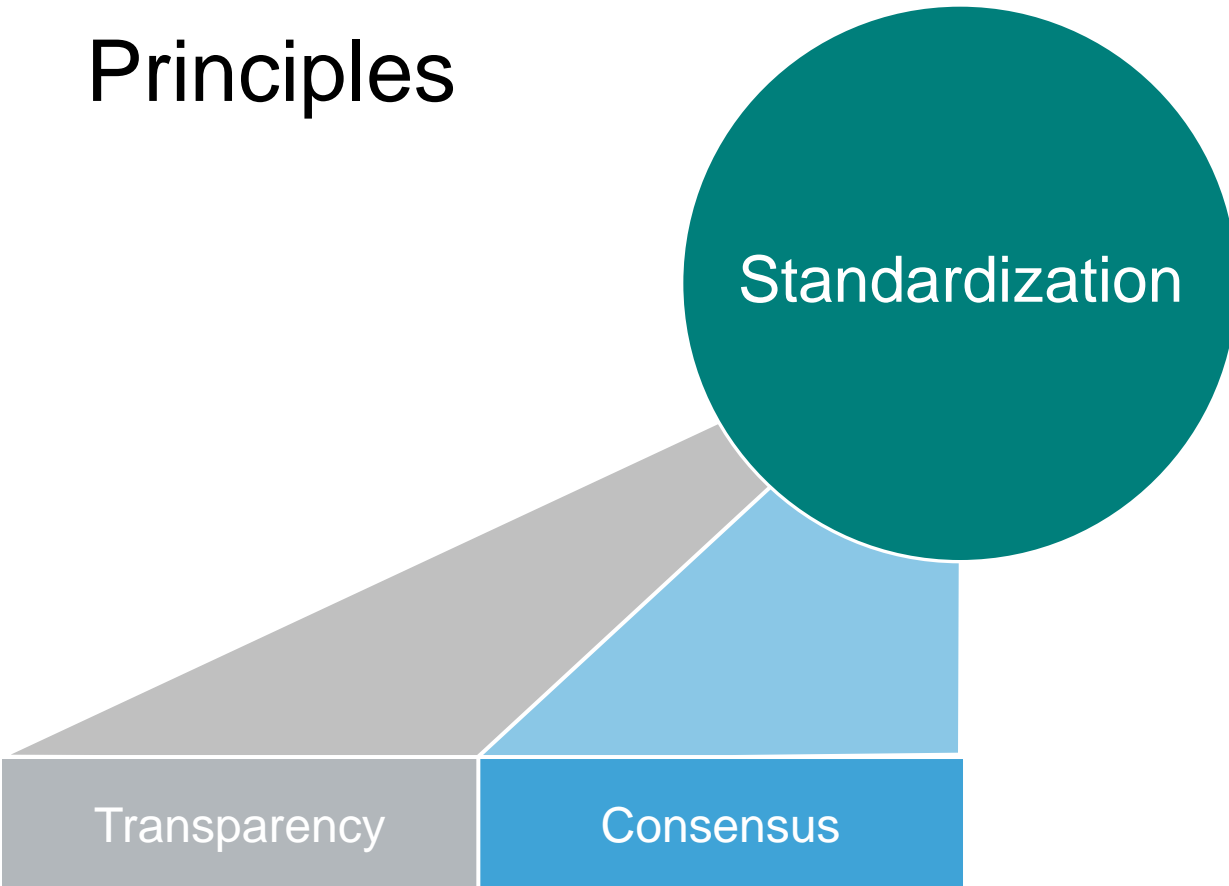
Principles

Standardization

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Principles

Standardization

Transparency

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Principles

Standardization

Transparency

Consensus

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Principles

Standardization

Transparency | Consensus | Stakeholder-driven

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Principles

Standardization

Transparency | Consensus | Stakeholder-driven | Voluntariness

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Principles

Standardization

Transparency | Consensus | Stakeholder-driven | Voluntariness
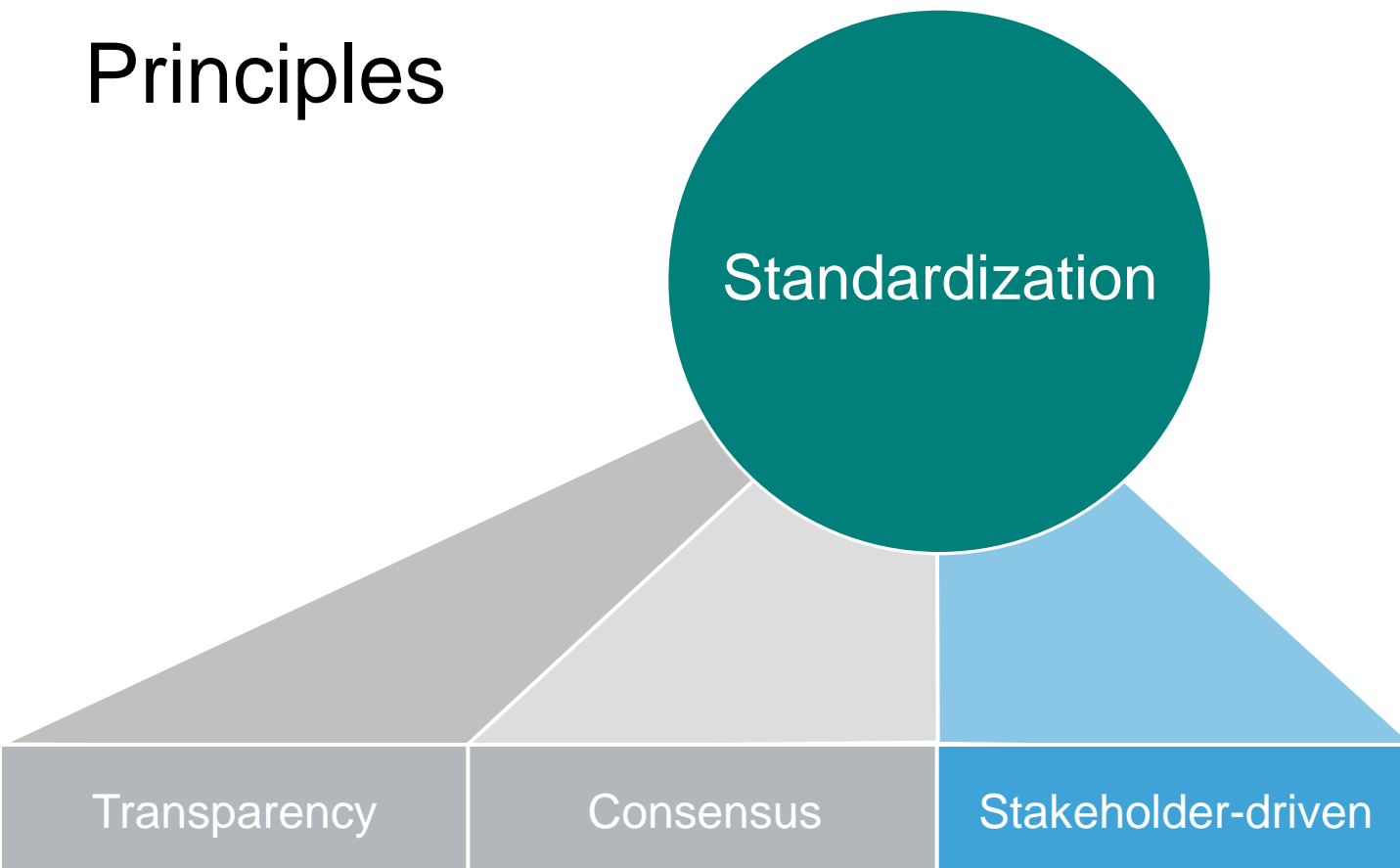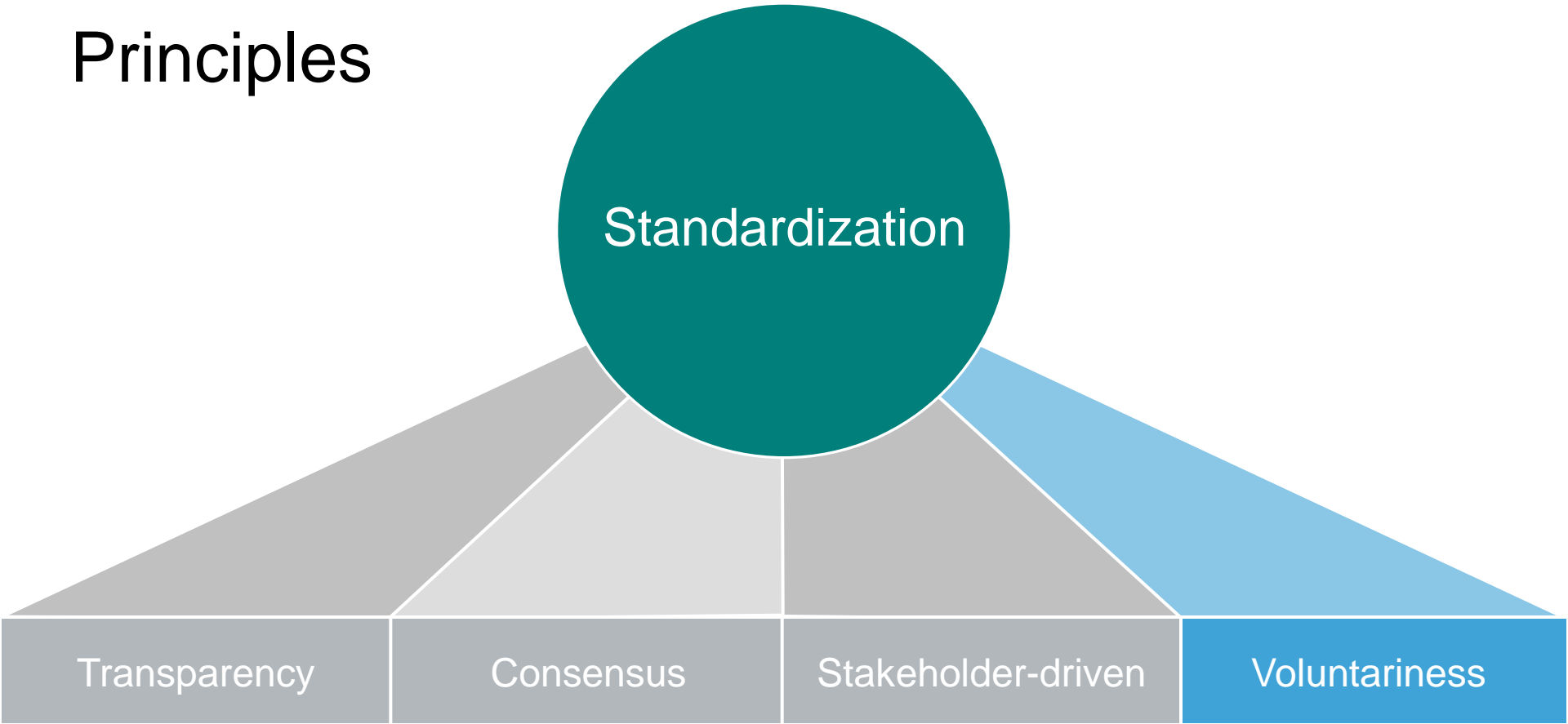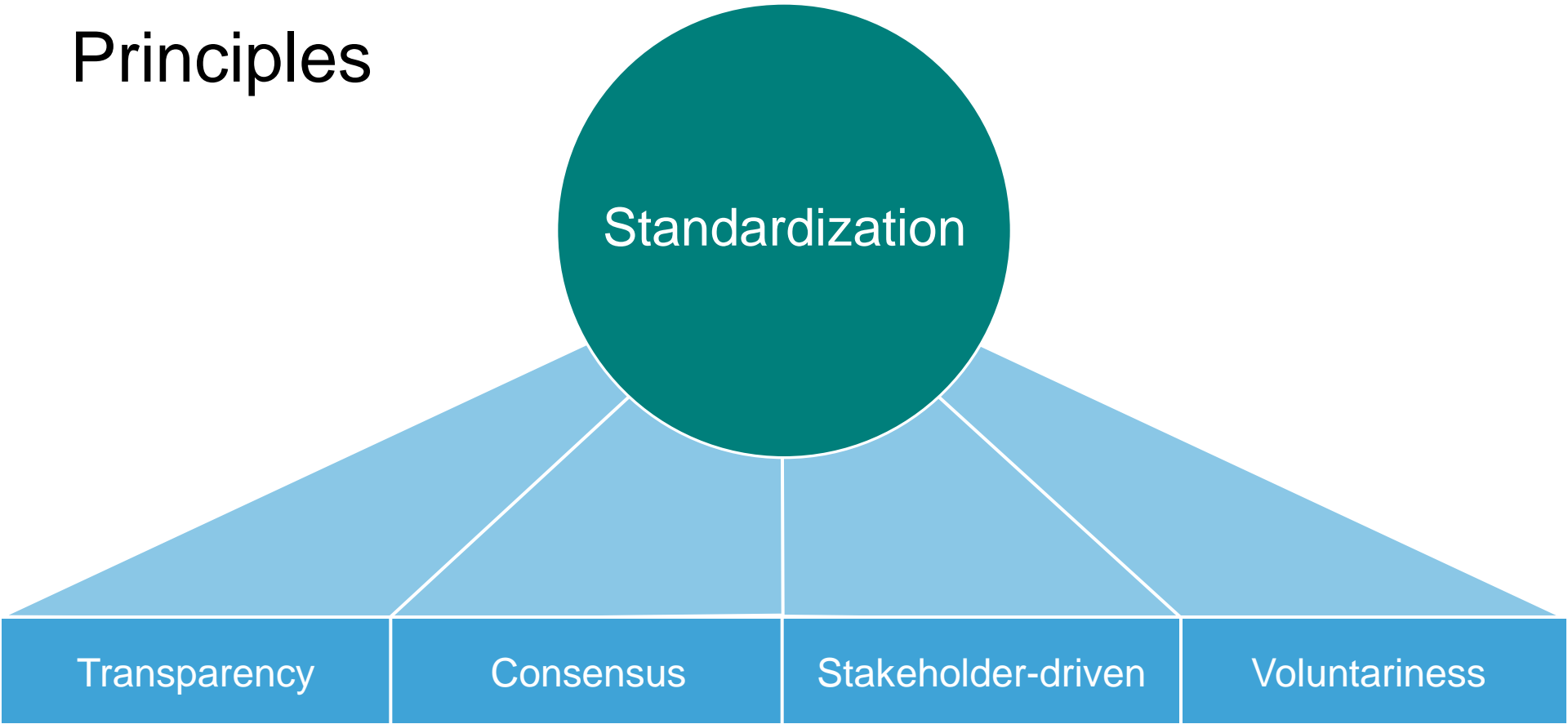
Standardization – local and global
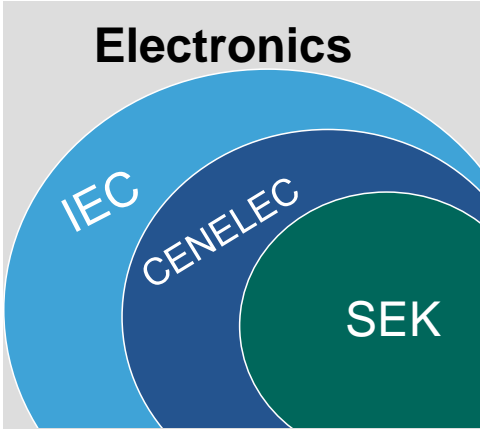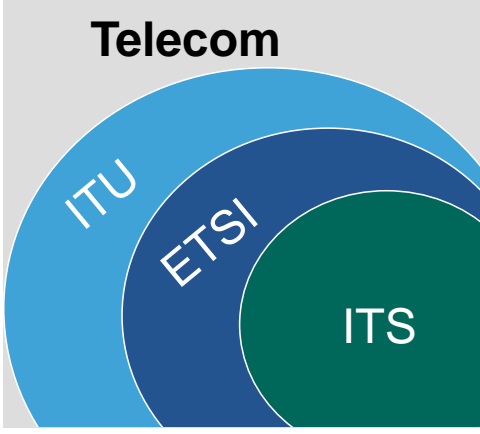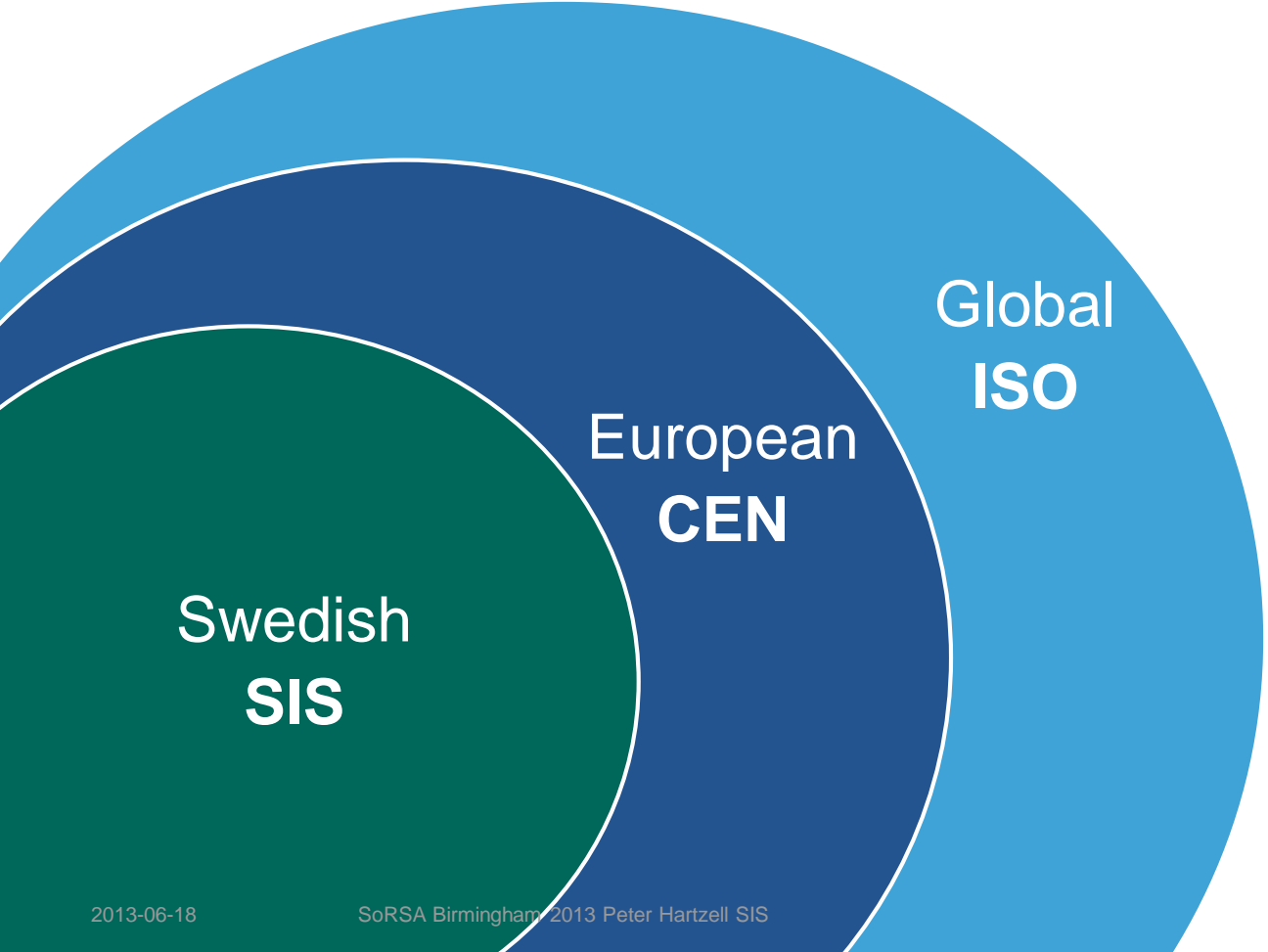
Why work with standardization

- Influencing the development of standards and networking
- Cooperate for competitiveness
- Influence the end result
- Stay updated and act upon knowledge

MAX.GR. 30.480 KGS
67.200 LBS
TARE 2.185 KGS
4.820 LBS
NET 28.295 KGS
62.380 LBS

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Example of successful international standards

ISO 9000-series

Background

- Manage your organization
- Improvement process
- Faster and safer process flow
- Better quality
- Market confidence

Results

- 1987 – first standards
- Revised 1994, 2000 and 2008
- ISO 9001 harmonized with ISO 14001
- 1 100 000 ISO 9001-certified organizations in 178 countries

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ISO 39001:2012

Road traffic safety (RTS) management systems
- Requirements with guidance for use

Clause titles – as per ISO Annex SL

- Introduction
- 1. Scope
- 2. Normative references
- 3. Terms and definitions
- 4. Context of the organization
- 5. Leadership

- 6. Planning
- 7. Support
- 8. Operation
- 9. Performance evaluation
- 10. Improvement

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RTS from 0 to 39001 – a brief summary

- 0: a) Zero Vision – zero fatalities and zero serious injuries
  b) Towards Zero Conference, Stockholm June 4-5th, 2013
    see www.trafikverket.se/towardszero
  c) Vision Zero Academy in Sweden
- 1: every road accident/crash is one too many
- 1.3: million people die each year as a result of road crashes
- 1.9: without action, by 2020 road deaths are expected to rise to 1.9 M
- 2.8: road traffic fatalities per 100,000 inhabitants (Sweden 2010) (compared with EU average of 6.2)
- 3: number of annexes in ISO 39001
  - guidance, intl examples and comparison with other ISO MSS
- 5: the UN initiative Decade of Action for road safety aims at saving 5 million people by 2020.

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RTS from 0 to 39001

- 6: % of deliberate acts (Sweden 2012), i.e. suicide in road traffic
- 10: ten clauses in ISO 39001 (standard for all ISO MSS)
- 15-29: road traffic injuries is the leading cause of death among young people age15-29
- 37: number of pages in ISO 39001 - a useful tool for a systematic approach and organizational commitment in addressing RTS. Systematic road safety work also contributes to the company's profitability. 17 pages of requirement text, the rest is annexes.
- 45: number of countries involved in developing ISO 39001 (& 12 liaisons). 20% of the world.
- 90: % of the world's road fatalities occur in low and middle-income countries
- 241: the allocated number of the ISO technical committee (2 for 1: MSS and RTS specific content)

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RTS from 0 to 39001

- 2011-2020: UN Decade of Action for road safety.
- 2020: by then the EU aims at halving road casualties, based on the European Commission's White Paper on RTS.
- 2050: EU's objective of moving close to zero fatalities in road transport.
- 39001: ISO standard for RTS (for certification).
- Euro 5 billion: social savings thanks to 2661 less road deaths in the EU in 2012 compared to 2011.
- Infinitive number of possible users: case studies and pilots, e.g. Swedish and Japanese transport industry and Johnson & Johnson.

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World membership in ISO/TC 241
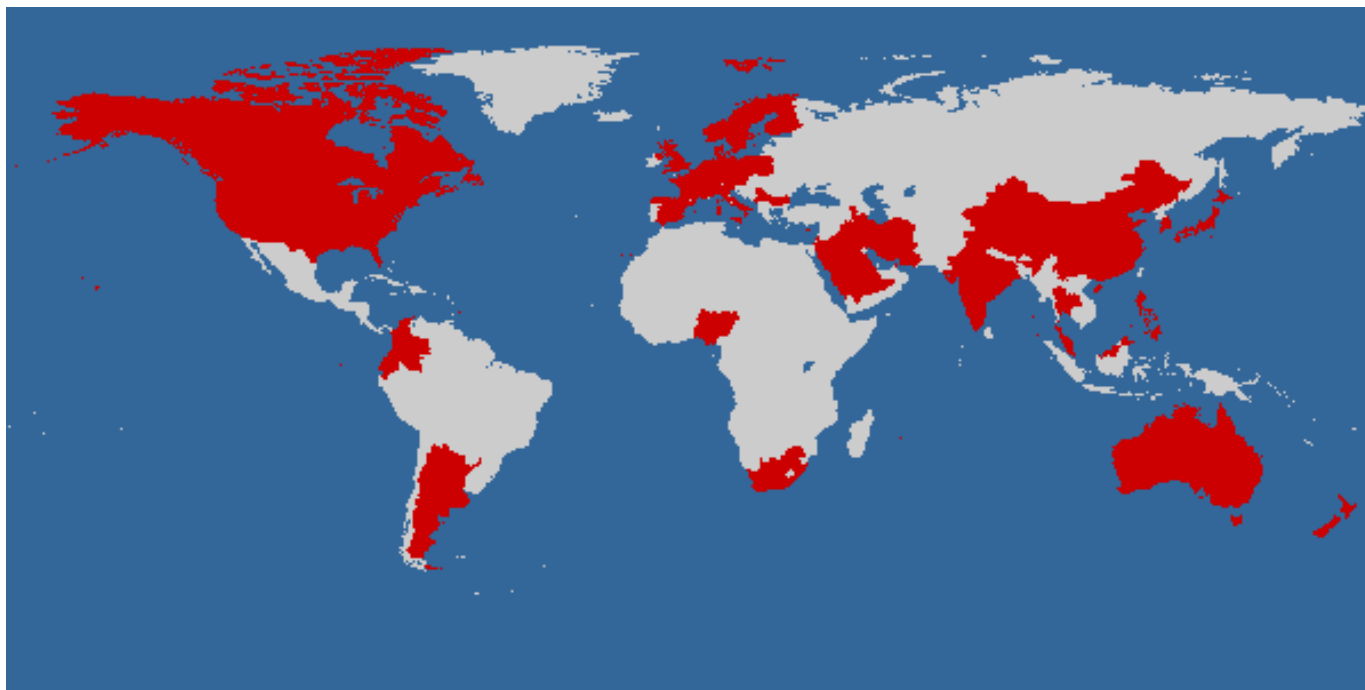
45 member countries = 20% global participation

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ISO 39001
- RTS management systems standard

- Based on the new harmonized structure for management system standards
  (e.g. ISO 9001/QMS and ISO 14001/EMS)

- Integrate with the organization´s management system

- Unique content - RTS

- Is a requirement standard - for certification

- For all organizations; public and private sector

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ISO 39001: Plan-Do-Check-Act

PLAN:

- **Clause 4 Context of the organization**: it introduces requirements necessary to establish the context of the RTSMS (road traffic safety management system) as it applies to the organization, as well as needs, requirements, and scope.

- **Clause 5 Leadership**: it summarizes the requirements specific to top management's role in the RTSMS, and how leadership articulates its expectations to the organization via a policy statement.

ISO 39001: Plan-Do-Check-Act

PLAN:

- **Clause 6 Planning**: it describes requirements as it relates to establishing strategic objectives and guiding principles for the RTSMS as a whole.

- **Clause 7 Support**: it supports RTSMS operations as they relate to establishing competence and communication on a recurring/as-needed basis with interested parties, while documenting, controlling, maintaining and retaining required documentation.

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ISO 39001: Plan-Do-Check-Act

DO:

- **Clause 8 Operation**: it defines RTS requirements, determines how to address them and develops the procedures to manage and respond to an emergency.

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ISO 39001: Plan-Do-Check-Act

CHECK:

- **Clause 9 Performance Evaluation**: it summarizes requirements necessary to measure RTS performance, road traffic crash and other incident investigation, RTSMS compliance with the international standard and management's expectations, and seeks feedback from management regarding expectations.

ACT:

- **Clause 10 Improvement**: it identifies and acts on RTSMS non-conformance through corrective action.

ISO 39001 – RTS management systems standard – unique RTS content

Clause 6 – Planning:

- **6.3 RTS performance factors**

  The organization shall identify RTS performance factors :

  a) risk exposure factors
  b) final safety outcome factors
  c) intermediate safety outcome factors

ISO 39001 – RTS management systems standard – unique RTS content

Clause 6 – Planning:

- **6.4 RTS objectives and planning to achieve them**
  The organization shall establish RTS objectives at relevant functions and levels.

The RTS objectives shall:

- be consistent with the RTS policy
- be measurable (if practicable)
- take into account applicable requirements
- be monitored
- be communicated, and
- be updated as appropriate

The organization shall retain documented information on the RTS objectives and the RTS targets.

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ISO 39001 – RTS management systems standard – unique RTS content

Clause 6 – Planning:

- **6.4 RTS objectives and plans to achieve them, cont.**

When planning how to achieve its RTS objectives and RTS targets, the organization shall determine:

- what will be done
- what resources will be required
- who will be responsible
- when it will be completed
- how the results will be evaluated

The action plans shall be documented and reviewed as necessary.

ISO 39001 – RTS management systems standard – unique RTS content

Annex A, B & C:

- **Annex A (informative) -** Guidance on the use of this International Standard

- **Annex B (informative) –** International work relating to road traffic safety management frameworks

- **Annex C (informative) –** Correspondence between ISO 39001:2012 (RTSMS), ISO 9001:2008 (QMS) and ISO 14001:2004 (EMS)

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Knowledge – case studies and pilots

- **Type of organization:**
Swedish road transport industry
  - 8,000 companies
  - 80% of road transport companies in Sweden
  - 50,000 employees
  - 30,000 motor vehicles

- **Purpose:**
  - Include ISO 39001 in the organization's management system (QMS/ISO 9001, EMS/ISO 14001, OHSAS 18001)
  - Risk assessment

- **Achievement:** ISO 39001 certified transport companies

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Knowledge – from case studies and pilots

- **Challenge: Factors affecting Risk**
  - Speed
  - Use of safety belt
  - Alcohol and drugs
  - Fitness of driver (incl. considering fatigue)
  - Handsfree (mobile phone)
  - Separation; oncoming traffic
  - Surface texture and friction
  - Load securing

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Knowledge – from case studies and pilots

- **Type of organization:**

Transport industry in Japan

- Transport, insurance, consultancy and car leasing companies

- **Purpose**:
  - To construct a management system and control system in regards to road traffic safety
  - To improve awareness of road traffic safety for drivers in the company; to decrease accidents
  - To announce the policy of road traffic safety to its clients

- **Challenge**:
  To identify relevant RTS performance factors for each company/industry

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Knowledge – from case studies and pilots

Type of organization:

Johnson & Johnson (multi-national manufacturer)

- Current matured RTSMS
  - World wide fleet safety program
- Integrate with ISO 39001
- Match the J&J RTSMS program with ISO 39001 clauses
- Update and align RTS strategies and KPIs
- Self-assessment, scorecards, management action plan & formal assessment
- Ambition: Go for global ISO 39001 certification

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Attitude – organizational culture

- Leadership and management support
- Competence and training programs
- Corporate RTS culture and program
- Genuine ownership of the RTS program
  - genuine benefits and results
- Paradigm shift of attitude in society at large

Solution – effective and efficient use of ISO 39001

- Long-term commitment

- Direct link with strategic goals and objectives

- Close relation with products, services and processes

- Clear and continuous communication with management, staff and customers (and other interested parties)

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ISO 39001 – part of RTS solutions
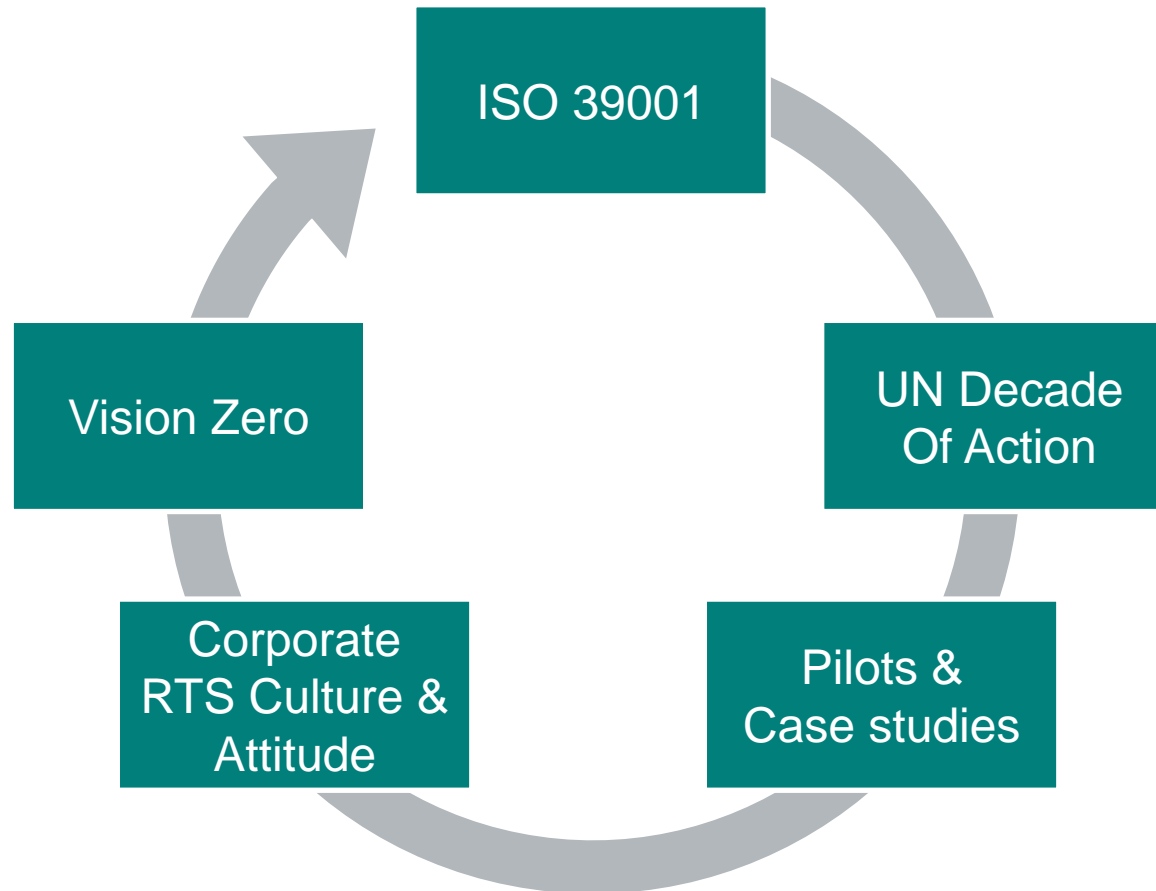
Thank you for your attention!
For more information, please contact:

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