

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

Vision Zero with ISO 39001





Foolproof road traffic
- What about the human factor?

Outline:

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



Peter Hartzell

SIS – Swedish Standards Institute



- Secretary ISO/TC 241 Road traffic safety management systems (since 2010)
- Project manager and Delegation leader for the Swedish mirror committee to ISO/TC 176 Quality management and quality assurance (2007-2013)
- Member of UNRSC – United Nations Road Safety Collaboration where ISO 39001 is part of Pillar 1
- 20 years international experience of management systems
- Business degree (Sweden and USA)





SIS - Swedish Standards Institute

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





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

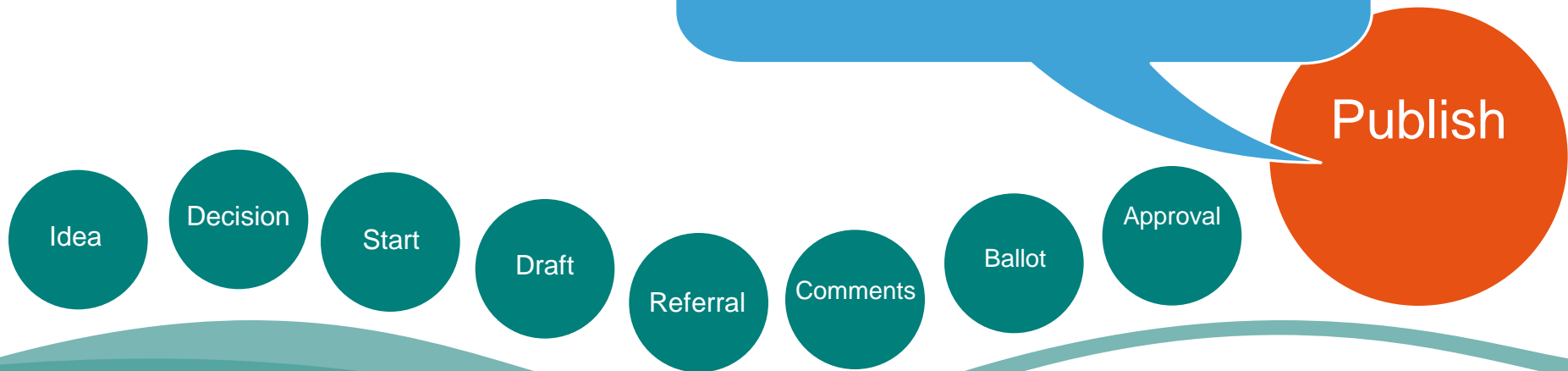
Ewa Björling
Swedish Trade Minister



How to develop a standard

To develop a standard

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




Solve challenges and create a platform for opportunity



Do it once

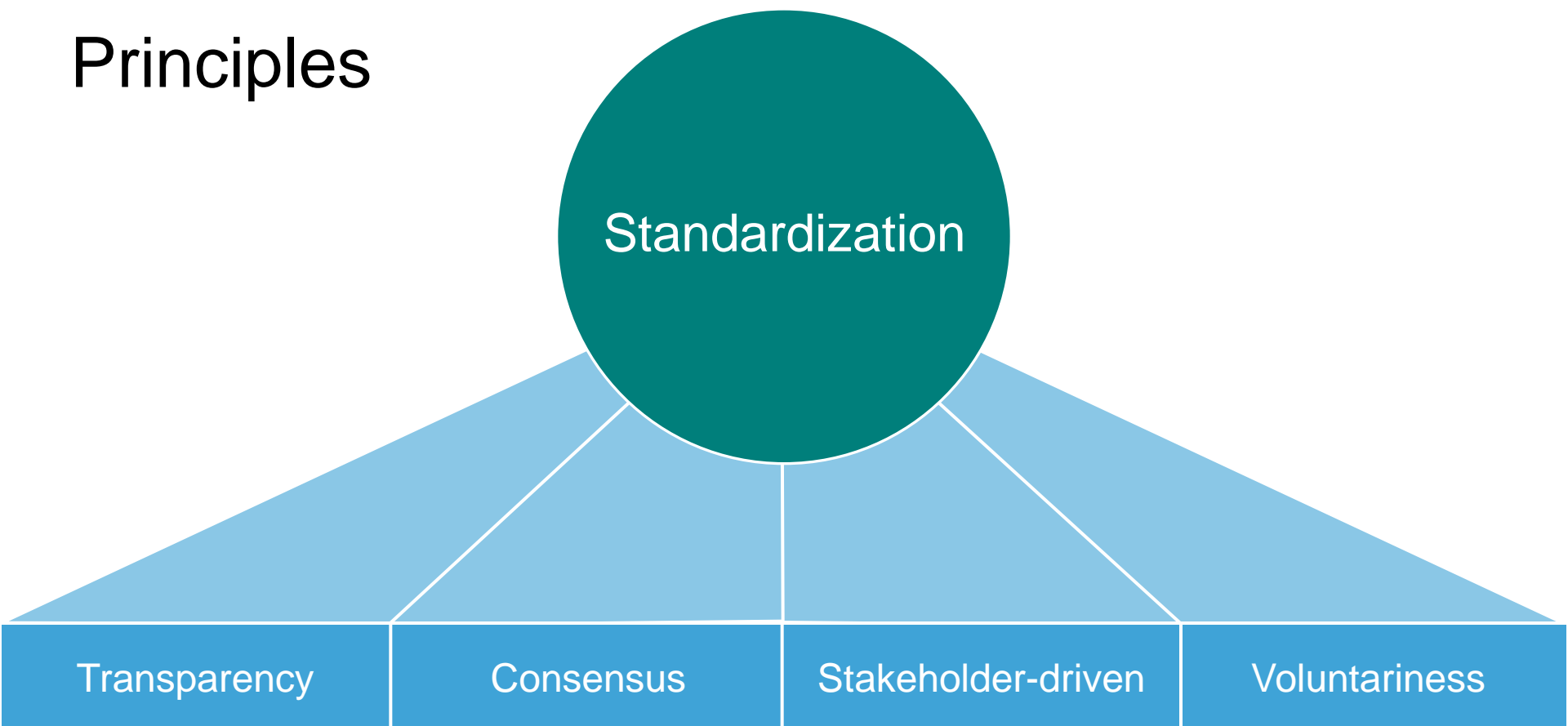


Do it well



Do it
internationally

Principles





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



ISO 39001:2012

Title:

Road traffic safety (RTS) management systems

- Requirements with guidance for use

RTS quality management and quality assurance:

To ensure that the organization's RTS related matters are handled in a structured way to support a corporate culture of quality, safety and continual improvement.

Clause titles – as per ISO Annex SL

- ISO standard for ISO MSS/Management systems standards

- 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

RTS from 0 to 39001 – a brief summary

- 0: a) Zero Vision – zero fatalities and zero serious injuries
b) Towards Zero Conference, Gothenburg, Sweden June 9-10th, 2015
see www.trafikverket.se/towardszero
c) Vision Zero Academy in Sweden
- 1.3 million people die each year (3500/day) as a result of road crashes
- 1.9 million road deaths by 2020 – if we don't take action
- 1-3%: Economic consequence of crashes estimated to 1-3% of GDP (Gross Domestic Product), reaching a total of over USD 500 billion.
- 3 road traffic fatalities per 100,000 inhabitants (Sweden)
(compared with EU average of 6.2)
- 3: number of annexes in ISO 39001
- guidance, intl examples and comparison with other ISO MSS
- 5 million people is expected to be saved by the UN initiative Decade of Action for road safety by 2020. ISO 39001 is part of Pillar 1 RTS management

RTS from 0 to 39001

- 8: Road traffic crashes are the eighth (8th) leading cause of death globally.
- 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 age 15-29
- 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, 20 pages annexes.
- 46: number of countries involved in developing ISO 39001 (& 14 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)

RTS from 0 to 39001

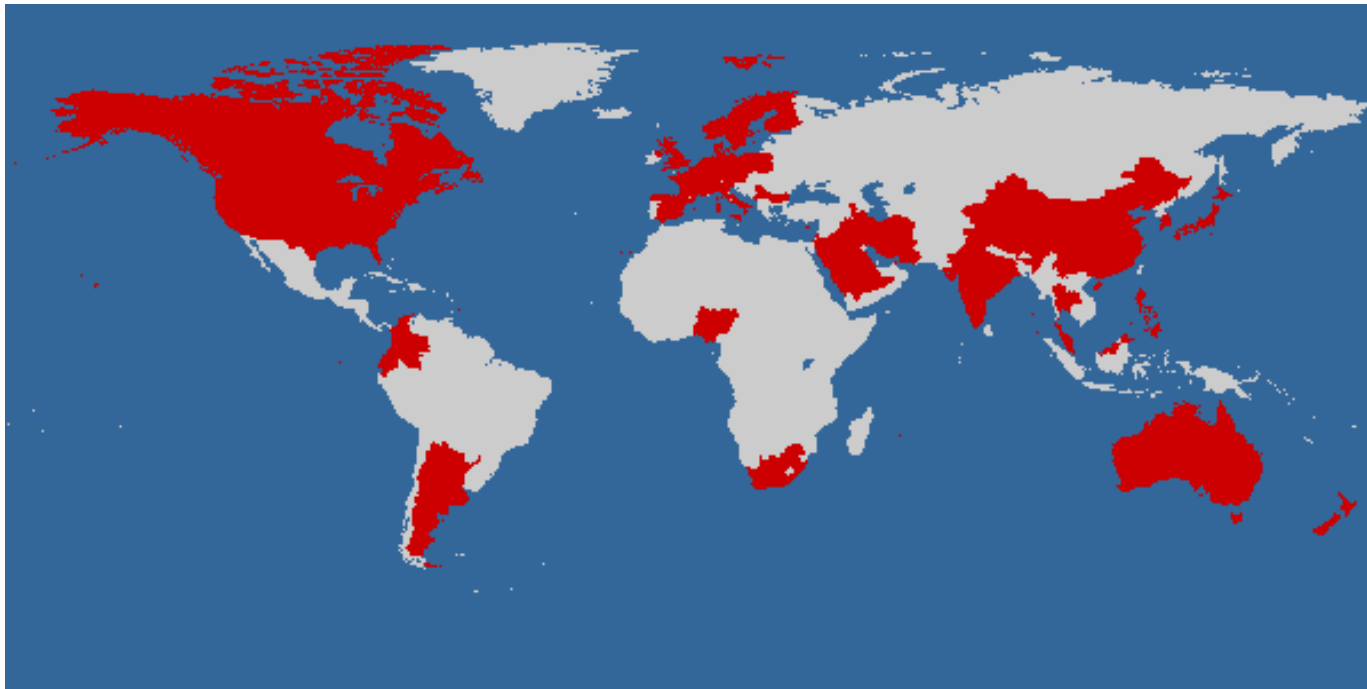
- 2011-2020: UN Decade of Action for road safety. Pillar 1 deals with RTS management systems, including ISO 39001.
- 2020: by then the EU aims at halving road casualties, based on the European Commission's White Paper on RTS.
- 2050: EU's objective of moving close to zero fatalities in road transport.
- 27700: number of road deaths in 2012 in EU27. Around 313 000 seriously injured. 2661 fewer deaths (9% cut) compared to 2011 (monetary value of reduction estimated to Euro 5 billion).
- **39001**: ISO standard for RTS (for certification).
- Billions in savings: economic consequences related to less road deaths. Global cost of road deaths 1-3% of GDP equivalent to USD 500 billion.

RTS from 0 to 39001

- Spain (10-11% cut) has performed better than the EU average both in serious injuries and in road deaths.
- Spain had 136 road deaths per million population in 2001, totally 5517 deaths. In 2012 (estimate) it was down to about 40, at 1834 deaths.
- Sweden had 60 in 2001(531 deaths) and 31 in 2012 (286 deaths).
- The EU27 equivalent was 113 (54352 deaths) in 2001 and 55 (27721 deaths) in 2012.

Global membership in **ISO/TC 241**

- Road traffic safety management systems



46 member countries = 20% global participation

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/Road traffic safety
- A requirement standard - for certification
- For all organizations; public and private sector

ISO 39001

- RTS audit competence

- ISO/TC 241 and CASCO has a Joint Working Group
- Develop a Technical Specification for RTS-specific audit competence.
- Part of ISO/IEC 17021
- **Title: Conformity assessment — Requirements for bodies providing audit and certification of management systems — Part 7: Part 7: Competence requirements for auditing and certification of RTS/road traffic safety management systems**

ISO International Organization for Standardization

TC 241 Road traffic safety management systems (developed ISO 39001)

CASCO: ISO:s technical committee for Conformity Assessment

IEC International Electrotechnical Commission Standards

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.

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.

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.

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)
 - can also be done with OHSAS 18001

Knowledge – global application

- **Type of organization:**

Swedish road transport industry

- **Purpose:**

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

- **Achievement:** 40 ISO 39001 certified transport companies (August 2013), expect to reach 100 in 2014.

Knowledge – global application

■ **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

Knowledge – global application

- **RTS objectives:**

Top three (3) most important **RTS objectives:**

Speed, use of safety belt and to minimize risk of crash.

- **RTS factors:**

RTS factors such as drive-and rest time, no drugs and alcohol and obeying traffic regulation and laws are frequently prioritized in the ISO 39001 certified organizations.

- **Regular advice (from ISO 39001 certified organizations):**

Use safety belt, drive calmly, respect all in traffic, time gained is not that big from speeding, anchor (confirm) RTS policy with all staff and for management to lead by example.

Knowledge – global application

- **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

- **Result:**

- Japan has published a bilingual (Japanese-English) **ISO 39001 hand book**.
- About 30 Japanese organizations are ISO 39001 certified (2013). Transport companies (bus, truck and taxi), car leasing companies, insurance companies and companies using private cars a lot for business trips.

Knowledge – global application

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, gap analysis, scorecards, management action plan & formal assessment
- Ambition: Go for global ISO 39001 certification

Conclusion:

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

Human factor/behaviour in combination with a structured approach, e.g. with **ISO 39001**

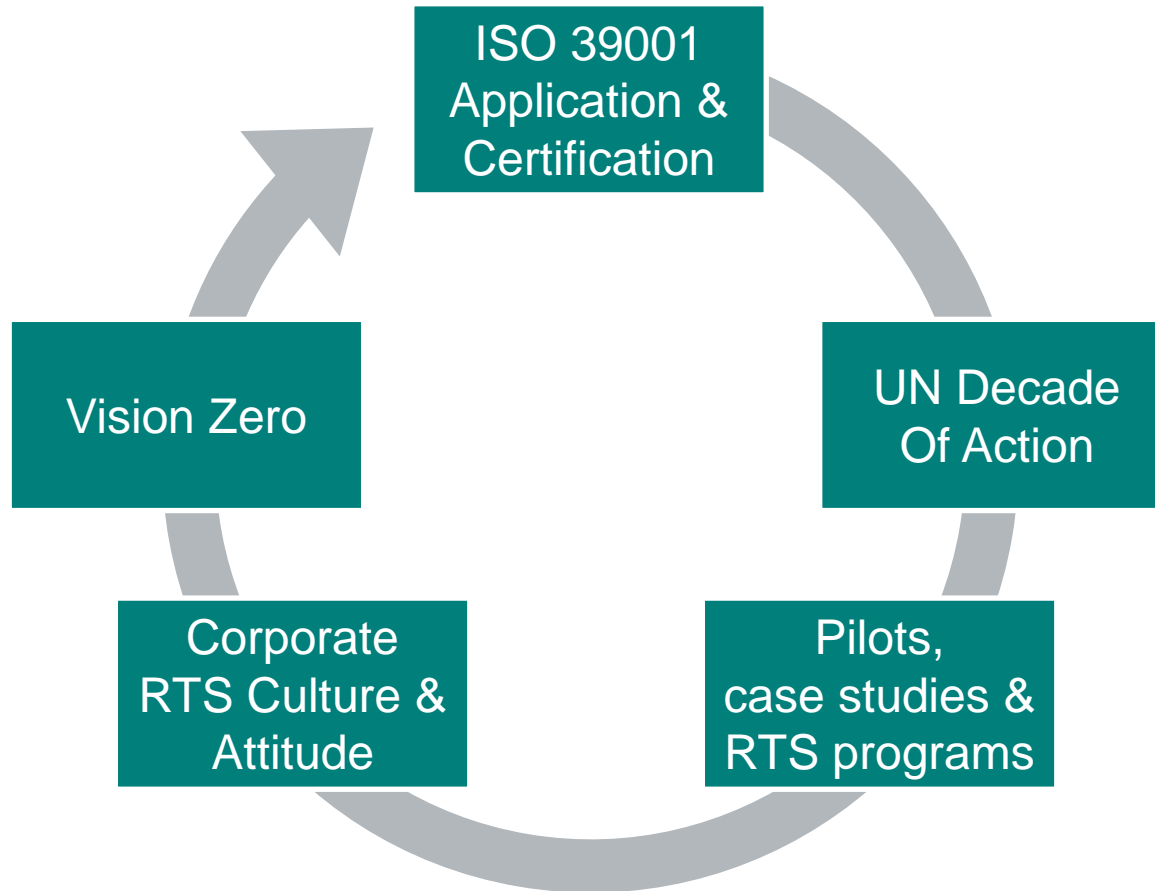
Conclusion:

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)

Conclusion:

ISO 39001 – part of RTS solutions





Thank you for your attention!
For more information, please contact:

ISO/TC 241 Secretariat
Peter Hartzell, peter.hartzell@sis.se

Phone: +46-8-555 520 29
Mobile phone: +46-707-64 56 99

www.sis.se



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PRAISE Barcelona 2014 Peter Hartzell SIS





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