

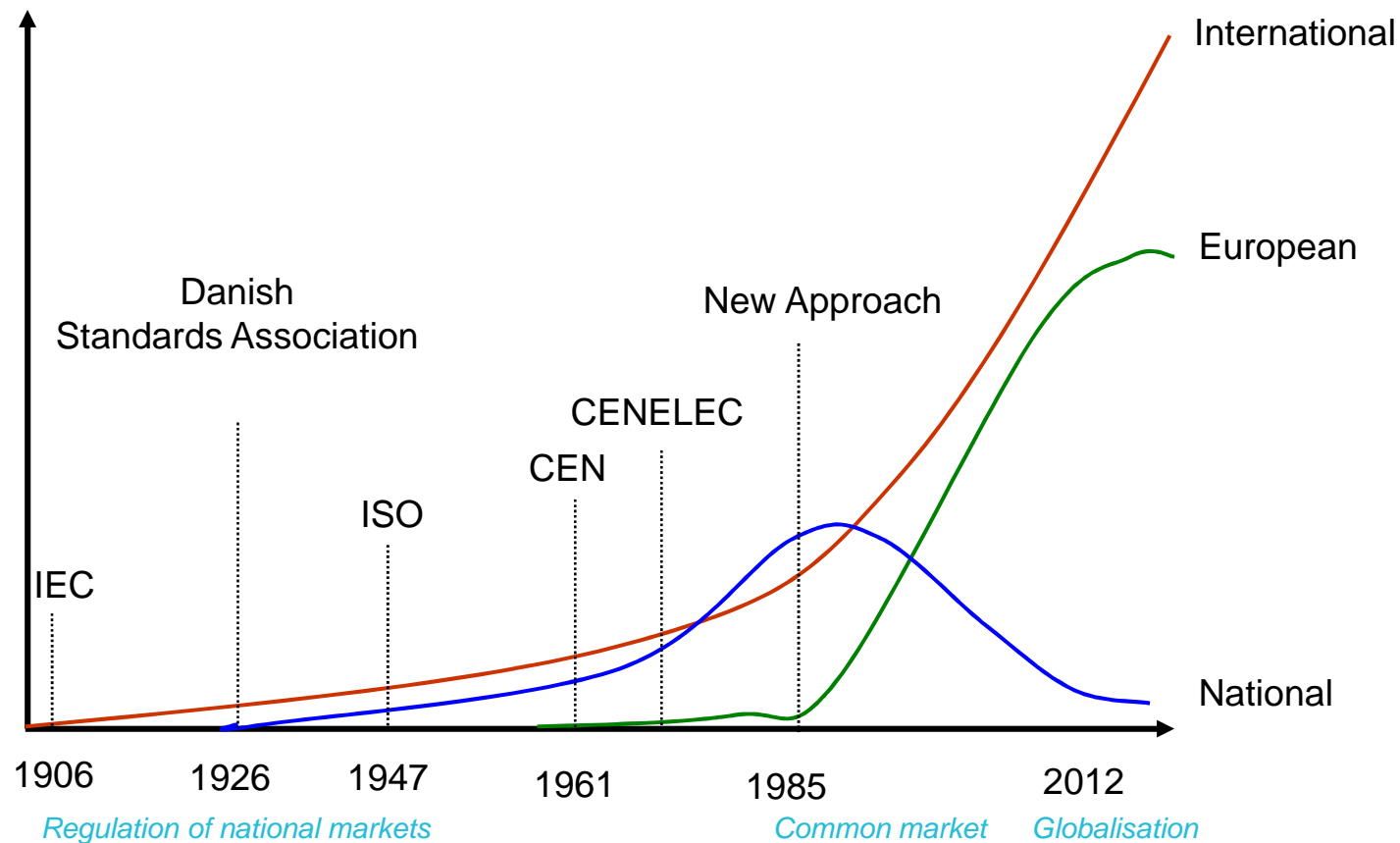
New ISO standards for sustainable development of communities

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A life without standards would be rather difficult...



Standards have developed into a very important tool in globalisation



From global to local

UN sets the agenda

- Brundtland et al. 1987: Our common future (book)
- Rio-conference 1992: Conference on environment and development
- Johannesburg 2002: World summit on sustainable development
- Rio +20: The Future We Want
 - Natural, social and economic environment
 - **Economic, social and environmental dimensions** or pillars
 - Strengthening coherence, coordination, avoiding duplication of efforts and reviewing progress (75)

Thematic areas and issues:

- Poverty eradication
- Food, nutrition and agriculture
- Water and sanitation
- Energy...
- 20 in total

Instruments:

- Renewing political commitment
- Green economy
- UN institutions
- Finance
- Technology
- Capacity building
- Trade

Law on planning, chapter 6a, Local Agenda 21

- Every 4th year, regions and municipalities shall plan their contribution to sustainable development including how
 - To protect the country's nature and environment through prevention of pollution
 - to create and maintain valuable buildings
 - to involve the public in planning
- The municipality shall address the following issues in their plan:
 - Reduce the environmental impacts
 - Promote sustainable city development and re-development
 - Promote biodiversity
 - Involve citizens and local business in LA 21
 - Promote interaction between decisions on environmental, transport, industry, social, public health, educational, cultural and economic issues

Local Agenda 21 (in Gladsaxe in Denmark)

Local association

- Not sustainable solutions but more sustainable solutions
- Self-sustainability by organic gardening, urban gardening and agriculture...
- Resource housekeeping in procurement (eco-labelled and organic) and waste management
- Protection of “nature” by fighting invasive species and giving citizens – especially children – infotainment in nature

Municipality

- LA 21 = environmental action plan, 1. and 2. generation
- 3. generation expanded to all sectors – what are your environmental impacts?
- 4. generation the municipal strategy went across also on indicators 4 years ago and repeated this year
- Green Idea Centre celebrated 10. years anniversary this summer

Sustainability in ISO standards – some examples

ISO and CEN facilitates standardization

Horizontal:

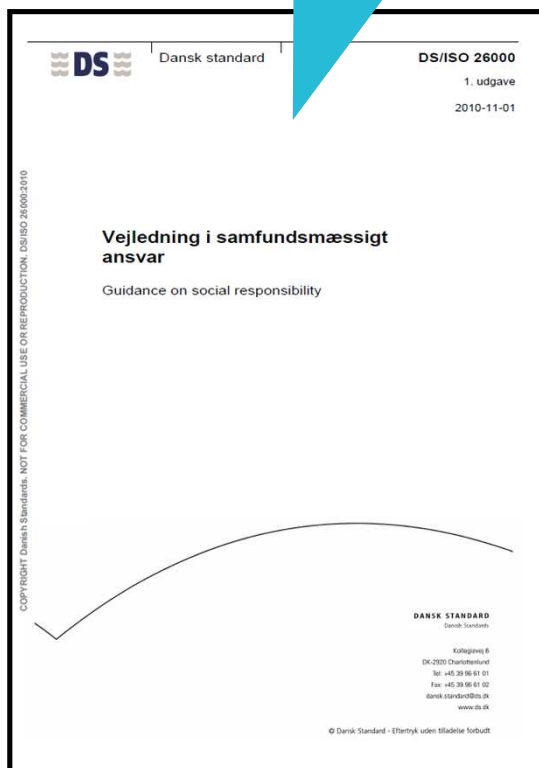
- All technical committees and working groups (shall) contribute to sustainable development
- ISO 26000 Social responsibility
- ISO Guide 82 Guide for addressing sustainability in standards
- ISO/TC 268 Sustainable development and resilience of communities
 - Management system
 - Indicators
 - Metrics

Specific :

- Anti-bribery
- Biofuels
- Business districts (IWA 2011)
- Ceramic tiles systems
- Cocoa
- Construction and construction products
- Cork
- Earth-moving machinery
- Events
- Information safety
- ITC products
- Nanotechnology
- Procurement
- Soil remediation
- Tourism
- Tractors

Denmark

Adopted as DS



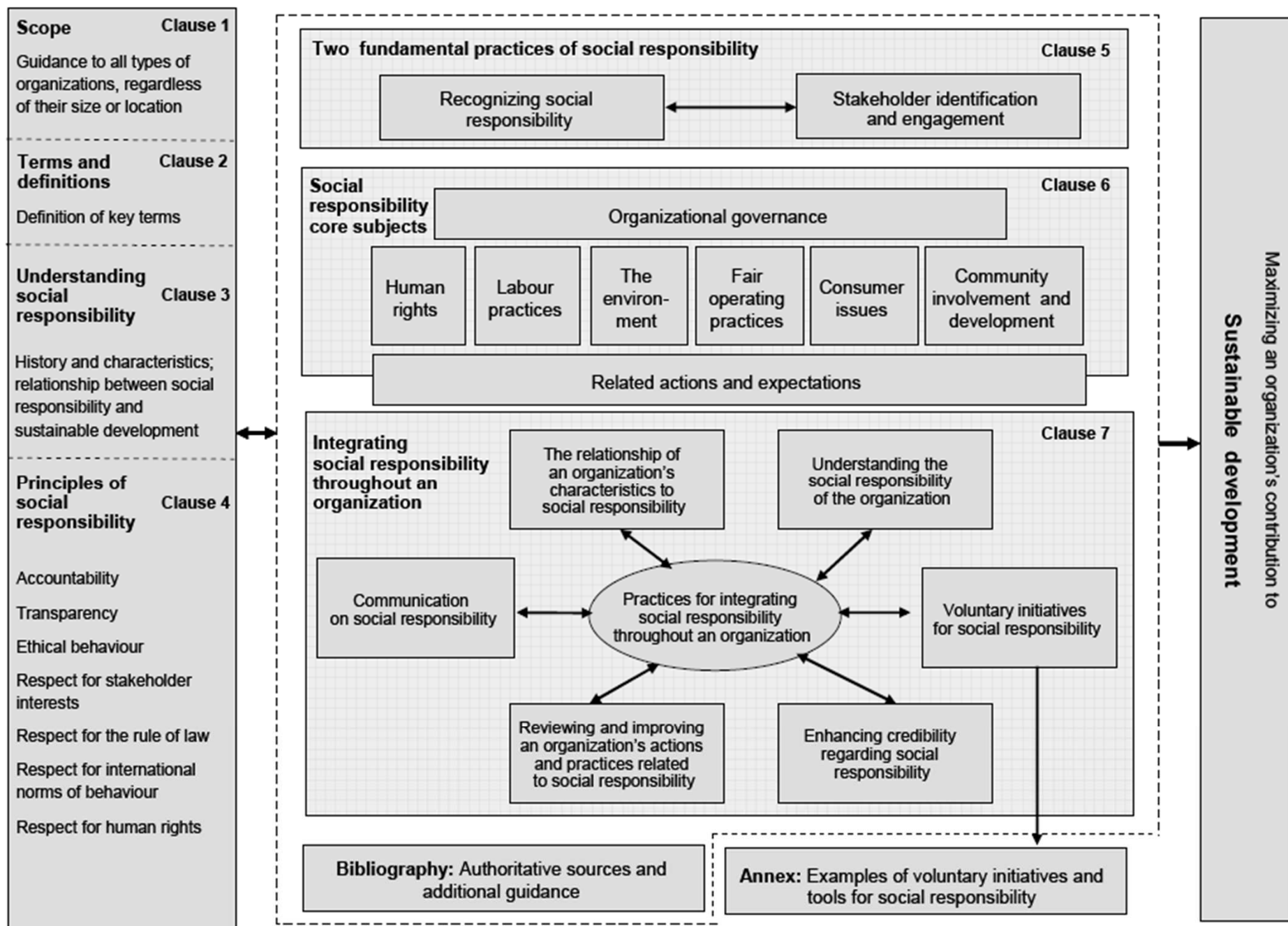
$$9+14+26 = 49$$

NMC decision

10 principles
40 issues
MSS



Danish
examples and
tools



Today and Future

"Organization" recognizes ISO 26000 as a reference document that provides guidance on social responsibility.

"Organization" has used ISO 26000 as a guide to integrate social responsibility into our values and practices.

ISO Guide 82
Guide for
addressing
sustainability in
standards

ISO 26000
Social
responsibility
management
system

ISO 26001
Social
responsibility
management
system

ČSN 01 03
Systém
manageme
společens
odpovědnosti
organizací –
Požadavky



ISO Guide 82

Guidelines for addressing sustainability in standards

Corrected version
2014-04-01

First edition
2014-03-01

Our vision

To be the world's leading provider of high quality, globally relevant International Standards through its members and stakeholders.

or det
nfund



Our mission

ISO develops high quality voluntary International Standards that facilitate international exchange of goods and services, support sustainable and equitable economic growth, promote innovation and protect health, safety and the environment.

Executive summary

- Sustainability is the goal of sustainable development
- It refers to any state of the global system in which the needs of the present (generation) are met without compromising the ability of the future generations to meet their own needs
- The concept of sustainability is continually evolving
- Standard writers are encouraged to consider sustainability issues in their work at all stages in the standards development process
- This Guide provides guidance to standard writers on how to take account of sustainability in the drafting, revision and updating of ISO standards and other deliverables
- It aims to raise awareness of sustainability issues arising from the application of ISO standards

ISO Guide 82

Guide for addressing sustainability in standards

- Project group under TMB
- Started in 2010 with one year target...and still going strong
- CD.2 comments by all CEN TC's a.o. almost a year ago...
- Based on ISO Guide 64 and ISO 26000?
 - Life cycle matrix of environmental aspects to identify and prioritize
 - 7 core subjects, 37 issues, 300+ actions – multi-stakeholder consensus
 - Stakeholder engagement
- Introduction
 - a) raise awareness of the specific sustainability aspects and impacts arising from the application of all types of standards
 - b) outline the possible relationships between the provisions of a standard and the environmental, social and economic impacts of activities and products addressed by the standard
 - c) provide a systematic approach to addressing sustainability aspects and impacts in a coherent and consistent manner by standards writers, with regard to both new and revised standards
 - d) promote consistency among standards that address sustainability.

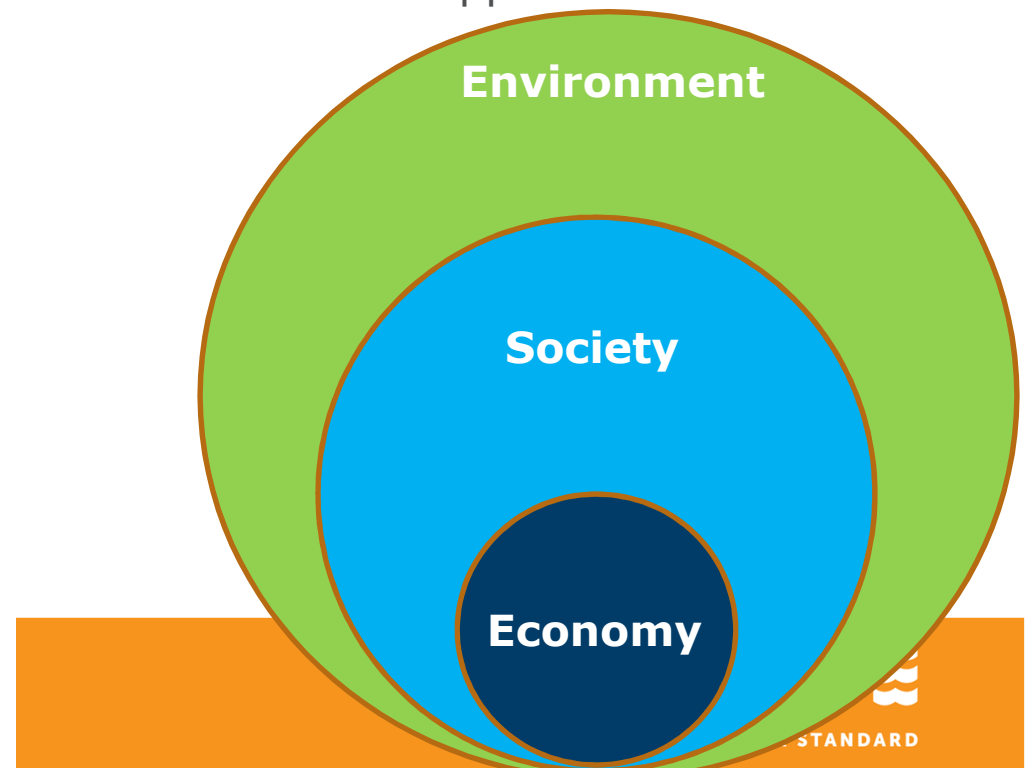
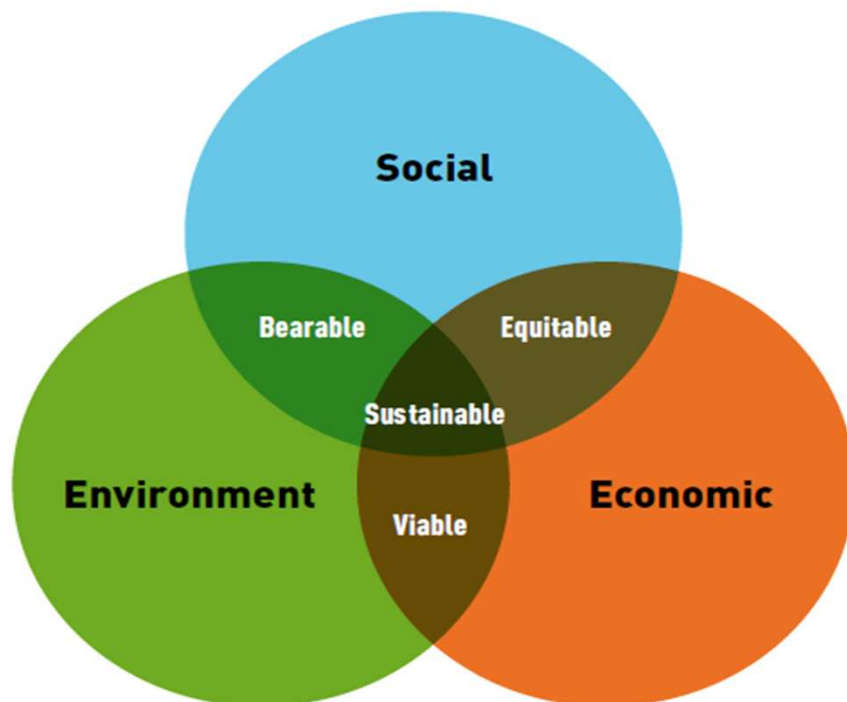
ISO Guide 82 Guide for addressing sustainability in standards

Principles

- Transparency
- ~~Accountability~~
- ~~Relevance~~
- ~~Consistency~~
- Stakeholder interests
- ~~Long-term behaviour~~

Approaches

- Systemic approach
- Life cycle approach
- Precautionary approach
- Risk-based approach
- Stakeholder approach



Identifying sustainability

a) Social

- Public health
- Education
- Occupational and consumer safety

b) Environment(al)

- Natural resource use
- Energy use and climate change
- Pollution of land, sea and air
- Protection of biodiversity and natural habitats

c) Economic

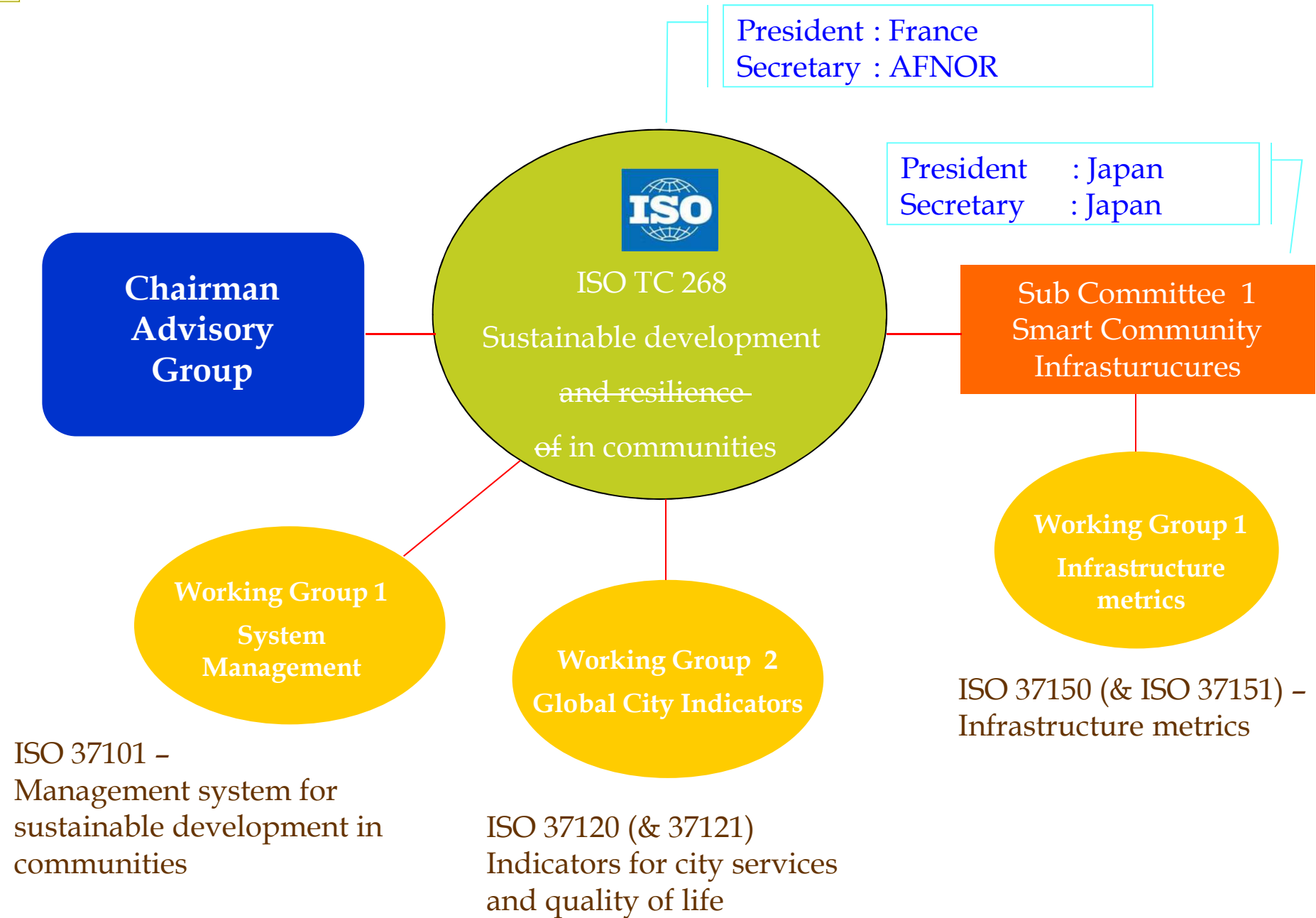
- Employment
- Business formation
- Income

Example of a list of structured sustainability issues

[Table A.1](#) contains the list of core subjects and issues that were developed through the stakeholder-based process which resulted in the publication of ISO 26000:2010.

Table A.1 — Core subjects and issues of social responsibility

Core subject: Organizational governance
Core subject: Human rights
Issue 1: Due diligence
Issue 2: Human rights risk situations
Issue 3: Avoidance of complicity
Issue 4: Resolving grievances
Issue 5: Discrimination and vulnerable groups
Issue 6: Civil and political rights
Issue 7: Economic, social and cultural rights
Issue 8: Fundamental principles and rights at work
Core subject: Labour practices
Issue 1: Employment and employment relationships
Issue 2: Conditions of work and social protection
Issue 3: Social dialogue
Issue 4: Health and safety at work
Issue 5: Human development and training in the workplace
Core subject: The environment
Issue 1: Prevention of pollution
Issue 2: Sustainable resource use
Issue 3: Climate change mitigation and adaptation
Issue 4: Protection of the environment, biodiversity and restoration of natural habitats
Core subject: Fair operating practices
Issue 1: Anti-corruption
Issue 2: Responsible political involvement
Issue 3: Fair competition
Issue 4: Promoting social responsibility in the value chain
Issue 5: Respect for property rights
Core subject: Consumer issues
Issue 1: Fair marketing, factual and unbiased information and fair contractual practices
Issue 2: Protecting consumers' health and safety
Issue 3: Sustainable consumption



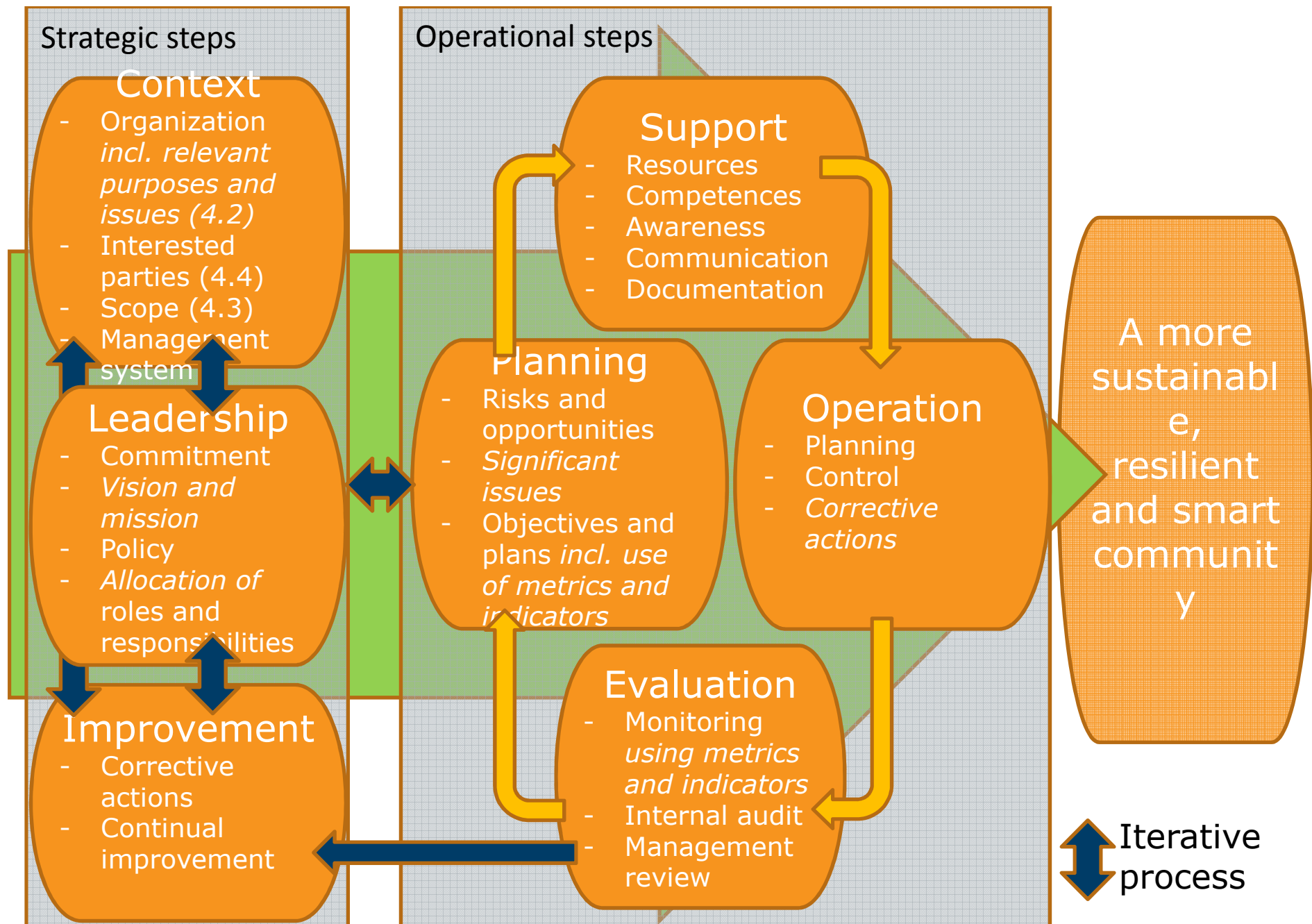
Diapositiva 18

14

The titles of SC1 and SC1/WG1 are updated as approved in the TC268 plenary meeting in Paris.

Takahiro

10776503; 11/10/2012



ISO 37101 Sustainable Development, Smartness and Resilience of communities — General principles and requirements — Management system standard

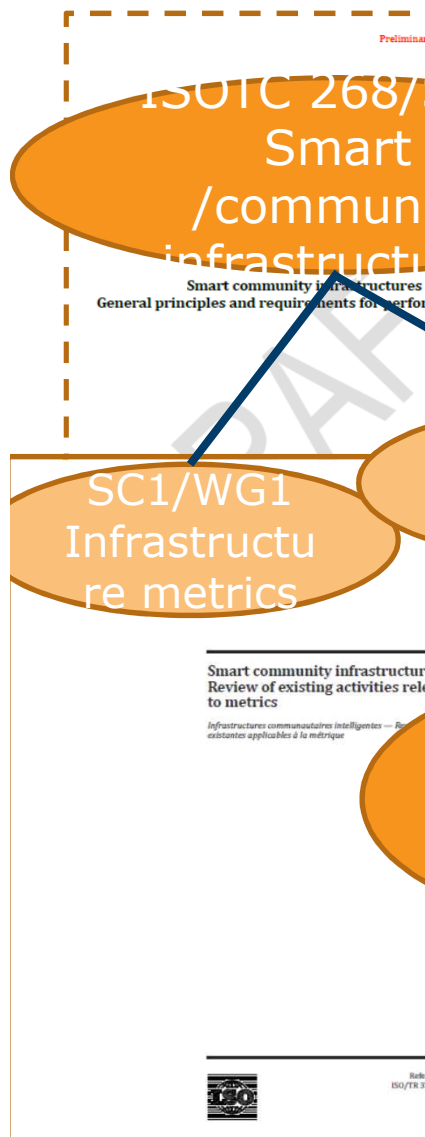


Figure 2 The family of ISO/TC 268. Full details indicate under development

1. Quality management system
2. Management responsibility
3. Resource management
4. Product/service realization
5. Measurement, analysis and improvement

INTERNATIONAL STANDARD

ISO
18091

First edition
2014-02-15

Quality management systems — Guidelines for the application of ISO 9001:2008 in local government

*Systèmes de management de la qualité — Lignes directrices pour
l'application de l'ISO 9001:2008 à la collectivité locale*



Reference number
ISO 18091:2014(E)

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ISO/TC 268
Sustainable
development in
communities

ISO 37120

Sustainable
development
of communities

Indicators for city services
and quality of life

ISO/TC
268/WG 3
Terminology

ISO
37102

Initiated
Vocabulary

Coordination...

ISO/IEC JTC 1/SG 1 on Smart cities

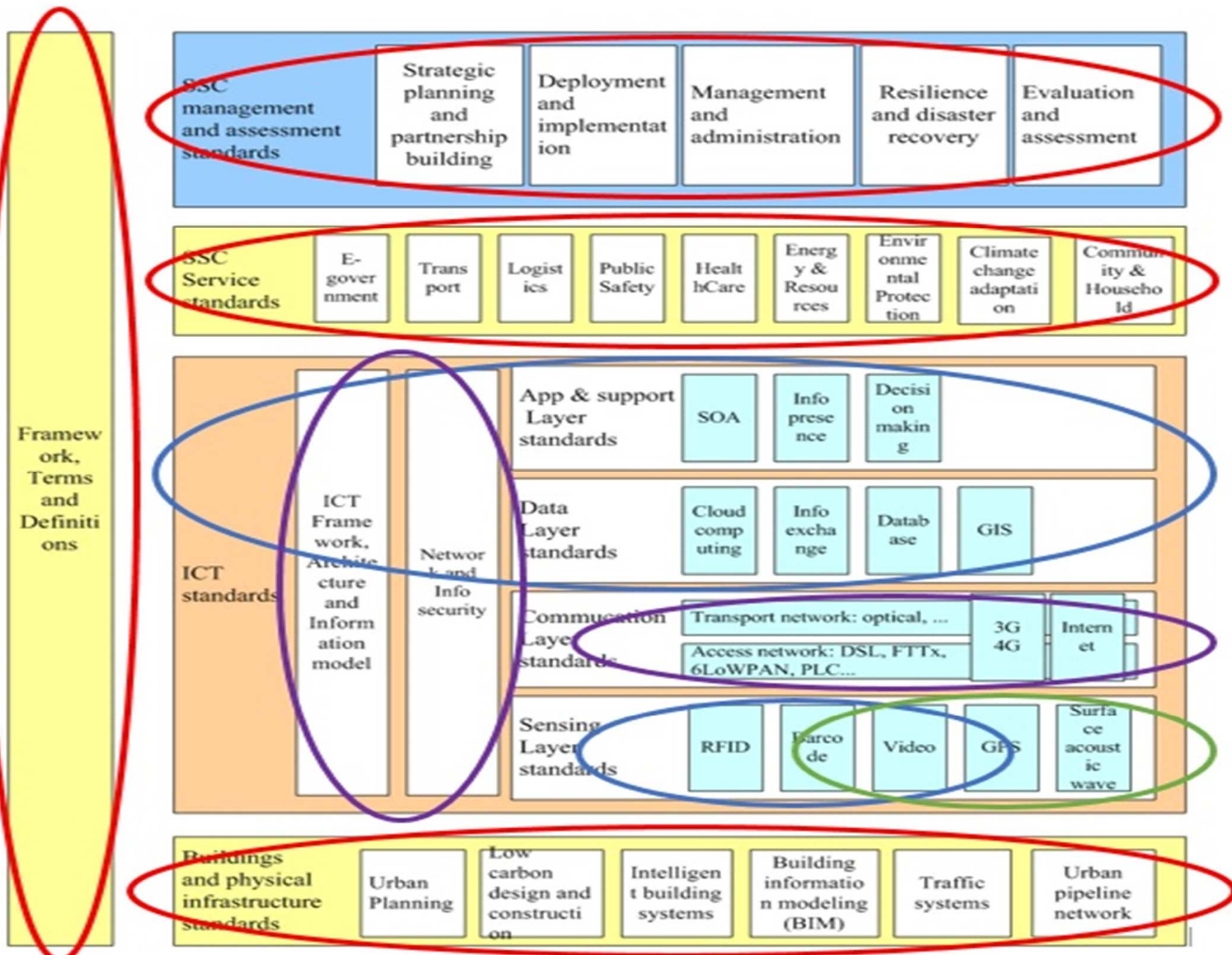
- Report on (ICT) standardization needs for Smart Cities (draft October 2014)

CEN/CENELEC/ETSI Smart and sustainable cities and communities coordination group (SSCC-CG)

- Established December 2012
- Mapping relevant initiatives at European and national levels
- Mapping stakeholders and interested parties in Europe
- Mapping of topics and issues
- Draft Road Map

ISO/TMB SMART CITIES STRATEGIC ADVISORY GROUP (S-C SAG)

- Propose a clear working definition of smart cities;
- Describe the smart cities landscape and identify the aspects of the smart city concept that are most relevant to ISO;
- Review the existing initiatives and standards activity in ISO;
- Develop a gap analysis to identify areas for standards development in ISO and areas for collaboration with other standards bodies, and
- Coordinate ISO input, and nominate experts



Ongoing standardization on SSCC

Organizations

- ITU-T
- IEC
- IEEE
- European Commission
- CEN/CENELEC/ETSI
- NIST (US)
- ANSI (US)
- BSI (UK)
 - BSI PAS180 Smart cities – Vocabulary
 - BSI PAS 181 Smart city framework – Guide to establishing strategies for smart cities and communities
 - BSI PAS 182 Smart City Data Concept Model
 - BSI PD 8100 on Smart City Overview – a guide for city managers
 - BSI PD 8101 Smart cities – Guide to the role of the planning and development process
 - BS 8904 Guidance for community sustainable development provides a decision-making framework that will help setting objectives in response to the needs and aspirations of city stakeholders
 - BS 11000 Collaborative relationship management
- ACR-NEMA (medicine)
- China
- Korea
- Germany
- ISO/TC 268, *Sustainable development in communities*
- ISO/TC 163 *Building environment design* and ISO/TC 205 *Thermal performance and energy use in the built environment*
- ISO/TC 257, *General technical rules for determination of energy savings in renovation projects, industrial enterprises and regions*
- ISO/TC 242, *Energy management*
- ISO/TC 59, *Buildings and civil engineering works*, subcommittee SC 14, *Design life*
- ISO/TC 223, *Social Security*
- ISO/TC 241, *Road traffic safety management systems*
- ISO/TC 204, *Intelligent transport systems*
- ISO/TMB, *ISO 20121:2012 and ISO 26000:2010*

smartness

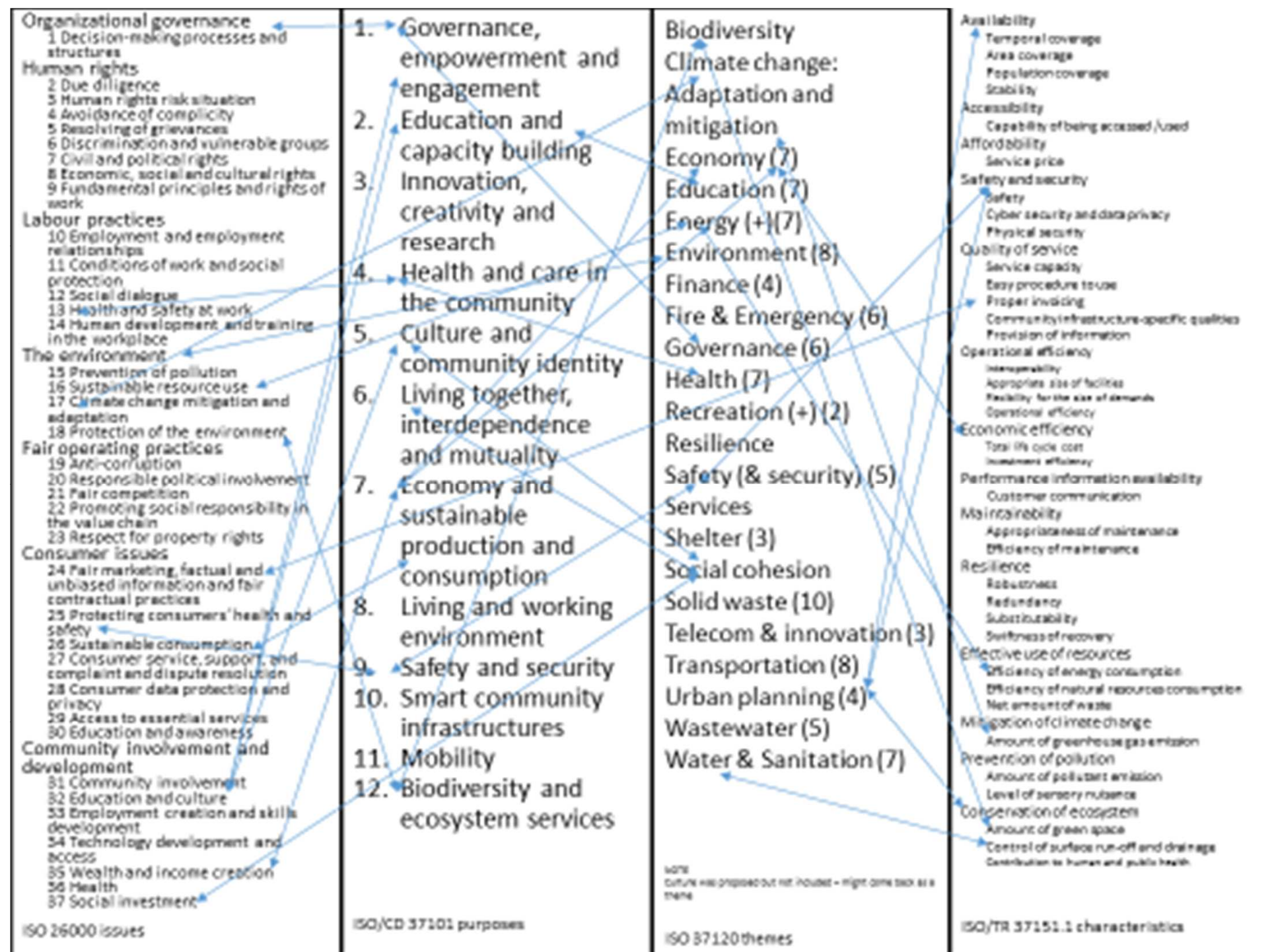
Smartness is a means to contribute to sustainable development and resilience through soundly based decision-making and the adoption a long time and a short perspective.

NOTE It implies an holistic approach, including good governance and adequate organization, processes and behaviours, and appropriate innovative use of techniques, technologies and natural resources

community

group of people and organizations with an arrangement of responsibilities, activities and relationships

NOTE: a community might not be in the same geographic area



Conclusions

- Every region, city or town like to develop their own “standard”
- There are already many initiatives
- ISO etc. offers multistakeholder involvement and consensus oriented process
- Sustainable, smart, city and community still to be defined – and definitions to be accepted
- ISO 26000 is the best offer on a list of sustainability issues
- Most human beings don’t know and don’t care about standards
- The interactions between the three pillars of sustainability should also be included, not the individual pillars per se
- The overall protection areas are people (human health) and planet (natural environment and natural resources) – profit is a mean – and profit should be understood as societal economy, not only as private economy – stock exchange is not leading to sustainability

"New" indicators in ISO 37120

- Number of volunteer and part-time fire-fighters per 100,000 population
- Number of natural disaster-related deaths per 100,000 population
- Response time for emergency response services from initial call
- Suicide rate
- Crime against property
- Response time for police department from initial call
- Collected municipal solid waste per capita
- Modal split (percentage of commuters using a travel mode other than a personal vehicle)
- Km of bicycle paths and lanes per 100,000 population
- Percentage of total energy derived from renewable sources, as a share of the city's total energy consumption
- Energy consumption of public buildings
- Women as a percentage of those elected to city-level office
- Number of convictions for corruption/bribery by city officials
- SO2 emissions
- NO2 emissions
- PM 2.5
- Percentage change in number of native species

Principles of social responsibility and quality vs purposes of management system

ISO 26000

- Accountability
- Transparency
- Ethical behaviour
- Respect for stakeholder interest
- Respect for the rule of law
- Respect for international norms of behaviour
- Respect for human rights

ISO/DIS 9000

- Customer focus
- Leadership
- Engagement of people
- Process approach
- Improvement
- Evidence-based decision making

ISO/CD 37101

- Attractiveness
- Social cohesion
- Well-being
- Resilience
- Responsible resource use
- Preservation and improvement of the environment

Discussion

Aalborg Commitments

Principles

- to keep the rate of consuming renewable material, water and energy resources without exceeding the rate at which the natural systems can replenish them,
- to keep the rate of consuming non-renewable resources without exceed the rate at which sustainable renewable resources are replaced.
- to keep the rate of emitted pollutants without exceeding the capacity of the air, water, and soil to absorb and process them
- to maintain biodiversity; human health; as well as air, water, and soil qualities at standards sufficient to sustain human life and wellbeing, as well as animal and plant life, for all time.

Implementation of principles

- base their work on co-operation between all actors involved,
- work with all interested groups - citizens, businesses, other interest groups
- recognize the responsibility for the implementation of sustainable development to be shared among all sectors of the community
- ensure that all citizens and interested groups have access to information and are able to participate in local decision-making processes and
- seek opportunities for education and training for sustainability.

Aalborg process

- Aalborg Charter (1994) - first European Conference on Sustainable Cities & Towns – signed by 3000 local communities in 40 countries
- Aalborg Commitments (2004) - 4th European Conference on Sustainable Cities & Towns – list of 10 qualitative objectives – signed by 700 cities and towns
- 1. [Governance](#)
- 2. [Urban management](#)
- 3. [Natural common goods](#)
- 4. [Responsible consumption](#)
- 5. [Planning and design](#)
- 6. [Better mobility](#)
- 7. [Local action for health](#)
- 8. [Sustainable local economy](#)
- 9. [Social equity and justice](#)
- 10. [Local to global](#)