International Standards – A vital tool to assess and manage risk in daily life and in business

UNECE - International Conference on Risk Assessment and Management

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Geneva, Switzerland
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Outline

- Standards in our daily lives
- Standards, business and risk
- ISO Standards in business management and the management of risk
- Risk management - Principles and guidelines of ISO 31000:2009
- For example
Standards – helping with solutions to global Risks
Standards – Helping to manage Risks in Daily Life

One-stop-shop for a smooth ride

Hundreds of ISO standards routinely contribute to reducing injury and death on the world’s roads. Below are just a few examples.

Driver risks
Visual demand (ISO 16970)
Suitability of information and control systems (ISO 17257)

Fuel safety (ISO 15801)

Tyres and rims
Capabilities (ISO 16191)
Wet grip (ISO 23571)
Pre-assembly monitoring (ISO 21790)

Pedestrian protection
Head collision test (ISO 6218, ISO 6219)
Biodynamic properties (ISO 9869)

Brakes
Brake performance (ISO 13631)

Motocycle
Rider crash protection (ISO 12252)

Seat belt anchorage (ISO/TS 14117)

Airbag testing (ISO 12087)

Seat belt anchorage (ISO/TS 14117)

Brakes
Quality assurance (ISO 13404)
Tests (ISO 6567)

Sight for snowplough (ISO 26681, ISO/TS 25199, ISO TR 25198)

Injury prevention
Vehicle impact (ISO 34827), Occupant restraint performance (ISO 6648)
Injury risk assessment (ISO/TR 12681), Traffic accident analysis (ISO 12959)
Neck injury criteria (ISO/TS 12950)

Heavy commercial vehicles
Brakes (ISO 26918, ISO 21066)
Obstacle detection (reversing) (ISO/TS 12560)

Pneumatic devices (e.g. for releasing airbags, protection of actuators)
Performance (ISO 10097)
End of life activities (ISO 20020)
Functional safety (ISO 26262)

Lighting and signalling
ISO 13088

Protective glazing (ISO 15098)

ISO 15198

* under development
** multi-part standard
Business and risk management ... Standards support and enhance business ... Everywhere!

Access to global procurement markets
- Lower transaction cost
- Consistent quality
- Transparency
- Economies of scale

Value Chain
- Inbound logistics
- Production
- Outbound logistics
- Marketing
- Service

Other supporting functions
- Research and Development
- Procurement

Facilitates inter-action with public stakeholders, regarding compliance (e.g., safety, health, environment)

Easier cooperation with other companies on common basis

- Simplified service
- Broader markets
- Broader customer base
- Lower pressure on price
- Lower transaction costs
Pressures (opportunities!) on business - There are many things a Manager in a business must consider. What and where are the risks / opportunities?
What is “risk”? 

- Organizations of all types and sizes face internal and external factors and influences that make it uncertain whether and when they will achieve their objectives.
- The effect this uncertainty has on an organization's objectives is “risk.”
- All activities involve risk.
Is all risk equal? Should we treat different risks differently?

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<th>Unlikely</th>
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Likelihood:
- Almost certain
- Possible
- Unlikely
- Rare
- Almost incredible

Consequences:
- Insignificant
- Minor
- Moderate
- Major
- Catastrophic
Risk management

- Organizations manage risk by **identifying** it, **analysing** it and then **evaluating** whether the risk should be modified by risk treatment in order to satisfy their risk criteria.

- Throughout this process, they communicate and consult with stakeholders and monitor and review the risk and the controls that are modifying the risk in order to ensure that no further risk treatment is required.

The design and implementation of an organization's quality management system is influenced by:

- its organizational environment, changes in that environment, and the **risks** associated with that environment
- its varying needs
- its particular objectives
- the products it provides
- the processes it employs
- its size and organizational structure
Risk management process

- Establishing the context
- Risk assessment
  - Risk identification
  - Risk analysis
  - Risk evaluation
  - Risk treatment
- Communication and consultation
- Monitoring and review
ISO 31000:2009 - Risk management - Principles and guidelines - Key Features

- Published 15 November 2009 with ISO/IEC Guide 73: Risk management - Vocabulary
- Applicable to part or an entire organization, to any public or private or community enterprise, association, group or individuals
- Applicable to any type of risk
- Develop, implement and continuously improve a framework to integrate the process for managing risk into the organization's overall governance, strategy and planning, management, reporting processes, policies, values and culture
- Provides principles and guidelines for managing any form of risk in a systematic, transparent and credible manner
- Describes systematic and logical process in detail
ISO 31000:2009 – Principles

Risk management

- creates and protects value
- is an integral part of all organizational processes
- is part of decision making
- explicitly addresses uncertainty
- is systematic, structured and timely
- is based on the best available information
- is tailored
- takes human and cultural factors into account
- is transparent and inclusive
- is dynamic, iterative and responsive to change
- facilitates continual improvement of the organization
ISO 31000:2009 – Who can benefit?

- Those responsible for developing risk management policy within their organization
- Those accountable for ensuring that risk is effectively managed within the organization as a whole or within a specific area, project or activity
- Those who need to evaluate an organization's effectiveness in managing risk
- Developers of standards, guides, procedures and codes of practice that, in whole or in part, set out how risk is to be managed within the specific context of these documents
An example where risk management might have helped

“Troubled waters for drinks giant

- Coca-Cola executives were supremely confident that their stylish purified water product Dasani – which its marketing brainiacs believed suggested relaxation, pureness and replenishment – would be a runaway success in the UK. After all, five years after its launch in the US, Americans were guzzling 1.3bn litres of the stuff each year.

- However, the bubble burst for Coca-Cola, which invested $13m on the UK launch, when it emerged that the factory in Kent which made Dasani used ordinary tap water as the source.

- Thames water added to the sense of public outrage by mentioning that it charged just 0.03p for the same quantity as that contained in Dasani’s 95p half-litre trendy blue bottle. The final humiliation came via the discovery that samples of the water inadvertently contained up to 22 micrograms per litre of bromate, a carcinogen, which is more than double the limit permitted in the EU.

- Within weeks of the launch, Dasani was pulled from UK shelves and plans to roll it out in Germany and France, were, well, put on ice.”

extract from http://www.guardian.co.uk/business/2007/dec/27/topfivedisasters
An example where risk management has helped

ISO Central Secretariat escalation plan in the event of H1N1 pandemic

**Level 0**: business as usual

**Level 1**: communication, putting in place hygienic preventive measures

**Level 2**: up to 19 sick/absent staff members:
- meeting of the crisis committee at the first confirmed case of the illness
- activation of the crisis committee and monitoring of the pandemic’s evolution
- contact with the sanitary authorities

**Level 3**: as from 20 sick/absent staff members
- continued monitoring of the pandemic’s evolution
- reinforcement of the hygienic preventive (cleaning) measures

**Level 4**: on decision of the sanitary authorities
- closure (7 days) of the Central Secretariat
- functioning of ISO/CS with a limited number of nominated staff members
An example where risk management could help
What needs to happen in the aftermath of the economic crisis?

Risk assessment
- Risk identification
- Risk analysis
- Risk evaluation
- Risk treatment

Establishing the context

Communication and consultation

Monitoring and review
Conclusion

- All activity involves risk – opportunity for business, integral part of business
- Risk management should therefore be an integral part of management of the business
- ISO standards are pervasive and assist business – new ISO Standard on Risk Management (ISO 31000:2009) designed to be integrated into the management systems of business
THANK YOU!

http://www.iso.org

"We've considered every potential risk except the risks of avoiding all risks."