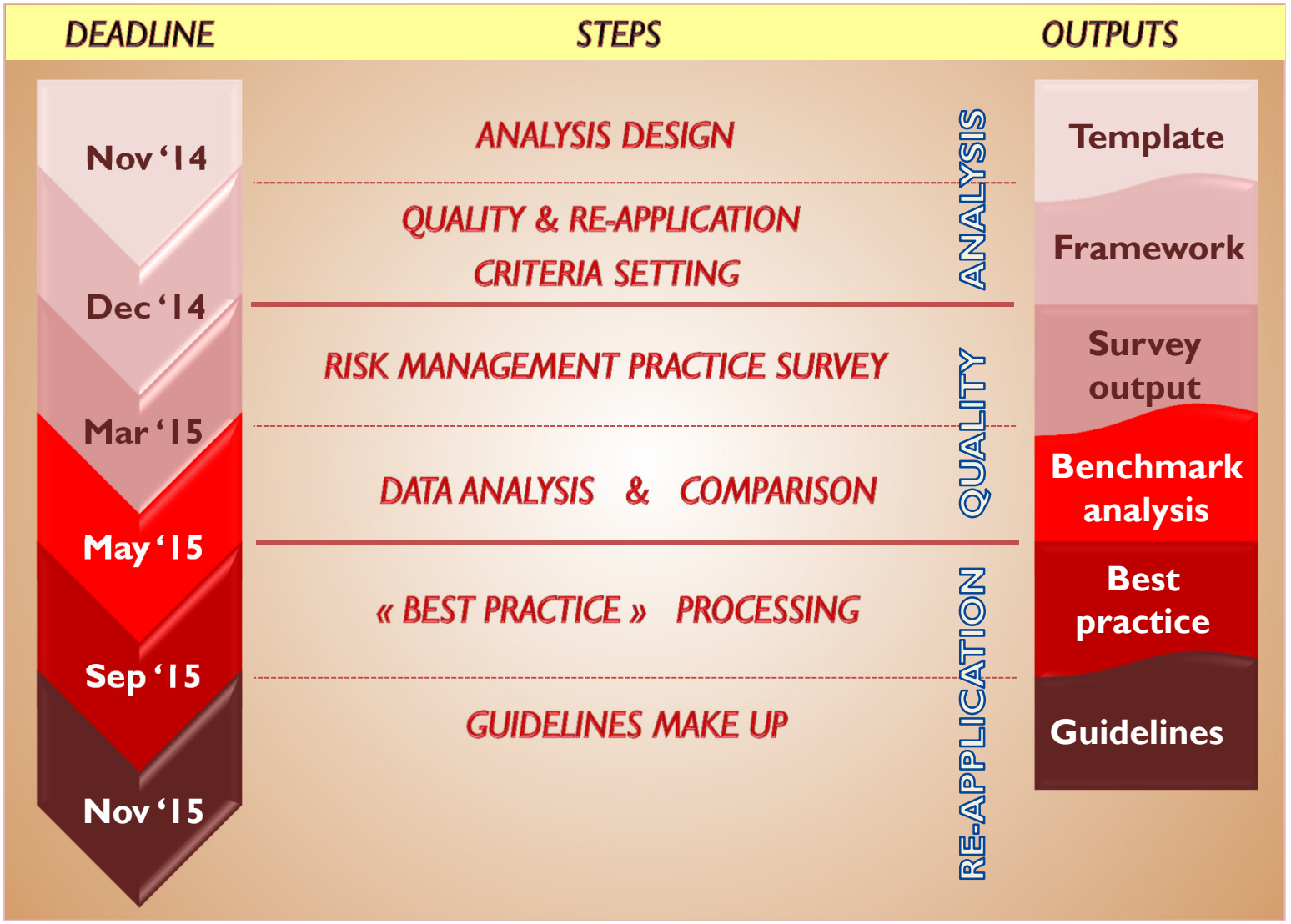
WORKSHOP ON RISK MANAGEMENT
SYSTEMS AND PRACTICES

Guidelines on Risk Management practices among statistical organisations

Genève, 25-26 April 2016

Road map proposal for developing Risk Management among statistical organisations



Project subdivisions and links among output variables

3 READING-KEY CRITERIA

To analyse the experiences

- *Risk Rationalities* (*processes*)
- *Uncertainty Experts* (*roles*)
- *Technologies* (*support*)

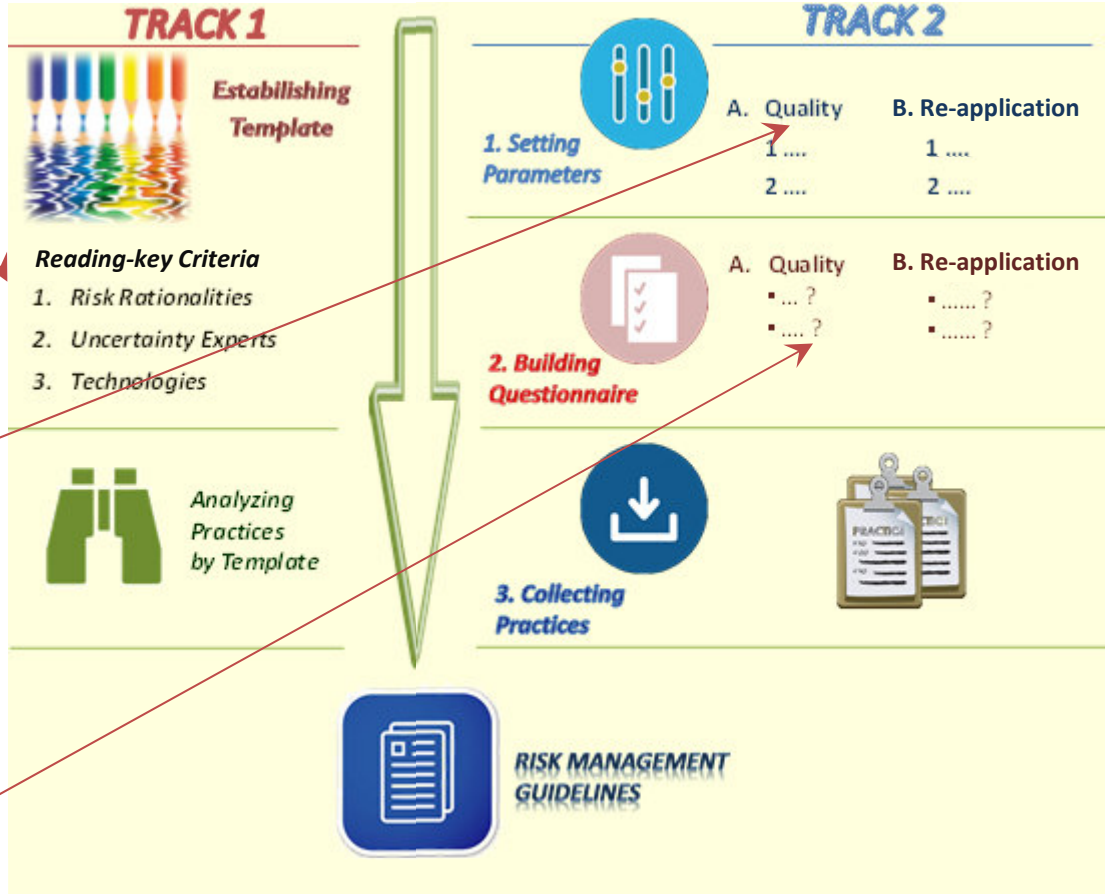
2 PARAMETERS

To elaborate the questionnaire

- *Quality* (*development*)
- *Re-application* (*adaptability*)

SEVERAL FACTORS *describing each parameter*

To set the questions



Method: the procedure

The methodological approach for data analysis is involving a **multi-phase** procedure:

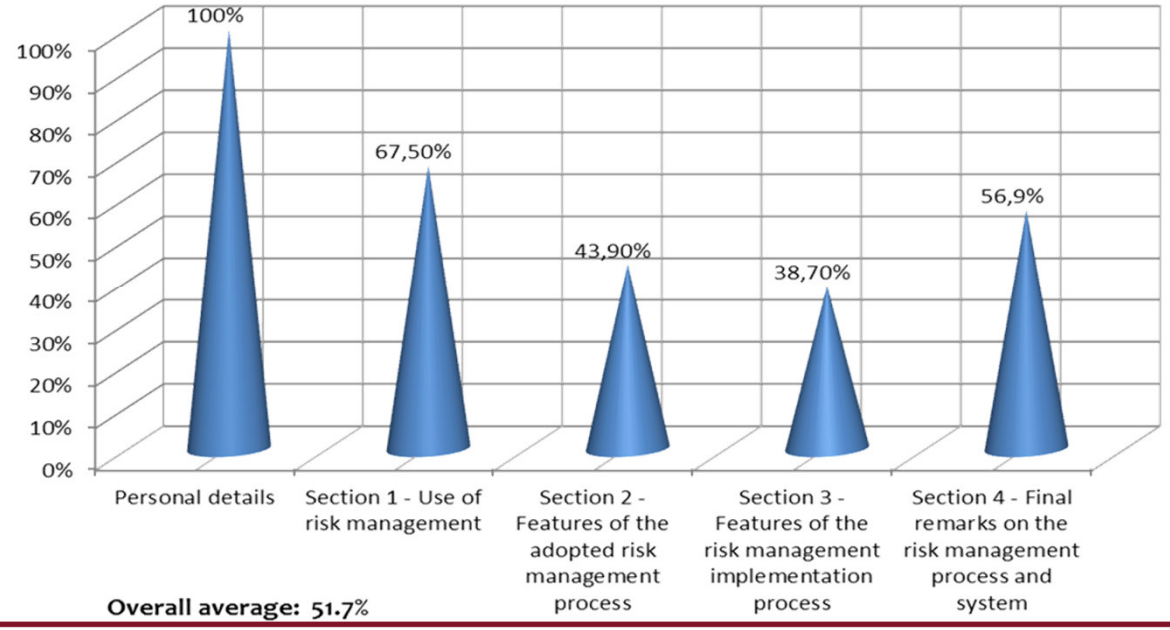
1. • **Carrying out the surveys to detect how many Countries can be profitably analysed and which of them**: Question n. 4 has been used as a filter ("Is there a strategy to effectively manage uncertainties and related threats and opportunities in your organizations?")
2. • **Leading the Items** (representing consistent sets of significant features for analysis, i.e. "Training & Communication") back to the three Reading-keys (Risk rationalities, Uncertainty experts, Technologies) used in the Survey design phase.
3. • **Defining Item parameters and making up descriptors** that allow the former to be allocated among the three levels Low-Medium-High.
4. • **Allocating descriptors and Countries within a conceptual chart** crossing the dimension which shows the different levels of DEVELOPMENT (Low-Medium-High).
5. • **Detecting the practices that can actually be implemented** through evaluating their Re-application, based on the «Adaptability» criteria, that is the practice ability to be transferred to other organizations without needing any specific actions or tools.
6. • **Identifying the Best Practices** (both Country and process ones) through: i. their Re-application level; ii. their development level; iii. their actual use, that is, the recurrence of isolated strategic behaviors throughout the sample.
7. • **Analysing the practice internal consistency** by bridging back the answers provided by the Countries.

First Survey (May 2015) - Statistical analysis

1. **Objective:** The survey aims at collecting information on the RM approaches that can be useful to establish a suitable reference for statistical organisations interested in implementing RM
2. **Structure:** The survey contains four sections composed by a total of 53 questions
3. **Target-audience:** NSOs members of UNECE and other statistical organisations

Involved Institutes and Organizations	**64**
Respondents	**34**
Overall Redemption	**53,1%**
Anonymous	**5**
Double responses	**2**
Total of valid responses	**29**
Redemption of valid responses	**45,3%**
Countries recognizable	**27**
Redemption of countries recognizable	**42,2%**

Respondents: Overall average by section



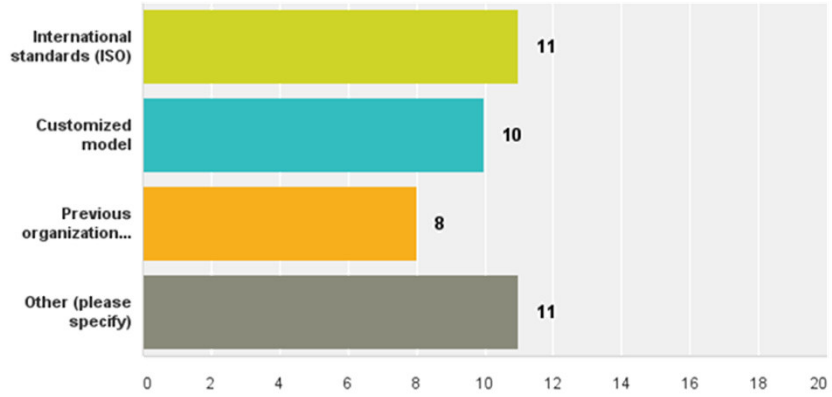
Overall average: 51.7%

Respondent 7 (EU) Romania:

"The risk management process is mainly influenced by the national norms and regulations. In our approach we look to integrate it with the specificity of statistical production process. One direction for more efficient risk management is ***to integrate it in GAMSO****".*

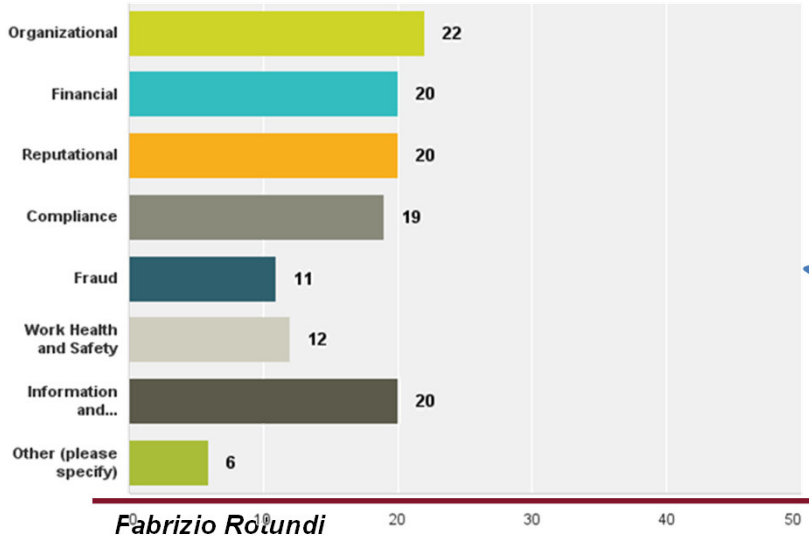
Q18 What inspired your organization's adopted approach to risk management? (Select all that apply.)

Answered: 24 Skipped: 10



Q17 In your organization, what kinds of risks are addressed by the risk management process? (Select all that apply.)

Answered: 24 Skipped: 10



Respondent 9 (EU) Ireland:

"Organizational, Financial, Reputational, Compliance, Legal and Regulatory, Interagency Dependance, Loss of Personnel, ***Morale and Change Management***

Survey (phase 2): Defining *Item parameters* and *Descriptors*

Items represent consistent sets of significant features for analysis (i.e. "Risk Framework") complying with the 3 Reading-keys *(Risk rationalities, Uncertainty experts, Technologies)* identified in the Survey design phase.

Parameters and Descriptors allow allocation of the countries among the levels Low-Medium-High.

READING KEYS	ITEMS	ITEM PARAMETERS	DEVELOPMENT		
			Low	Medium	High
RISK RATIONALITIES *	Risk Framework	*Attitude towards uncertainties*	Either preventative or ex-post control system	Both preventative and ex-post control system	Both preventative and ex-post control system involving a specific audit unit
		Approach to RM	Previous organizational practice	International standards (ISO, COSO, ecc)	Customized model
UNCERTAINTY EXPERTS **	Organizational chart	*RM function in the organization chart*	Neither a RM Unit nor a board entity deciding on RM exists	Either a RM Unit (included in the Organization chart) or a board entity deciding on RM exists	Both a RM Unit (included in the Organization chart) and a board entity deciding on RM exist
TECHNOLOGIES ***	Human Resources	*Human resource adequacy*	HR are either not suitable or not yet evaluated	HR are quite suitable	HR are suitable

** Internal/external context, Risk Framework and Process*
*** Actors, roles, structures*
**** Practices, Procedures &Tools*

In-Depth Surveys on Risk Management, Change management and Modernisation practices

Q52: What are the most important lessons learned from implementing risk management in your organization that other organizations should take into account when developing their own risk management processes?

Respondent 7 (EU) Romania:
*"Many **projects related to GSBPM, GAMSO, QAF and risk management are in progress** or finalized either under UNECE or Eurostat initiatives. Their value is undisputable, but, **some additional actions would be required**, mainly in **assisting Statistical offices to implement results**."*

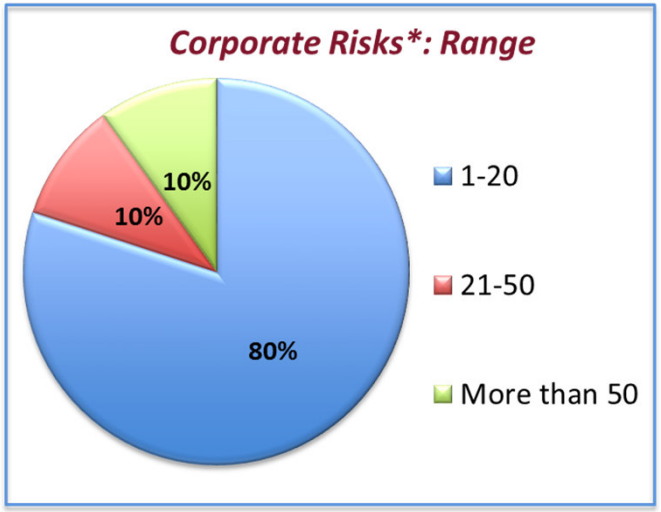
Q18: Is there an application (toolkit / digital dashboard) to support the RM process in your Organization?

Respondent 9 (Non-EU) Canada:
*"A **management tool** for all current projects is used by project managers **to manage their changes, issues, and risks throughout the life cycle of their project**. The implementation of the corporate tracking tool provides a consistent **approach to management for all projects and establish a centralized service.**"*

Q10: With reference to the risk measurement phase, does your Organization use different techniques concerning risk classification (IT, financial, compliance, etc.)?

Respondent 8 (Non-EU) Australia:
*"There are qualitative measures for assuring quality for most statistical output. The NSI has expanded its focus on **managing statistical risk to include a more holistic assessment of risk in statistical areas that can affect data quality as well as managing stakeholder relationships**, the impact of change programs and workforce capability."*

Second Survey - Quantitative Results



The points highlighted by the **general trend** are:

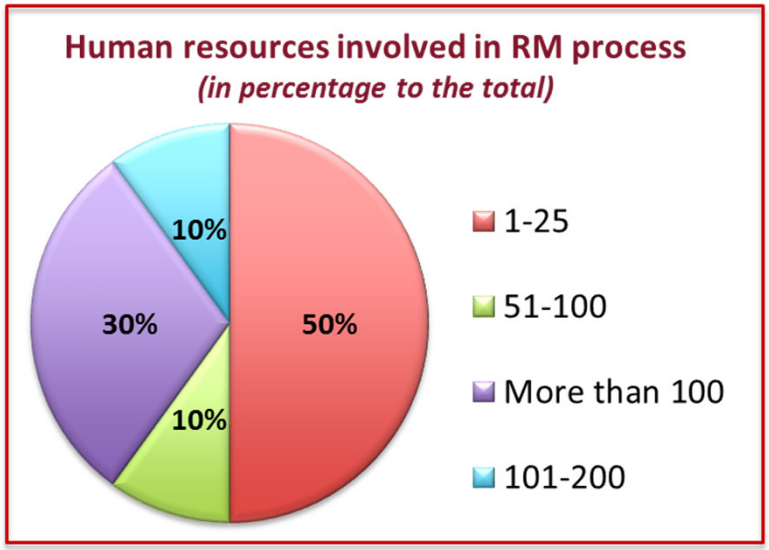
- **corporate risks*** *(strategic, cross-cutting, most common, ...)* are lower than **operational ones**;
- the **absolute number** of corporate risks varies depending on the risk policy (*top-down vs bottom-up approach*)

In terms of percentage of total, **statistical risks are the majority**, followed by organisational risks.

Other risks arisen are: financial, ICT, reputational, security ones.

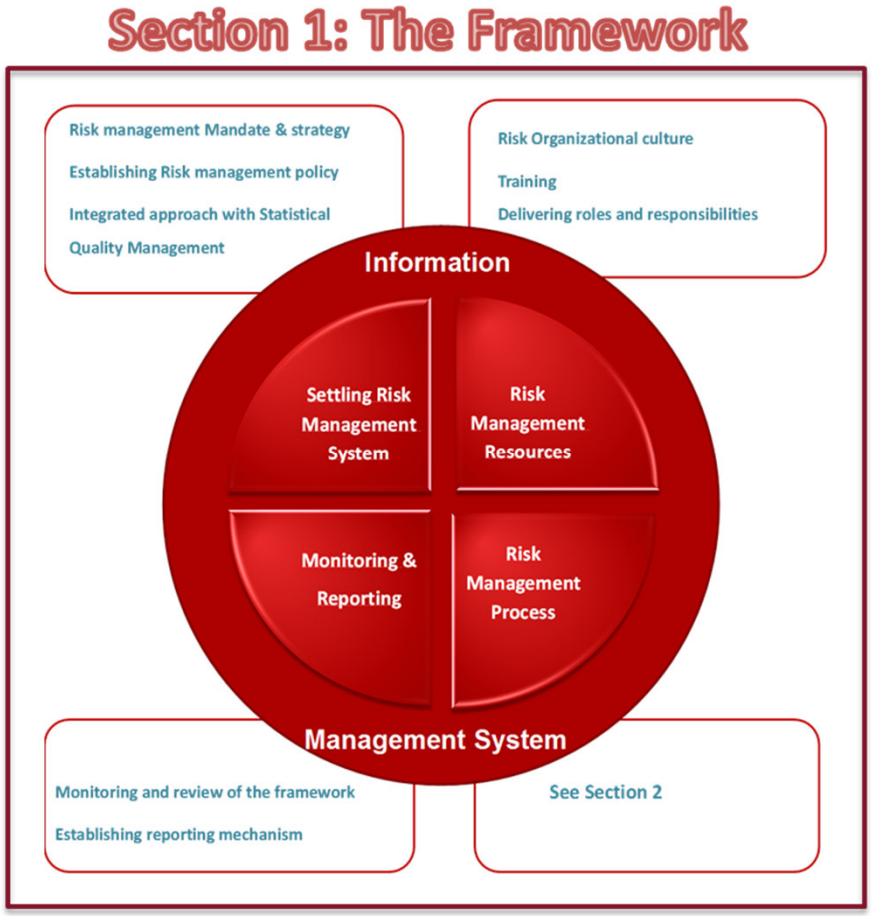
Approximately **one third** of respondent countries shows a **not-negligible pervasiveness** of the Risk Management process within the organisational structures.

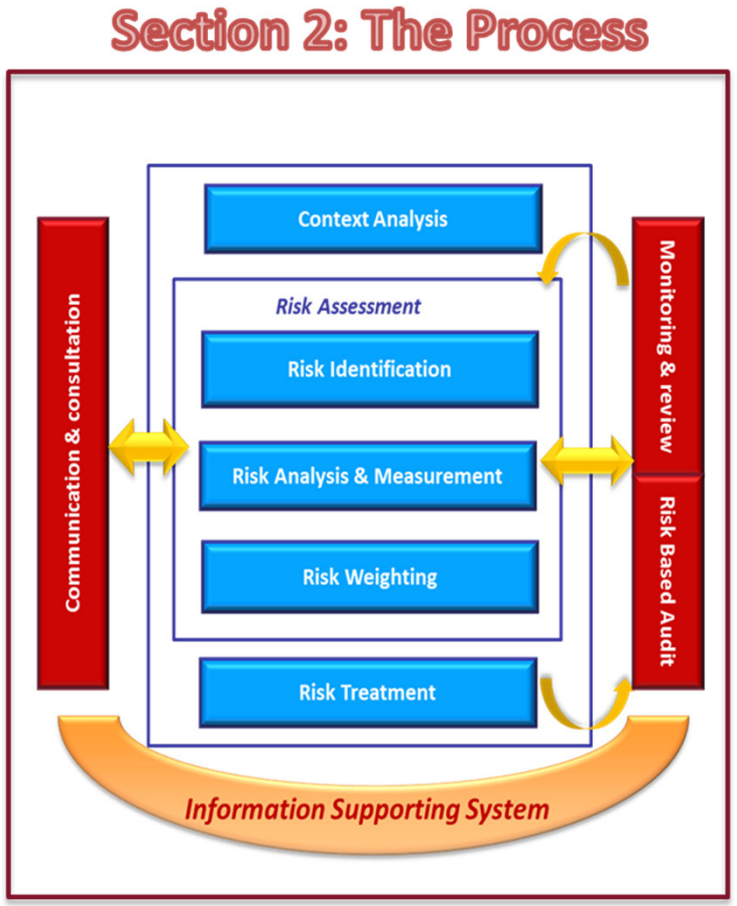
The **high percentage** of respondent countries with **trained specialists** underlines an organizational culture that, as regards Risk Management, is under a significant and ongoing development.



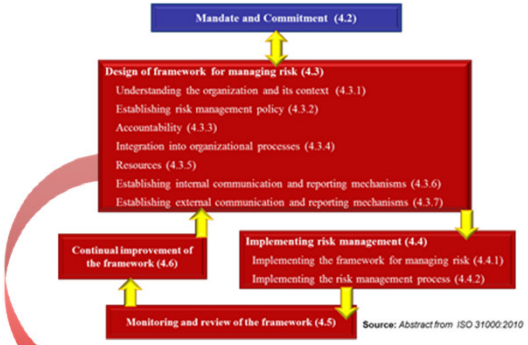
The Guidelines: **Section 1** - ***The Risk Management Framework***

The draft consists of two sections that comply with the Risk Management standard ISO31000/2009: **Section 1** investigating the ***Risk Management system***; **Section 2** focusing on the ***Risk management process***.





The Framework: Policy, Accountabilities and Integration



ISO 31000:09: The **risk management policy should clearly** state the organization's objectives for, and commitment to, risk management.

The organization should ensure that there is **accountability, authority and appropriate competence** for managing risk.

Risk Management should be **embedded** in all the organization's **practices** and **processes** in a way that is relevant, effective and efficient

PRACTICE: *"**The risk appetite** [..] will only tolerate High or Extreme risks when treatment measures are unable to reduce the level of inherent risk to an acceptable level." [..] "Better quality management practices has been endeavored through the development and use of the risk mitigation strategy known as **quality gates**."*

*"The **leadership of governance system** is provided by the Executive Management Board […]. Directors, Assistant Directors, Chiefs and Unit Heads (Divisions) are owners of Operational risk and Project risk registers. All Other Staff are responsible for identification, documentation and management of operational and project risks."*

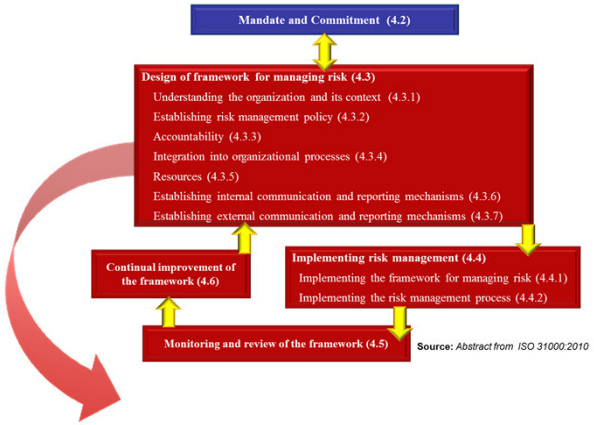
*"**Object Oriented Quality and Risk Management** (OQRM) model is a quality framework developed [..] statistics in order to improve compliance with the European Code of Practice and deal with quality standards of statistical output."*

GUIDELINES: Risk philosophy (as feature of risk strategy) and risk appetite (as feature of risk policy) should be always kept aligned.

A. The Chief Statistician is responsible for ensuring an effective RM.
B. The Risk Committee is responsible for: …..
C. The Risk Manager is responsible for: …
D. ….

Statistical risks (i.e. the possibility that one or more of the production process components fail to meet the quality standard) are unavoidably managed at all levels (strategic, operational and project ones), [..] even when they are managed separately they should eventually be integrated into an organizational risk framework.

The Framework: Human Resources and Training



ISO 31000:09: The organization should allocate appropriate resources for risk management.

Consideration should be given also to training programs.

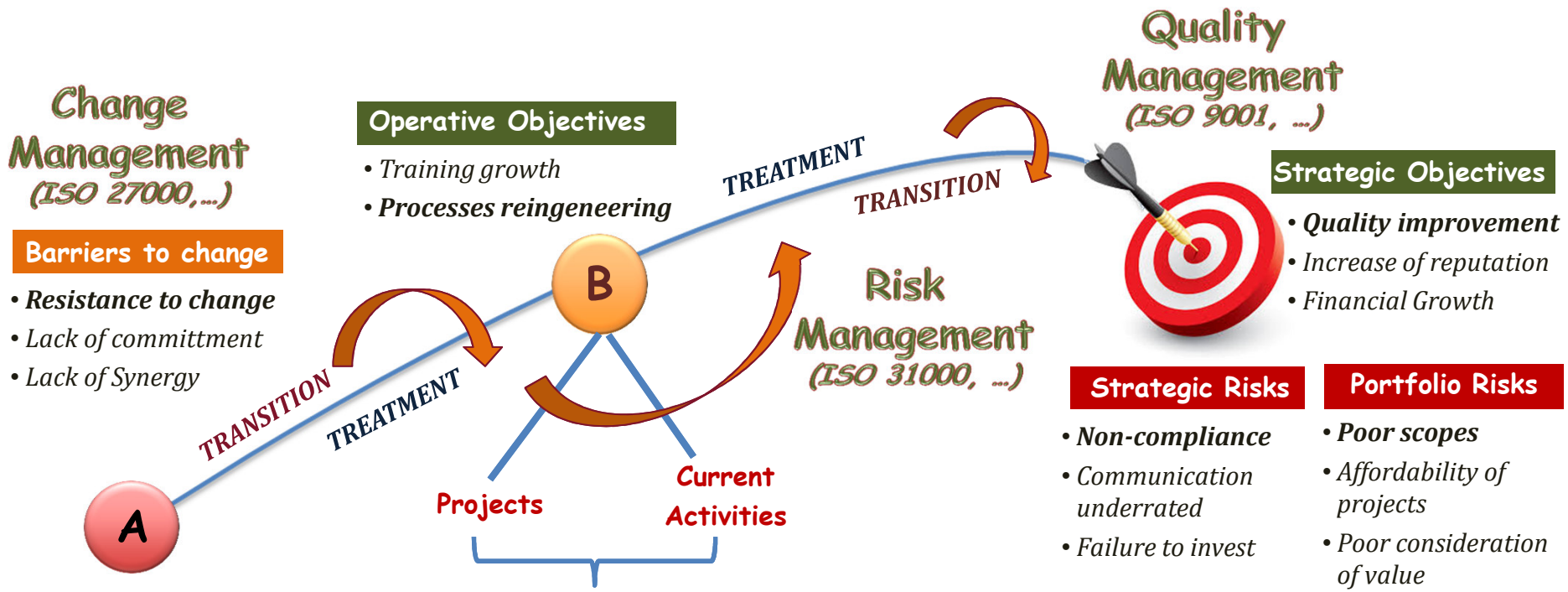
PRACTICE: *"**Yearly training on Risk Management and Internal Control System** with an external expert is organized. A presentation of the Risk Management system is provided to all new staff members within Statistics Austria's general training programme (half-yearly)"*

*"The **Risk Management Training program** involves General control system training, quality management issues, internal auditing of QMS; up to 10% of staff have been trained on Risk Management so far."*

*"A **specific training program on risk management** issues has been envisaged and addressed to all employees".*

GUIDELINES: It is advisable to start training with a program devoted to managers and employees assigned to run risk management matters at different levels; it would be best if kick-off training activity focuses first on higher-risk areas. It is also important to carry out training initiatives regularly, in accordance with risk management system development, as well as concurrently with significant organizational changes.

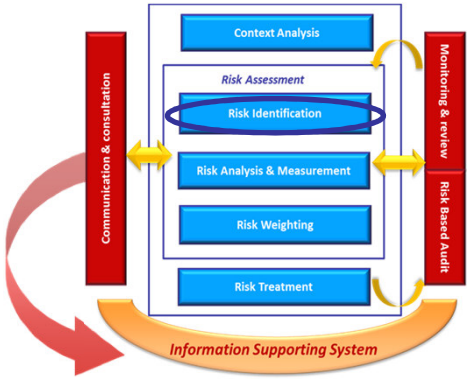
The «Risk-Based thinking»: from the Framework to the Process



Green: Framework
Red: Process

*Risks related to specific projects' and/or activities' objectives

The Process: Risk Identification and Assessment



ISO 31000:09: The organization should define criteria to be used to evaluate the significance of risk

The organization should identify sources of risks, areas of impacts, events (including changes in circumstances), their causes and their potential impacts

The purpose of risk evaluation is to assist in making decisions, based on the outcomes of risk analysis, about which risks need treatment and the priority for treatment implementation

PRACTICE: *"**Risks are identified by accountable managers** and then gathered in strategic categories (corporate risks), in order to be assessed, treated and monitored, based on: Monitoring risk treatments through specific indicators; Organizational sustainability; Cross-cutting treatments; **priority areas**".*

*"Risk identification, analysis and management are practices aim at anticipating and removing the obstacles that may prevent the achievement of strategic objectives. **3 levels of risks [..] have been identified**: **1. Risks associated to the ESS Vision 2020** [..]**; 2. Portfolio management risks; 3. Project related risks**".*

eurostat

*"**The risk management matrix is a tool** developed in for identifying, analyzing, evaluating and treating risks. This tool allow to incorporate process data, participants in this activity and shows preloaded content to facilitate their operation".*

GUIDELINES:

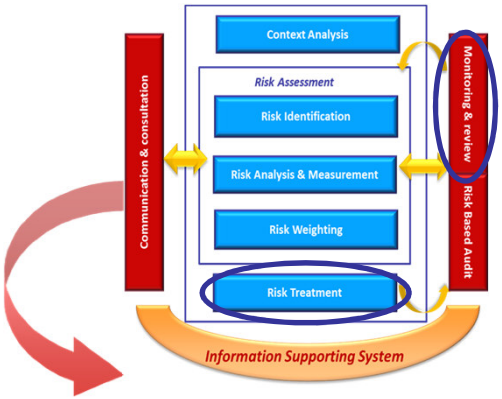
The coordination of Risk Management process phases is centralized […].

Three kinds of approach can be followed in identifying risks: Top-Down; Bottom-Up; Mixed.

The RM framework includes a hierarchy of risks: A) Enterprise, by Executive Managers: *compliance, emerging markets…*; B) Operational Risks, by line managers: *inappropriate skills mix; budget cuts*; C) Project Risks, by project risk manager: *poor scope; quality requirements not clearly specified* .

The purpose of risk weighting is to ensure that use of resources will be focused on the most important risks. A common approach to prioritize risks is to divide them into three bands: Upper, where [..] risk treatment is essential whatever its costs; Middle, where costs and benefits are taken into account [..]; Lower, where the level of risk is regarded as negligible [..].

The Process: Risk treatment and monitoring



ISO 31000:09: The information provided in risk treatment plans should include also those who are accountable for approving the plan and those responsible for implementing the plan.

Both monitoring and review should be a planned part of the risk management process and involve regular checking or surveillance. Responsibilities for monitoring and review should be clearly defined.

PRACTICE: *"**Risk treatment** [..] is assigned to managers and **followed up (annually or bi-annually by the board of directors)**. [..]. The treatment is assigned to person responsible for implementing the treatment as a part of normal operations or if that is not possible a separate implementation plan is to be prepared"*

*"**Directors/division chiefs** (Risk owners) propose response actions **validated by the Risk Manager**. Governance select the actions after defining their significance on a priority basis (risk strategic area, risk value, feasibility) and entrust them to the executives.*

*"Risks and treatments are included in the regular **follow up of operations after each 4 month** period with focus on effectiveness and deviations from plan".*

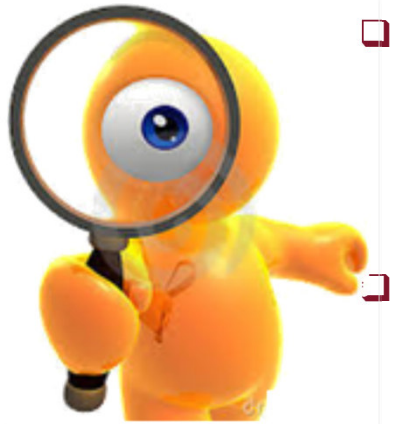
GUIDELINES:

Responsibilities related to the treatment phase should be clearly assigned specifying who is accountable for the management of particular risks or categories of risk, for implementing treatment strategies and for the maintenance of risk controls.

The overall responsibility for monitoring and review activities relies on the board and top management. Operational risks are monitored at business unit level, project risks are monitored within the Project Management system, and corporate risks are monitored by Senior managers.

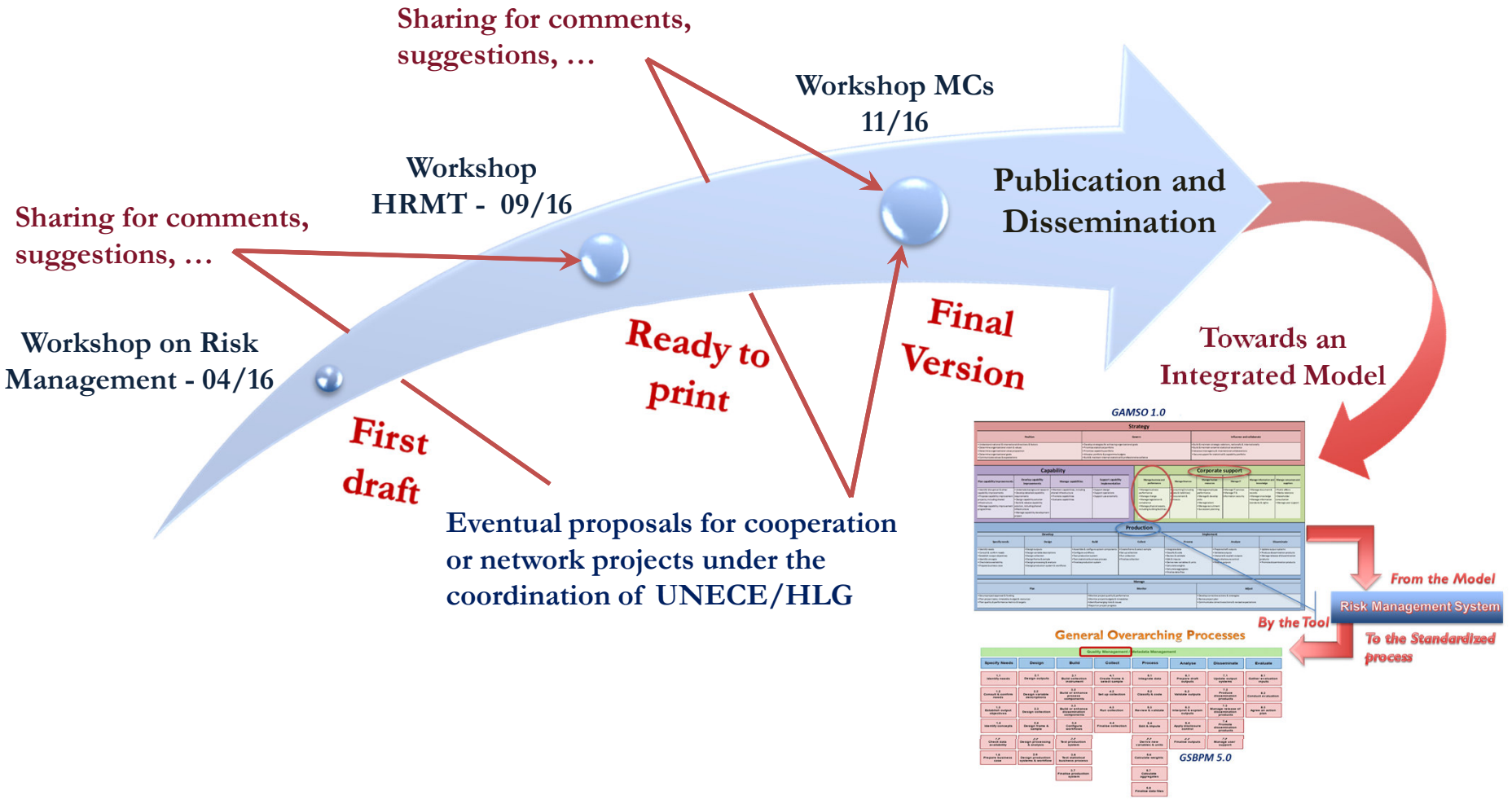
Guidelines' Annex, References and Glossary

- **The Annex** aims at: highlighting the massive information obtained and providing a more practical approach to the different domains of Risk Management. It consists of two sections, Risk Framework and Risk Process, showing two categories of examples:
  - **Focus points on Risk Management core topics**, in order to share practices, coming from the NSOs, able to substantiate "theoretical" information;
  - **Case-studies, shortly reporting some NSOs' significant experiences** on particular features of the Risk Management systems in order to share the know-how gained from implementing Risk Management within the different organizational contexts and highlight any element in common among the different experiences.



- **The References** reports the main sources of the Guidelines, i.e. Research Investigation, Ad hoc Analysis, documentation provided by the Countries involved, National and International Standards, Models and Guidelines, ISO, Academic Sources, papers and handbooks.
- **The Glossary** includes definition of the main relevant terms of the Guidelines, arising from the countries' practices and the international standards, i.e. *"The ISO Guide 73:2009. Risk Management Vocabulary".*

Sharing, publishing and disseminating the Guidelines



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Practice makes the difference …