Risk Management DEMO Training

Implementing Risk Management among NSOs
Intermediate and Advanced Level
Geneva, 27/29 September 2017

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Objectives

- To acquire practical tools for the implementation of a risk management system to align with the characteristics of statistical organizations;

- To share good risk management practices related to the topics covered by the training course.
Agenda

- Establishing the context
- Risk Management Standards
- Development of risk appetite statements
- Wrap-up and close
Up front assumptions

• Attendees understand basic risk management vocabulary.
• Attendees work within organisations who have or are aiming to have a risk management approach.
• Attendees have an appetite to grow their maturity in risk management.
On target expectations

• Exercise – attendees to highlight what they want to gain from the training. Check back at the end.
Risk Management Standards
Management Systems Network

- No overlapping !!
- More quality of services and products
- Supporting decision-making processes
- Enhancement of transparency

- Initial investment in resources and training
- Organizational re-thinking of production processes
- High innovation but low experience in P.A.

Protecting and strengthening:
- Tangible and intangible assets
- Organizational culture
- Leadership and relationship
- Effectiveness and efficiency
- Resources for priorities
- Stakeholder’s satisfaction
Risk Management approach

- **GOALS**
  - Definitions
  - Prioritization
  - Objectives/Processes

- **PROCESSES**
  - Process Mapping
  - Effectiveness
  - Processes/Objectives

- **RISKS**
  - Risk Analysis
  - Risk Assessment
  - Risk Treatment

- **CONTROLS**
  - Processes Controls
  - Controls/Objectives/Vulnerability
  - Controls Evaluations

- **MONITORING**
  - Mitigating Actions
  - Monitoring

**Approach**
- “BASIC”
- “ADVANCED”
- “PRO”
STANDARD - Definition

The standard is a method, generally recognized, to create a product, manage a process, provide services and/or goods; it is a rule coming from the experience of people who, thanks to their competences, know the needs of the organizations they belong to (producers, sellers, buyers, trade associations, users and regulators).

Standards:

- have been developed to help organizations implement RM systematically and effectively
- seek to establish a common view on frameworks, processes and practice, recognized at international level, used by either public and private companies, regularly updated
- reflect the different motivations and technical focus of their developers and are appropriate for different organizations and situations
- are normally voluntary, although adherence to a standard may be required by regulators or by contract
Selected standards:

- **ISO 31000:2009** – RM Principles and Guidelines
- **COSO 2004/2013** - ERM- Integrated Framework
- **AS/NZS 4360:2004**
- **IRM/Alarm/AIRMIC 2002** – UK
- **Especially for managing the Business Risk of Fraud:**
  - **ANAO** - Australian National Audit Office

**Frameworks**

- **UNI Italian standard by UNI (Italian National Unification body)**
- **EN European standard realized by CEN (European normalization Committee)**
- **UNI EN European standard transposed in Italy**
- **ISO international standard realized by ISO**
- **UNI ISO international standard realized by ISO and adopted in Italy**
- **EN ISO European standard realized by CEN and identical to an ISO standard**
- **UNI EN ISO international standard realized by ISO, adopted by CEN and transposed in Italy**
- **UNI/TS National technical requirements**
- **UNI CEN/TS European technical requirements transposed in Italy**
- **UNI CEN ISO/TS International technical requirements adopted by CEN and transposed in Italy**
- **UNI/TR National technical report**
- **UNI CEN/TR Italian translation of an European technical report**
- **UNI ISO/TR Italian translation of an International technical report**
Risk Management Systems

RM Process

Process phases are very similar

Differences among standards

Objects

Characteristics distinguishes approach
Conceptual Framework Map

Resources Balancing Management

Processes

Compliance

ERM, Co.SO

ISO

INTEGR. FRAMEWORK
International Standards

The Orange Book
- The management of risk has not a linear process; rather it is the balancing of a number of interwoven elements which interact with each other and which have to be in balance with each other if risk management is to be effective.
- The whole model has to function in an environment in which risk appetite has been defined.
- The particular stage of the process to manage any particular risk will not necessarily be the same for all risks.

Operational Risk Management
- Accept no unnecessary risk that does not bring adequate returns in terms of benefits or opportunities
- Make risk decisions at the right level on allocating resources to reduce or eliminate the risk and implement controls
- Accept risk when benefits outweigh the cost
- Anticipate and manage risk by planning because subsequent changes are more expensive and take more time

Red Book. «Principled Performance» is an integrated approach to business that helps organizations achieve the objectives in a reliable manner, addressing uncertainty and acting with integrity. It is based on the selection of the standards more fitting to an organization to manage: Performance, Risk and Compliance
## Risk assessment: standards’ strengths

<table>
<thead>
<tr>
<th>Components</th>
<th>ISO 31000 ess.</th>
<th>ERM</th>
<th>AZ/NZS 4360</th>
<th>ALARM</th>
<th>ANAO</th>
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<tr>
<td>Governance:</td>
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<td>Context analysis,....</td>
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<td>Actors and responsibilities</td>
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<td>Processes:</td>
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<td>Communication</td>
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<tr>
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<td>✓</td>
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<td>Evaluation of existing controls</td>
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<tr>
<td>Weighting</td>
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<tr>
<td>Treatment</td>
<td>✓</td>
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<tr>
<td>Monitoring and review</td>
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<td>Controls and audits</td>
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Enterprise Risk Management – ERM

**RISK** is the **effect of uncertainty on objectives** as a deviation from the expected (positive and/or negative) achievements, resulting from the combination of the likelihood and effect of one or more potential events.

**Enterprise Risk Management (ERM)** is “... a **process** effected by an entity’s board of directors and management, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.”
Standards comparison

*RISK assessment doesn’t only concern* the combination of Likelihood and Impact but it also entails the analysis of the internal controls as organizational boundaries to risks materialization

1. The internal environment sets the basis for how risk and control are viewed and addressed by an entity’s people.
2. Objectives must exist before management can identify potential events affecting their achievement.
3. Event identification involves identifying potential events affecting achievement of objectives.
4. Risks are assessed considering likelihood and impact.
5. Personnel identify and evaluate responses to risks.
6. Policies and procedures are established to help ensure the risk responses management selects are carried out.
7. Relevant information is identified and communicated to enable people to carry out their responsibilities.
8. The entirety of enterprise risk management is monitored, and modifications made as necessary.

\[ R = L \text{likelihood} \times I \text{mpact} \times O \text{rganization} \]

\[ (C_{\text{control}}) \]

\[ S_{\text{peed}} \]

\[ P_{\text{ervasiveness}} \]

- **ISO 31000:2009** states the Risk Management *architecture that includes: Principles, Framework, and Process*
- **ISO/TR 31004:2013** declares how *Principles are associated* with each phase of the Risk Management process
- **ISO 31010:2009** describes the *techniques* for each phase of Risk Assessment (identification, analysis, measurement and weighting)
The Principles

**RISK MANAGEMENT:**

1. creates and protects value
2. is transparent and inclusive
3. is tailored
4. takes human and cultural factors into account
5. facilitates continual improvement of the organization
6. is part of decision making
7. is based on the best available information
8. is systematic, structured and timely
9. explicitly addresses uncertainty
10. is an integral part of all organizational processes
11. is dynamic, iterative and responsive to change
Risk Process – The Stages 1/4

Communication and Consultation

Purposes. To ensure that stakeholders understand the information on which decisions are taken and the reasons why those particular actions are required.

Object. Communicating and consulting with internal and external stakeholders at all stages of the process, regarding: causes, consequences and treatment measures.

Establishing the context

Purposes. To set goals and define external and internal parameters for risk management and analysis process criteria.

Object. Analysis of the context in which the organization seeks to achieve the risk management objectives. Internal: organizational culture, processes, structure and strategies; External: objectives and stakeholders’s interests.
Risk Process – The Stages 2/4

Risk Identification

**Purposes.** To create a complete list of risks based on events that may create, enhance, prevent, worsen, accelerate or delay the achievement of the objectives.

**Object.** Risk identification, in order to apply the tools and techniques best suited to the objectives of Risk Management, using the available expertise.

Risk Analysis

**Purposes.** To provide input to risk assessment and decisions concerning more suitable treatment, especially in cases of options involving different types and levels of risk.

**Object.** Analyzing causes/effects and sources of risk, positive and negative consequences and their probability of occurrence, also based on the efficiency and effectiveness of controls.

- Risk management is based on the best available information
- Risk management is systematic, structured and timely
- Risk management explicitly addresses uncertainty
- Risk management is an integral part of all organizational processes

Source: Abstract from ISO 31000:2009
Risk Process – The Stages 3/4

Measurement and Weighting

**Purpose.** To contribute to decisions on the selection of the risks that need to be treated and the their implementation priorities; to evaluate whether to initiate further analysis or treat the risk maintaining existing controls.

**Object.** Comparison between the level of risk measured by the analysis, according with the criteria set when establishing the context; consider both the risk tolerance and the duties of compliance.

The Control & Risk Self Assessment (C&RSA), measures the risk’s likelihood and impact on the organization; the multiplication of the 2 factors determines the overall risk value. A sample of people representing the critical process, who identified the risks, qualitatively and quantitatively assesses the risks of the division they belong to.
**Monitor & Review**

**Purpose.** a) to check the effectiveness and efficiency of the controls considered by the system design and by the process; b) to gather information to improve the assessment; c) to detect changes of context, parameters and risks; d) to review the treatment and priorities; e) to identify emerging risks

**Object.** a) Analysis of the events, changes, successes and failures; b) periodically check of the framework, the process and results; c) evaluation of the treatment owners's responsibilities, for the purposes of their appreciation or sanction applications

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**Risk Treatment**

**Purpose.** To define measures on risk not necessarily exclusive or fitting to all circumstances: a) avoid; b) take or increase; c) remove the source; d) intervene on probability; e) change the consequences; f) share; g) maintain

**Object.** Treatment evaluation; deciding on the residual risk tolerance; redefining treatment, if the risk is not tolerable; evaluation of the action effectiveness; to provide for the selection of one or more mitigating options
Risk Appetite
Development of risk appetite statements

- An organization cannot consider risk as simply resulting from likelihood-per-impact in order to treat it: its management depends on the component variables involved in determining risk appetite, or “the amount of risk that an organization is prepared to accept, tolerate or be exposed to at any point in time”.

- Risk Appetite level mostly depends on the kind of activity performed, the products and services offered, and the regulatory and environmental contexts in which the organization operates.
Development of risk appetite statements

Contents:

• Risk appetite definition

• Risk Appetite components as part of Risk appetite framework (Risk perception, Risk attitude, Risk acceptance, Risk capacity, Risk retention, Risk tolerance)

• Relationships between risk profile and risk appetite
Development of risk appetite statements (example of practice)

*Example: A behavioral approach to risk appetite (ONS-UK)*

<table>
<thead>
<tr>
<th>Risk Approach Definition</th>
<th>Averse</th>
<th>Minimal</th>
<th>Cautious</th>
<th>Open</th>
<th>Actively Seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avoidance of risk and uncertainty is a key organizational objective</td>
<td>Preference for ultra-safe business delivery options that have a low degree of inherent risk and only have potential for limited reward</td>
<td>Preference for safe delivery options that have a low degree of inherent risk and may only have limited potential for reward</td>
<td>Willing to consider all potential delivery options and choose the one that is most likely to result in successful delivery while also providing an acceptable level of reward and value for money</td>
<td>Eager to be innovative and to choose options offering potentially higher business rewards (despite greater inherent risk)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Type 1</th>
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<tr>
<td></td>
<td></td>
<td>• Behaviors if we were to take less risk</td>
<td>• Agreed risk appetite and expected behaviors</td>
<td>• Behaviors if we were to take more risk</td>
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<table>
<thead>
<tr>
<th>Risk Type 2</th>
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<tr>
<td></td>
<td></td>
<td>• Behaviors if we were to take less risk</td>
<td>• Agreed risk appetite and expected behaviors</td>
<td>• Behaviors if we were to take more risk</td>
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</table>
Risk Appetite

Risk appetite is the amount of risk an organisation is willing to take.
Personal Risk Appetite quiz
## Results

<table>
<thead>
<tr>
<th>Averse</th>
<th>Minimal</th>
<th>Cautious</th>
<th>Open</th>
<th>Actively Seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Won’t get into car</td>
<td>Consistent Approach</td>
<td>Drive at 120 mph</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Julian Speedy

ONS

Expectation

Consistent Approach

Won’t get into car

Drive at 120 mph

Frameworks

Appetite

Standards

Context

Intro

TRAINING
Development of risk appetite statements

*From the risk profile to the risk appetite definition*

The variables expressing **risk profile-risk appetite** ratio are as follows:

- **Risk perception**, which describes how people perceive risks according to their values and interests;
- **Risk attitude** (existing risk profile): If an organization is particularly effective in managing certain types of risks, it may be willing to take on more risk in that category, or conversely, it may not have any appetite in that area;
- **Risk acceptance**, which refers to the maximum potential impact of a risk event that an organization could withstand. Often appetite will be well below acceptance;
- **Risk capacity**, which is the maximum level of risk that an organization can assume without violating the regulatory burden;
- **Risk retention**, which considers stakeholders’ conservative return expectations and a very low appetite for risk-taking;
- **Risk tolerance**, which is the level of variation that an organization is willing to accept around specific objectives.
Development of risk appetite statements

**ONS Example**

The approach taken by the **ONS risk management team** was simple, it involved 1) inviting the Executive and Non-Executive Directors of the organization to individually assess risk appetite across risk types (on a matrix, see overleaf), 2) to challenge and explore their views through a series of one-to-one meetings, and 3) to discuss a consolidated view at Board level and to agree the levels of risk appetite with articulated behaviors.

The ONS experience has proven the benefits of this process. Thinking through specifically what risk appetite means for culture/behaviors has been of great benefit, by way of illustration:

- Under a **'Cautious' appetite for ‘statistical quality’** risks a potential behavior may be "Formal outputs must be of high quality to maintain reputation and confidence, but development and timeliness needs to be challenged in order to improve quality. Timeliness is recognized as an element of quality therefore we aim for timely statistics whenever possible."

- Under an **'Actively Seeking' appetite for ‘innovation’** a potential behavior may be "We recognize the risk of irrelevance without innovation and are relentlessly curious, investing considerable time in new approaches and being prepared to try new things even if many of them do not result in a viable product."
# ONS Risk Appetites

<table>
<thead>
<tr>
<th>Appetite level</th>
<th>Averse</th>
<th>Minimal</th>
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<th>Actively Seeking</th>
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<tbody>
<tr>
<td>Helpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Take risk to avoid becoming irrelevant</td>
</tr>
<tr>
<td>Professional - Statistical Quality</td>
<td></td>
<td></td>
<td>Balance quality, value and impact</td>
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<tr>
<td>Professional - Security</td>
<td></td>
<td>Be vigilant about appropriate access to data</td>
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<tr>
<td>Innovative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Take risks to innovate</td>
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<tr>
<td>Efficient - Financial Management</td>
<td></td>
<td></td>
<td>Don’t over/under-spend</td>
<td></td>
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<tr>
<td>Efficient - Reform</td>
<td></td>
<td></td>
<td>Take risk to change the Organisation</td>
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<td></td>
</tr>
<tr>
<td>Capable - Systems</td>
<td></td>
<td></td>
<td>Focus on new systems</td>
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<tr>
<td>Capable - People</td>
<td></td>
<td></td>
<td>Take risks to employ the right people/skills</td>
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</tr>
</tbody>
</table>

*TRAINING*

*Intro*

*Context*

*Standards*

*Appetite*

*Frameworks*
Risk Management is about Appropriate Decision Making

Risk management is not a separate entity to your work/role/job. It is your job

We all undertake risk management daily.
Integrated Frameworks: Risk and Quality Management
The **Risk Management framework**: 


- is a set of **2 types of components** supporting and sustaining risk management throughout an organization:  
  - *a*) **foundations** (policy, objectives, mandate, and commitment);  
  - *b*) **organizational arrangements** (plans, relationships, accountabilities, resources, processes).

- assists in managing risks effectively through the **application of the RM process** at **varying levels and within specific contexts** of the organization.

- ensures that **information about risk** coming from the risk management process is **adequately reported and used as a basis** for decision making and accountability at all relevant levels.

- **complies with the Corporate Risk Profile**, a high-level summary of the most critical risks being managed by the Organization, periodically reviewed, used as a **reference tool** for decision-making.
Integrated risk approach

From a practical point of view:

a. **Risk management should not be seen as a separate system**, regardless how the organization manages itself, makes decisions, allocates resources and holds people accountable.

b. **Risk management cannot take place at some levels** if that excludes other ones.

c. **Risk management cannot take place in only a few parts** of the organization.

In models based on an **enterprise-wide perspective of risk**, **internal control are implemented through a risk-based approach**, built on the **following criteria**:

a. **Policy positions reflect the risk appetite** of senior management, and are developed to guide the behavior of empowered staff in managing risks.

b. **Governance** arrangements ensure **transparency and accountability in decision making**, by promoting strong leadership, sound management, and effective planning and review.

c. **Planning and reporting** provide great opportunities to document goals and related risks.

d. **Assurance activities are a part of Internal audit**, aimed at verifying that risk management within an organization is run consistently with international standards and established practice.
Risk Management Integrated Framework

Quality demand comes from the users' needs. It encompasses both quality criteria and demands related to risks, but different objectives may be in conflict with each other. *E.g.*, accuracy with timeliness. *Risk analysis might help assess relations between risks and objectives.*

At operational level, approaches of Quality and Risk management are strictly connected:

- **Quality is the extent** to which characteristics of an object meets the requirements (ISO 9001:2015); if not, corrections and corrective actions are implemented; it’s focused on products, customer satisfaction, processes (input/output) and the organization as a whole;

- **Risk** is defined as the effect of uncertainty on objectives (ISO 31000:2009); if the risk level is too high, mitigating measures are implemented.

*A process is under control when quality criteria are met and risks are acceptable.*
Integrated Common Framework

The way to integrate the Framework in a NSO runs through to standardize the interconnections among: the Architecture (GAMSO), the Process (GSBPM) and Risk Management (ISO 31000)

1. **The RM governance** and the corporate RM (i.e. the overall risks on strategic objectives), could be placed within the “Strategy and Leadership” activity area, under the “Govern and Lead”;

2. **The statistical risk management**, related to the RM identification and monitoring phases, could be placed within the capability management activity area, under “Plan/Monitor capabilities”;

3. The identification and treatment of organizational risks, connected to supporting activities, can be placed in each sub-area of “Corporate support”, depending on the type of risk (i.e. fraud risks);

4. The management of operational statistical risks, is a routine activity under the responsibility of the risk owners, within the Production process, especially with regard to the identification and treatment phase, in order to ensure statistical quality and successful delivery.
Integrated Common Framework

Designing process flow map(s), in order to identify the points where product and process quality can be measured, is crucial to implement a quality framework.

The **Generic Statistical Business Process Model (GSBPM)** is often used by NSIs as a guide to map the activities of statistical processes because it ensures that all steps of a statistical process are included for monitoring purposes.

The **GSBPM** recognises several over-arching processes that apply throughout the production phases, and across statistical business processes, including quality management.

**Quality management**, in turn, involves institutional and organisational factors which are included in other GSBPM over-arching processes (e.g. Human resources management, Risk Management) which can have an impact on quality.
The organisational Risk Management encourages practices based on the early planning of activities, anticipating possible obstacles in achieving objectives, instead of the logic of urgency.
Risk Management Integrated Framework

- The most advanced integrated models based on enterprise-wide perspective of statistical risk adopt standardizes terms and include in the RM catalog different kind of risks, for example: statistical, fraud, work health and safety, ITC security and transparency.

- They define the statistical risk as: “the possibility that one or more of the production process components fail to meet the quality standard stated, so that statistical output quality or integrity is affected”.

- Risk Assessment in statistical areas considers the issues that can affect data quality in a statistical processing cycle as well as managing stakeholder relationships, the impact of change programs and workforce capability.

- Risks are managed using the same framework at a Strategic, Operational and Project level across the organization. Statistical risks can be recognized separately but in any case it should be integrated within the organizational risk framework.
Risk Management Integrated Framework – Quality gates

Advanced **Quality management model** are assisted by the **risk mitigation strategy** based on the **quality gates**, designed to facilitate the detection, discussion and resolution of problems through a collaborative effort to improve the early detection of errors.

Normally, the **6 components** of the quality gates are:

1. **Placement** of quality gates **throughout a statistical process**
2. **Roles, tasks to people** or areas involved in a quality gate
3. **Actions**, responses to various outcomes for a quality gate
4. **Evaluation**, a **review to examine where improvements can be made**
5. **Tolerance**, an **acceptable level of qualitative or quantitative quality**
6. **Quality Measures**, a **set of indicators** that provide information about **potential problems** at a given point in the process

The **quality gates** are placed by **assessing the key activities** associated with each step of the statistical process, according to the ISO 31000:10 methodology.

If a **Statistical Risk Assessment** reveals that the risk rating is **extreme or high** it is recommended that a **quality gate be utilized to mitigate the statistical risk**.
Examples of **risk register** belonging to "**Statistical Production**"

<table>
<thead>
<tr>
<th>Risk</th>
<th>Treatment</th>
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</thead>
<tbody>
<tr>
<td>Delay in updating repositories to make balancing data</td>
<td>Mapping and re-engineering the collecting data process for the estimation of a table chart-supply use</td>
</tr>
<tr>
<td>Delay in receiving internal / external sources</td>
<td>Risk Analysis aimed at removing obstacles to the data collecting process through internal and inter-institutional agreements</td>
</tr>
<tr>
<td>Lack of timeliness in the preparation of data files by the competent departments</td>
<td>Mapping and re-engineering the production process of the national accounts relating to the production and value-added services non-market at current prices</td>
</tr>
<tr>
<td>Lack of formalized procedures (supporting documentation, methodological notes, data quality control)</td>
<td>Improving communication and developing information-sharing initiatives</td>
</tr>
<tr>
<td>Delay in receiving data concerning financial accounts and investments with regard to both sector and sub-sectors of Public Administrations</td>
<td>Reviewing and monitoring agreements in place</td>
</tr>
<tr>
<td>Reduction of the amount of data collected at the local level</td>
<td>Execution and tender’s award to provide tablet to municipal detectors of consumer prices</td>
</tr>
<tr>
<td>Delay in the computerization of procedures for the acquisition and processing of data</td>
<td>Activating the control system and correcting data through models used by other NSIs</td>
</tr>
<tr>
<td>Transmission of questionnaires poorly filled out because of lack of competence</td>
<td>Monitoring procedures of collection data by the local Authorities</td>
</tr>
<tr>
<td>Discontinuities in the collection mode and in the data stream</td>
<td>Reviewing organizational process to manage replacements of those involved in data collection</td>
</tr>
<tr>
<td>Difficulties in managing archives and data delivery aligned with new tax regulations</td>
<td>Continuous staff training and making up working groups including statistics and informatics</td>
</tr>
</tbody>
</table>
Change, Risk and Project Management

Change management is interconnected with Risk management: Innovation requires risks so every change strategy comes with its own levels of risk; changes can be made less risky if they are adequately reviewed, assessed, and coordinated adopting a proper risk management process.

The relationship between Risk and Change management is characterized as having circular nature:

RM is a part of the wider cycle of CM as well as CM is a component of the RM’s cycle.

• Risk Management identifies criticalities in changing processes and plans fitting response activities to minimize risk of failure both during and post implementation phases.

• Change Management acts as a subsystem of Risk Management; the actions aiming at reducing the likelihood of incoming risky events are themselves changes.

Project management aligns the organization’s components through the implementation of: Portfolio management that optimizes, oversees and selects concurrent organizational initiatives and Program management that defines a set of expected benefits and their transition into the business.
Risks in Change management

Risks in change management could be grouped in:

- **Human resources risks** (e.g., forms of resistance to change, political agendas, competition for power, and fear of loss of status or job);

- **Cultural risks** (e.g., risk avoidance, group think, policies, or rules (unwritten guides to behavior) that contraindicate the change, control culture, unclear decision-making paths, or norms);

- **Capability development risks** (e.g., insufficient training and learning reinforcement, inability to respond to questions/problems, low starting capability or capacity, poor methods for institutionalizing learning, withholding/protecting knowledge, lack of informal learning);

- **Process development risks** (e.g., insufficient employee involvement in process definition, processes dominated by single-skilled people, lack of experience with process development tools, work decisions only made at high levels);

- **Organizational structure/management risks** (e.g., weak leadership, too many layers of management, dispersed decision-making authority, matrix management, unclear role definitions);

- **Time risks** (e.g., unacceptable time frames for absorption of change, competing time priorities of resources needed for the project (training, process design, etc.));

- **Environmental risks** (e.g., market volatility, changing competition, changing technology, changing leadership, regulatory or legal uncertainty, inability to absorb magnitude of change).
The way forward: the «Risk-Based thinking»

Change Management (ISO 27000, ...)

Operative Objectives
- Training growth
- Processes reingeneering

Operative* Risks
- Improper business plan
- Failure to observe data security
- Inadequacy of technology
- Loss of local data

Risks of Portfolio
- Poor synchronisation
- Wrong balance of projects
- Ineffective cost/benefits analysis

Portfolio Risks
- Poor scopes
- Affordability of projects
- Poor consideration of value

Areas
- Projects and Planning
- Compliance with laws
- ICT
- Data Quality

As Is
- Changes in regulation
- Stakeholders’ mistrust
- Budget constraints

Strategic Objectives
- Quality improvement
- Increase of reputation
- Financial Growth

Strategic Risks
- Non-compliance
- Communication underrated
- Failure to invest

Risk Management (ISO 31000, ...)

Quality Management
(ISO 9001, ...)

Frameworks
- Appetite
- Standards
- Context
- Intro
- TRAINING

Barriers to change
- Resistance to change
- Lack of commitment
- Lack of Synergy

Intro

TRAINING
Integrated Frameworks: Risk and Agile Delivery
Decision Making in an Agile Environment

Agile focuses on the improvement of value, flow and quality, through use of regular feedback loops with users.
Development types

An AGILE approach mitigates risk because you’re developing & delivering often primarily focusing on delivery and responding to user feedback to improve value for the user.
In other words...
Complex rules and regulations give rise to simple and stupid behaviour…

Simple, clear purpose and principles give rise to complex, intelligent behaviour.
Risk and Agile: Finding the Sweet Spot

The Agile approach to delivery is being used more and more within NSIs and can prove challenging in some cases.

During times of accelerated change in technology and data we need to find a way through the challenge of embracing Agile delivery while also managing in a risk filled environment and providing assurance and confidence around successful delivery.

Agile should not be seen as being at the expense of risk management but rather as an enabler for the more effective management of risk.

• How can we embrace Agile delivery while still maintaining the right level of assurance and confidence around successful delivery?
• How can risk management and Agile collaborate in order to ensure successful delivery?
• How can NSIs enhance their implementation of risk management best practice in a way which is suited to an Agile culture?
Risk and Agile: Finding the Sweet Spot

**PRINCIPLE 1:** Define your appetite for risk, and make it real

**PRINCIPLE 2:** Identify threats and opportunities

**PRINCIPLE 3:** Deal with threats and exploit opportunities at the most appropriate level but document and escalate if necessary
On target expectations

• Exercise – did we meet all expectations?
Need more information?

• Guidelines on Risk Management

• Enhancing Risk Management with Agile Principles

• UNECE Wiki

• Ask the Community
Thanks for your attention