Effective risk management is fundamental to the success of modernization in national statistical organisations (NSOs), in that it concerns both organisation and production processes. Actually, Risk management, on the one hand, points at strengthening organization governance on the whole by supporting the decision-making process when selecting priorities; on the other hand, it points at identifying, analysing and removing the uncertainties that can put obstacles in the way of change and development.

The UN Guidelines on Risk Management in Statistical Organizations give NSOs, interested in internally implementing a risk management system, a reference based on the practices developed within the UNECE organizations and containing some key features: effective development, sustainability (in terms of resources and complexity), alignment with change management processes.

This training module supports the implementation of the Guidelines and is structured consistently with the ISO 31000:2018 standard architecture; this standard is widely accepted internationally as well as used by most public organisations when implementing Risk management systems.
Statistical organisations are all facing a period of unprecedented change as the external operating environment is increasingly complex and the digital and data revolution provides a platform for transformation. With any change there are associated risks. It is important during this time to have a clear – or at least as clear as possible given the known complexities – understanding of where to take risk, where to be more cautious and, importantly, what this means in words staff across the whole organisation can easily understand and translate into action.

It is through the management of risk which organisations seek to minimise (but not necessarily eliminate) threats and maximise opportunities. But how do organisations know which risks to tolerate and which to treat? And how can we encourage our organisations to take more risk, to innovate and adapt, whilst also ensuring we avoid threats to delivery and reputation?
Any organization intending to implement a risk management system should define a Risk Appetite Framework, which is a framework connecting risks to the mission and strategic objectives.

With reference to the risk profile (the “set of risks that may affect all or part of the organization”) and consistently with the overall strategic plan, such a framework defines the leaning toward risk (risk tendency), tolerance thresholds, risk limits, risk governance.

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”.

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

While risk appetite is linked to strategic objectives, risk tolerance is mainly connected to the operational ones since through the latter the governing body sets up the maximum deviation allowed by risk appetite.
The Risk Appetite Framework is a methodological scheme aimed at determining the organization’s risk appetite level, through an evolving, iterative process, that helps the organization outline the amount of risk it is willing to take, in order to achieve its objectives according to the business strategy.

When outlining risk appetite, all strategic activities (planning, detection of financial and human resources, portfolio project selection, etc.) are determined according to risk-based thinking and criteria. It’s up to the governing body to develop a risk appetite statement, comprising an official document that sets out risk objectives, as well as the ways to monitor their achievement and cascading them through the organization’s operational processes.

In particular, the RAF should state:
- The types of risks an organization intends to take;
- For each kind of risk, any possible tolerance threshold and operational limit, under both normal and critical (at organizational/financial level) circumstances;
- Any procedures and/or actions to start if it becomes necessary to lead risk level back to either the objective or the limits established, especially if risk level reaches the tolerance threshold;
- The role of actors involved in defining and implementing the RAF (board, managers, auditors, operational units);
- Timing and procedures to monitor and update the RAF;
- Rules for sharing the RAF contents with all actors, both internal and external, involved in its definition and implementation.

Those organizations who effectively adopt a risk Appetite Framework are able to integrate it within their own decision-making processes, and strive to internally communicate and disseminate its contents, starting from the top management.
A behavioral approach to risk appetite

The practice described in this module concerns a behavioral approach to the definition of risk appetite in order to align the Institute's risk policy with the staff’s risk approach.

Risk appetite is defined as the amount of risk that an organization is prepared to accept, tolerate or be exposed to at any point in time. Organizations often have in place an overall ‘risk appetite statement’. However in order to truly embed risk management in decision making, deliver the organization’s strategy and respond appropriately to the pressures of an increasingly changing world, organizations should not only review its risk appetite but to use appetite as a catalyst for transforming its behaviors.

Whilst a definition of risk appetite was essential to allow consistent and appropriate decision making, a single statement of risk appetite could be bland and open to interpretation. On a scale from ‘averse’ to ‘actively seeking’ risk, a single organization position tends to end up at the mid-point as it would take account of areas at either end of the spectrum. Also, a statement along the lines of ‘we are averse to risk in x area’ is open to interpretation. What does this mean? How should staff act? What are the expectations of the organization’s leaders?

To address these questions organizations can take an approach to redefine risk appetite and to ensure the strategic alignment of risk based decision making, to bring risk appetite to life, and to drive cultural change. The overall approach involved setting a level of risk appetite for each of the organization’s highest level ‘strategic risks’, which themselves were aligned to the strategic aims within the organization’s strategy. A fundamental part of the approach, however, is defining the expected and specific behaviors aligned to the level of appetite, therefore developing a clear framework for decision making.
The approach is simple, it involves

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.

Following approval by the organization’s Board approved risk appetite statements must be cascaded and the new expectations communicated throughout the business via seminars, risk training courses, etc.

The risk appetite matrix should also used to regularly challenge decision making and articulate Board expectations.

Redefining risk appetite through this approach can bring color to what can be a transactional and subjective process. As well as encouraging a more uniform approach to risk taking within the organization, it supports the development of an organizational culture which is strategically aligned.

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**Development of risk appetite statements**

- Inviting the Executive and Non-Executive Directors of the organization to individually assess risk appetite across risk types (on a matrix, see overleaf).
- To challenge and explore their views through a series of one-to-one meetings, and
- To discuss a consolidated view at Board level and to agree the levels of risk appetite with articulated behaviors.

Thinking through specifically what risk appetite means for culture/behaviors is of great benefit; by way of illustration:

- Under a Strictly adequate for `statistical quality’ a potential behavior may be “Formal outputs must be of high quality in material, presentation and confidentiality, but development and timelines must 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’ adequate for `innovator’ a potential behavior may be “We recognize the risk of innovation without innovation and are enthusiastically curious, investing considerable time in new approaches and being prepared for try new things even if many of them do not result in a viable product.”
Risk appetite is the level of risk that an organization is prepared to accept in pursuit of its objectives, and before action is deemed necessary to reduce the risk. It represents a balance between the potential benefits of innovation and the threats that change inevitably brings. The ISO31000 standard refers to risk appetite as the "Amount and type of risk that an organization is prepared to pursue, retain or take". In a literal sense, defining your appetite means defining how "hungry" you are for risk.

Levels of risk appetite
The appropriate level will depend on the nature of the work undertaken and the objectives pursued. E.g. where public safety is critical (e.g. operating a nuclear power station) appetite will tend to be low, while for an innovative project (e.g. early development on a computer program) it may be very high, with the acceptance of short term failure that could pave the way to longer term success.

Below are examples of broad approaches to setting risk appetite that a business may adopt to ensure a response to risk that is proportionate given their business objectives.

• **Averse**: Avoidance of risk and uncertainty is a key organization objective.

• **Minimal**: Preference for ultra-safe options that are low risk and only have a potential for limited reward.

• **Cautious**: Preference for safe options that have a low degree of risk and may only have limited potential for reward.

• **Open**: Willing to consider all potential options and choose the one most likely to result in successful delivery, while also providing an acceptable level of reward and value for money.

• **Actively seeking**: Eager to be innovative and to choose options offering potentially higher business rewards, despite greater inherent risk.
• Exercise
• Break into groups
• Take a Category of Risk
• Agree a level on the matrix
• Define what this means in three statements
## Risk Appetite Examples

<table>
<thead>
<tr>
<th>Area</th>
<th>Vision</th>
<th>Strategy</th>
<th>Implementation</th>
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- **Vision:** High-level statement of the company's direction and aspirations.
- **Strategy:** High-level approach to achieving the vision.
- **Implementation:** Detailed plan to execute the strategy.

### Activities

- **Business Unit:** Activities related to specific business units or departments.
- **Technology:** Activities related to technology or innovation.
- **Market:** Activities related to market expansion or growth.
- **Regulatory:** Activities related to compliance with regulatory requirements.
- **People:** Activities related to human resources and talent management.

**Notes:**

- [Note 1](#).
- [Note 2](#).
- [Note 3](#).
- [Note 4](#).

**References:**

- [Reference 1](#).
- [Reference 2](#).
- [Reference 3](#).
- [Reference 4](#).
Translating Risk Appetite into Action

The value of risk appetite comes when it leads to tangible change across the organisation. This can be encouraged through both “soft” and “hard” mechanisms and management routines.

Communication is key. Risk appetite statements should be communicated broadly across the organisation through various channels. This should highlight the benefits of risk appetite statements as a framework for decision making.

The senior team should regularly review their decision making against appetite and ensure behaviours are being demonstrated from the top down.