

# Rethinking and reshaping Organizational systems in time of changes: The Process of Risk Management in Istat

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**Workshop HRMT**  
**Modernising statistics: how to get there?**

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# Why doing Risk Management?

## PROS

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



## CONS

- ✗ Initial investment in resources and training
- ✗ Organizational re-thinking by production processes
- ✗ High innovation, low experience in PA

# Risk Management Objectives

## Protecting and strengthening:

- ✚ Values, ethics and sense of belonging
  - ✚ Entity's tangible and intangible assets
  - ✚ Growth of organizational culture
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- ✚ Leadership and relationship
  - ✚ Effectiveness and efficiency of processes
  - ✚ Resources for strategic priorities
  - ✚ Stakeholder's satisfaction

## «Golden Rules» to follow

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- *Considering culture, values and human behaviors*
- *Using common language and updated information*
- *Building context-oriented tools*
- *Addressing real risks*

- *Promoting transparency and staff involvement*
- *Being a part of decision-making processes*
- *Protecting and preserving every asset*
- *Being dynamic and responsive*



- ***Complying with standards recognized at international level***

# Risk Definition

**Risk** is the effect of uncertainty on objectives, intending this effect as a deviation from the expected (positive and/or negative), often characterized by reference to potential events and consequences, or a combination of these.

Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood of occurrence.

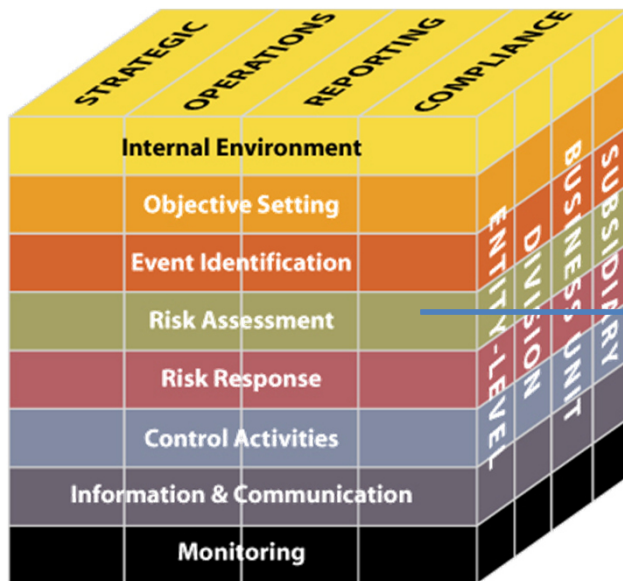
Uncertainty is a state, even partial, of deficiency of information related to: understanding or knowledge of an event, its consequence, or likelihood.

*[Sources: AS/NZS 4360:1999, ISO 31000:2009, ISO Guide 73:2009, definition 1.1, ERM - IF, COSO, 2004, UNI 11230 – Gestione del rischio]*

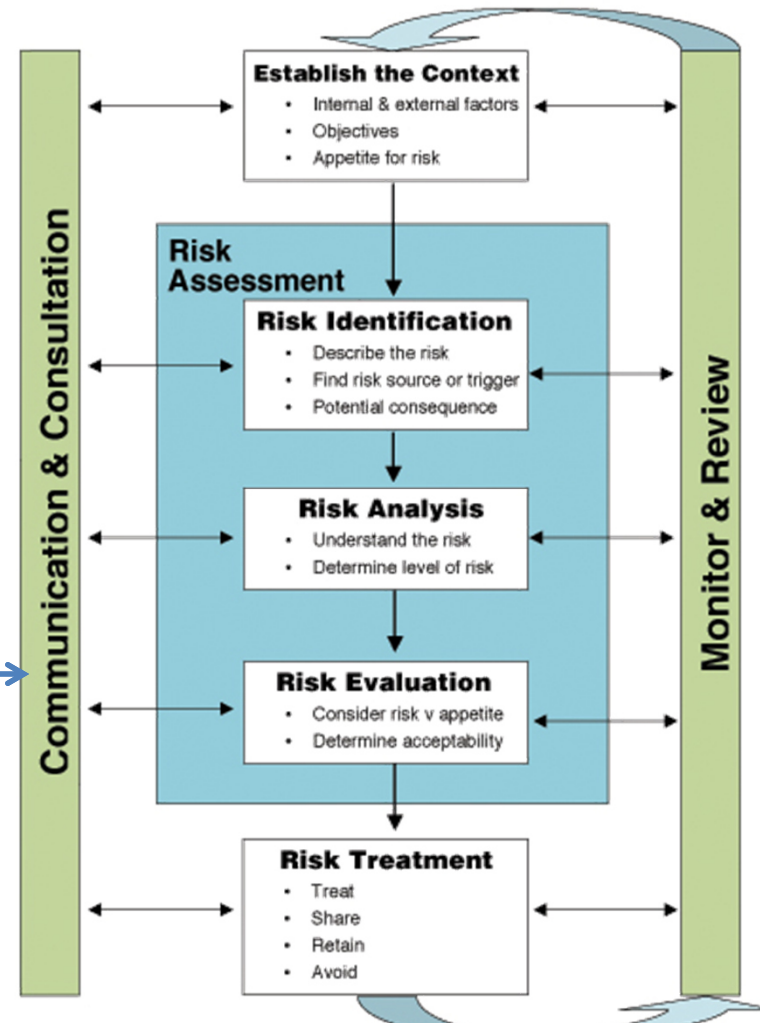


# Risk Management Definition

***RISK MANAGEMENT** is a process, effected by management and other personnel, applied in strategy across the enterprise, to identify potential events, and manage risks to assure the achievement of objectives*



## RISK MANAGEMENT PROCESS



Co.SO. ERM, 1992/2004/2013

AUS/NZS 4360/2004, ISO 17799:2005, ISO 31000:2009

# Risk management project in Istat

## *THE ROAD MAP*

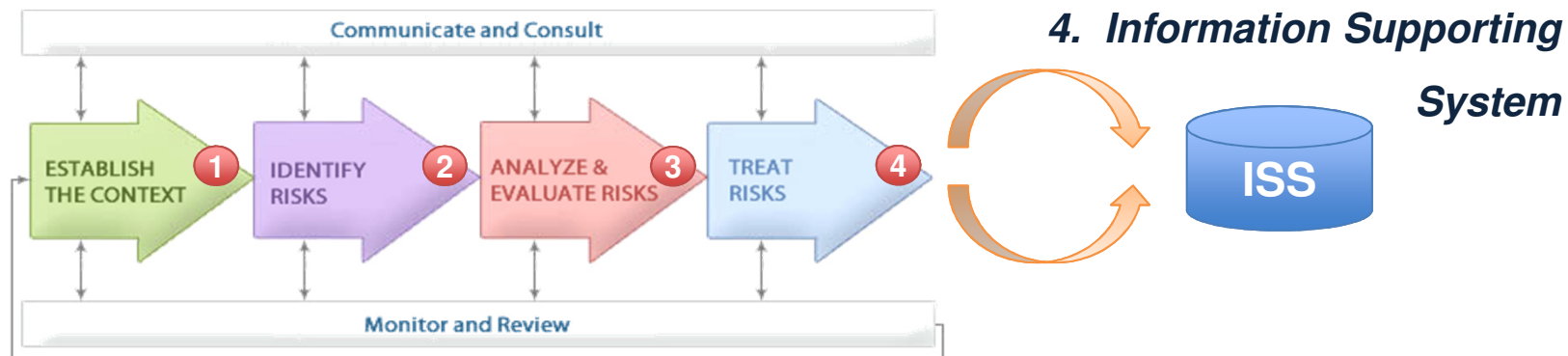
2009	2010	2011	2012	2013..2014
<b>Project launched</b>	<b>Approach trial</b>	<b>Experimental phase</b>	<b>Experimental phase</b>	<b>Full implementation</b>
<ul style="list-style-type: none"> <li>• Analysis and comparison of practices and models</li> <li>• Identification of appropriate approach</li> <li>• Establishing of Istat's RM model</li> </ul>	<ul style="list-style-type: none"> <li>• Pilot and rollout of risk management approach</li> <li>• RM training and dissemination</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of a risk register</li> <li>• Risk assessment</li> <li>• RM training and dissemination</li> </ul>	<ul style="list-style-type: none"> <li>• Revision of a risk register</li> <li>• Identification of risk treatments</li> <li>• RM training and dissemination</li> </ul>	<ul style="list-style-type: none"> <li>• Integration w/ operational planning</li> <li>• Risk treatment monitoring</li> <li>• <b>Information System startup</b></li> </ul>

# Risk management project in Istat

The project has been developed following four parallel but related paths:

- 1. Organisation:** both the President and the Directorate general endorsed and sponsored the project. A business unit was involved in implementing and coordinating risk management system
- 2. Training and dissemination** program, in order to improve management culture and promote a common language and understanding throughout the organisation

### 3. Risk Management process





# The ERM Process in ISTAT

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1. *Survey on perception*

2. *Risk Identification*

3. *Risk Assessment*

4. *Communication and Reporting*



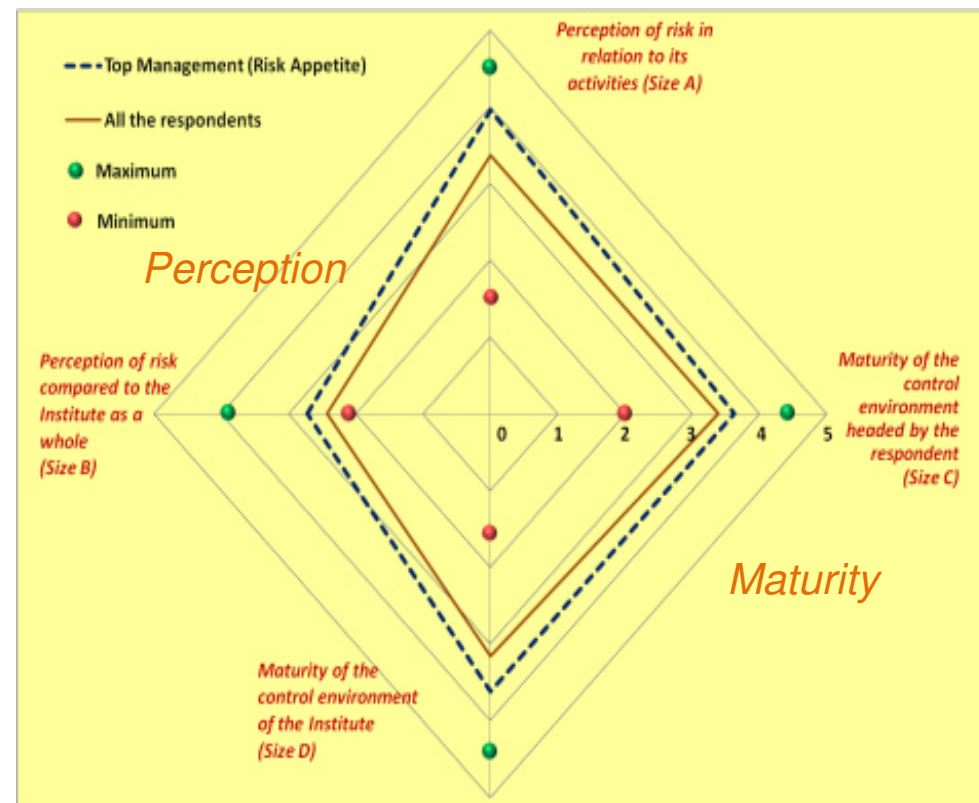
# Step 1: Survey on Risk perception

The questionnaire on management risk perception is composed of about **70 questions**

❖ It is divided into **4 sections**: 1) Internal control environment and organisational culture; 2) Objectives of the organisation and Risk Management; 3) Identification and classification of risk factors; 4) "Cataloging" risk

❖ It investigates **four dimensions**:

- I) risk perception compared to the activities of each manager;
- II) risk perception in the Institute as a whole;
- III) maturity of the control environment in the structure led by each manager;
- IV) maturity of the control environment in the Institute as a whole



## Step 2: Risk catalogue

- ❑ Risks and organisational criticalities:  
more than 96% of the total (100% in the Prioritization Areas)

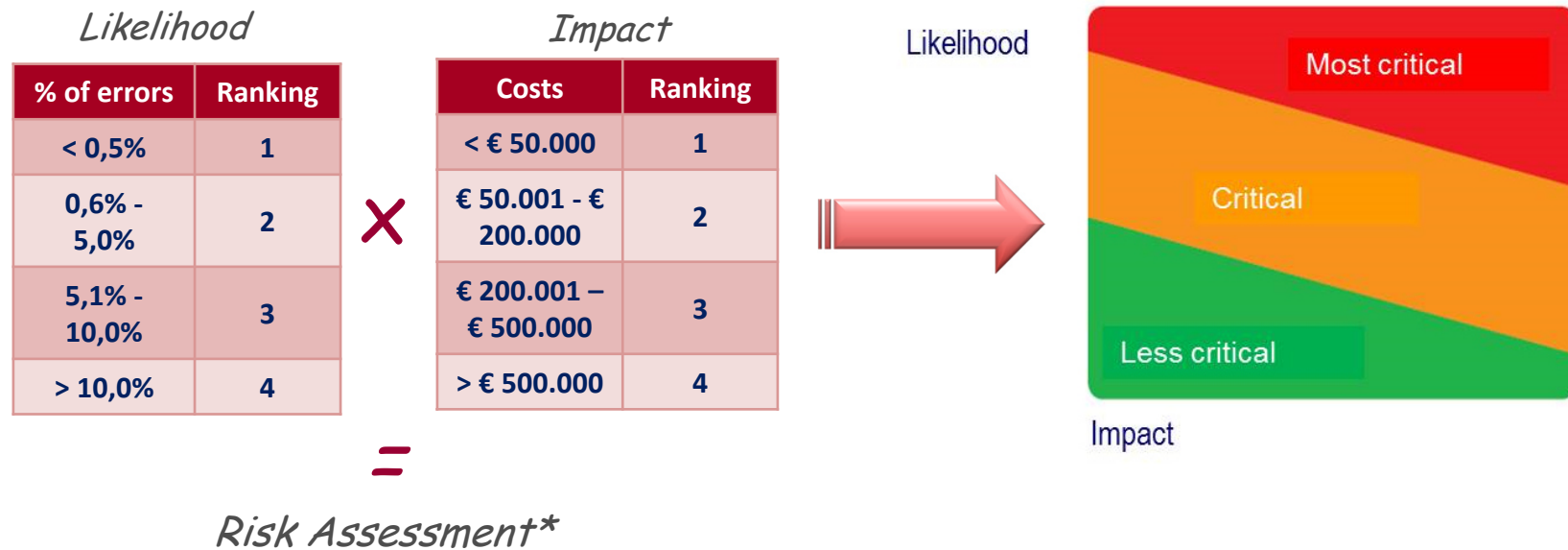
- ❑ About 78% are criticalities, i.e. inefficiencies in management of processes solved by organisational improvement (over 80% in the P. A.)

Risks	All Areas		Prioritization Areas	
	N.	%	N.	%.
<b>TOTAL</b>	<b>359</b>	<b>100,0%</b>	<b>170</b>	<b>100,0%</b>
<b>Nature</b>				
Risks	65	18,1%	33	19,4%
Criticalities	279	77,7%	137	80,6%
Others	15	4,2%	0	0,0%
<b>Type</b>				
Strategic	22	6,1%	6	3,5%
Compliance	6	1,7%	2	1,2%
Operatives	310	86,4%	155	91,2%
Reporting	13	3,6%	6	3,5%
Exogenous	8	2,2%	1	0,6%

- ❑ About 4% are problems different from organisational risks (i.e. statistics, ICT, exogenous factors, human resource policies)

## Step 3: Risk Assessment - C&RSA

The Control & Risk Self Assessment (C&RSA) measures risk likelihood and impact on the organization; the multiplication of the two factors determines the overall value of the risk

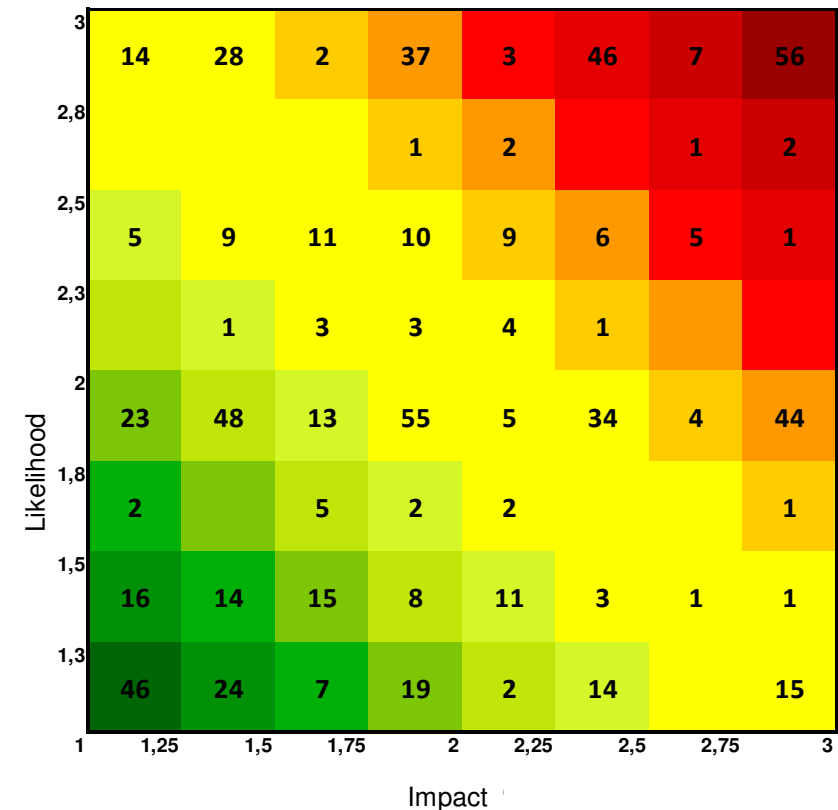


\* By a sample of self-evaluators representing the process influenced by the risks, everyone with the same weight

## Step 3: Risk Assessment - Risk Matrix

The **Risk Matrix (or Risk Map)** shows the distribution of the risks depending on their level of likelihood and impact

- Low gravity (green area): about 24% of the critical events
- Highest priority (red area): about 18% of critical events;
- Careful monitoring (yellow area): about 58% of the critical events, with different gradation



## Step 4: Risk Treatment

466 organisational response actions (231 in *Priorities Areas* – “P.A.”)

Treatment	All Areas		Prioritization Areas	
<b>TOTAL</b>	<b>466</b>		<b>231</b>	
<b>Risks and Criticalities</b>	<b>V.A.</b>	<b>%.</b>	<b>V.A.</b>	<b>%.</b>
<b>TOTAL</b>	<b>450</b>	<b>100,0%</b>	<b>231</b>	<b>100,0%</b>
<b>Types</b>				
Preventive	36	8,0%	24	10,4%
Subsequents	6	1,3%	3	1,3%
Improvement	261	58,0%	143	61,9%
To deepen	83	18,4%	42	18,2%
Others	64	14,2%	19	8,2%
<b>Responsibilities</b>				
Internal	170	37,8%	101	43,7%
External	44	9,8%	22	9,5%
Cross-cutting	172	38,2%	89	38,5%
Not attributable	64	14,2%	19	8,2%

□ 58% of the proposals refers to organisational or production improvement (about 62% in the p.a.);

□ Nearly 38% of the actions are internal (about 44% in the p.a.);

□ Over 38% of the actions requires the collaboration of different structures (about 39% in the P.A.)

## Main priority areas

- ❑ Management and administrative procedures: obsolescence, non-compliance, waste of resources, inefficiencies in sharing and disseminating information
- ❑ Recognition and quantification of the project costs to properly deploy the available resources
- ❑ Integration between the management systems to support decision making and sector plans
- ❑ Tendering procedures: requirements, preparation of specifications (technical and legal)
- ❑ Technical management of contracts and their qualitative and quantitative supply monitoring
- ❑ Compliance with regulations and technical standards (i.e. GSBPM) for improving the quality of services and reduce the risk of administrative fines



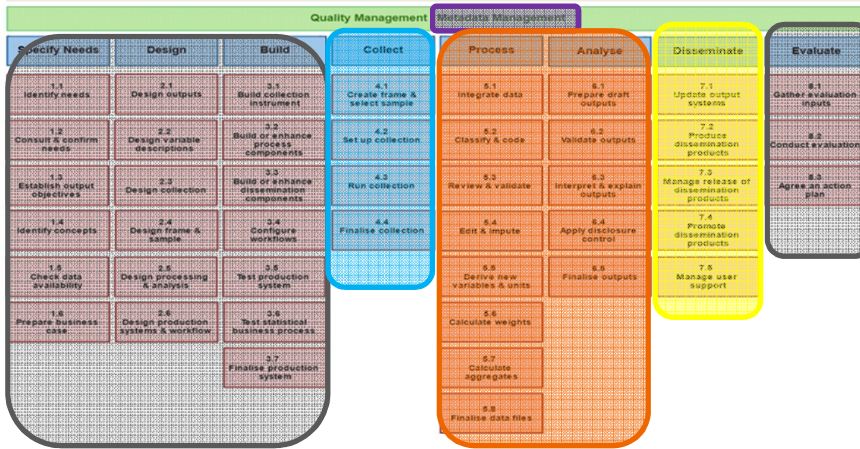
## Application to Istat's Modernization Programme "Stat2015"

- Launched in **2010**, it aims at revamping the *business chain* by **2015**, through coordinated multiannual projects
- It is consistent with European and international best practices
- It leads Istat **from a stovepipe model** towards an **integrated production system** based on common infrastructures and services
- It provides an **overall framework** for methodological, **technological and organisational innovations**





# GSBPM 5.0 - The Common Reference Point



*From the Standardized process*

*Through the Model*



Macro Phases of Istat Production Process	Classification	Codes for Istat Strategic Planning
Metadata	Quality Reference Metadata	Stat2015-01.01
	Structural Metadata	Stat2015-01.02
	Strategic Planning Metadata	Stat2015-01.03
Develop/Build	Check of Relevant Contents	Stat2015-02.01
	Check of data	Stat2015-02.02
	Process Design	Stat2015-02.03
Data Collection	Survey Data (Total; Sample)	Stat2015-03.01
	Administrative Data	Stat2015-03.02
	Big Data	Stat2015-03.03
Process/Analyse	Integration, editing and imputation	Stat2015-04.01
	Processing and estimation	Stat2015-04.02
	Analysis	Stat2015-04.03
Dissemination	Validated Microdata	Stat2015-05.01
	Corporate Data Warehouse	Stat2015-05.02
	Visualisation and Dissemination Techniques	Stat2015-05.03
Processes/Methods	Standardisation	Stat2015-06.01
	Quality	Stat2015-06.02
	Process Support	Stat2015-06.03
Infrastructures	Common Reference Environment	Stat2015-07.01
	Archives	Stat2015-07.02
	Support Actions	Stat2015-07.03
Coordination		Stat2015-08

*To the Projects*



Risk Management Model

Change Management

## «RiskInIstat» Tool

The information system tool “RiskInIstat” has been implemented to manage risks via web with the main objective to let Management edit and view the necessary information in an intuitive and immediate way; it gives the opportunity to update catalogs and shows the objectives’ achievement progress at different stages of the ERM process and at different levels of the organization



Username:

Password:

Login



# «RiskInIstat» Tool

## Process Phases

- **Catalog Update:** review and input of new information, by the structures, in their own catalogs
- **Catalog Validation:** the process Administrator verifies the data entered by the structures and supplement them with information within her/his competence
- **Monitoring response actions** to solve critical events
- **Planning response actions:** defining risk activities for next years
- **Reporting:** Processing reports containing specific information represented in the risk catalogs



# Communication & Collaboration

The **University of Rome Tor Vergata** and the **Italian National School of Administration** have been deploying their interventions, in order to:

- ❑ Support Italian public institutions in starting risk management process in their specific fields, helping them select and adapt international standards
- ❑ Develop, coordinate research, train and participate in national and international scientific projects
- ❑ Promote a community of public and private companies engaged in experimenting innovative policies and Risk Management tools
- ❑ Systematize and enhance RM knowledge and experience in public entities
- ❑ Disseminate the results by publications, conferences, seminars and training



Thank you for your attention !!!

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