



#### **INNOGROW: Workshop on Risk Mitigation Planning**

(virtual event, organized by FLA- Lombardy Foundation for the environment)

Monday, 20 <sup>th</sup> June 2022 (09:30 - 12:40 CET)							
Zoom link: https://us06web.zoom.us/j/89418281263?pwd=UUd2S3RvdXZQQzNnaDJMeHBDbkFpdz09  Meeting ID: 894 1828 1263							
Passcode: 592275							
09 <b>.00 – 09.15</b>	Log in to ZOOM – Technical check [online]						
	Establishment of connections and preparation of audio-visual settings						
09.30 - 09.50	Welcome and introduction						
	Official welcome and opening statement LP Region of Thessaly						
	Introduction to the workshop, agenda overview						
	Prof. Antonio Ballarin Denti, Chairman, Scientific Committee Lombardy Foundation for the Environment (FLA						
	Session 1 – Understanding risk management in rural SMEs						
09:50 – 10:10	Concepts of rural SMEs resilience and risk management Massimo Di Domenico, External Expert, FLA and Scuola Superiore Sant'Anna di Pisa						
10.10 – 10.30	Communities facing Covid19: lessons learnt and SMEs resilience Giulia Pesaro, External Expert, FLA and Milan Politecnico						
10.30 – 10.50	Resilient business system exposed to natural risks: some recent researches by Milano Politecnico Veronica Gazzola, ABC Department, Milan politecnico						
10.50 – 11.00	Q&A session						
11:00 – 11:15 (15' Coffee break)							
Session 2 – Building resilence of rural SMEs							
11:15 – 11:35	Adaptation to climate change, risk management and resilience strategies for rural SMEs.  Prof. Antonio Ballarin Denti, Chairman, Scientific Committee Lombardy Foundation for the Environment FLA						







11:35 – 11:55	Risk management strategies used by rural SMEs during the Covid-19 pandemic: evidence from the UK Matthew Gorton and Thao Nguyen, The University of Newcastle upon Tyne							
11:55 – 12:15	Risk assessment and management in Business Continuity Romina Niro and Luca Casale, Macroazienda S.r.l.Innovazione e Sviluppo CoC -Molise, Italy							
Se	ROUND TABLE SESSION Session 3 – Disaster risk reduction for building the resilience of rural SMEs							
	Issues to be discussed							
12:15 – 12:30	Building resilience through prevention							
	Role of public authorities and rural SME stakeholders to strengthen resilience to risk for rural SMEs							
	Greatest risks and skills required for risk management							
	12:30 – 12:40 Wrap up and conclusions of the workshop							









## Risk assessment and management in Business Continuity

### Macroazienda Innovazione e Sviluppo srl Romina Niro – Luca Casale



## **Company Profile**

**Macroazienda**, for over 30 years, offers services in the field of Management Systems and Business Organization.

### Our services

- Compliance (Quality, Environment, Security, Privacy, Training)
- Company and product sustainability
- Company and product certifications
- Organizational models pursuant to Legislative Decree 231/2001
- Management consulting
- Support to corporate finance and subsidized calls

Macroazienda is a certified company in accordance with UNI EN ISO 9001:2015 – UNI CEI 11352:2014 – ISO 37001:2016, in Campobasso. Other locations: Rome – Milan – Teramo – Isernia.









### **Our Mission**

"Experts in quality of life" is the corporate mission of Macroazienda. Being care specialists for the improvement of a company, providing qualified assistance according to the needs of business partners distinguishes the excellence of our work.

Our network of highly specialized consultants allows us to support our client companies to obtain a wide galaxy of certifications in compliance with national and international standards and protocols.









### Our added value











### **About us**

Our consultants are all professionals with high technical skills. They operate individually or in teams according to the complexity and specific needs of our customer.

Over the years they have acquired skills to be used in offering dynamic and advantageous solutions.

Our network is made up of lawyers, engineers, computer scientists and other professional figures, able to guarantee a continuous multidisciplinary comparison and exchange of experiences.

To support the technical network, there are the administrative - commercial staff and the back-office operational staff. They all support the finalization of solutions and ensure the sharing of information by offering continuity to the service.









### **Our customers**

Our customers (public and private) belong to all product sectors and all size classes.

Understanding the needs of our customers is a constant aspiration, both in terms of business development and social responsibility.

Every project we carry out is the result of a close collaboration with the customer: listening, comparison, communication and team feeling are necessary to build solid professional and personal relationships and contribute to the virtuous growth of each company.









### Let's introduce

# Risk assessment and management in Business Continuity









## UNI ISO 31000: 2010 Risk management

Risk management is a goal to which every company attentive to preventive aspects should strive and that every customer should demand, especially in sectors characterized by high variability.

The ISO 31000 Guideline offers us a risk management model and its integration into the company management system. It is applicable to all types of risks (from strategic to operational, currency, market, compliance, country, etc.)









## **Key principles of ISO 31000**

Risk management creates and protects value

Risk management must be an integral part of all processes in the organization Risk management is part of the decision-making process and needs to be systematic, structured and timely

Risk management takes into account human and cultural factors

Risk management is dynamic, iterative and responsive to change Risk management promotes the continuous improvement of the organization









### Characteristic elements of risk

Risk is often characterized by reference to potential agents and consequences or a combination of these

Risk is often expressed in terms of combining the consequences of an event (changes in circumstances) and the likelihood of its occurrence

Risk depends on uncertainty (not events) and the consequences that uncertainty has on our goals

The risk does not depend on the fact that some events can affect our goals, but on the fact that we do not know such events (uncertainty)

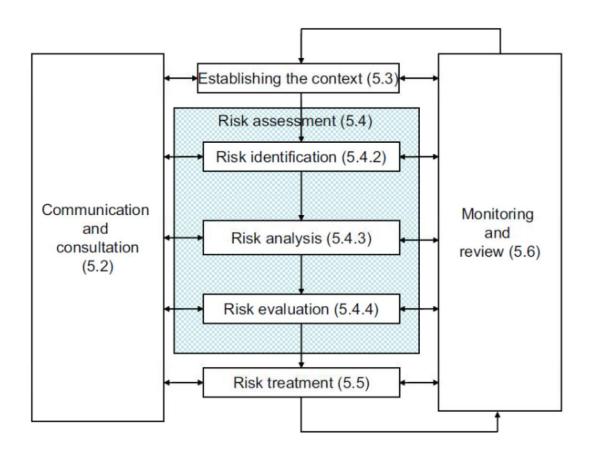








## Risk management process











### Risk identification











### Criteria for risk assessment

Nature and types of causes and consequences and how to measure them Definition of likelihood (or probability) Analysis time horizon Determination of the level of risk Stakeholders' views Level of risk acceptability Presence of multiple risks and their combinations









## Risk analysis

- Involves developing a knowledge of risk
- Provides input data to risk weighting and treatment needs
- > It implies considerations on:
  - ✓ Causes and sources of risk
  - ✓ Positive and negative consequences
  - ✓ Likelihood (probability) of their occurrence
- ➤ It is analyzed by the correlation between the consequences and their likelihood
- Existing controls and their effectiveness should be taken into account









### Risk evaluation

Evaluation of consequence and likelihood

Comparison between the level of risk defined in the analysis phase and the established criteria

Consider the risk tolerance borne by stakeholders

Define the risks that need treatment and their implementation priorities









## Risk management

Avoid the risk by deciding not to start or continue the activity that entails the onset of the risk

Take or increase risk in order to pursue an opportunity

Remove the source of risk

Change the probability

Change the consequences

Sharing risk with another stakeholder (e.g. financial control)

Considering the risk by informed decision









## Cyclical risk management process

Assessment of the treatment of a risk

Evaluation of the effectiveness of such treatment

Decision on the tolerability of residual risk

Generation of a new treatment if the risk is not tolerable









## Review of the risk analysis

## The need to carry out and/or review the risk analysis may arise in the face of:

- > an emergency situation not already evaluated
- > results of the context analysis;
- results of the analysis of the needs of customers and other relevant stakeholders;
- results of the analysis of compliance with mandatory requirements;
- definition and/or review of processes;
- > any other need such as the choice of a new supplier, a new raw material, etc.









## Crisis Management and Business Continuity

#### **CRISIS MANAGEMENT**

The process by which an organization faces a situation that risks damaging the company's performance and reputation, putting in place various practices that allow to prevent, manage and mitigate the negative consequences of the crisis.



## OBJECTIVES OF CRISIS MANAGEMENT

- Respond to potential or actual threats
- Implement reactive and proactive conduct, for monitoring and preventing potential threats
- Enabling a rapid and structured response to the crisis
- Define a crisis plan with guidelines on the actions to be taken and on the subjects to be activated.









### PP-RR approach to Business continuity

#### **BEFORE and AFTER a crisis**

- Business Risk Management Framework
- Insurance policy
- Review plans and procedures
- Lesson learned

#### **BEFORE** a crisis

- · Assess threats and vulnerabilities
- Analyze the impact on the business
- Develop plans and procedures
- Train and train
- Try the scenarios

#### **Prevention**

Mitigate future incidents or minimize their impact

#### **Preparation**

Prepare to respond and recover from incidents



Reduce downtime and recovery

Response

Control, containment and minimization of the impacts of an accident

#### **DURING the crisis**

Assess the consequences Activate the Business Continuity Plan Managing economic and financial aspects

Activate the communication plan Activate recovery plans







- Assessing the potential crisis and its effect
- Activate the Crisis Team
- Determine the level of response
- Activate plans and procedures





## The Crisis Management Team

- Top management (Team manager)
- Human Resources Manager
- Purchasing Manager
- Head of Legal Department
- Head of Administration and Finance
- Production Department Managers
- > IT Manager
- Communication Manager
- EHS Manager
- Quality assurance function
- Workers' representatives
- Consultants











## Elaboration of the internal protection plan and definition of mitigation measures

- Protection plan and reaction aimed at internal functions of the company including:
  - Internal organizational decisions
  - > Financial and administrative measures
  - Limitations in the tasks to be performed
  - Revisiting workspaces
  - Operating procedures for the conduct of personnel working in the company
  - Procedural practices to be followed for the implementation of a given process or activity
  - Increase in product control plans
  - Increased site protection and surveillance measures
  - Increase in support activities (cleaning, maintenance, staff training, etc ...)









## Elaboration of the external protection plan and definition of mitigation measures

- > Protection and reaction plan aimed at external stakeholders
  - Exchange of detailed information with customers and suppliers about the operation of the business (stock breakages – plant downtime)
  - > Execution of strategic purchases and redefinition of stocks
  - Search for new suppliers not affected by the crisis (where appropriate)
  - Evaluation of external activities (transport services carried out by third parties and their impacts)
  - Services carried out by third parties at the company and request for mitigation measures
  - Management of events outside the company (fairs conferences – audits)









## Communicating the crisis

Communication is an essential element for the proper management of the crisis as

- it provides the real dimension of the crisis and avoids underestimating or overestimating the crisis itself and therefore the effects
- information determines decisions (ours, customers and suppliers)



Define what, how, when, who should communicate.

Provide stakeholders with clear contacts for the management of the emergency and related issues









## Key elements for Crysis Management in the agri-food chain

- Food Safety Plan HACCP
  - Review of changes to the pre-requisite plans
  - Management of Critical Control Points
- Emergency Supplier and Raw Material Approval
  - Emergency Supplier approval
  - Raw material approval
  - Packaging Materials
- Vulnerability assessment / fraud prevention









## Food Safety Plan HACCP

#### Review of changes to the pre-requisite plans

- The existing HACCP plan will have identified the prerequisite programs and critical control points under normal operating conditions.
- The pre-requisite programs are likely to be affected by changes made to the operation in response to a crysis. It is important to review any planned changes to understand and mitigate any impact on product safety.

#### **Management of Critical Control Points**

- The Critical Control points identified through the HACCP programme are critical because they enable control of the safety of the products and cannot be compromised. At this time, when the operation is under stress, increased emphasis of the identified critical control points should be given. This should include:
  - identification and training of deputies to manage CCPs to cover for any absenteeism
  - clear identification of critical control points within the processing environment for the benefit of new employees
  - reference to the significance of the relevant CCPs in the training of new or temporary staff recruited
  - additional checks sign off of CCP records particularly where monitoring is carried out by less experienced staff.









## Emergency Supplier and Raw Material Approval

- Shortages of raw materials as production shuts down or reduces in parts of the world and the supply chains become disrupted as a result of a Crisis.
- Alternative sources of supply for raw materials will need to be used to ensure continuity of production. This brings increased risks, and it is very important that these risks are understood and managed.
- Whilst supply issues cannot always be predicted steps should be taken to monitor the supply chain. This could include, regular reviews with suppliers of their stock situation, understanding the situation in countries of origin for key raw materials and watching commodity prices as an indication of product scarcity.

#### **Emergency Supplier approval**

It may be necessary to use emergency suppliers of raw materials, processing aids or packaging materials Inevitably it will not be possible to visit or audit the site however the following options should be considered in order to gain confidence in a potential new supplier:

- check for existing certifications or audit reports to review
- consider remote site audits
- carry out online searches for historical site issues or information
- request product samples and specifications for assessment.









## Emergency Supplier and Raw Material Approval

#### Raw material approval

When introducing new raw materials or processing aids whether from a new supplier or existing supplier it is essential to have information about the material before acceptance. This allows for a full review of the consequences of its use. This should include:

- product specification including all component ingredients as applicable
- identification of any significant variance from the current raw material it will be used to replace
- the nature of the raw material i.e. frozen, chilled etc
- full list of allergens declared or considered likely to have cross contaminated during production. Most importantly check for any new allergens not present in the original raw material
- any potential effect on product shelf life
- the potential for fraud or substitution.

#### **Packaging Materials**

Where it is necessary to change supplier of packaging materials it is important to understand any differences in specification between the new and former product. The packaging specification needs to be reviewed with consideration of any effect on:

- migration of chemicals into food (where direct food contact)
- product shelf life for instance where barrier layer properties have changed
- product protection during transit.









## Vulnerability assessment / fraud prevention

Shortages of supply of materials are often accompanied by price rises and this can increase the risk of fraudsters entering the market with substituted products, extended products or false claims.

Often the buyers are most aware of market scarcity and changes of origin or price increases in raw materials. It is important to maintain a close working relationship between the buying and technical teams to share information on changing circumstances and access the potential risks from fraud.

#### It is recommended that:

- closely monitor raw material shortages and price changes to identify raw materials at greatest risk from fraud
- pay close attention to articles and published incidents of fraud
- review the raw material risk rating and contingency plans
- increase testing or inspection procedures where appropriate for raw materials identified to be at increased risk









## **Business Continuity Plan – Case study Manufacturer of frozen pastry products**

#### **Identified crisis situations**

- Fire with involvement
  - a. at the establishment
    - i. of the production lines only
    - ii. of the plant warehouse only
    - iii. of the whole establishment
  - b. of the external warehouse
- Flood / earthquake with involvement
  - a. of the establishment
  - b. of the external warehouse
- Prolonged interruptions / micro-interruptions / power surges
  - a. of the establishment
  - b. of the external warehouse
- Significant plant and service failures
  - a. at the establishment
    - i. of the production lines only
    - ii. of the plant warehouse only
    - iii. of the whole establishment
  - b. of the external warehouse









## **Business Continuity Plan – Case study Manufacturer of frozen pastry products**

#### Identified crisis situations

- Sudden strikes of staff operating at
  - a. the establishment
  - b. the external warehouse
- Physical Security Breaches at
  - a. the establishment
  - b. the external warehouse
- Episodes of civil disobedience
- Need for recall from the market
- Epidemics and health emergencies
- Cybersecurity breaches / Unavailability of IT infrastructure
- War crises with consequent reduction in the availability of raw materials









## General crisis management measures

- Duplication of warehouses
- Product stock.
- Emergency site
- Food Defence / Security Management
- Market recall procedure
- IT recovery procedures
- Alternative suppliers
- Alternative raw materials









## **Management of events**

Crisis Events	A Duplic. W.houses	B Product stock	C Emergency site	D Food Def. / Security	E Market Recall	F Proc. IT recovery	G Altern suppliers	H Altern. Raw Mat.
Fire with involvement								
<ul> <li>at the factory</li> </ul>								
<ul> <li>of production lines only</li> </ul>		✓	✓			✓		
<ul> <li>of the only mag. of establishment</li> </ul>	✓	✓				✓		
<ul> <li>of the entire plant</li> </ul>	✓	✓	✓			✓		
<ul> <li>of the external deposit</li> </ul>	✓					✓		
Flood / earthquake with involvement								
<ul> <li>of the establishment</li> </ul>	✓	✓	✓			✓		
<ul> <li>of the external deposit</li> </ul>	✓					✓		
Prolonged interruptions / micro-								
interruptions / power surges								
<ul> <li>of the establishment</li> </ul>		✓	✓			✓		
<ul> <li>of the external deposit</li> </ul>	✓					✓		
Significant plant and service failures								
<ul> <li>at the factory</li> </ul>								
<ul> <li>of production lines only</li> </ul>		✓	✓					
<ul> <li>of the only mag. of establishment</li> </ul>	✓	✓						
of the entire plant	✓	✓	✓					
of the external deposit	✓							









## **Management of events**

Crisis Events	A Duplic. W.houses	B Product stock	C Emergency site	D Food Def. / Security	E Market Recall	F Proc. IT recovery	G Altern suppliers	H Altern. Raw Mat.
Sudden strikes. personale at								
<ul> <li>the factory</li> </ul>		✓	✓					
<ul> <li>the external deposit</li> </ul>	✓	✓						
Security Breaches at								
<ul> <li>the factory</li> </ul>		✓	✓	✓				
<ul> <li>the external deposit</li> </ul>	✓			✓				
Episodes of civil disobedience				✓				
Need for recall from the market.		✓	✓		✓			
Epidemic and/or health emergency		✓					✓	✓
Cybersecurity breaches						✓		
War crises with reduced availability of raw materials							✓	✓









## Review and testing of the Business Continuity Plan

Tests of the Business Continuity Plan are carried out annually in order to verify the structure's ability to respond to the identified crises.

At the same time as the tests, the document is reviewed in order to assess any need to integrate uneassessed elements or modify defined management methods.

The Business Continuity Plan is always revised following events that have required its effective activation in order to evaluate its effectiveness for the defined objectives















Grazie per l'attenzione!

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