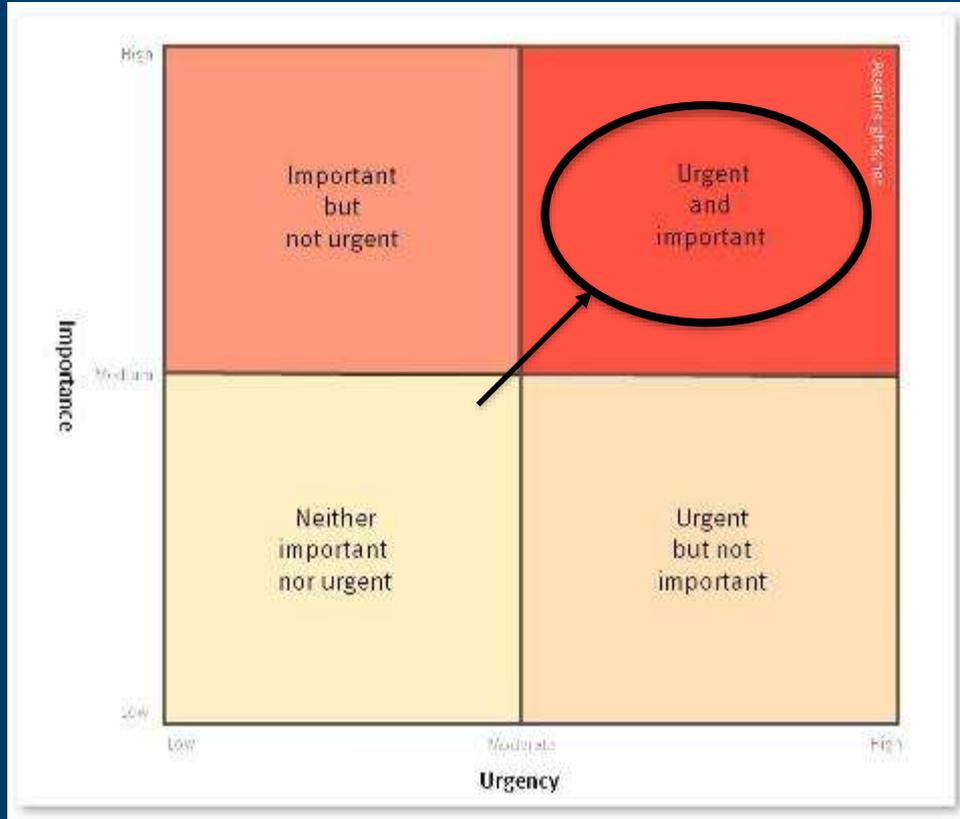# Human Impacts on nuclear activities due to conflicts

Fusion and Technology for Nuclear Safety and Security Department
Nuclear Safety Security and Sustainability Division

IMPACT OF CONFLICTS ON NUCLEAR SAFETY/SECURITY

1. Priorities are changed
2. Perception of the nuclear (or chemical) risk is augmenting
3. Management of human resources may be difficult
4. Conflicting procedures
5. Interface safety/security

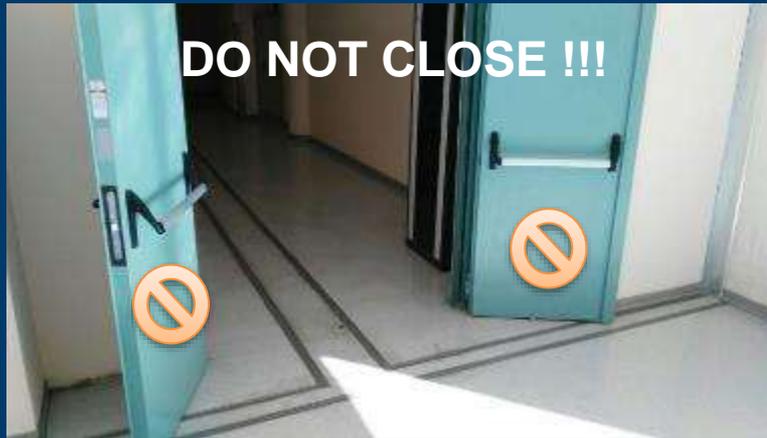# PRIORITIES CAN CHANGE DURING THE CONFLICT

IMPACT ON SAFETY

- **Availability** of PPE
- **Donation of PPE**
- **Borders closure – shortgage of materials**

DO NOT CLOSE !!!

NEW RISKS

- **Lack of personnel**
- **Disruption of procedures**
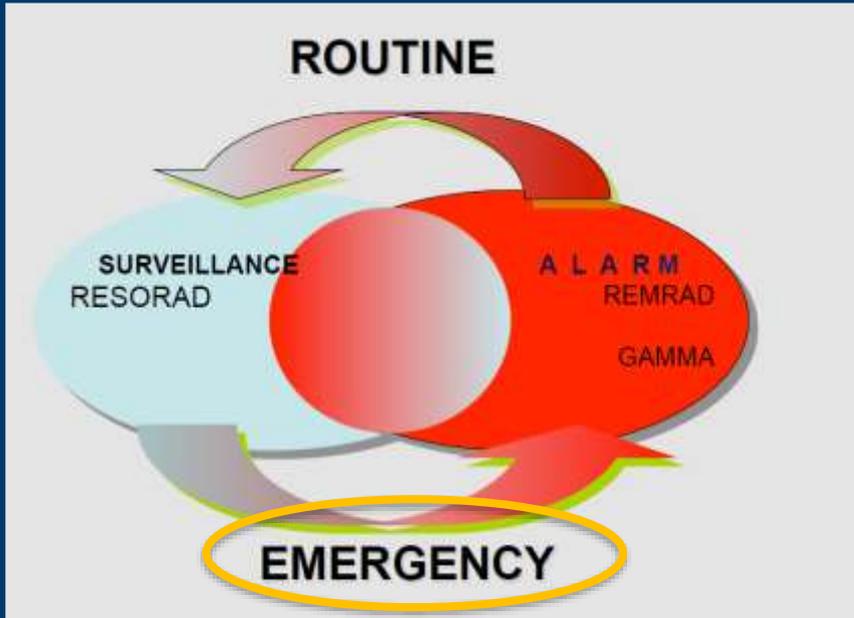- **Shortgage of spares, consumables, …**

BUSINESS CONTINUITY

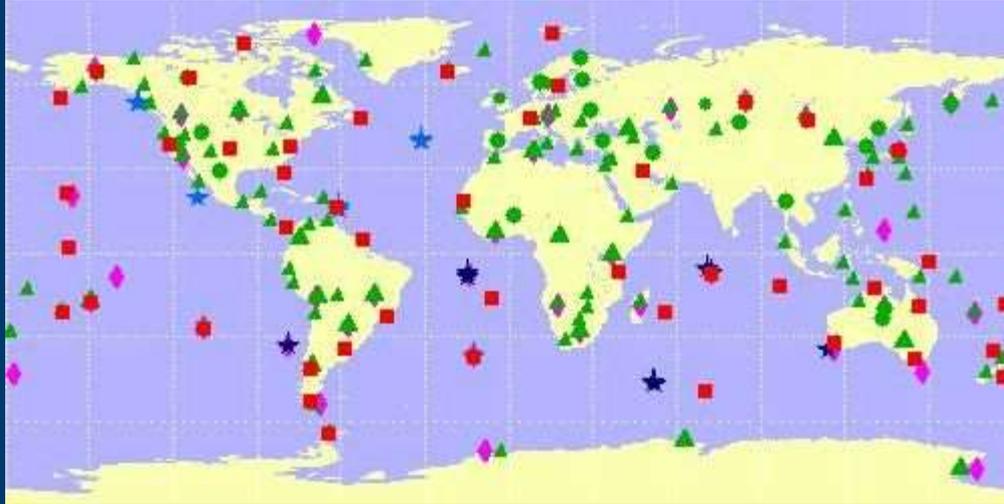**Individual perception of risk has to be managed**

BUSINESS CONTINUITY

Remote monitoring became important in order to guarantee business continuity

National network for environmental radioactivity surveillance RESORAD

BUSINESS CONTINUITY

Remote monitoring implies secure data connection, cryptography, bandwidth
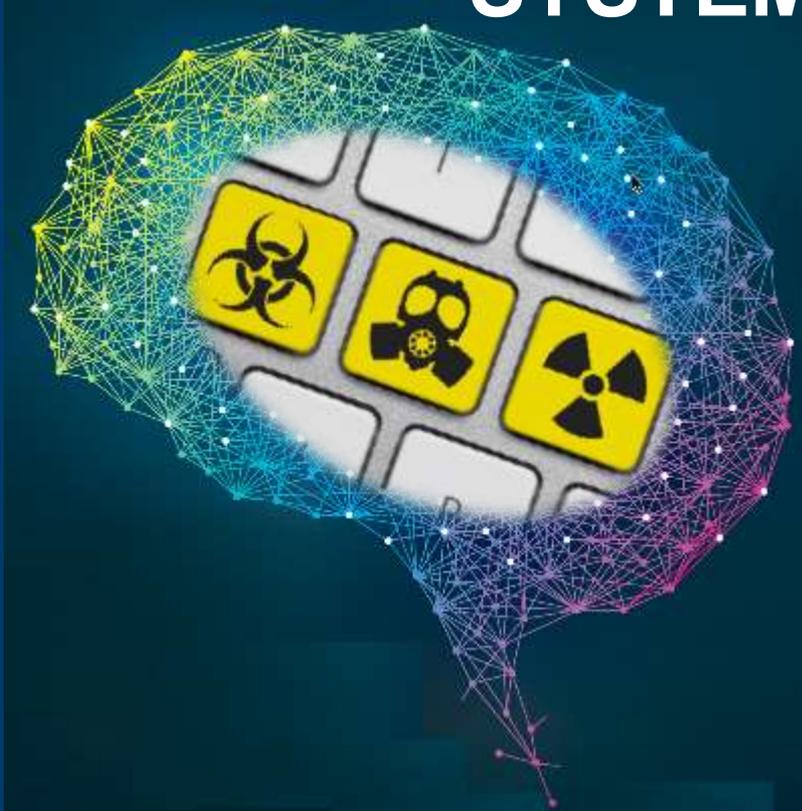
THREATS

Risk of hackering

Cybersecurity

Secure storage

BUSINESS CONTINUITY

During conflicts people change their ordinary duties, following the priorities.

…..How to ensure FAST and RELIABLE response to potential nuclear emergencies in such a situation ???

SYSTEM RECOVERY

Take lesson from all the fields

Mantain an holistic view

INTERFACE SAFETY / SECURITY

Not only nuclear safety /nuclear security

But also

Biological safety / nuclear security,

Chemical securty / nuclear security

Biological safety / cyber-security,

Chemical safety / nuclear security…

«Should we take the doors closed or open?»

LONG TERM STRATEGY

❑ **Develop more realistic scenarios for testing resiliance**

❑ **Identify critical infrastructures and related procedures**

❑ **In deep analysis of SAFETY/SECURITY interfaces**

❑ **Have an holistic view of emergency (not sectorial)/ multisciplinary teams**

❑ **Invest in transer of knowledge, distance learning and Virtual/augmented reality tools**

❑ **Develop remote monitoring and acquisition data system**

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