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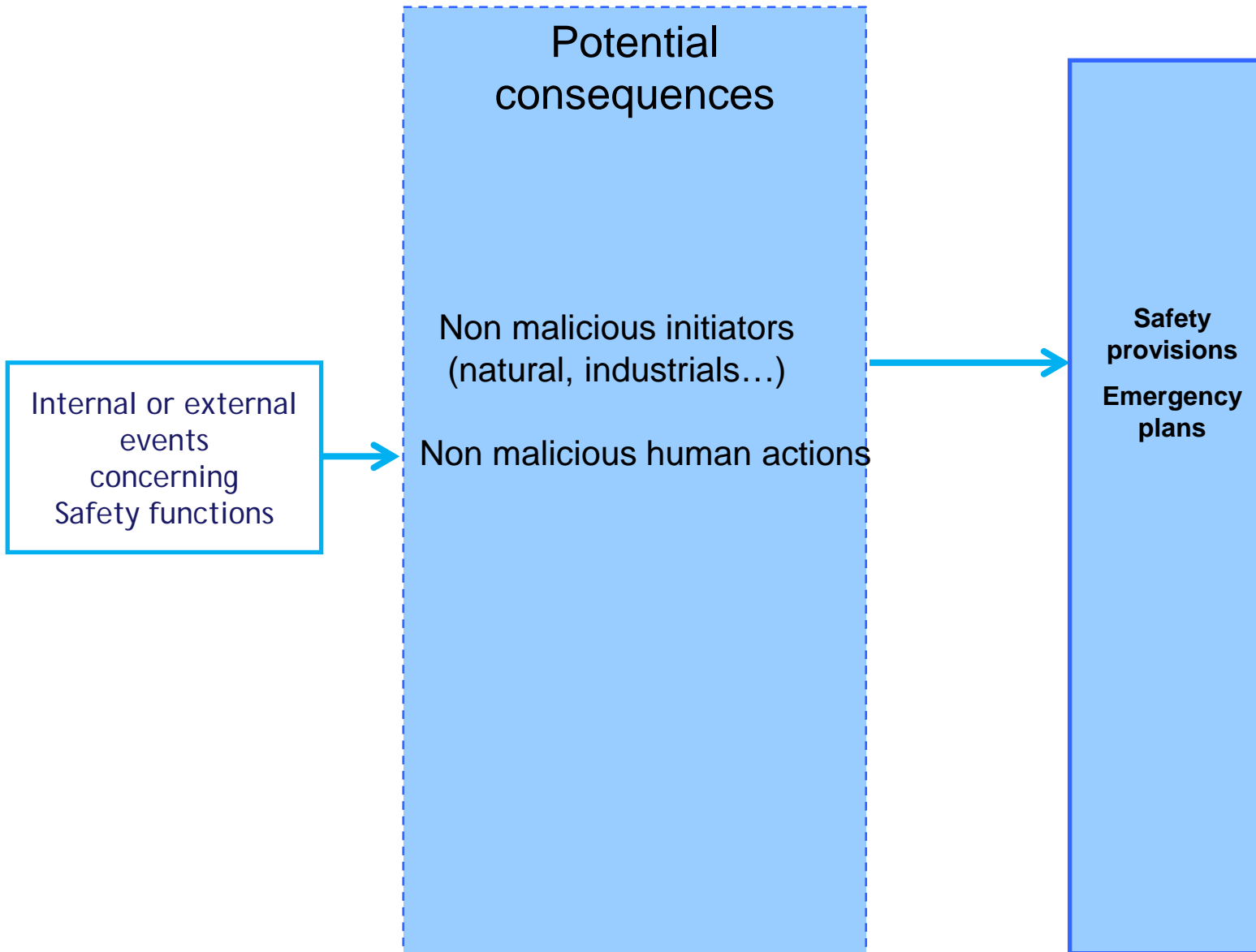
# The balance between Safety and Security issues during a nuclear security emergency

(based on security exercises feed-back)

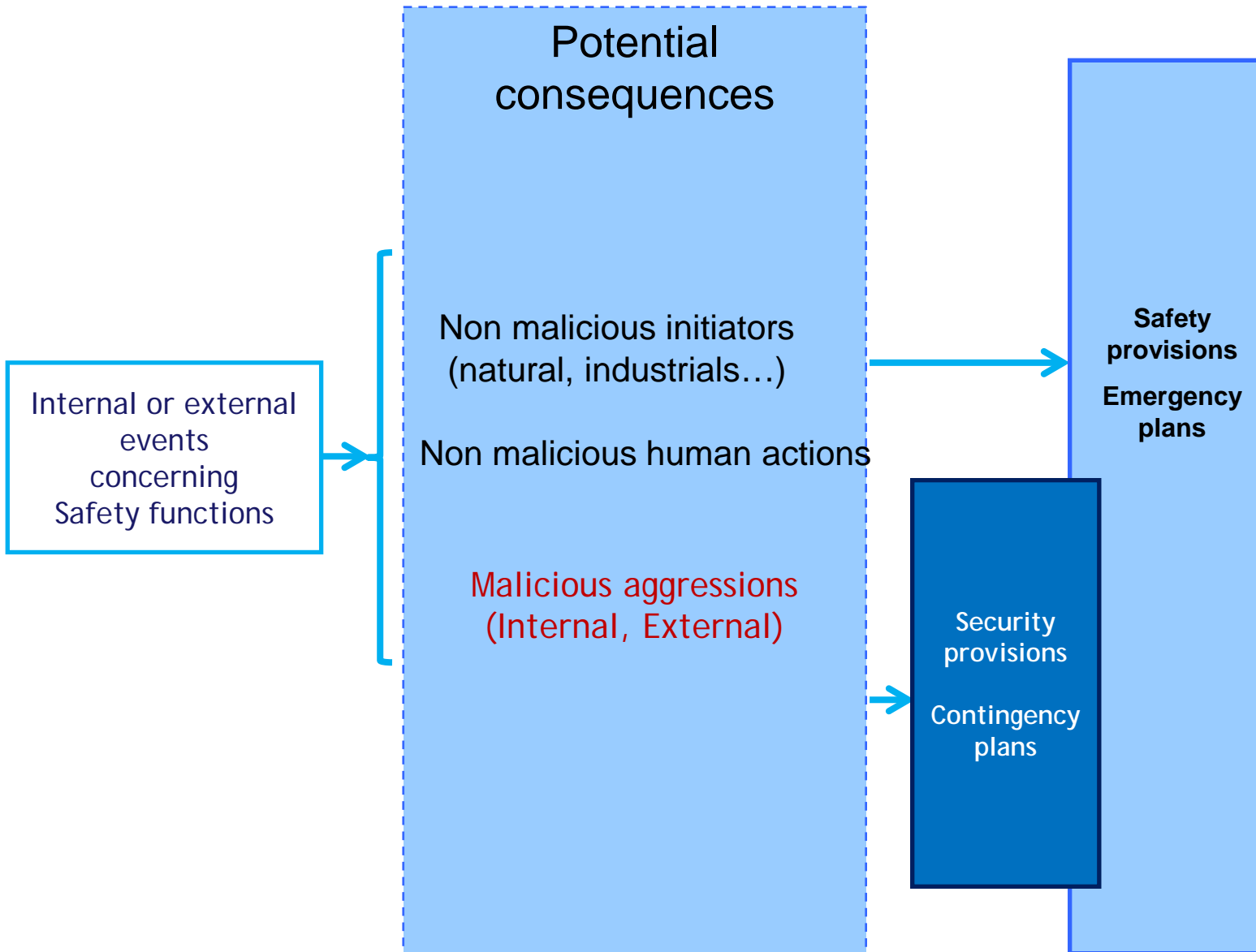
# SUMMARY

- Context
- Feed-back from exercises
- Allocation of responsibilities
- Emergency response management synopsis
- Main issues

# Global approach



# Global approach



# Context

IRSN has been involved in preparation and realization of exercises with the authorities, State agencies and operators for many years.

- **Testing on-site and off-site emergency plans:**

- Safety exercises (with non intentional initiator) **Large experience**
- Safety exercises (with malicious initiator) **Very limited experience**

- **Testing on-site and off-site contingency plans:**

- Security exercises (malicious initiator) **More limited experience**

## Feed back from exercises

Managing a severe aggression has several specificities:

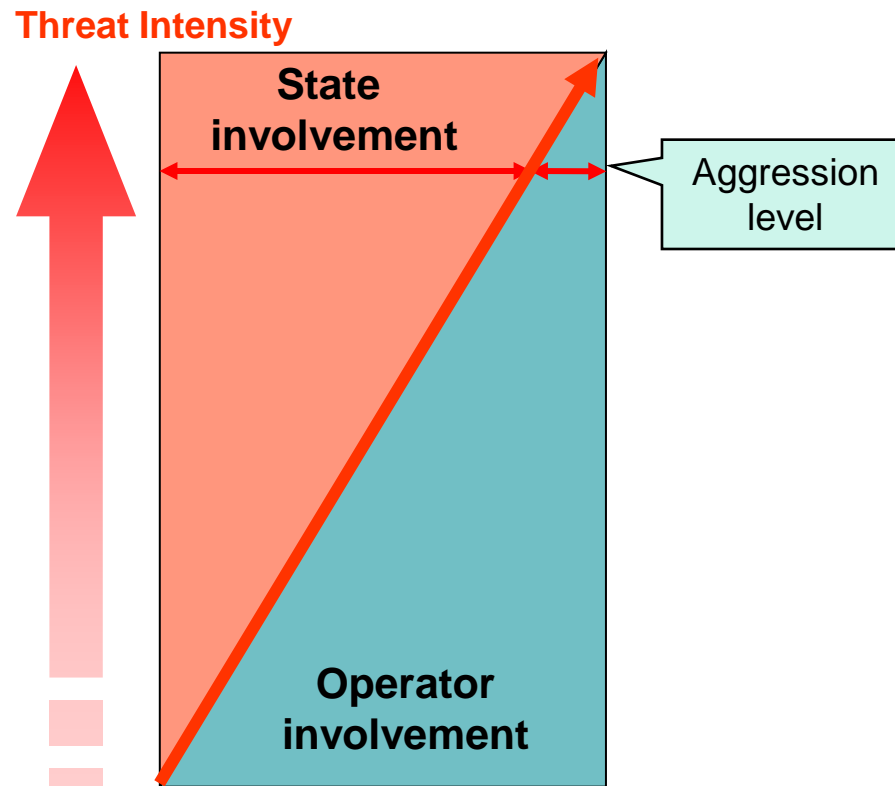
- The response to a severe attack against a nuclear facility encompasses protection of the public and the environment, maintaining public order... allocation of responsibilities between State and operator
- The emergency preparedness and response management has to be prepared at operator and State level
- A large number of local and national entities involved in the response will have to cooperate efficiently (security and safety authorities, operator teams, dedicated response forces, bomb squad, judicial authorities...)

## Feed back from exercises

- Emergency situation management following an high intense malicious action demands a perfect cooperation of a large number of local, regional and national entities (security and safety authorities, operator teams, dedicated response forces, bomb squad, judicial authorities...) to handle the safety & security aspects of the situation

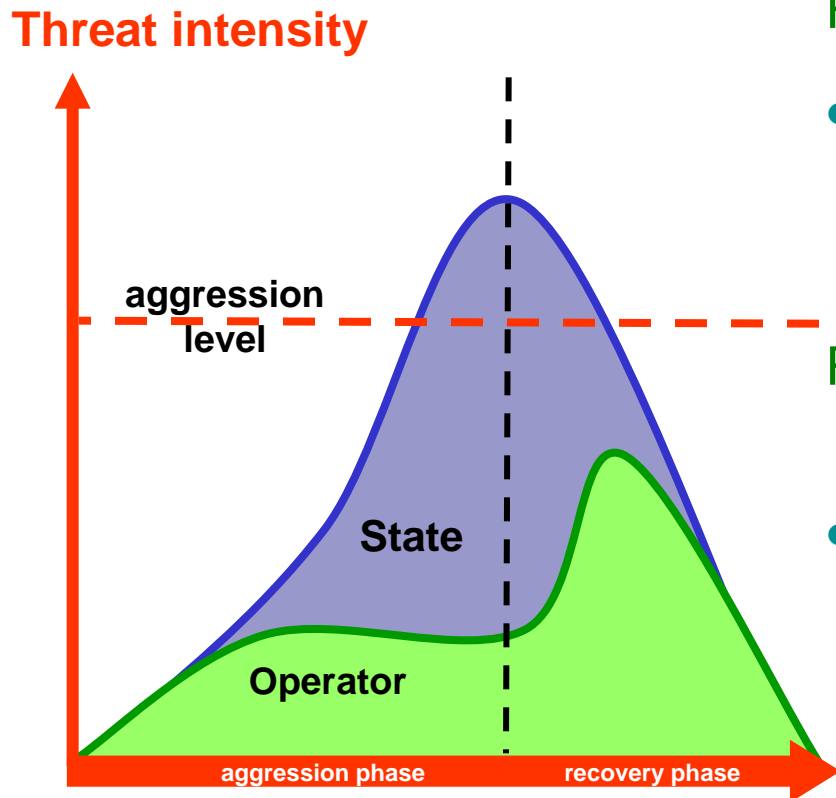
# Allocation of responsibilities

- Level of State involvement strongly depends on the intensity of the aggression





# Allocation of responsibilities



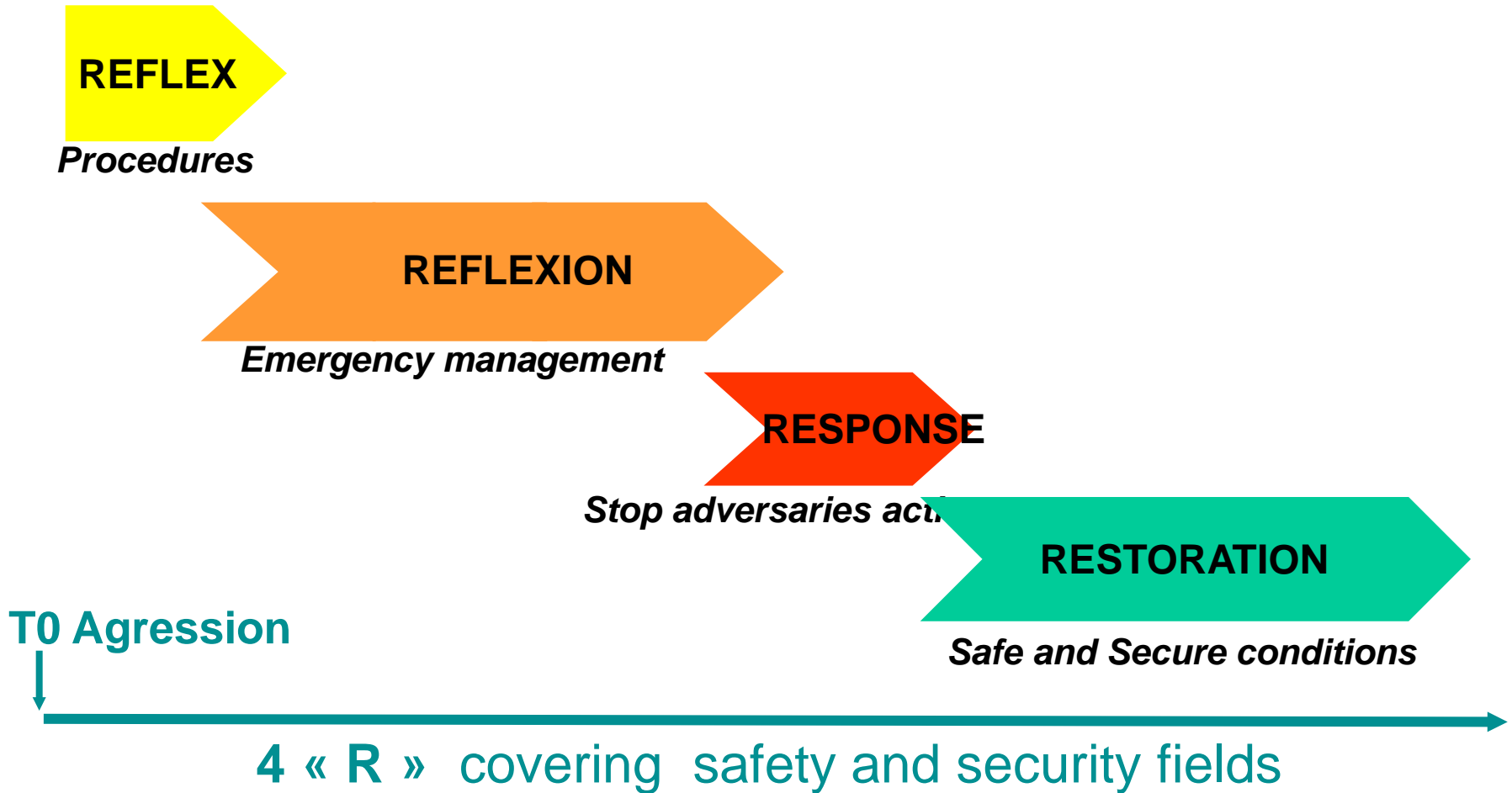
## Requesting a major State involvement:

- Requiring timely and appropriate measures to be taken to stop the aggression

## Requesting a coordination between safety and security:

- To recover a safe state

# Emergency response management Synopsis



# Security



- Security checklists
- Detection and assessment of security events
- Contingency plan activated (regional / national level)
- National response informed

Reflex phase

attack

# Safety

- Safety checklists
- Detection and assessment of safety events
- Emergency plan activated
- National safety emergency organisation activated



# Security



- Command posts staffed
- Local forces intervention
- National forces involvement
- All ministers informed
- Assessment of intervention strategy
- Negotiation with adversaries
- Order for neutralization of adversaries

## Reflection phase

First statement,  
first response

Emergency management  
deployment

Analysis of  
the situation

Intervention  
strategy

Decision  
making  
process for  
assault

- Command posts staffed
- Maintain of safety functions
- Preparation of population protection

# Safety



Security



- National forces lead negotiation with adversaries
- Last details of tactics are decided

## Response phase

Neutralization of adversaries / Assault

Safety



- Assessment of safety

# Security

- Securing buildings and areas



- Search of evidences
- Contingency plan deactivated?

## Recovery phase

### Recovery strategy

Short term

Medium and long term

- Equipment check
- Strategy to restart stopped equipment
- Strategy in case of equipment failure



- Starting the repair works
- Emergency plan deactivated?

# Main issues

- Decision making process
- Emergency management in a timely fashion
- Coordination / interfaces
- Planning / preparation / training

# Decision making process

- The decision making process may involve the highest State authorities
- Leadership (One, clearly identified)
- Must consider potential safety and security consequences
- Importance of an accurate assessment of the adversaries capabilities
- Specific issues to manage at the same time:
  - ☞ Hostile commando on site
  - ☞ Pre-accidental situation



# Emergency management in a timely fashion

- Time is a major concern in such emergencies
- Ready for graded responses
- Emergency is not over after the assault
- Deadlines for recovery, setting priorities

# Coordination / interfaces

- How to coordinate the different stakeholders involved in such an emergency?
- Complementarity or conflicts between safety and security
- Coordination between local and national involved entities
- Allocation of responsibilities for emergency management between several entities (State & Legal Authorities, Response forces, Operator)
- Links between several response forces  
(Local, Regional, National)

# Planning / preparation / training

- Necessity to be prepared for emergency through development, implementation and testing of emergency and contingency plans
- Mutual understanding through sharing a safety and a security culture
- Knowledge of the NPP (staff, building layout, issues, environment,...) by all offsite actors
- Experience feedback

# General conclusion

Security exercises are a way to progress in the management of safety and security interfaces by the development of a mutual understanding of entities with different skills and cultures and the sharing of experience feedback