

Technical workshop on crisis management in Danube delta

Emergency response in Netherlands

Common features

- The element of surprise
- Short decision time
- Situation materializes unexpectedly
- Decisions are required urgently
- Time is short
- Specific threats are identified
- Urgent demands for information are received
- Sense of loss of control
- Pressures build over time
- Demands are made to identify someone to blame
- Outsiders take an unaccustomed interest
- A threat to the organization
- Reputation suffers
- Communications are increasingly difficult to manage

Specific threats for an organization

- Operative viability
- Reputation
- Reliability
- Financial stability
- Action to law

Plans are needed

An emergency management plan generates order out of chaos. It needs strong leadership by well-trained and rehearsed individuals. Everyone within an organization should know what his or her role is in an emergency and should be prepared to deal with one.

Top 10 pitfalls (contingency) plans

1. No support from top management
2. Insufficient involvement of employees and stakeholders
3. No or bad planning
4. Insufficient training and exercise
5. No designated leader
6. Plan is not maintained and not 'up to date'
7. No method and system for alarming the employees
8. Legislation for health employees is not included in the plan
9. No procedures for stopping critical processes
10. Employees are not informed how to act in cases of emergencies

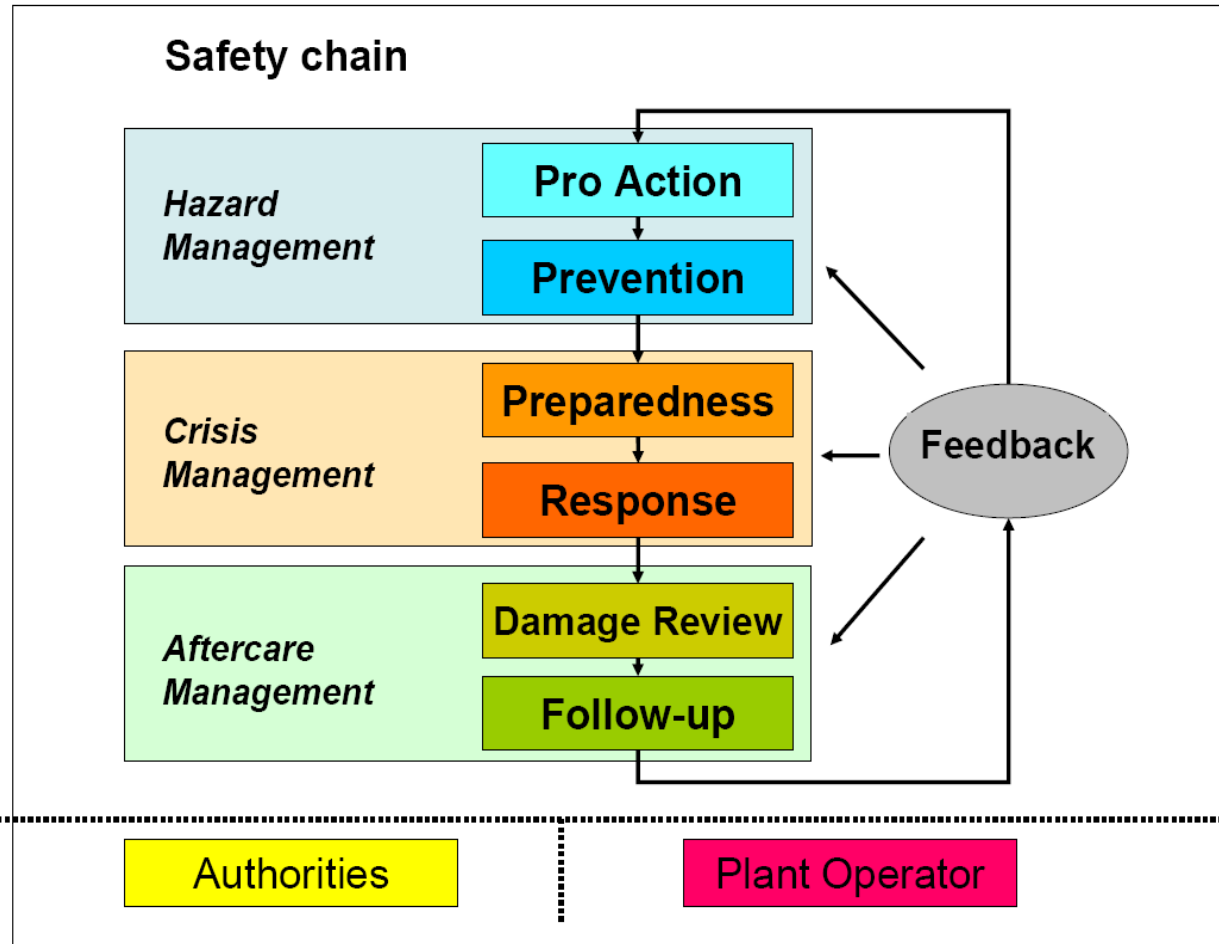
Safety chain

The 'safety chain' approach is a widely used model for policy making and evaluation in terms of risk management. Based on going through the links of the chain, plans can be developed.

Phases and interlinked elements of risk mitigation and crisis management:

- Proaction
- Prevention
- Preparedness
- Response
- Damage review
- Follow-up

Safety chain



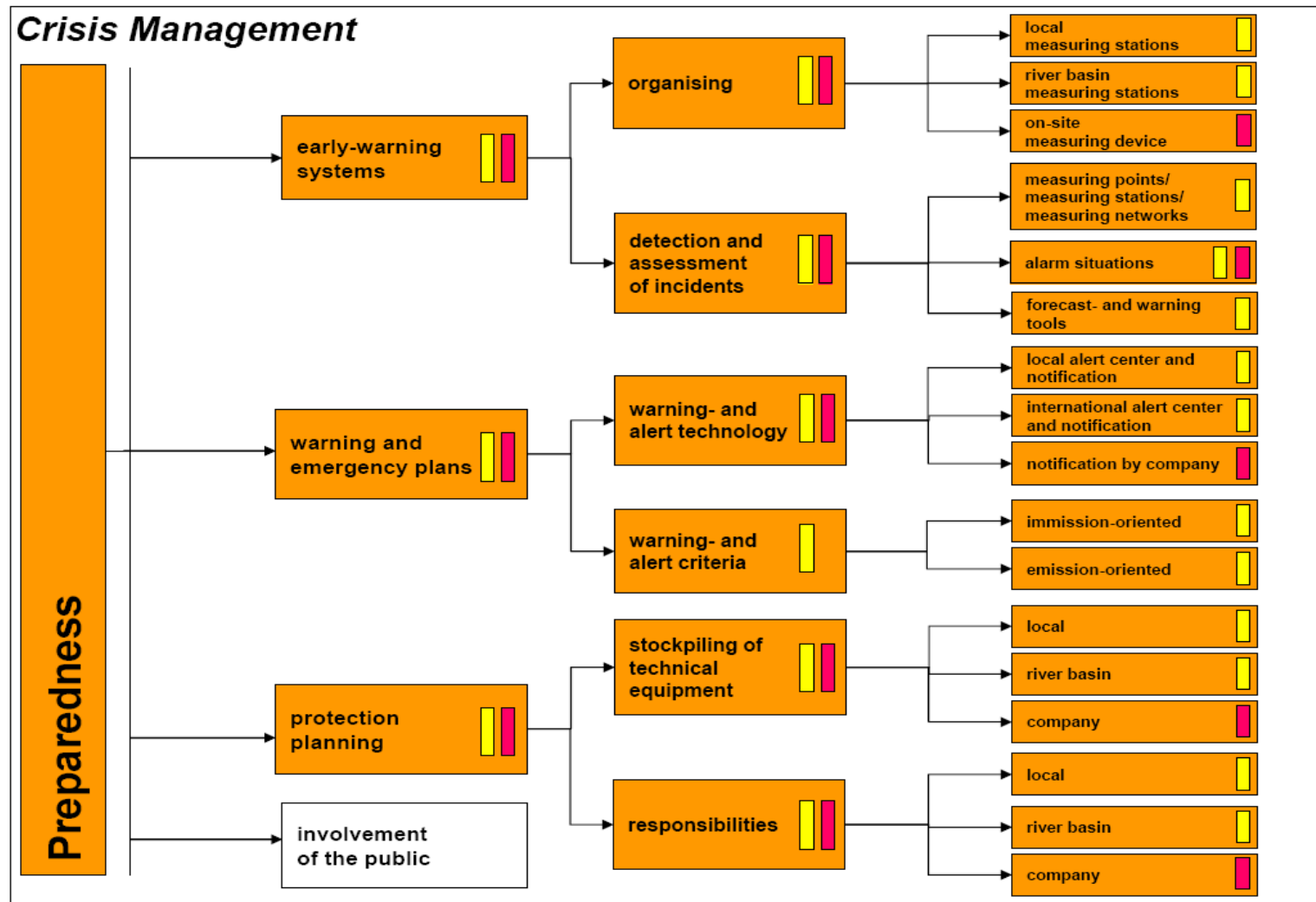
Safety chain

- Continued evaluation of the elements of the safety chain will lead to optimal risk and crisis management of accidents
- A close involvement of the industry and the authorities within the establishment of each link is highly important
- Obligations applicable under legislations and policy must be implemented
- Extra or specific measures must be taken to encourage and secure a safe environment
- Organizational measures must be included such as a safety management system
- Compliance monitoring by responsible authorities in each stage of the safety chain is a condition

Crisis management: preparedness

- Organizations should be ready to assess the risk
- The accident scenario involves the incident forecast
- Information transmission plan (state workers and the emergency staff)
- Development and implementation of emergency liquidation plans
- Provision of readiness and functionality of the crisis management tools
- Training and maintenance of the emergency services
- Репетиция и развитие методов оценки и планы эвакуации
- Development and replenishment of the materials and equipment
- Institutionalization of specialized emergency agencies, network and coordination centers

Emergency preparedness

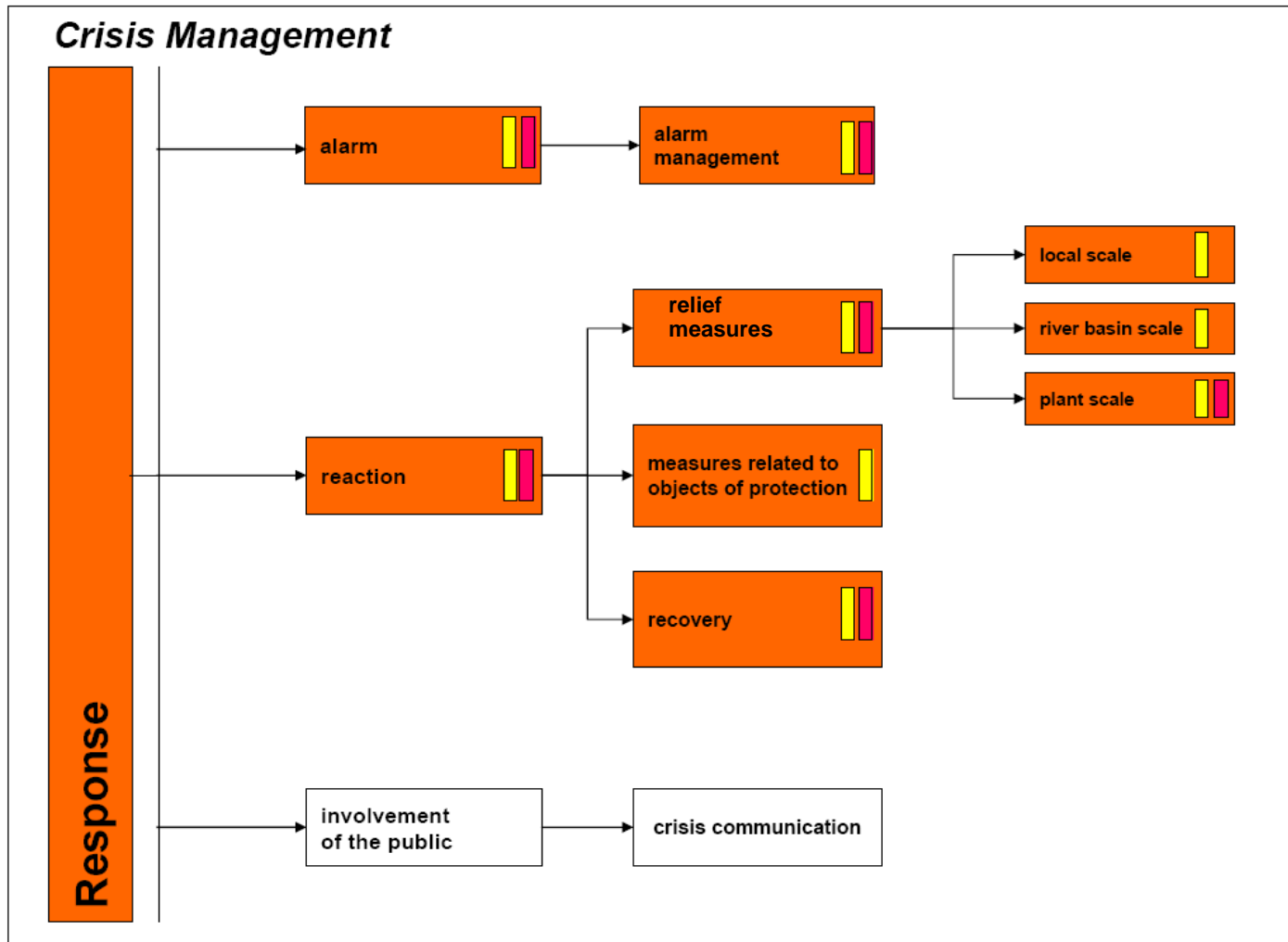


Crisis management : response

Response represent the actual measures to reduce the impact of an accident or natural disaster.

- Mobilization of first aid (basic emergency aid)
- Support of the secondary emergency aid services (for example, specialized ecological assessment teams)
- Efficient coordination of actions based on the rehearsal of emergency plan
- Participation in the local, regional and national activities (if necessary)
- Efficient communication

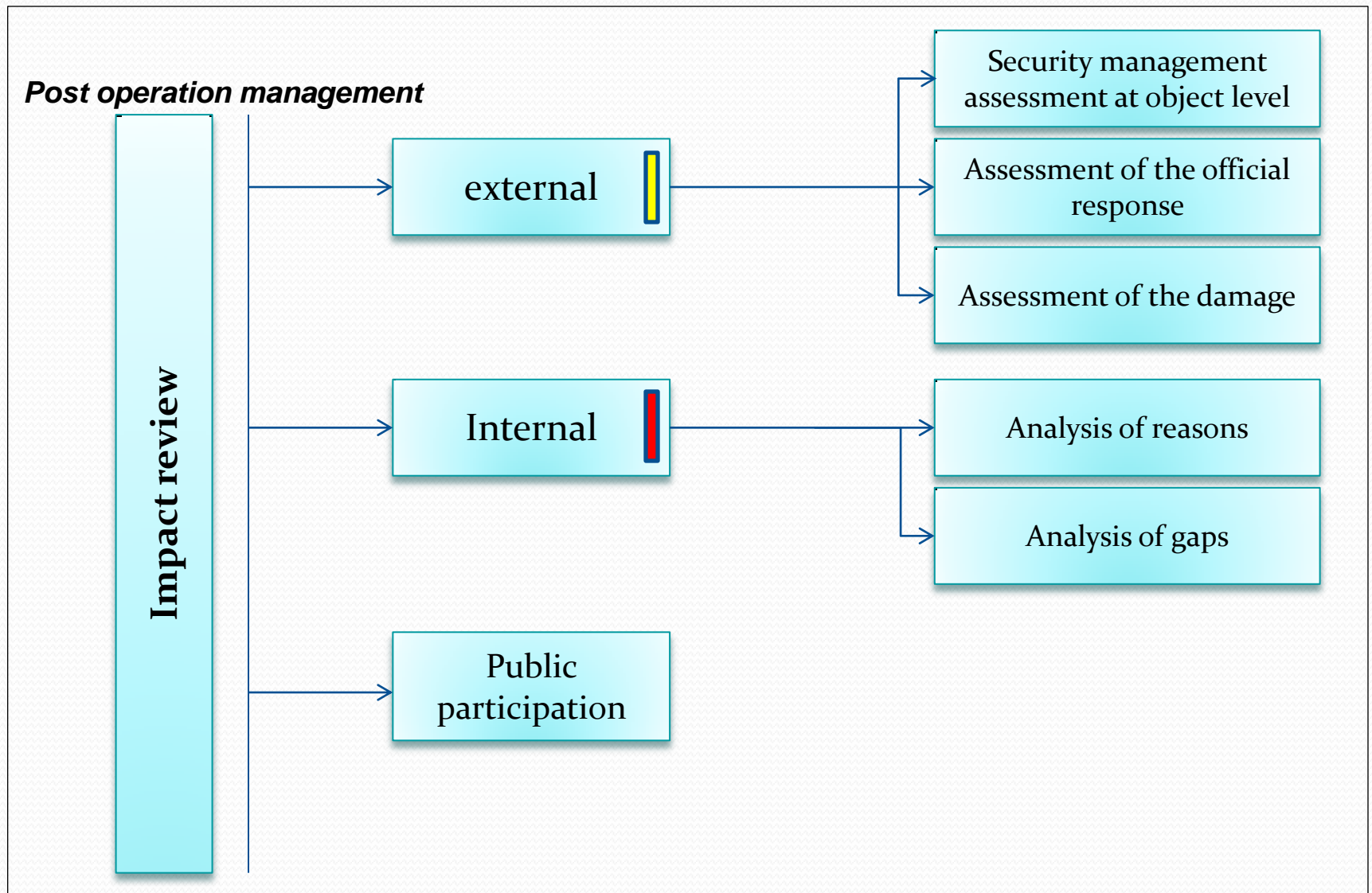
Emergency response



Post crisis management: review the impact

- Review and rehabilitation
- it is necessary to get back to normal and rehabilitate the state after the accident or disaster
- An important feature of the rehabilitation is the assessment

Impact review : post operation management



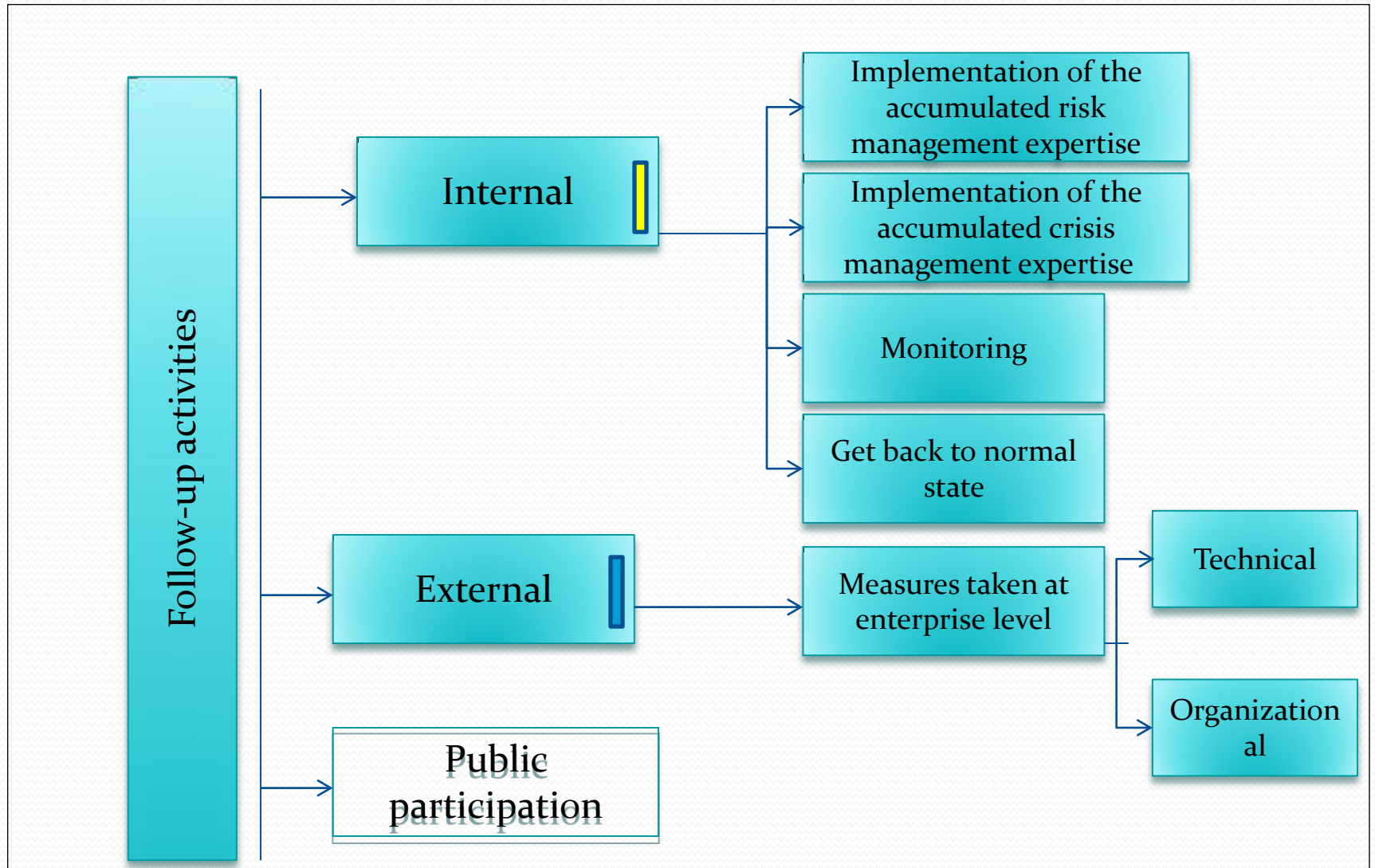
Management of effects: follow-up

The (hidden) search of fails and reasons of accidents and incidents is the only way to stop occurrence of such accidents and is crucial for improvement of the industrial security.

Therefore, the assessment should be oriented towards:

- Reasons of accident
- The precedent case and prophylaxis
- System and process of the response
- Recommendations for improvement of all the security chain elements

Post operation management: follow-up



conclusions (preparedness and response in Netherlands)

- The industrial object is responsible for security
- Strong security and rehabilitation programmes should be in place
- The plans and programmes should be provided with up-to-date services and training
- Distribution of accident prevention roles among the authorities (legislation and monitor the compliance)
- Only the systematic verification of all the security chain features and of all the follow-up activities will reduce the accident effects

Response organization in Netherlands

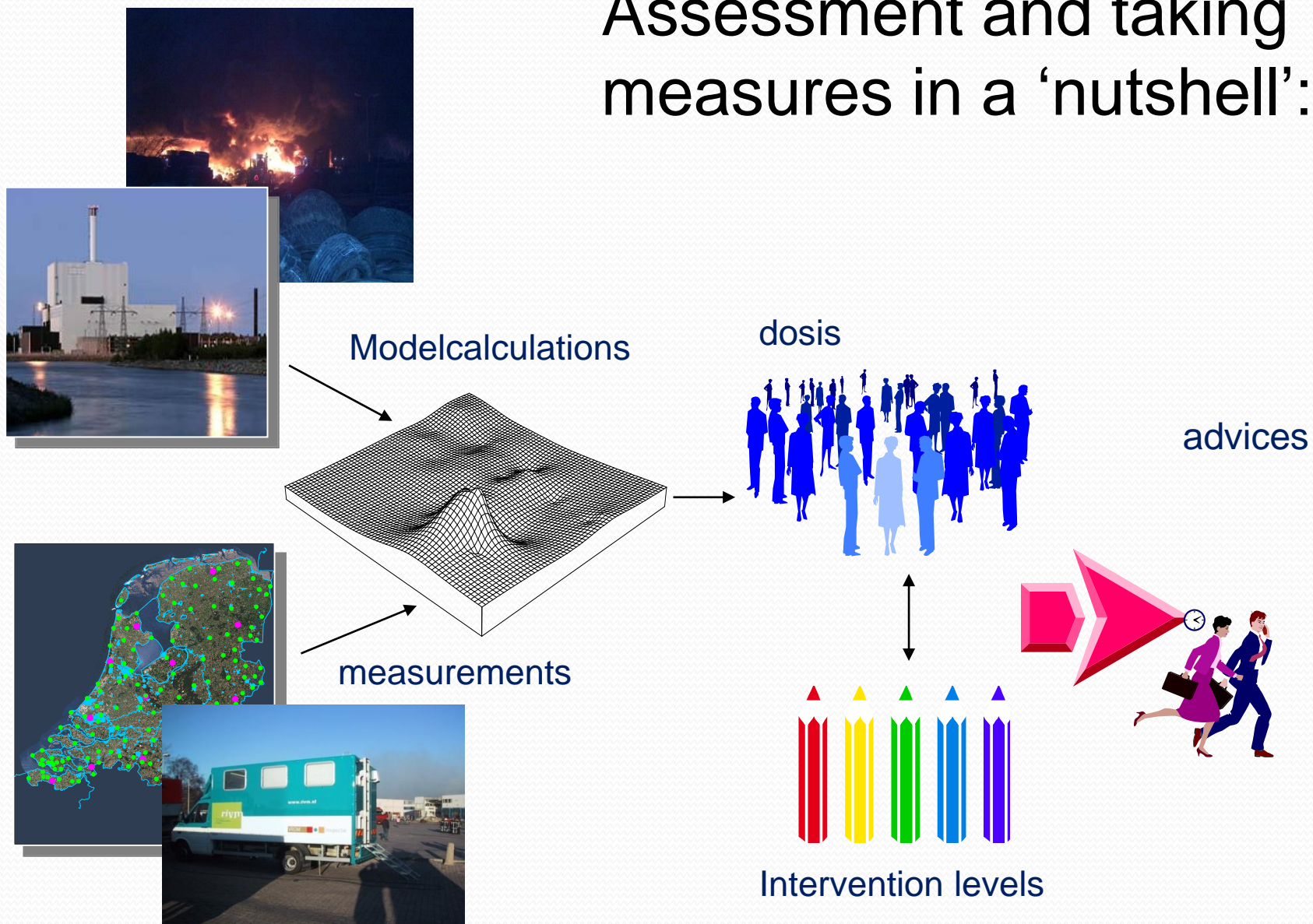
- Responsibility at local, regional and national levels
- Organization of cooperation at all levels
- Inclusion of all the possibilities in the response plans
- Training and exercise basing on different scenarios
- Development (if possible) of formal networks for specialized assessments (public health, environment)
- Using the available organizations capabilities and resources for the establishment of an efficient centre available 24/7
- Crisis management= network management
- Assess all the incidents, identify the lessons and best practices

Crisis management = network management



‘Who needs what I have and who has what I need’

Assessment and taking measures in a 'nutshell':



Network organizations Netherlands

- Emergency Planning and Advisory Units (EPA's) for:
 - environmental emergencies
 - nuclear and radiological emergencies
 - drinking water emergencies
 - terroristic threats and attacks (= National Laboratory Network)
- The network organizations:
 - are 'virtual' and to be activated during an emergency
 - are staffed by experts of 16 scientific institutes (> 100 members)
 - have a flexible structure
 - perform integrated advices

Available expertise

- Measure and sampling strategies
- Chemical analysis
- Risk and plume calculations
- Modelling (exposure) and future scenario (e.g. dispersion in air and water)
- External safety risks
- Risk analysis health impact
- Toxicological information
- Meteorological information
- Risk assessment aquatic environment
- Assessment food safety
- Assessment CBRN exposures
- Managing emergency response measures
- Crisis management experience

Example: risk and plume calculation



Problems

- The industrial and chemical security is becoming more crucial due to the quick industrial development
- Quality standards and norms
- Standardization of the emergency planning in and off site
- A right system of certification for risk assessment, emergency planning and security audit
- Regular exercises in order to check the effectiveness emergency preparedness and response plans
- Professional training and capacity building at all levels
- Involvement of insurance companies for a better risk management in the industrial sector
- Rising awareness among personnel and community