# WSMART Exercise Preparation

## Exercising in Crisis management

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*November 5th 2019*
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# What if Calamities or Crisis do occur…?

# How to be resilient?

## *Business Continuity Management*

- Availability of enough of sustainable and reliable resources

- Well designed redundant infrastructure for now and the future

- Good operations, staff & skills

- Good maintenance

- Effective procedures

- Prepared for internal calamities

- Prepared for external crisis situations

- Adequate emergency measures

- Knowing the risks! What to focus on…
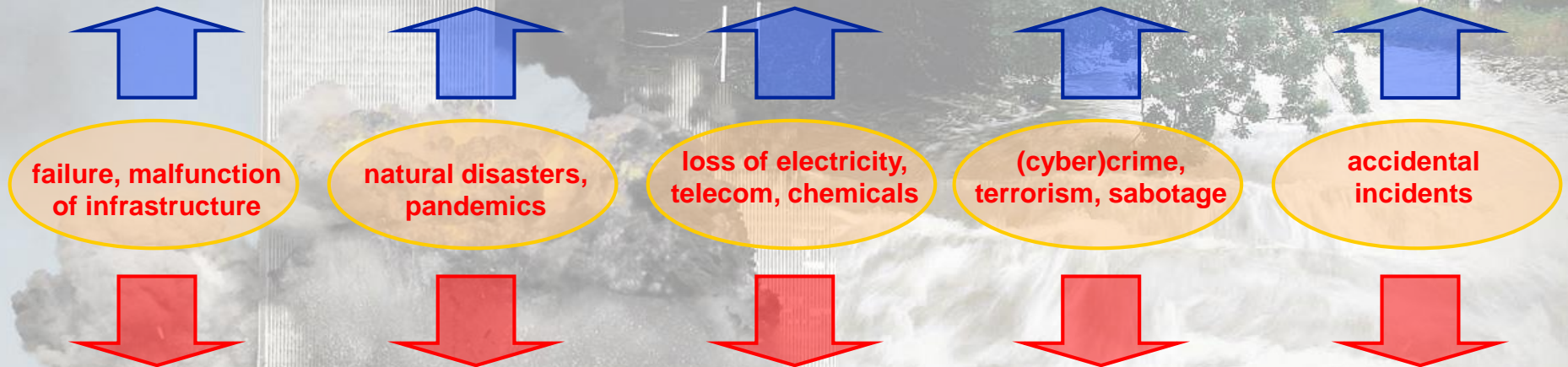
# Risk Assessments

## *Common risks for discontinuity in Water Supply*

1. Malfunction of assets (physical, hygienic)

2. Pandemics

3. Flooding (river, sea)

4. Earthquakes

5. Bushfire caused by extreme drought

6. Heavy Storms

7. Loss of Power, Telecommunication, Fuels and Chemicals

8. Chemical Fire and Nuclear Fallout

9. Terrorism (contamination of water)

10. Cybercrime (PA-SCADA)

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# Business Continuity Management



*proaction, prevention, preparation*

- failure, malfunction of infrastructure
- natural disasters, pandemics
- loss of electricity, telecom, chemicals
- (cyber)crime, terrorism, sabotage
- accidental incidents

*consequence management, recovery*

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# Business Continuity

> **> 95%**

*proaction, prevention, preparation*

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# Risk Diagram for Water Supply



Catastrophic

Very severe

Severe

Significant

Limited

Impact →

Probability →

Very unlikely  Unlikely  Possible  Likely  Very likely

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# Incident- and Crisis Management



*Utility*

*Authorities*

**proaction, prevention, preparation**

- failure, malfunction of infrastructure
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- accidental incidents

**consequence management, recovery**

**RECOVERY**

*Blue Light Forces*

*Mayors and Regulators*

*Homeland Security*

*Other Utilities*
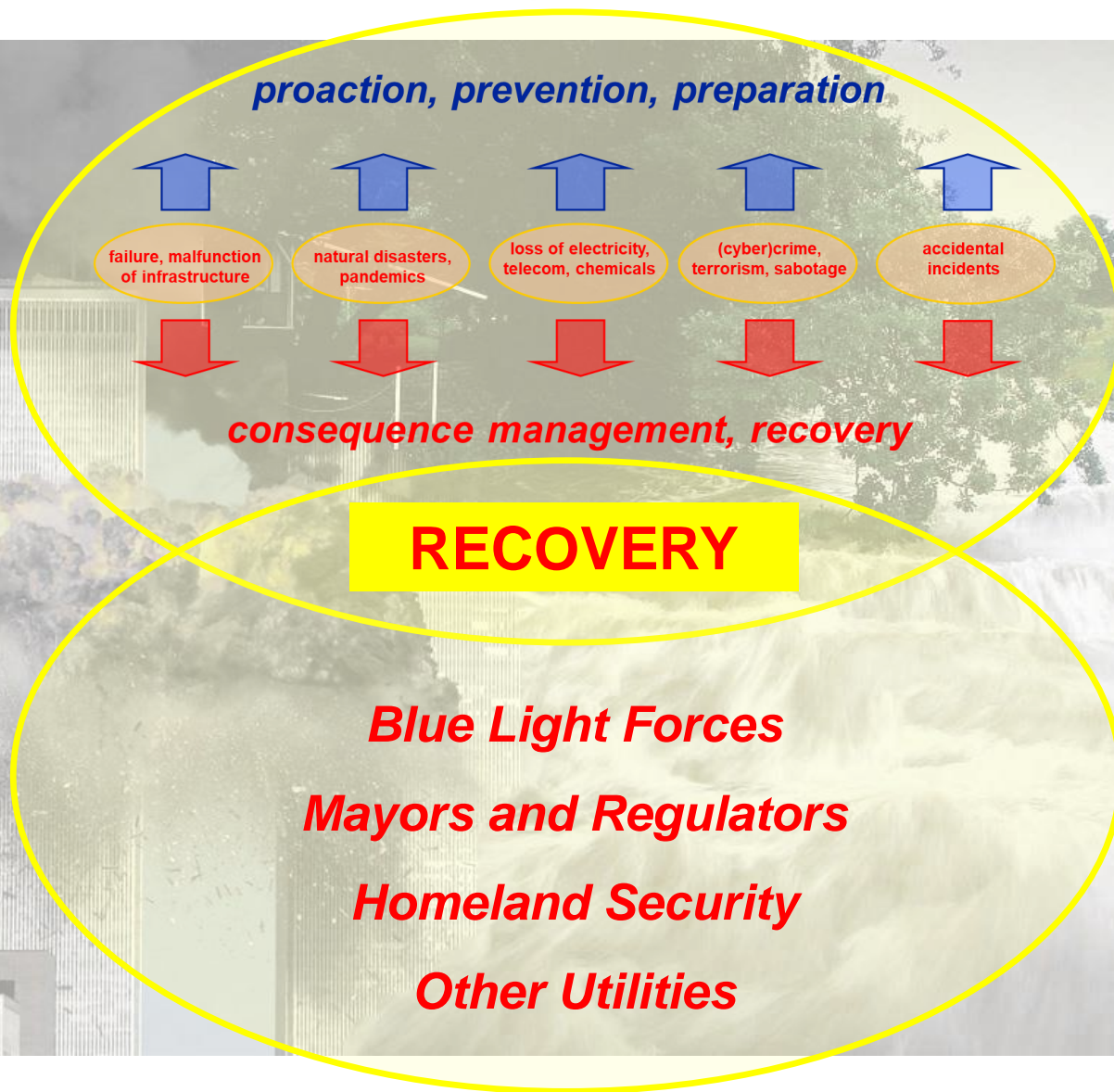
# Incidents, Crisis & Disasters

## *Severity & Escalation*
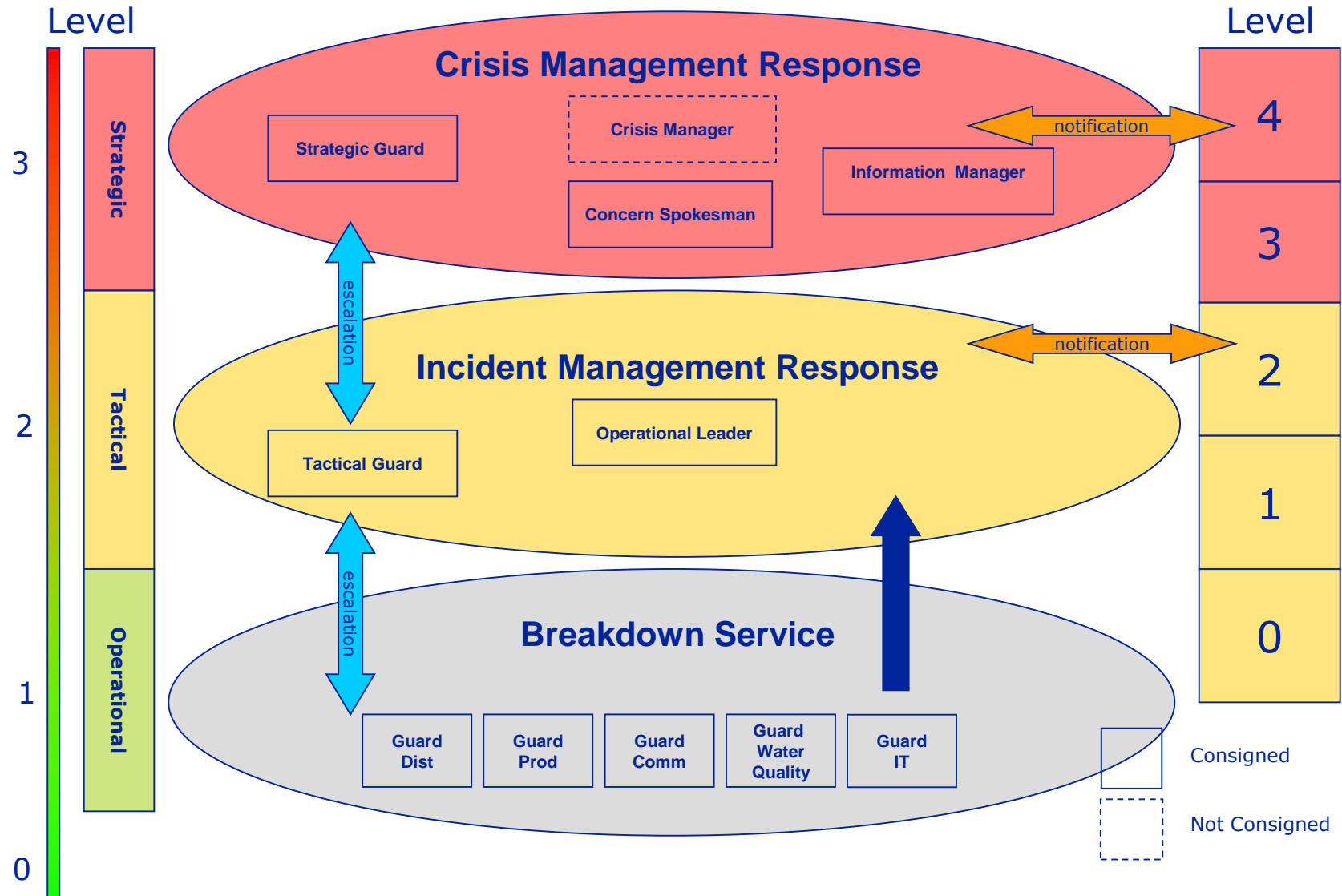
- <u>Incident</u> (local)
    - caused by utility itself (often)
    - asset-related (malfunction)
    - manageable by operational technicians (going concern)

- <u>Crisis</u> (regional)
    - many customers involved
    - manageable by an incident management team (IMT)
    - in cooperation with authorities

- <u>Disaster</u> (sub-regional)
    - not caused by utility itself (mostly, hopefully…☺)
    - authorities in the lead
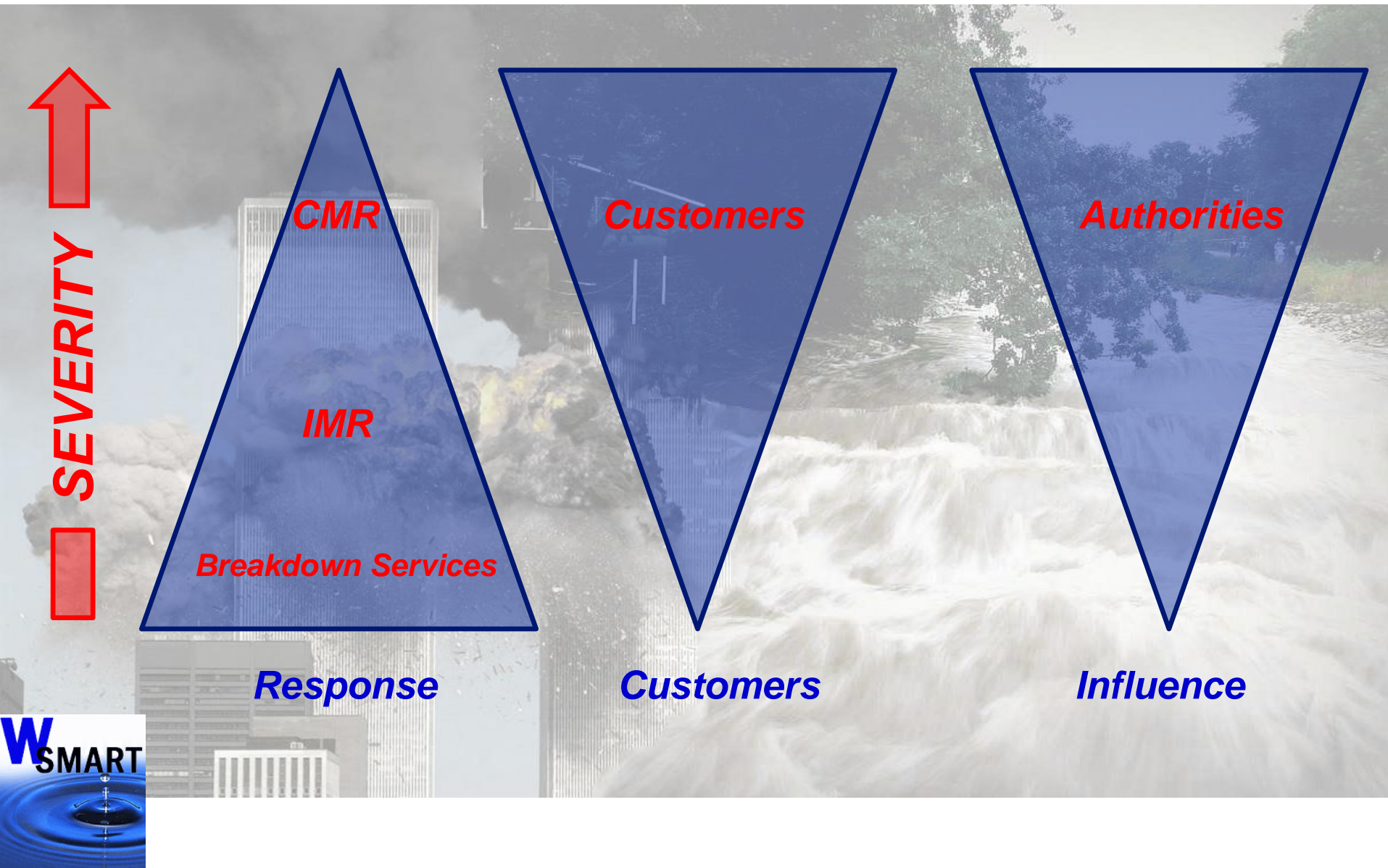    - utility-part managed by a crisis management tem (CMT)

# Escalation Levels



**Utility**

**Authorities**

Level (Utility): 3, 2, 1, 0

Strategic / Tactical / Operational

**Crisis Management Response**
- Strategic Guard
- Crisis Manager
- Concern Spokesman
- Information Manager

**Incident Management Response**
- Tactical Guard
- Operational Leader

**Breakdown Service**
- Guard Dist
- Guard Prod
- Guard Comm
- Guard Water Quality
- Guard IT

notification

escalation

Level (Authorities): 4, 3, 2, 1, 0

Consigned

Not Consigned

# Incidents and Crisis



SEVERITY

CMR

IMR

Breakdown Services

Response

Customers

Customers

Authorities

Influence

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# All Hazards Approach…?   Assets involved
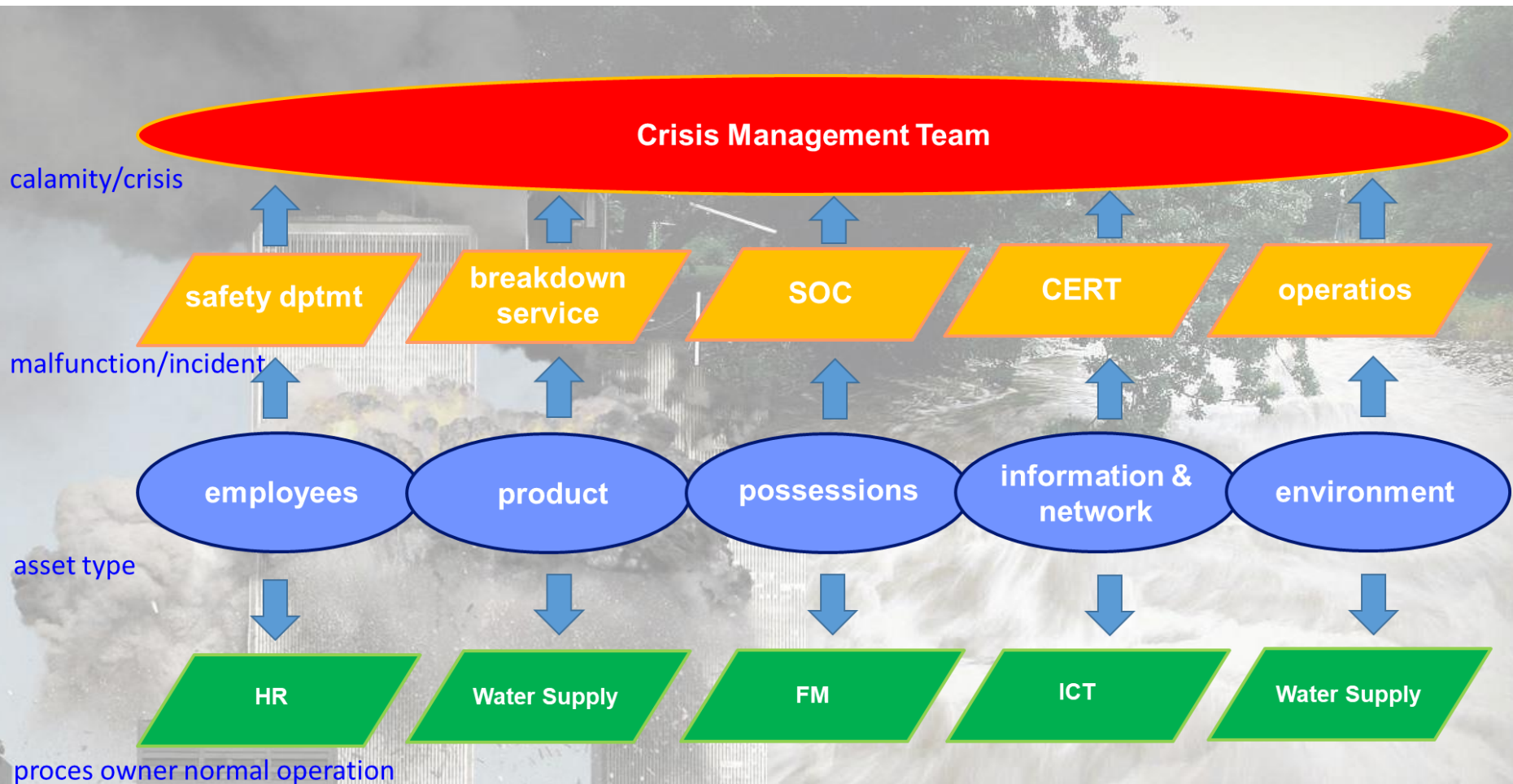
# Focus for the right Level

## *Breakdown Service*

- Focussed to solve the malfunction

## *Incident Management Team*

- Event driven (fixing the problem)

- Coordinates internal departments to solve the malfunction

- Coordinates the internal and external communication

## *Crisis Management Team*

- Consequence driven (managing the effects)

- Manages the interest & concerns of all stakeholders involved

- Communicates with Authorities

- Concern Spokesman member of the team (or CEO itself)

# Four stages in Crisismanagement

## 1. *Logistics & Facilities*

- Situation Room(s)

- Team Members & Schedule for Replacement

- Roles & Responsibilities (chair, secretary, information manager etc)

- Regular communication devices, internet, radio, TV etc.

- Emergency communication devices

- Calendar, Meeting Clock

- Procedures & Guidelines

- Access to Asset Information, Maps, GIS

- Logbooks, SitRaps, Status Flaps on the wall, digital CMS

- Climate & Catering

# Four stages in Crisismanagement

## 2. *Analyses of the situation (on flaps or digital CMS)*

- Who is owner of the crisis?

- Who is the owner of the issues?

- Facts & Assumptions

- Time Line of events

- Scenario Building, define worst case, best case & most likely

- Stakeholder Analyses with their Concerns & Interests

- Media Watch & Communication Strategy

- Primary Issues and Secondary Issues

- Formal closing



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# Four stages in Crisismanagement

## 3. *Strategies for Solutions (on flaps)*

- What handling options are available?

- What are the possibilities of your own utility?

- Effectivity: How do they solve the defined issues?

- Are they realistic?

- How do they work out on the defined scenarios?

- Closing

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# Four stages in Crisismanagement

## 4. *Decision making (on flaps)*

- Scoring of alternatives for decision making

- Actions & Priorities

- Appoint SMART actions and designate the holders

- Appoint unsolved Problems

- Check on the original goals (right focus ?)

- Closing

    - Go back to the first stage and repeat…….

    - Finally downscale the Crisis and end it up

    - Do a hot debriefing

    - Arrange later an evaluation (often forgotten…)

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# Soft Skills

## *Relevant Human Interactions in the Team(s)*

- Speed of Discussion ?

- Decision making ?

- Right Sense of Urgency ?

- Focus on the right things: Causes or Effect ?

- Cooperation between the members ?

- Unproductive Dominancy ?

- Use of formal & informal available power ?

- Amount of Internal & External Communication ?

- Who's Decider, Figurehead, Spin Doctor, Worker, Advocacy ?

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# Crisis Communication
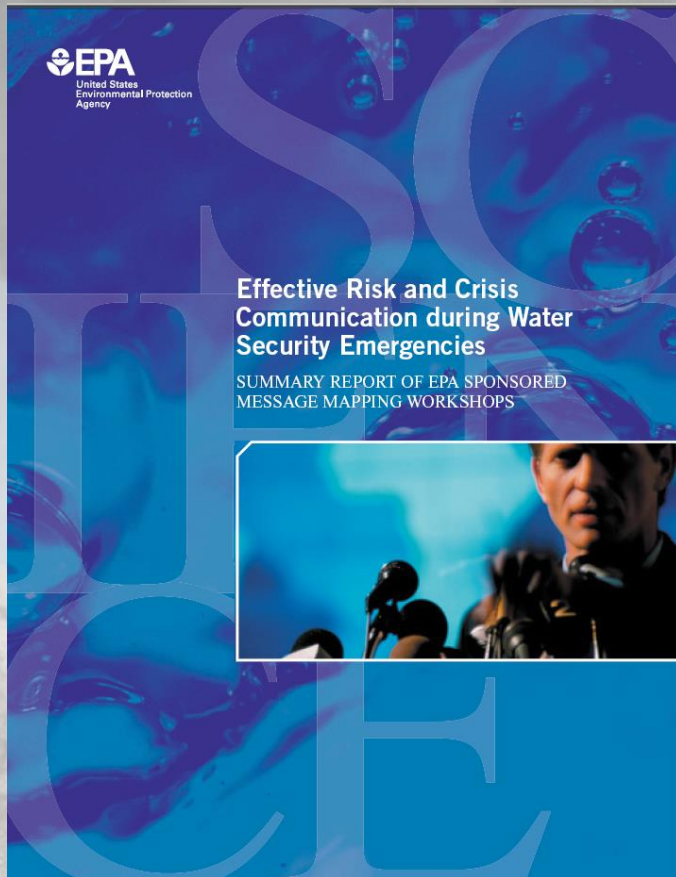
- Identify all stakeholders

- What are their interests & concerns ?

- Define 3 core messages

- Choose a experienced spokesperson

- Choose reliable media

- Choose the right communication channels

- Use the 27/9/3 methodology for statements

**EPA**
United States
Environmental Protection
Agency

**Effective Risk and Crisis Communication during Water Security Emergencies**

SUMMARY REPORT OF EPA SPONSORED MESSAGE MAPPING WORKSHOPS

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# The 27/9/3 – rule for Effective Statements

- The average length of a sound bite in the print media is **27** words

- The average duration of a sound bite in the broadcast media is **9** seconds

- The average number of messages reported in both the print and broadcast media is **3**

- Quotes most likely to be used as sound bites contain **compassion**, **conviction**, and **optimism**

- You better do not lie, but not everything has to be said…

# Exercising

*Demming Cirkel of Exercising*
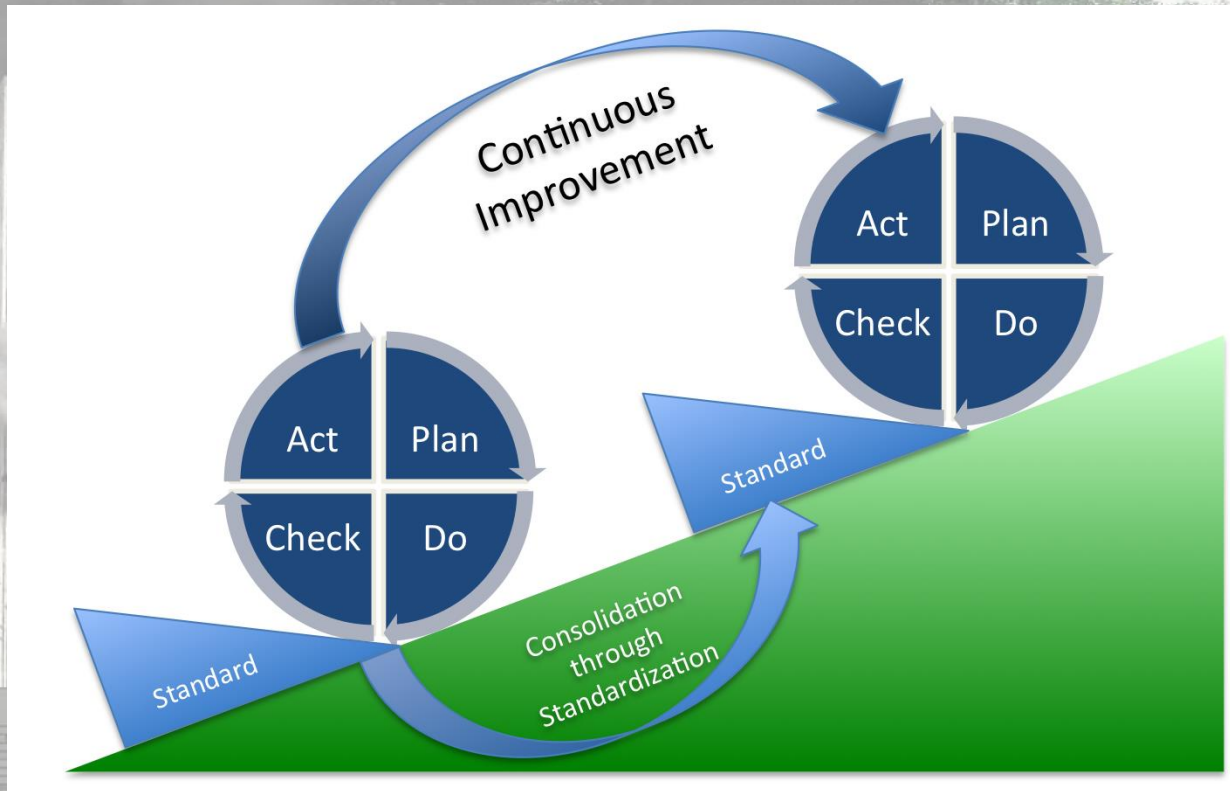
# Exercising (overview)

1. **Learning Points from previous exercises, incidents or crisis**

2. **What are the best goals for a next exercise ?**
   - Logistics & Facilities ?
   - Analyses of the Situation ?
   - Strategy for Solutions ?
   - Decision Taking ?
   - Soft Skills ?

3. **What is the right kind of exercise ?**
   - (Semi) Table Top (focus on soft skills & procedures)
   - Multi Entity (focus on cooperation with stakeholders and authorities)
   - (Semi) Live (focus on technical skills)

4. **Logistics, Teams, Facilities**
   - Area, Rooms, Catering, Phones, Flaps, Data….
   - CMT, IMT, Exercising Staff, Response Board, Observers, Externs, Authorities

5. **Making the Plot, Script, Timeline, Injections**
   - Information & Interventions

6. **Briefing, Go!!!, Debriefing**

7. **Reporting**

# Exercising (Skills)

Soft Skills

- **Improve**
- **Calibrate**
- **Eliminate**
- **Test**
- **Check**
- **Understand**
- **Analyze**
- **Examine**

- **Decide**
- **Ensure**
- **Communicate**
- **Control**
- **Validate**
- **Change**
- **Demonstrate**
- **Restore**

# Exercising (Scope and Caracteristiscs )

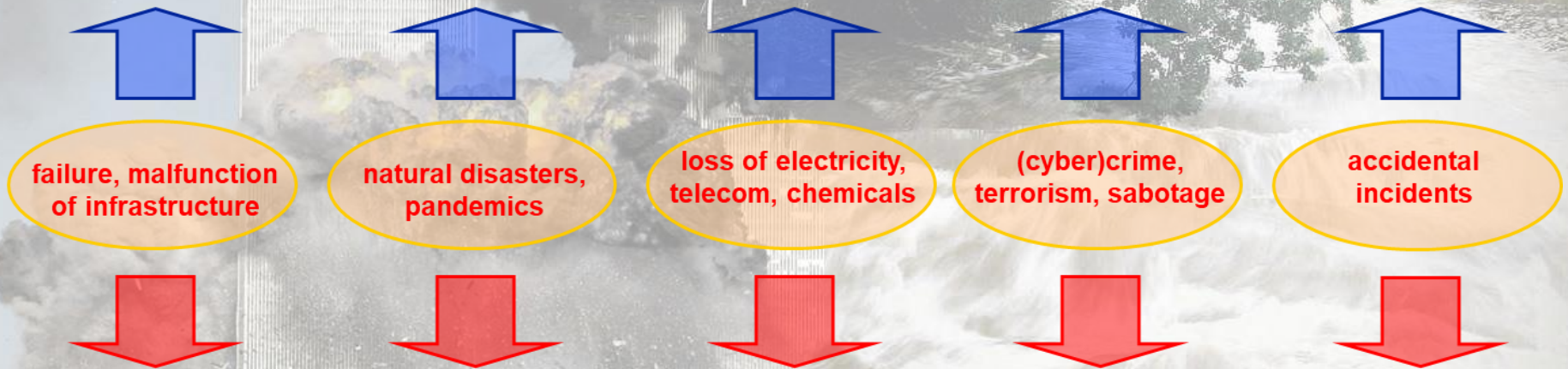Full Scale - Semi Live - Field Exercise

- **Level of surprise regarding events**

- **Employees and Teams involved**

- **Stakeholders involved**

- **Assets involved :**
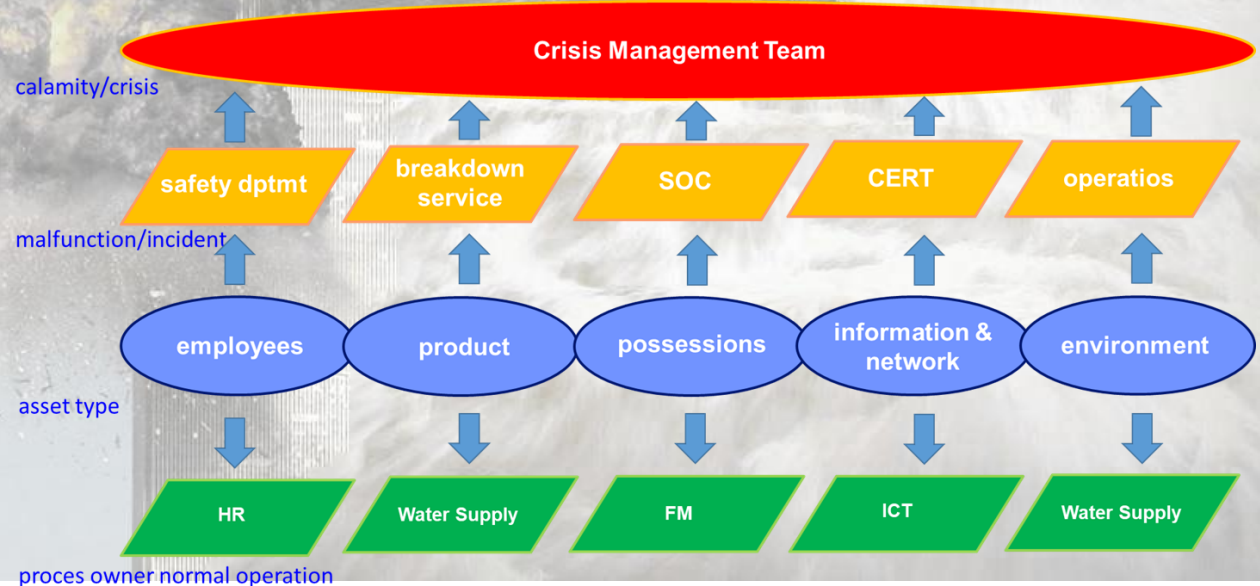
# Exercising (Threat Categories)

Incident types to build excercise scenarios

*proaction, prevention, preparation*

| failure, malfunction of infrastructure | natural disasters, pandemics | loss of electricity, telecom, chemicals | (cyber)crime, terrorism, sabotage | accidental incidents |

*consequence management, recovery*

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