

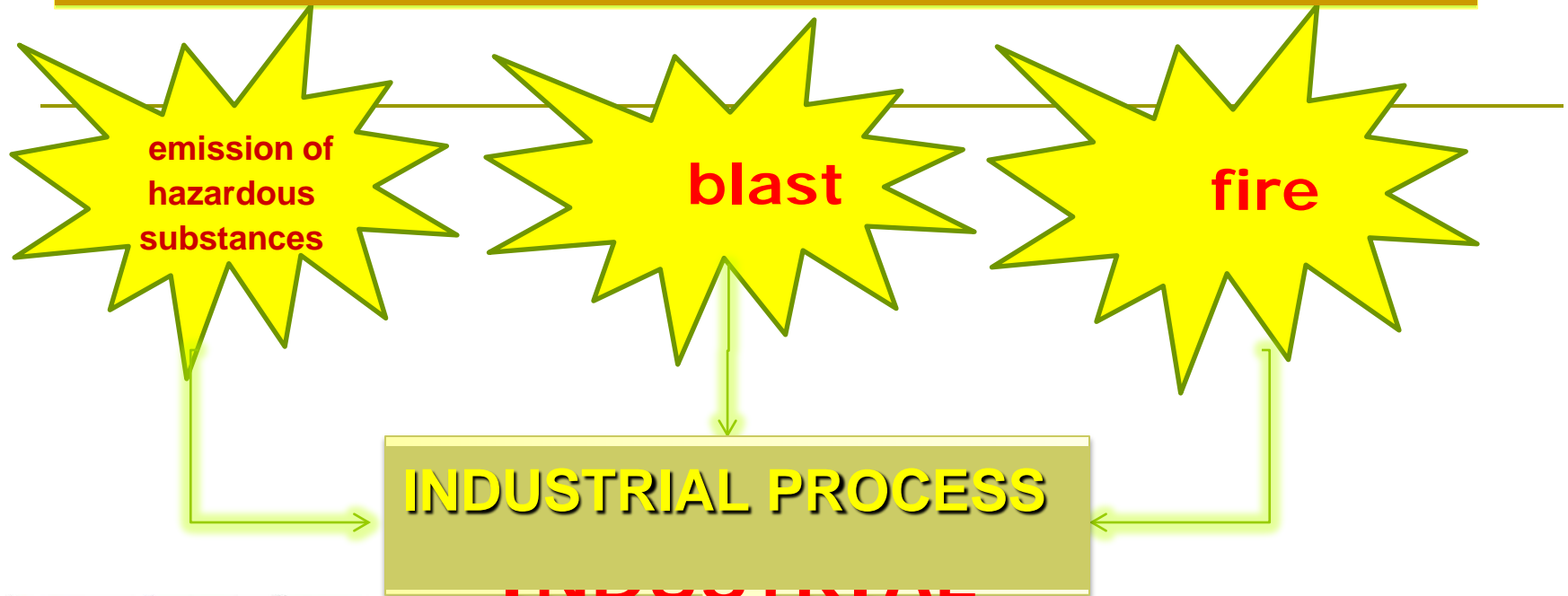


PROCEDURI

Operational Procedures for response in case of industrial accidents with transboundary effects

ACCIDENT MAJOR ? -

Major accident? - Identification



- 
- major consequences
 - danger for human health
 - environmental risk

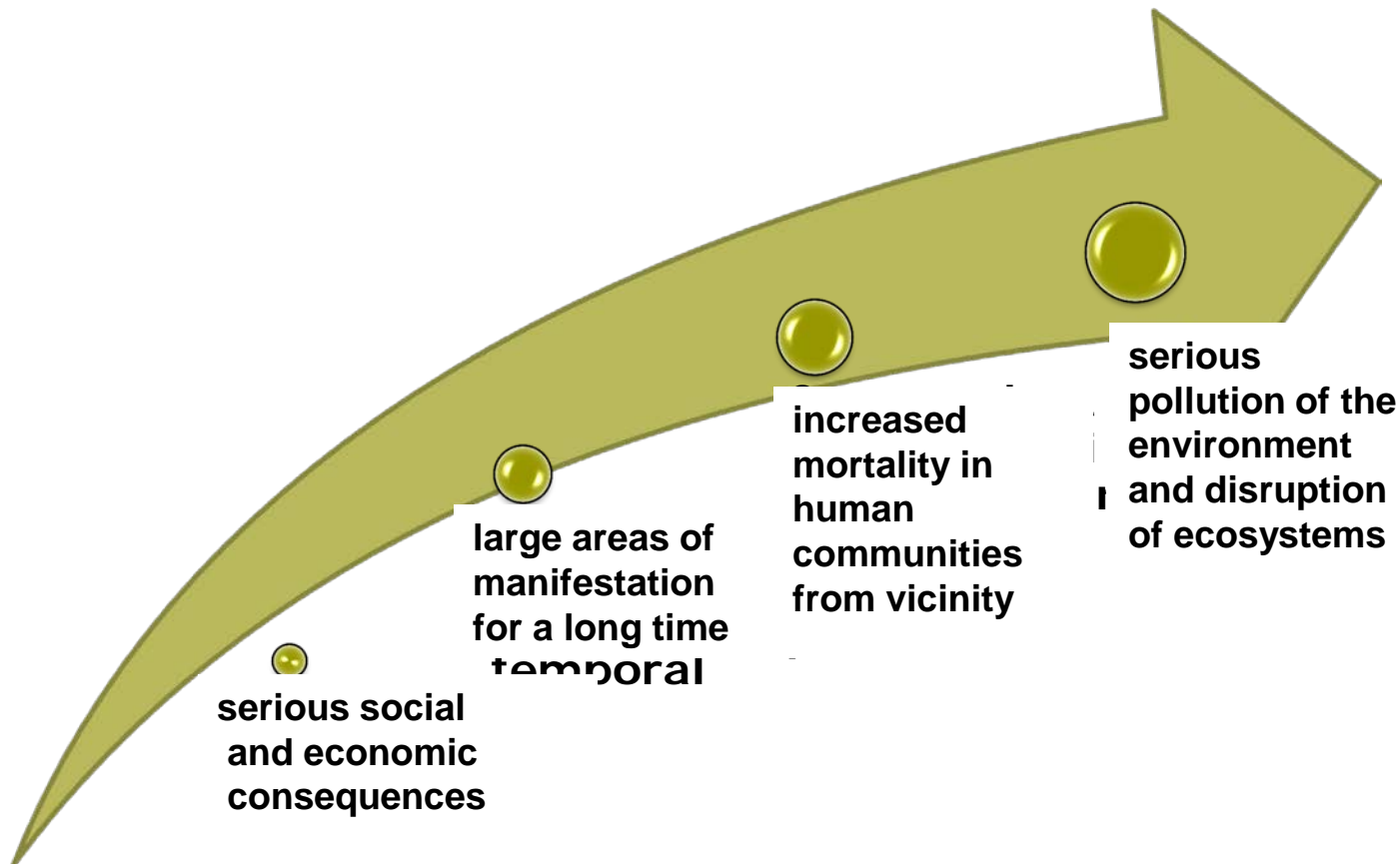
Key word: **hazardous substances**

CHARACTERISTICS

- On-site

nt

- In Off-site



Evaluation Criteria



- ❑ Presence of hazardous substances
- ❑ Injury to persons:
 - 1 death
 - 6 injured
 - Damage to property (real estate, housing unusable)
 - Evacuated people ≥ 500 (persons x hours)
 - Failure of public utilities (water / electric / gas / telecommunications) ≥ 1000 (persons x hours)

Evaluation Criteria



- Permanent or long-term damage to terrestrial habitats:
 - 0,5 ha or more of a habitat of environmental or conservation, protected by law;
 - 10 ha or more of more widespread habitat, including agricultural land;
- Significant or long-term damage to the river or marine habitats:
 - 10 km or more from a river or canal;
 - 1 ha or more of a lake or pond;
 - 2 ha or more of a delta;
 - 2 ha or more of a coastline or open sea water.
- Significant damage to an aquifer or groundwater marine:
 - 1 ha or more;
- Damage to property:
 - a) damage to property of the target, whose value in lei represents the equivalent of at least 0.5 million €;
 - b) damage to property outside the target, whose value in lei represents the equivalent of at least 0.2 million €;

Transboundary damage - Effects outside the national territory

NOTIFICATION

Pre-disaster phase

Identification of
hazardous activities

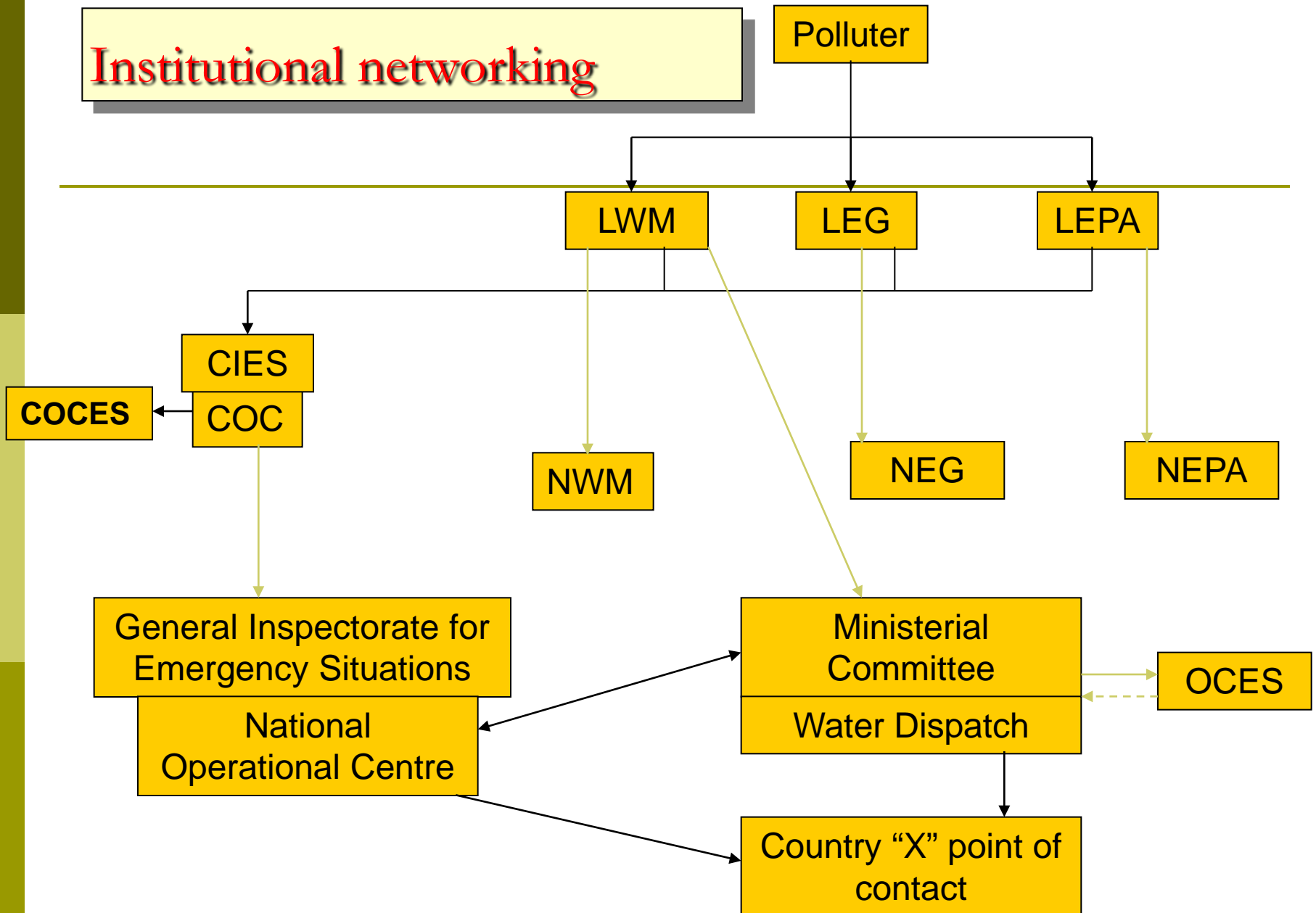
National Inventory of
operators

notify the competent
national authorities

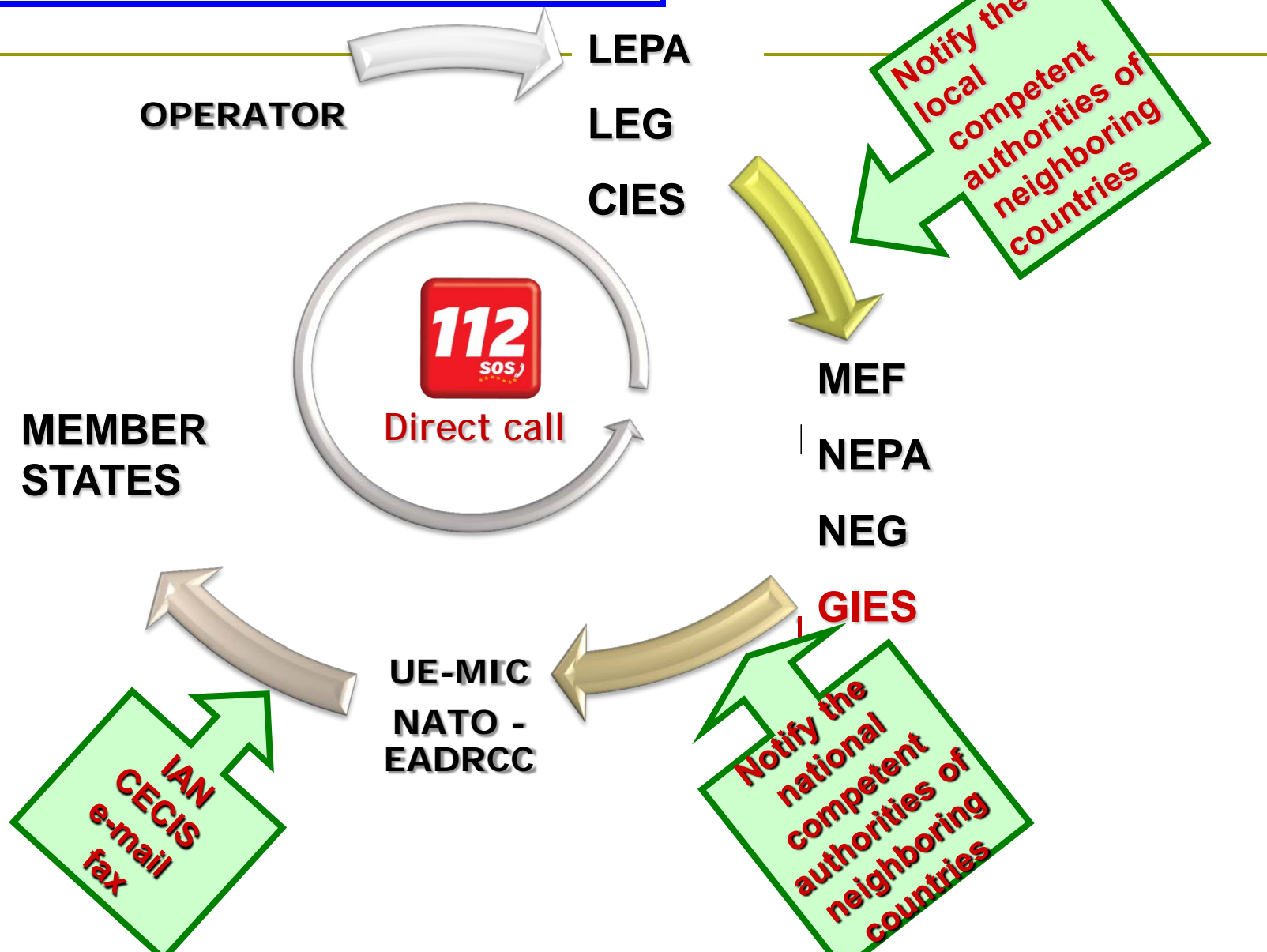
Disaster
phase

notify the international
authorities

Institutional networking



NOTIFICATION FLOW



EARLY-WARNING

- Early-Warning - transmitting to the population the authorized information about the possibility of occur of an event

dedicated
communication
systems

mass media

Mobil crews
(Police, Gendarmes)

ALARMING E

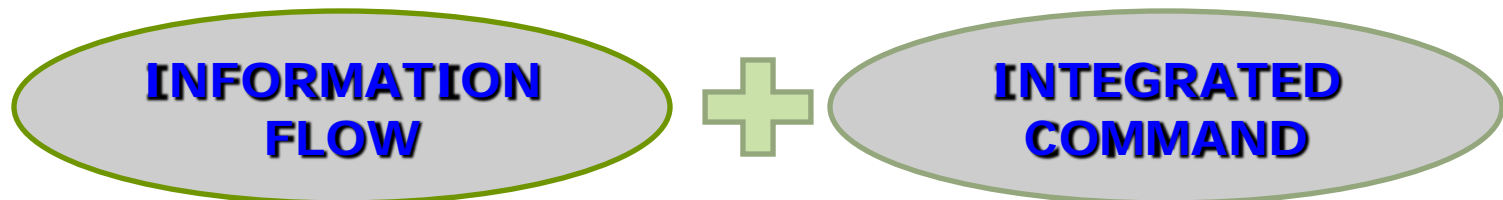
- ▣ Alarming - transmitting messages (signals) to the population about imminent or an event occurs



Appropriate behavior

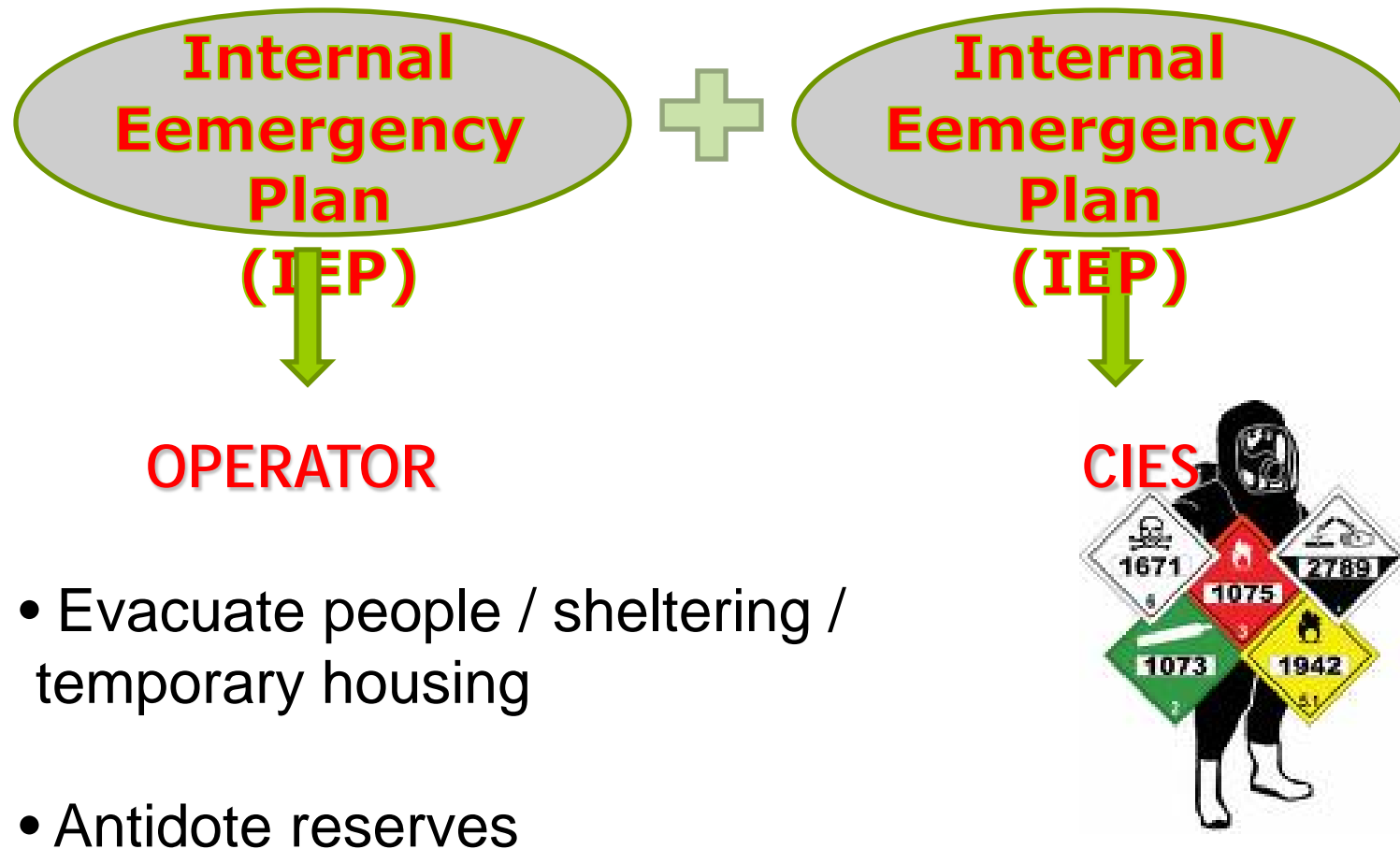
INTERVENTION

- **concentrating resources**
- **activation of the command structure (NCES/CCES/LCES) and support structure (TSG)**
- **integrated mission planning (long time – mobile command points)**
- **dispatch of support operative resources**
- **providing the reserves for intervention**
- **request for international assistance (UE/MIC, NATO/EADRCC, bilateral agreements)**



INTERVENTION

- Applying the standard procedures for intervention, according to *specific substances safety data sheets*



REHABILITATION / RECOVERY

- ❑ allocation of emergency funds
- ❑ decontamination
- ❑ analysis / research
- ❑ investment / refurbishment

Restore of NORMALITY

SAPA-ROM - operative system

Function: subordinated to **Ministry of Environment and Forests**

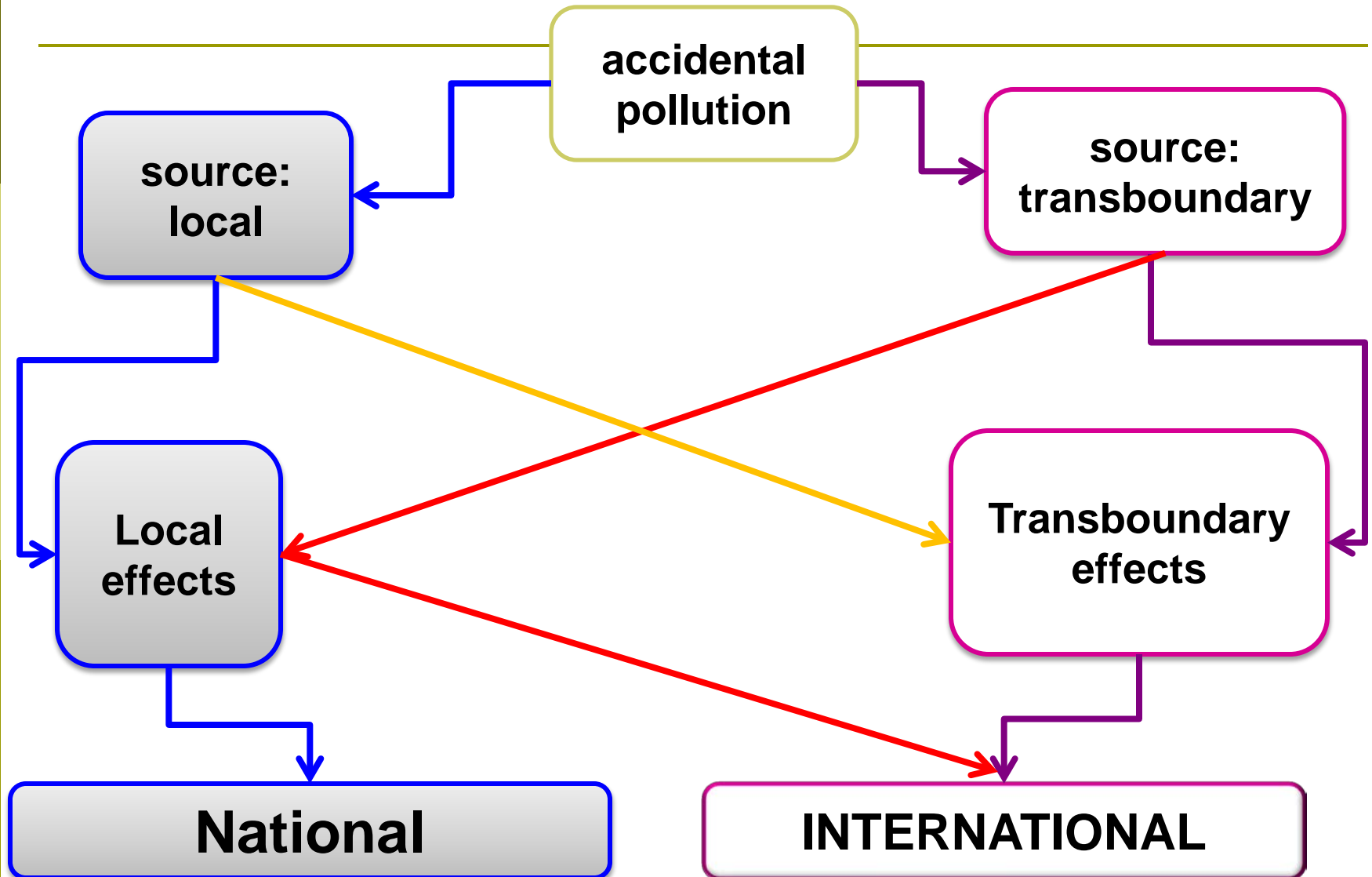
Frame of action for:

- Prevention
- Early-warning
- Control

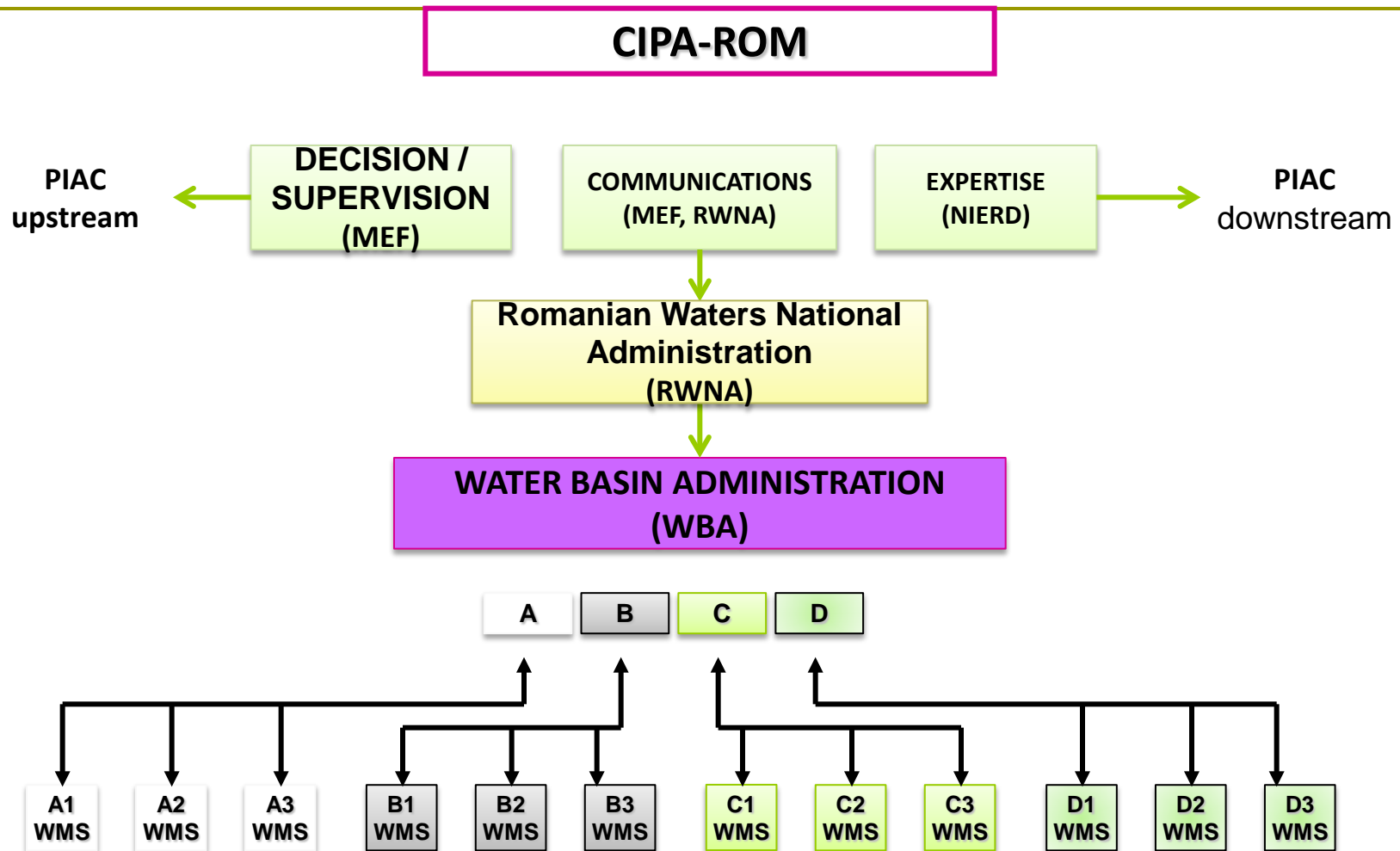
accidental pollution wheather of the nature and origin

Objective: ensure the operation of the informational system and to ensure communication of the relevant information necessary to warn people

ACTIVITY

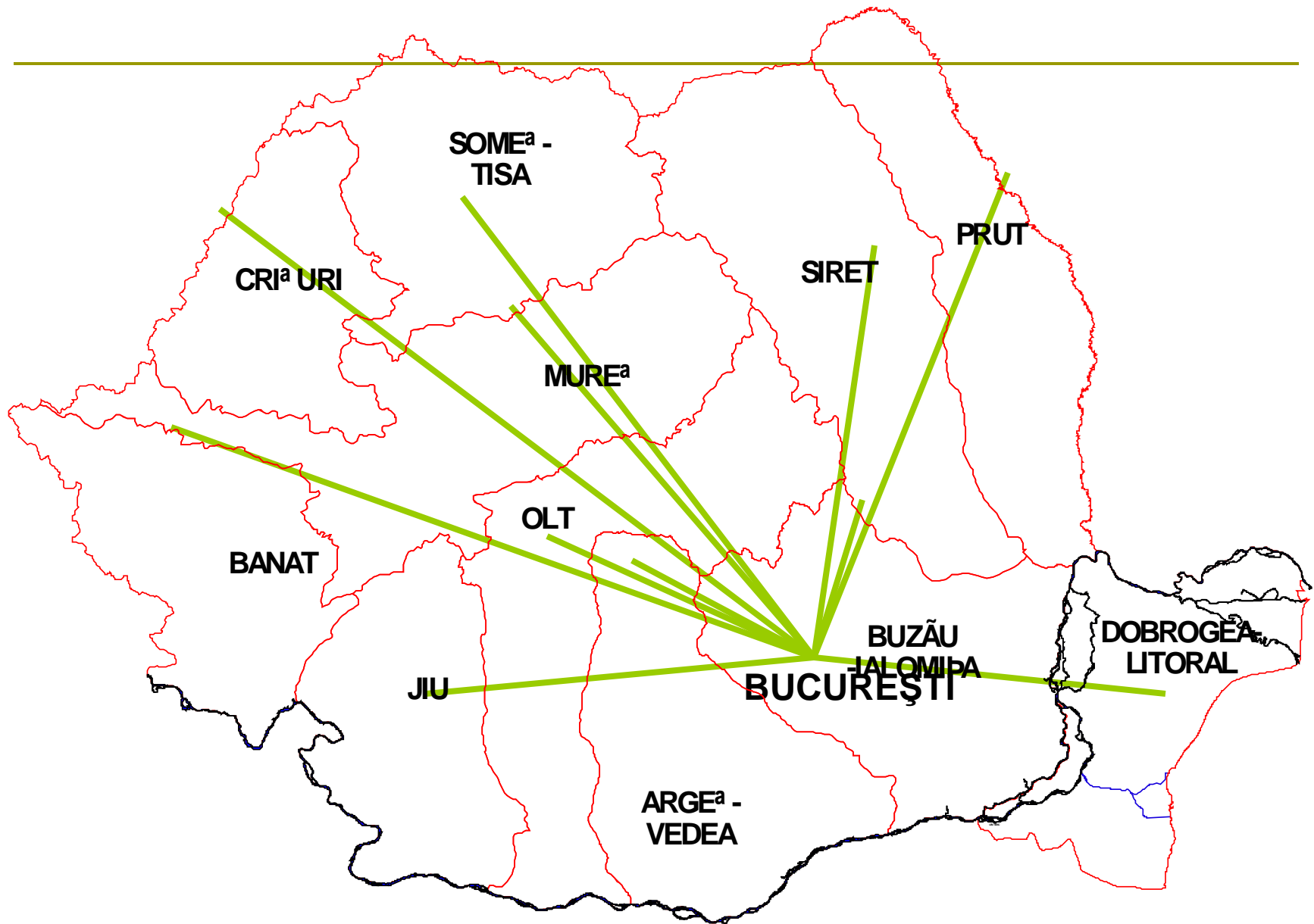


Overall structure



WMS – Water Management Services

Dispatchers system of Water Directorates - RWNA



NATIONAL ALARM SUBSYSTEM – PRIMARY INFORMATION FLOW

According to Prevention, Combat and Eliminate the Effects of Accidental Pollution Plan:

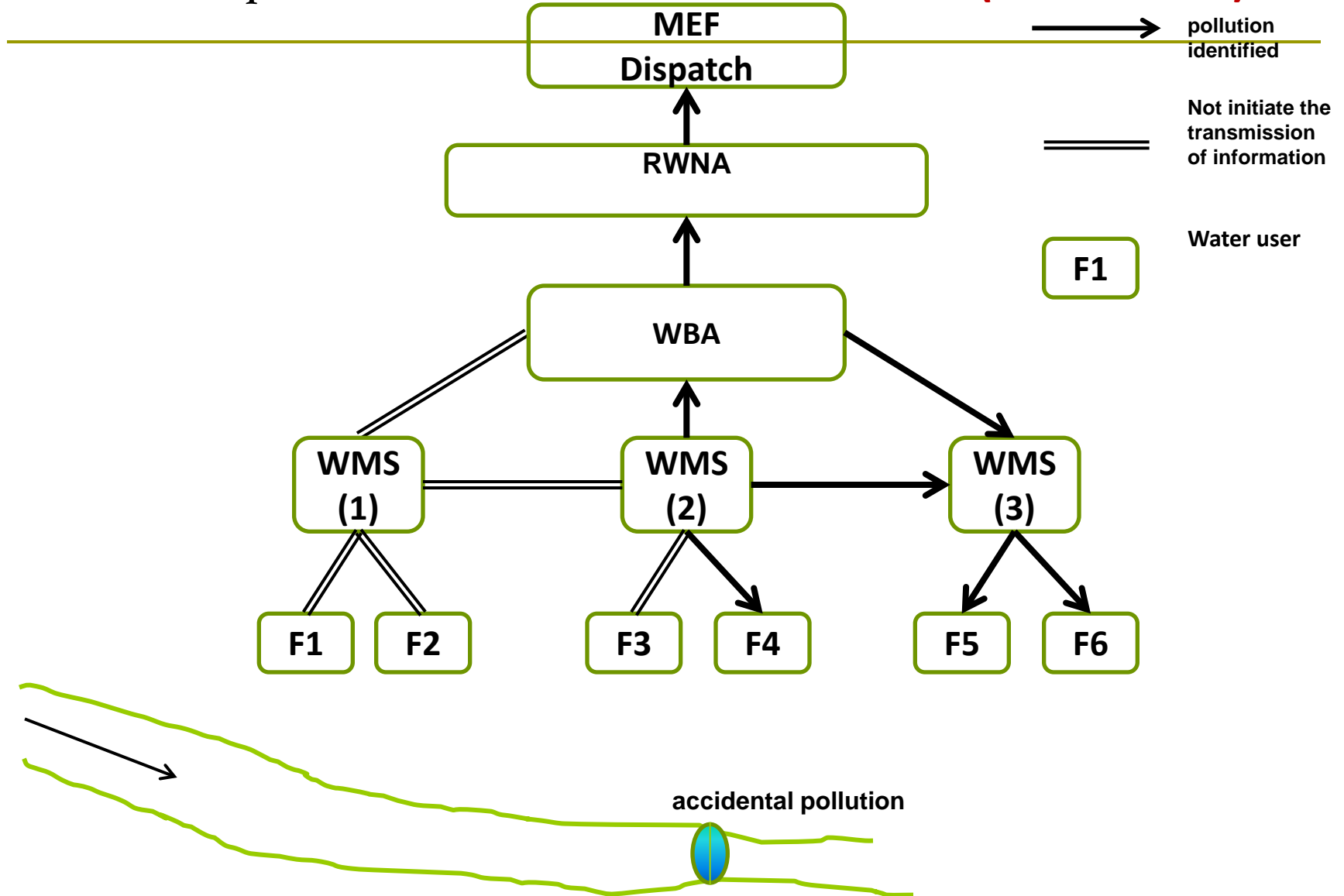
- Vertical (from one level to another)
- Horizontal (transit information to downstream units)

Important:

- Avoiding duplication of transmission of the reports
- Prevent duplication of information
- Transmission channel busy - alternative way (fax / email)

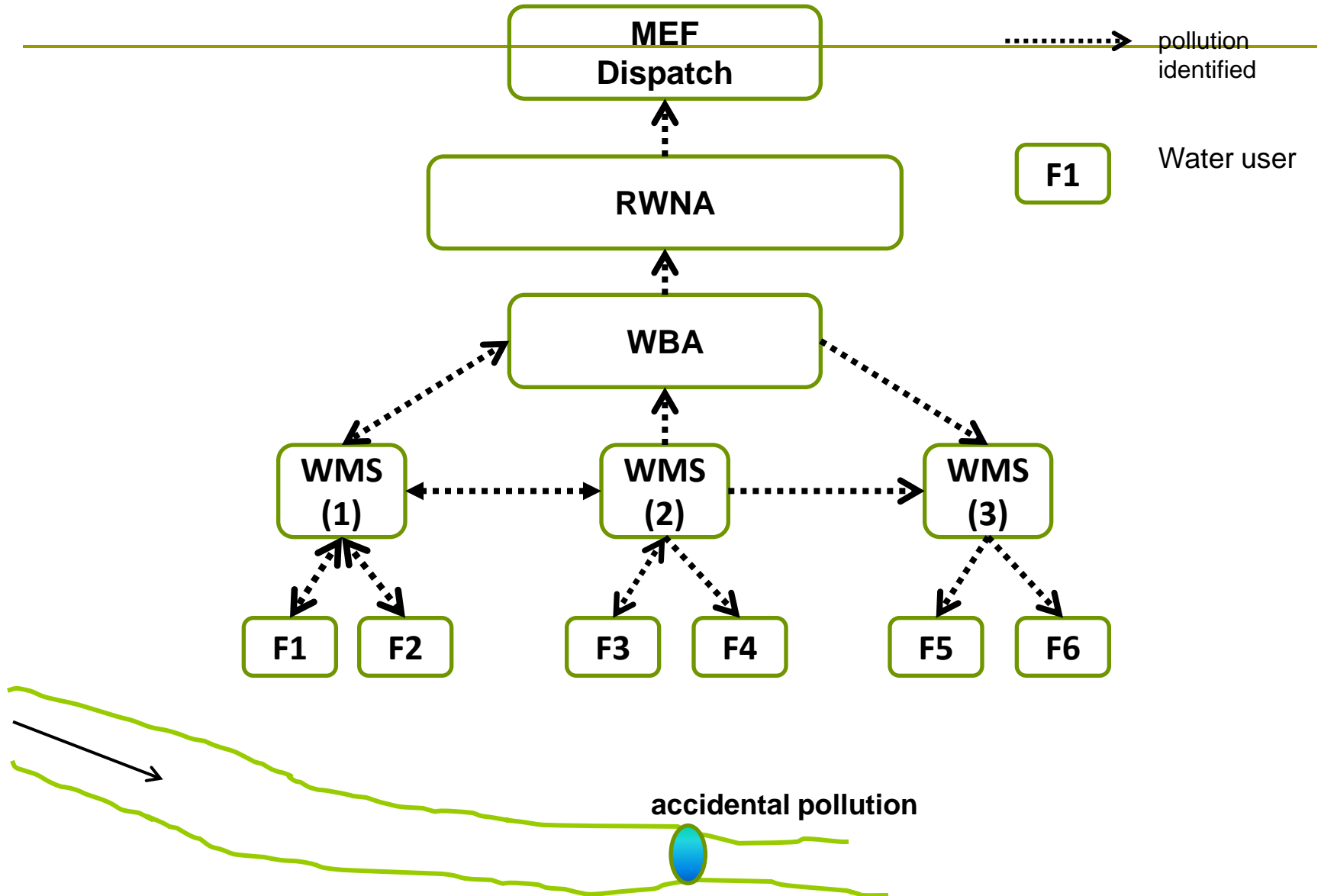
PRIMARY INFORMATION FLOW

accidental pollution local effects – source identified (annex no. 9)



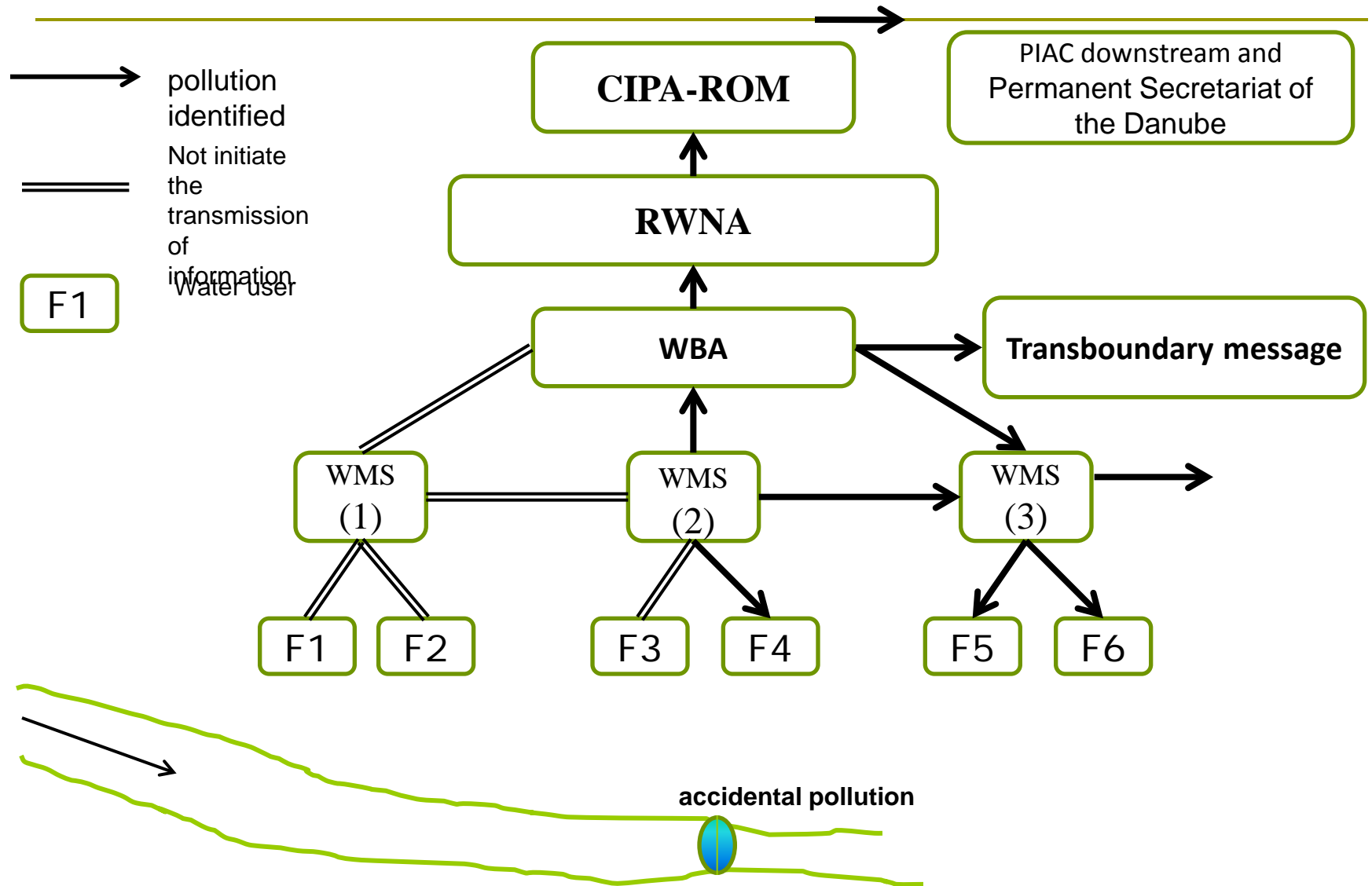
PRIMARY INFORMATION FLOW

accidental pollution local effects – source unidentified (annex no. 10)



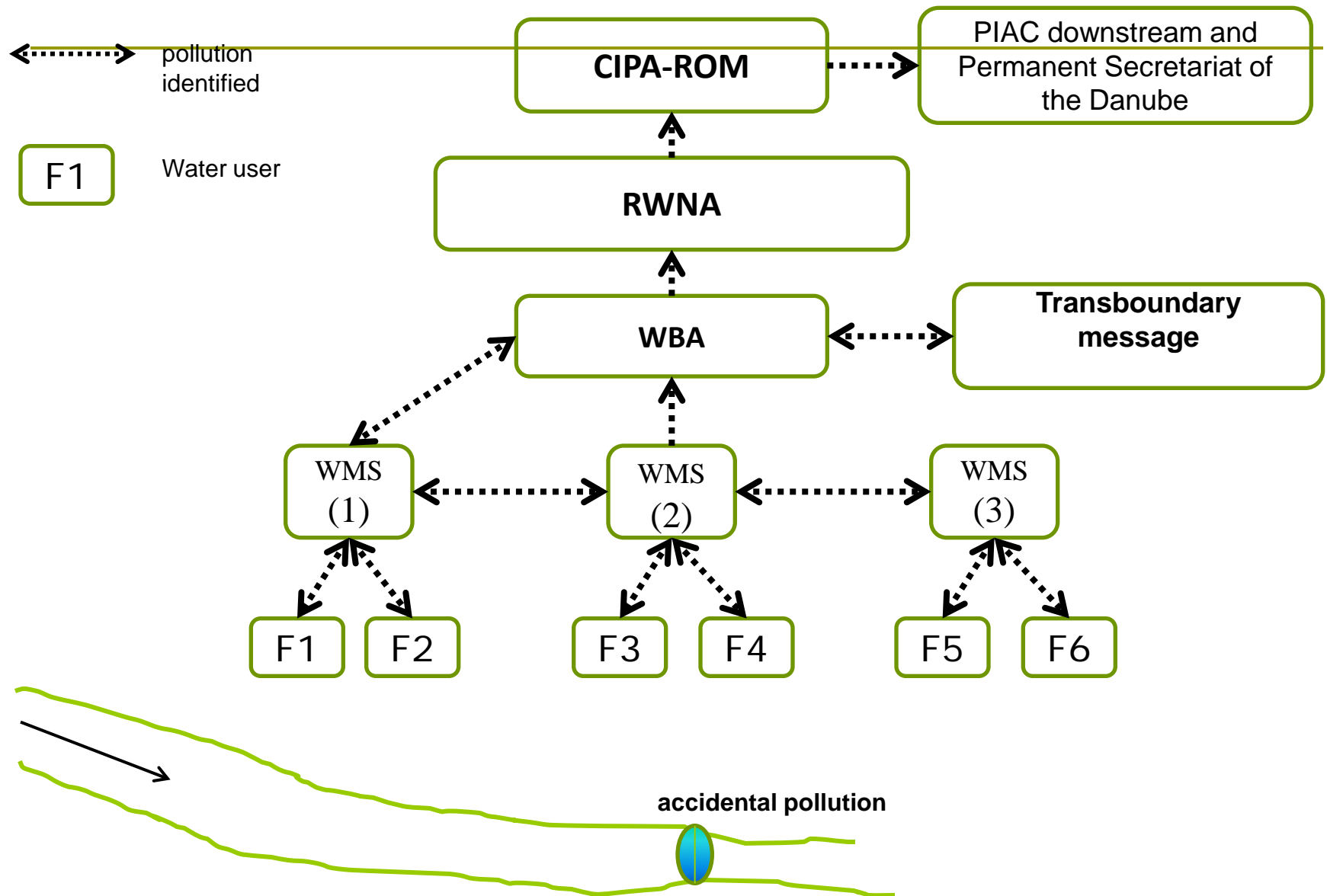
PRIMARY INFORMATION FLOW

local accidental pollution with transboundary effects – **source identified (annex no. 11)**



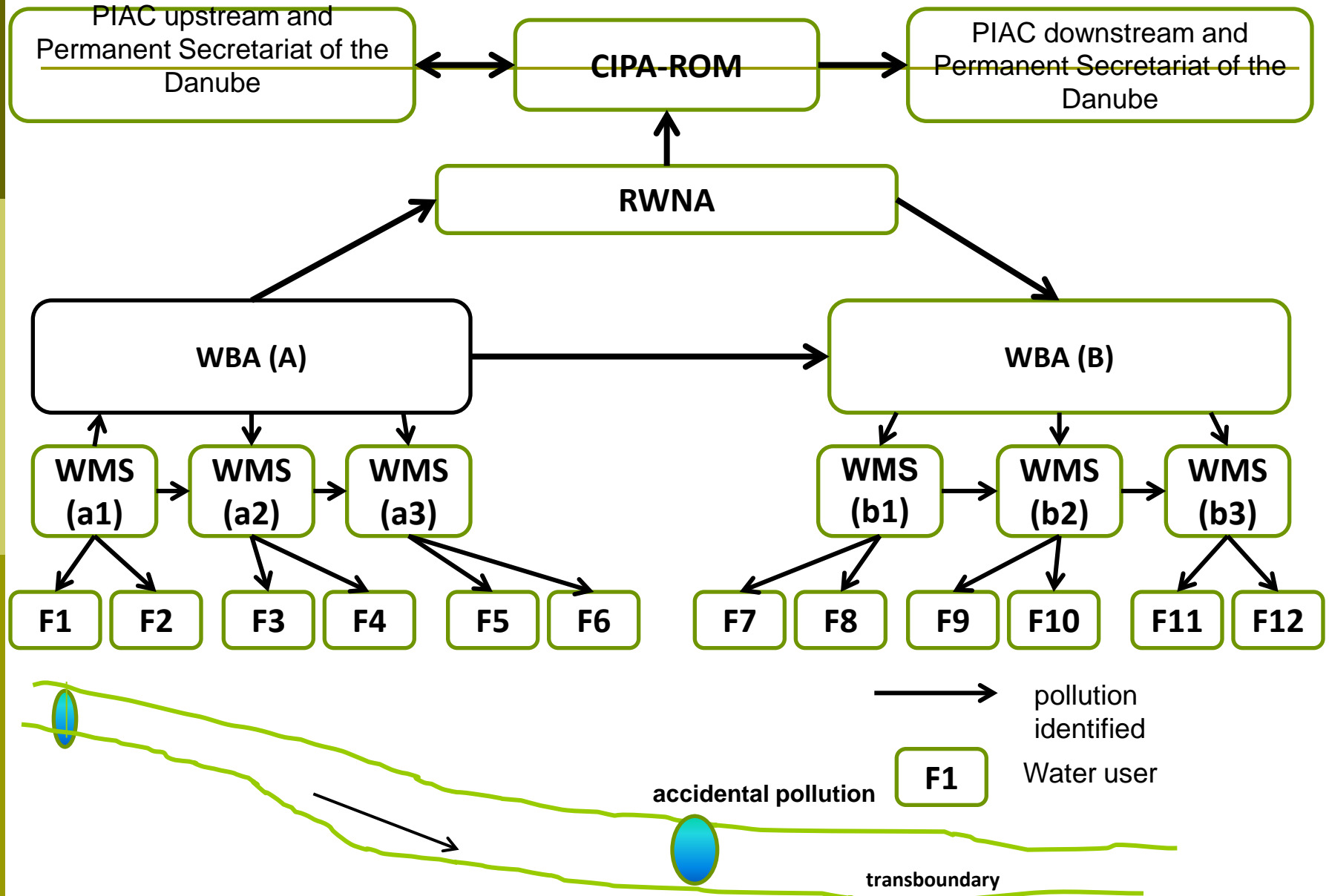
PRIMARY INFORMATION FLOW

local accidental pollution with transboundary effects – **source**
unidentified (annex no. 12)



PRIMARY INFORMATION FLOW

accidental pollution with transboundary effects (**annex no. 13**)



ANEXA 5: LIST OF MAIN POTENTIAL POLLUTION WATER USERS AND WATER USERS WHICH MAY PRODUCE THE EVENTS LEADING TO ACCIDENTAL POLLUTION OF WATER RESOURCES

| Nr. Crt. | Potential pollution water users | Adress, telephone, fax, e-mail | Water course | Potential pollution substances | Main water users from downstream which can be affected | Adress, telephone, fax, e-mail |
|---------------------|--|---|-------------------------|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |



| | | |
|-------------------|--|---------------|
| CN APDM SA GALATI | PROCEDURA DE INTERVENȚIE ÎN CAZ DE POLUĂRI ACCIDENTALE | |
| | Ediția 1 Revizia 0 | COD: PO 3-2-4 |
| | Data aplicării 15 octombrie 2006 | |

OPERATIONAL PROCEDURE IN CASE OF ACCIDENTAL POLLUTION

COD: PO 3-2-4



1.Scope:

- **Preventing and combating pollution of the Danube and the law in force in the field of environmental protection (MARPOL 73/78 Danube Commission recommendations)**
- **Environmental protection, particularly of the Danube, according to the "polluter pays" principles**
- **Compliance with environmental policy assumed by the Company.**



Field of applying

The procedure applies to Quality Management System for intervention activities for accidental pollution.



Related documents

- ☐ Procedure "Technical Assistance for Pollution Prevention"
- ☐ Establishing the "Charging port fees@



Responsibilities

- ✓ Elaborates the Order of march - Prepare for the movement of vessels participating in the remediation action, where the order was issued during office hours;
- ✓ Prepare invoice documentation required to provide remediation assistance
- ✓ Organizes and controls the activity of intervention for remediation



Description of work

Intervention in case of accidental pollution is carried out following the specifications issued by the polluter, according to the principle "polluter pays" and is performed by motor ferry "**Sălceni 1**" or, if the complex massive pollution clean-up, ships that have personnel for such interventions.



Description of the activities

When a hydrocarbon spill is announced, the designated persons from Environmental Protection Office alert the following:

- Company management
- Galati Environmental Protection Agency
- Galati Harbor Authority
- Galati Water Management System
- Onboard personnel responsible for preparing the ship for departure;

The representatives of the Company's Environmental Protection Office along with the specialized ship's crew will go to the polluted area only after an invocation was made by the polluter;



The depollution activities are:



Limiting the spread of the hydrocarbon film with absorbent barriers;

- Spreading absorbent material over the affected surface;
- Recovery and separation of the absorbent dam:
 - the unaffected portions of the dam will be stored onboard the ship
 - the altered portions of the dam, along with the absorbent material (transformed in a layer or cluster which can be easily gathered off the surface) will be deposited in plastic bags and passed on to the specialized depollution installation of CN APDM SA GL
- The activity ends by signing a written statement between the Company's representatives, the above mentioned institutions and the polluter.
- Forms and recordings

The forms used are the ones required by the national legislation.



POLLUTION PREVENTION AND MITIGATION PLAN IN THE COMPETENCY ZONE OF CN APDM SA GALATI



FOREWORD

**CN APDM Galati,
Established in 1991, reorganized by
the Governmental Decision no.
518/1998, modified and amended by
GD no. 222/2003 and GD no.
598/2009 as a national company,
established as a corporation and
conducting national public interest
activities, and in the last 19 years of
activity it has established a proper
reputation regarding the efficiency
and professionalism of the services
provided.**



The company is managed by the Administration Board, chaired by the General Manager and the activities are coordinated by the Infrastructure and Naval Transport General Division, under the Ministry of Transport and Infrastructure.

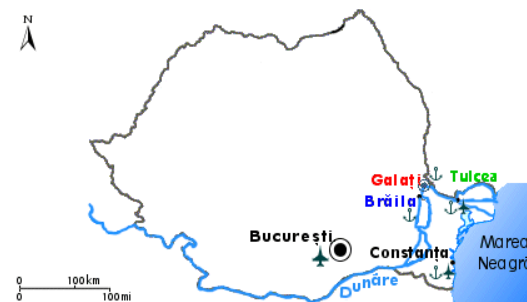
The main objectives of the company seek to assure harbor public services at European standards, maintaining and repairing the infrastructure for river transit, public or private property, continual diversification of services and increasing the efficiency in the competency zone: Mm 125 – Km 160 and Km 251 – Km 285 on the Danube, both banks and secondary branch Chilia, Sf. Gheorghe and Macin.



CN APDM SA Galati is issued the environmental functioning permit no. 299 / 17. 11. 2008, by the Galati Environmental Protection Agency.

Having direct access to the Rhine – Maine – Danube trans-European corridor through the Danube – Black Sea Channel, our harbor development priorities are:

- Integration to the Pan-European transport system;
- Implementing a system for Intelligent Transport Service;
- Integration to the European Information System;
- Danube pollution prevention and mitigation.





FACILITIES, INSTALLATIONS AND EQUIPMENT REQUIRED FOR THE SAFE OPERATION OF A HARBOR FROM THE ENVIRONMENTAL POINT OF VIEW

The facilities, installations and equipment required for the safe operation of a harbor from the environmental point of view are divided in several categories, according to the pollutants and the prevention and mitigation phase, as follows:



Specialized ships equipped with equipment designed to collect the hydrocarbon – water mix from the ship`s bilge while parked, operating or transiting the harbor;

Specialized ships for collecting solid household waste from aboard ships;

Specialized equipment for transport of household waste to designated storage areas;

Specialized ships for collecting waste water from ships;

Floating installations for collecting accidentally released oil waste from the river and harbor area, such as:

- **floats;**
- **surface suction pumps;**
- **tanks for depositing the collected waste;**
- **pumps to transfer the waste to onshore treating installations;**



Depollution complex provided with household waste
collecting installations, hydrocarbon waste, waste water
directly from ships;

Storage space for collection of bilge water;

Hydrocarbon waste separation facilities and collection areas;

Areas required for collecting waste water (AUF and AUG);

Waste water treatment facilities



SHIPS, INSTALLATIONS, EQUIPMENT USED IN CASE OF POLLUTION OF THE DANUBE RIVER IN THE COMPETENCY ZONE OF CN APDM SA GALATI, GALATI HARBOR

179 DEPOLLUTION COMPLEX - Pier 15, Galati Harbor

Hydrocarbon separator 3 mc/h, 60 mc/h;

Skimmer Pump 60 mc/h;

Storage tank for bilge water 50 mc;

Used oils storage tanks 16 mc ;

Inflatable barrier 300 x 900 x 200 ml;

Waste water purifier 3 mc/h;

Waste water storage tank 30 mc;

Absorbent substance for oil products OILDEPOLPLAST.

Working schedule : 24 h/day.



- **CD 179** is designed as a complex depollution station, made by modifying no 179 barge (former 7291).
- 179 depollution complex collects hydrocarbon contaminated water, separates them, discharges clean water in the Danube and delivers the separated hydrocarbons to the onshore processing installations;
- The separation capacity is 3 mc/h which can be upgraded to 60mc/h in case of hydrocarbon pollution;
- The onboard separation equipment is provided with a water quality analyzer. In case of exceeding the 15 ppm threshold, the contaminated water is diverted again to the collecting tank where they undergo separation once more.



B/M SALCENI 1

180 HP - Pier 15, Galati Harbor

- Collecting household waste from ships in the competency zone of CN APDM SA Galati ;**
- Assisting ships caring out transfer of oil products at pier – Unicom Oil Terminal Galati;**
- Mitigation of hydrocarbon pollution of the Danube, with onboard depollution equipment (absorbent dam and bulk materials).**

Absorbent dam Ø 200, 200 ml;

Working schedule : 24 h/day.



DEPOL 6 - Pier 15, Galati Comercial Port

**Specifically built ship to collect polluted surface water,
separate large floating debris and deposit polluted
waters onboard for separation
179 Depollution Complex.
Working schedule : 8 h/day.**



Assorted waste collection point – Pier 26, Galati Harbor, Cap de Mol area

**Specifically built platform, with modular containers and
garbage cans for collecting assorted waste (dangerous
and not) from ships, including bags of slurry.**

Working schedule : 8 h/day.



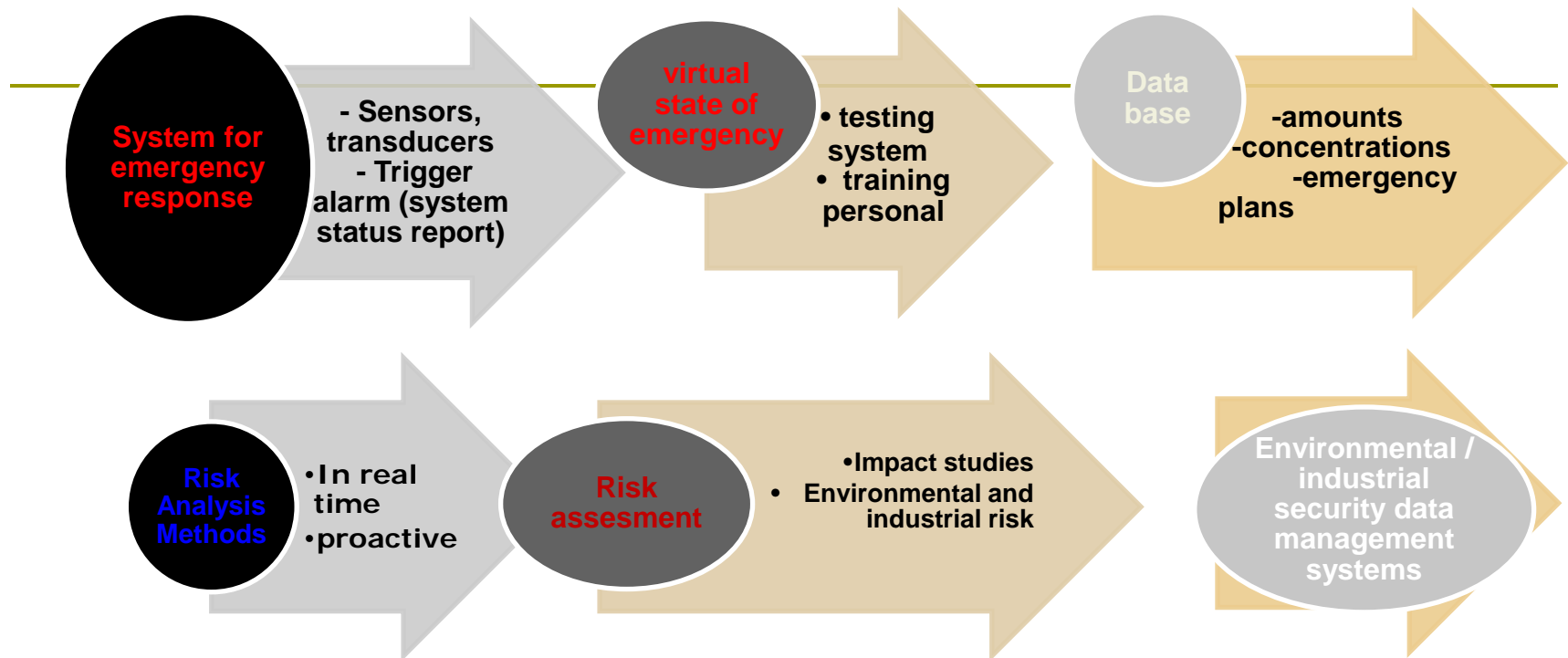
Specialized GL14PDM vehicle for collecting household waste

Degree of compaction 5 : 1;

Loading capacity : 3 mc;

Working schedule : 8 h/day.

FUTURE EXPECTATIONS



- monitoring and forecasting system for assisted decision in field of hazardous substances under technological risk
- risk analysis and assess impact on populated areas (modeling gas dispersion in the atmosphere depending on weather conditions and terrain)
- notice in real time - decision makers
 - Local authorities
 - Emergency services

QUESTIONS?

