

Paola Milano – Operating Procedures Coordinator and Main Evaluator
Salvatore Corrao – IT CBRN Coordinator

OVERC.O.M.E. Project

(Cross-border cOoperation in Managing Emergency)

Genesis of CBRN forms, guidelines and outline for international scope

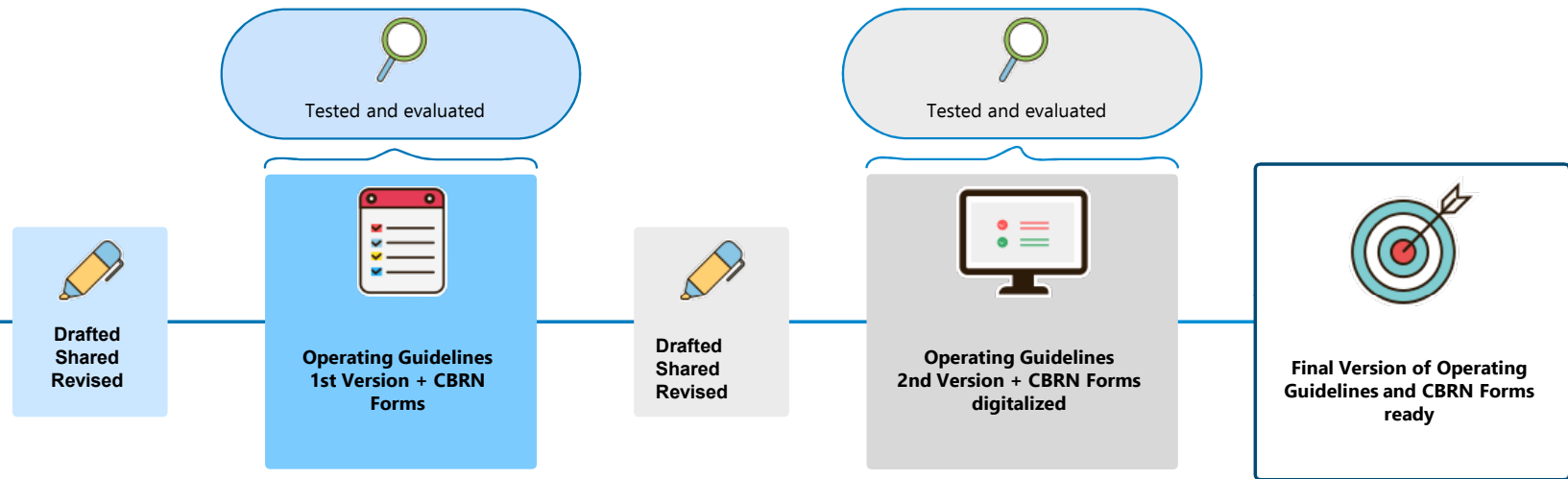
Final Conference on line, 18th March 2025



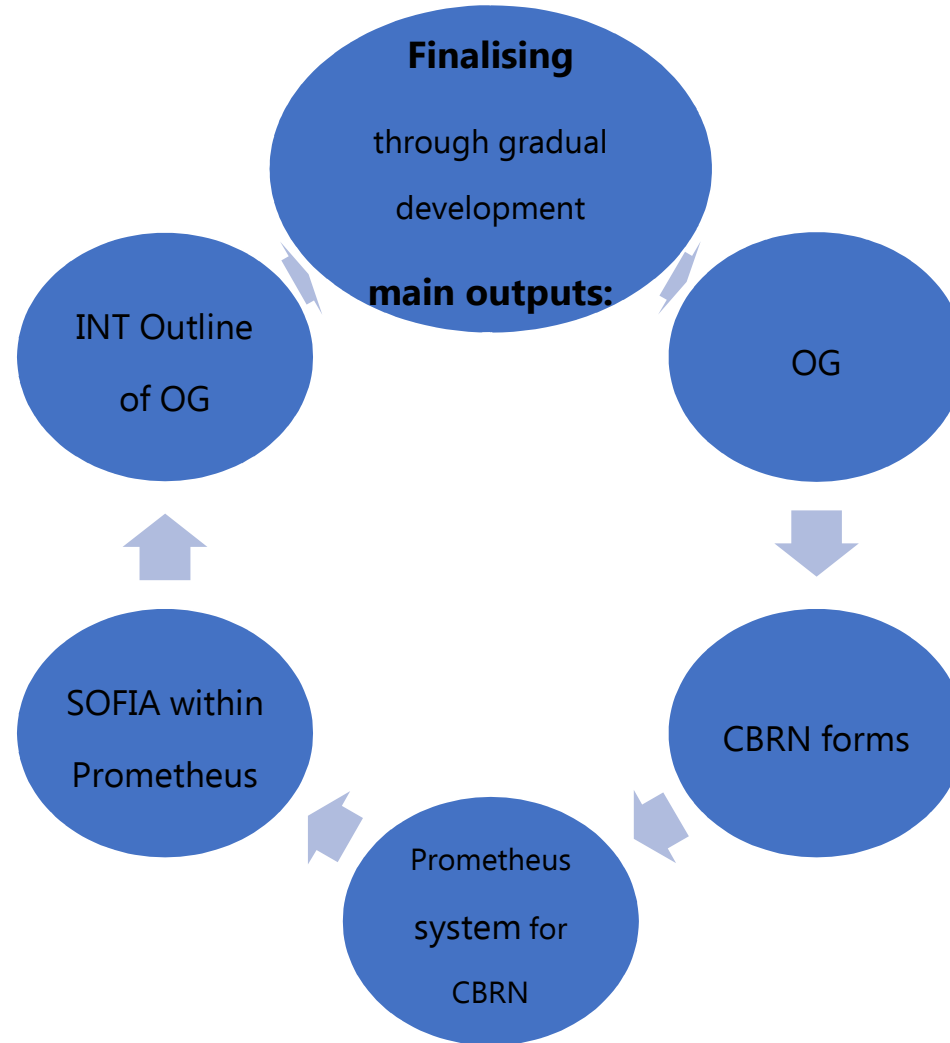
Methodology applied



Methodology applied



Methodology applied



OVERC.O.M.E. general evaluation aims

- i) evaluation of 2 exercises in 2024
- ii) evaluation of different versions of Operating Guidelines, CBRN forms and S.O.F.I.A.
- iii) evaluation Report following each exercise



Evaluation reports

Examples of Main Finding coming from the 1st Exercise Report:

- *"It has been noticed that some forms may be simplified, some can be deleted. In particular, the request forms (resource request, response delivery, reinforcement or jointly) can be compressed in one form."*
- *"It has been noticed that some language barriers were pointed out during the testing. The role of the Liaison Officer, already foreseen in the 1st draft of the Operating Guidelines, should be reinforced in their 2nd draft in order to facilitate the communication issues. An important improvement could also be to consider the training of the Liaison Officer in CBRN techniques, to quickly translate orders and reports of operations carried out on site."*

Examples of Main Finding coming from the 2nd Exercise Report:

- *"It has been suggested, in order to have more knowledge of all the items of Prometheus for SOFIA, to include a short description of the tools (for example: what is a "snow team"?)."*
- *"Sampling Form, the following was noticed:*
 - *It has been noticed that it is simple to fill, an important issue aspect that need to be taken into consideration is that this form must be filled and accompany each sample;*
 - *It has been detected that radiological, chemical, and biological issues need different and specific sampling forms, consequently only one is not enough;*
 - *It is easy to fill in and it is able to give a complete vision of the situation."*



OUR INITIAL APPROACH. WHERE WE STARTED FROM:

Project objectives

- Contributing to enhance mutual cooperation for border general interventions between Italy
- Improving the quality of CBRN operations, enhancing the coordination to take the "right"

Bilateral Agreements

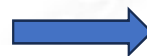
Case studies with transborder events

EU directives or Int. Agreements

SOPs from Certified CBRN Teams

Survey developed and conducted by ICI

Ideas to design Guidelines

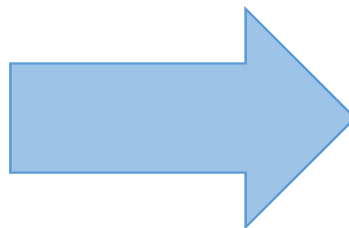


To test in a scenario



...giving life to...

OPERATING GUIDELINES To improve Coordination and Cooperation



**OPERATING GUIDELINES
TO IMPROVE COORDINATION AND COOPERATION**



OVERC.O.M.E.
Cross-border cOoperation
in Managing Emergency



OVERC.O.M.E.

How the document is structured...

OPERATING GUIDELINES To improve Coordination and Cooperation

- Index of the document**
- Section 0 – AIM of the PROJECT**
- Section 1 – ACTORS**
- Section 2 – TEAM COMPOSITION, EQUIPMENT AND TOOLS**
- Section 3 – OPERATIONAL PHASES**
- Section 4 – CBRN FORMS**
- ANNEXES**

...briefly

SECTION 0

- 0.1 Overcome Project;
- 0.2 OG to improve coordination and cooperation;
- 0.3 S.O.F.I.A.
- 0.4 Prometheus CBRN
- 0.5 Interconnection between SOFIA and Prometheus
- 0.6 Terms and definitions
- 0.7 Acronyms

Here presented: aim of the project; SOFIA as virtual operating room, alerting system and dispatcher; Prometheus as a management system when a CBRN event happens.



Section 0

0.1 OVERC.O.M.E. Project

OVERC.O.M.E. project has been funded by the European Union Mechanism of Civil F under the Call UCPM – 2022 – PP . It has been implemented by a consortium of Italian users: the Italian National Fire and Rescue Service (CNVVF), the French Departmental Service of Savoie (SDIS73), together with the International CBRNE Institute (ICI) coordinator of the project is the CNVVF. One of the objectives of the project is to improve CBRN operations, enhancing the coordination to take the "right decision" and interoperability toward a "Team Europe" approach as well as to improve the cooperation for general joint intervention at the border.

Thus, OVERC.O.M.E. intends to improve current tools, covering the lack of procedural operational forms in CBRN, to harmonise the type of data useful to the coordination of cross-border operations, to facilitate the flow of information to respond to the operational needs, especially when a country is involved. The project takes into consideration the standard international model for USAR operations (INSARAG Guidelines 2020) which is intended to be the level of standardisation in CBRN scope, applying a methodology that comes from USAR operational model. The project will test the CBRN forms and the CBRN procedures during two exercises to enhance mutual cooperation in a scenario simulating an intervention at the border between France and Italy and will enhance the already available data management system in USAR operations, "Prometheus" that could also be used by the teams during a CBRN emergency.

In the frame of protocols of cross border cooperation (CBC) already existing between the Interior of France and Italy signed in 2007, OVERC.O.M.E. is also aimed at enhancing a virtual operating room between Turin (Italy) and Chambéry (France) to improve daily operations at the border as a model for other borders' joint action. Thus, S.O.F.I.A. which stands for Operational I Alpine Arch (Sala Operativa Francia Italia Arco Alpino/Salle Opérationnelle France) developed in the frame of OVERC.O.M.E. to facilitate the coordination of cross-border operations in terms of: a) correct classification of an event; b) unambiguous address; c) standardisation of equipment and resources; d) translation on real time of additional information.

At the end of the project Prometheus will be therefore enhanced for CBRN (for full coordination) and for general intervention in the frame of S.O.F.I.A. (for the alert phase).

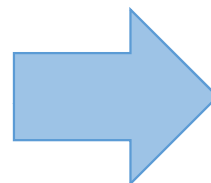
SECTION 1

Actors

Four parts are presented:

- **Part A: Actors in a CBRN event during a transborder emergency;**
- **Part B: Role of the LO and the Command Post;**
- **Part C: Head of the reinforcement team and Head of the Sector during a transborder emergency;**
- **Part D: Actors interacting with SOFIA, Prometheus CBRN and both.**

Here presented: List of actors and what they do in the 4 phases (box to the right!); Role of the Liaison officer, specific capabilities and functions; Command Post role; How the two Countries interact also using SOFIA and Prometheus.



SECTION 1 – ACTORS

The aim of this section is to identify the actors that can be involved during a transborder emergency, followed by their description, functions and competences.

This section is divided into four parts:

A – describing all the possible actors involved during a CBRN event during a transborder emergency;

B - specific terms of references for the International Liaison Officer and the interaction with the Command Post;

C - description of the head of reinforcement team and head of the sector during a transborder emergency;

D – brief description of the actors involved in CBRN and both.

PREPARADNESS

(Planning, Training, Awareness, Resource's inventory and facilities inventory)

RESPONSE

(Warning, Protect, Analyze, Mitigation, Rescue)

RECOVERY (Damage and impact assessment, Site-restoration plan, Restoration to normality)

SECTION 2

Team Composition, Equipment And Tools

In this section it is presented a minimum level for CBRN Teams in areas like:

- TRAINING
- PREPAREDNESS
- RESPONSE
- SAMPLING
- MODELING

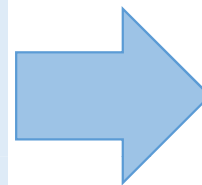
Here presented: Tasks within the team; activities in “peace time”; Response with actions to perform (e.g. survey, detection, decon...); team composition; software available for modeling; stabilization and recovery phase.



SECTION 2 – TEAM COMPOSITION, EQUIPMENT AND TOOLS

The aim of this section is to identify the minimum level necessary for CBRN teams. Similar teams, similar training, similar device can produce a higher response level in case of war emergency.

A possible distribution of tasks within a team for a cross-border emergency intervention is indicated in the following diagram:



MANAGEMENT



LOGISTICS

LOG
(BoO -
Equip)

OPERATIONS



SECTION 3

Operational Phases

In this section, we find phases:

- PREPAREDNESS
- RESPONSE
- RECOVERY
- MITIGATION/LESSONS LEARNED

in the framework of a cross-border emergency

Here presented the essential activities to perform, like zoning concept; activities in “peace time” and CBRN Sampling and Detection with proper equipment.

SECTION 3 - OPERATIONAL PHASES

With reference to this section and starting from possible scenarios, aspects and phase trans- border emergencies are as follows:

- Preparedness.
- Response;
- Recovery;
- Mitigation/Lessons Learned.

PREPAREDNESS

This phase is the time frame of operational stages between the end of a rescue mission the start of a new one.

In this phase, the CBRN personnel undertake all the actions aimed to ensure the preparation and readiness for deployment or get dispatched in case of an emergency. The country informs the neighboring control room about the resources that are available in case of a border event. Moreover, must be performed a communication check about all the involved in case of activation.

Within this framework, it is important to train personnel, to practice and get familiar with procedures, as well as operating methods for cross-border working teams with experience (e.g. detection). This way, it is vital to arrange exercises with teams at the borders trying to simulate a day, coordination and cooperation.

For instance, in a preparedness stage it would be necessary to foresee a table-top or a simulation with the neighboring Country making it possible to play it on different levels (operation and strategic).

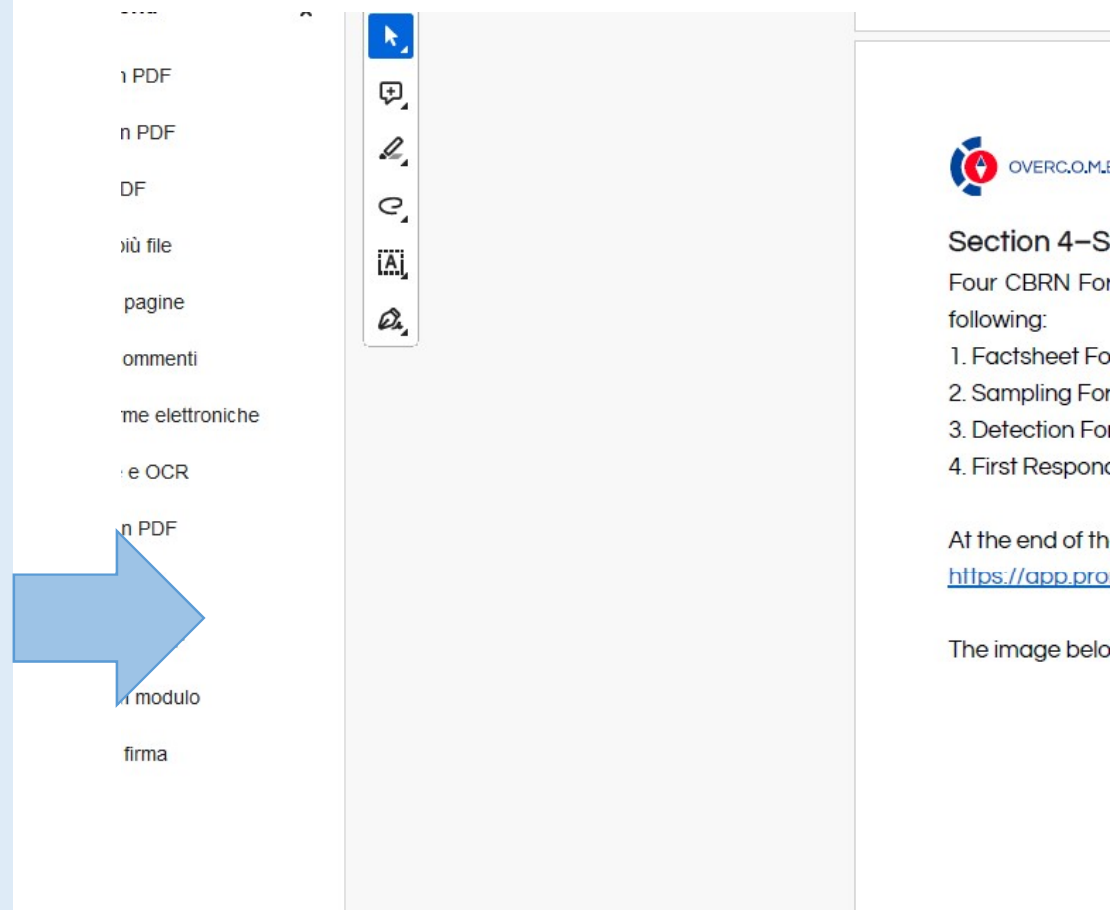
RESPONSE

Recognizing that a CBRN incident has or may occur is critical. The affected Country

SECTION 4 CBRN FORMS

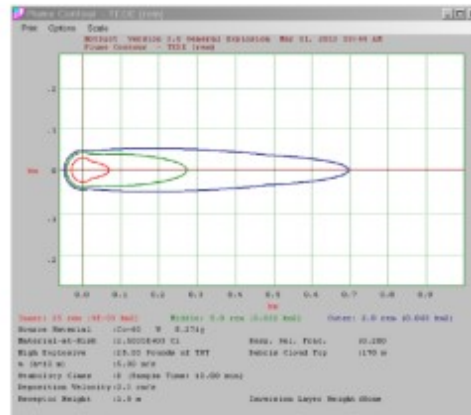
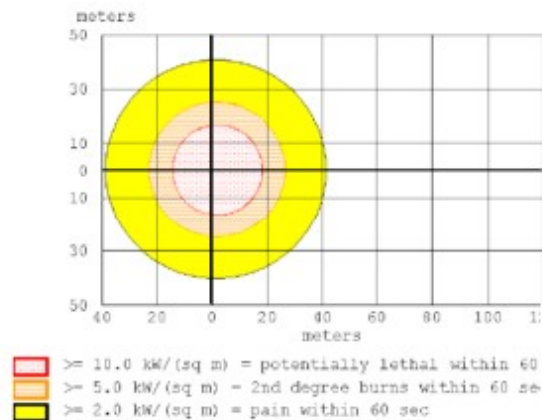
Forms are embedded in Prometheus System and can display data (after filling them out) about:

- 1- Fact sheet;
- 2 - Sampling;
- 3 - Detection;
- 4 - First Responders' Decontamination



Operating Guidelines to improve Coordination and Cooperation. ...for instance, in the Main document

SECTION 3 – MODELLING AND PREDICTING CHEMICAL AND RADIOLOGICAL DISPERSION



Powerful tool that can be used during operations **to understand the evolution of the scenario.**

Output models don't provide a detailed description of the area involved, but a **quick and reasonable result to use to develop a more effective strategy.**

Dispersion models require a certain amount of **data** to work properly, and these are **provided by teams on field**

ANNEXES

Annexes provide references about: France and Italy Emergency Response; CP role when more teams are interacting under also several level of Command.

In an annex, CBRN pieces of equipment are presented with their specific features.

ANNEXES

ANNEX 1 SECTION 1 - PART C

France emergency response

This annex represents, as a useful reference, the French emergency response system command in case of emergency situations.

The first incident commander is the head of the first engine.



The second level is the head of several engines. He is in contact with the head of each vehicle and they are in contact with the engine crew.



The third level is the head of several groups of vehicles. He is in contact with the head of each group and they themselves are in link with the head of each vehicle.

He is, often, helped by a small command post, managing collection and synthesis of information.



"colonne" chief

The fourth level is the heads described previously. He is helped by an important command post.

1- FACT SHEET - Form

- Nation;
 - Team name;
 - Numbers;
 - Capabilities;
 - Other capacity;
 - ETA;
 - Point of Entry;
 - Means of transportation;
 - Logistical needs;
 - LO contacts;
-
- Demob info;
 - ETD;
 - Point of Departure;
 - Information on means of transportation.



Fact Sheet
Nazione
Nome del Team
N° componenti del Team *
Capacità Team *
☐ Detection and Monitoring
☐ Sampling
☐ Analysis and Identification
☐ Modelling (Dispersion)
☐ Population protection (Cordon deployment, sheltering and evacuation)
☐ Hazmat containment
☐ Pollution recovery
☐ Lab Analysis
☒ Decontamination
Altre capacità
Arrivo Previsto (data e ora)
Punto di arrivo previsto in area colpita (Aeroporto, Porto, Località, ecc)
Mezzi di trasporto impiegati e targhe identificative



n° cellulare Liaison Officer
Email Liaison Officer (es: email1; email2)
Partenza prevista (data e ora)
Punto di partenza
Informazioni sul trasporto

2 - DETECTION Form

- **CHEM detection;**
- **BIO sampling and analysis;**
- **RAD detection;**
- **Performed by;**
- **When;**
- **Type of instrument;**
- **Point of Release (Lat/Long);**
- **Site description;**
- **Bio analysis (chain of custody/sample preparation...)**
- **Rad field analysis...**
- **Probe used;**
- **Radionuclides found..**

CHEMICAL FIELD ANALYSIS

Performed by: _____ Date: _____

Instrument type: _____ Model: _____ Ser. No.: _____

Probe type: _____ Model: _____ Ser. No.: _____

Emission Release Location: Latitude _____ Longitude _____

[illegible]

BIOLOGICAL ANALYSIS

ENVIRONMENT SAMPLING - UNKNOWN

SAMPLE ARRIVAL DATE: _____

SAMPLE CODE (see Sampling Form):

KIT SERIAL NUMBER: _____

INSTRUMENT CODE: _____

SAMPLE TRANSPORT MODE: -AMBIENT T°:

-REFRIGERATED T

- AWAY FROM THE

- ALIQUOTES YES NO

ANALYSIS START DATE:

ANALYSIS START TIME -

SAMPLE LOG NUMBER:

LAB OPERATOR NAME: _____

A - SAMPLE PREPARA^A

- | | |
|----|--|
| 01 | Check the performance of the instrument by playing a tune |
| 02 | Open the evidence bag and verify the condition of the sample |
| 03 | Pouch preparation |
| 04 | Hydrate Pouch |
| 05 | Sample Preparation |
| 06 | Run analysis |

3 - SAMPLING Form

- Sampling team;
- Type of sample and no;
- Date
- Location
- Weather condition;
- Sampling mode to later perform:
 - a) Rad analysis;
 - b) Chem analysis;
 - c) Biological analysis.
- Other remarks

SAMPLING FORM		
Completed by: Sample Team	SAMPLE RECORD ☐ Solid ☐ Liquid ☐ Gas	Nr. _____
Report Type: ☒ BLANK TEST ☐ SAMPLING		
Sampling performed by _____ (Full Name)		
Sampling date: _____ Sampling location: _____ (Map code)		
GPS: Lat _____ Long _____		
Weather conditions: ☒ Clear ☐ Cloudy ☐ Rain		
Other weather data:		
Temperature _____ Atmospheric pressure _____ W/V _____		
SAMPLING MODE:		
NR:		CHEMICAL/BIOLOGICAL:
☐ Marinelli beaker		☐ SPME
☐ Wipe test (Smear test)		☐ Vial
		☐ Jar (Bormioli)

4 - First Responders' Decontamination Form

- Decon team;
- Performed by and when;
- Information on the person receiving decon:
 - If injured
 - If any medical assistance
- Rad decon (timing/method, contamination location, instrument used, ...)
- Method used (Table A with info provided)

FIRST RESPONDERS DECONTAMINATION FORM

Completed by	Team	Nr. _____
-------------------------	------	-----------

Performed by: _____ Date: _____

Name of individual: _____ Ref. Nr. _____

Address: _____ Date of birth: _____ Sex: ☐ M ☐ F

Injury involved: ☐ Yes ☐ No Specify: _____

Medical assistance utilized: ☐ Yes ☐ No Specify: _____

RADIOLOGICAL DECONTAMINATION

Time decontamination began: _____ Background reading: _____

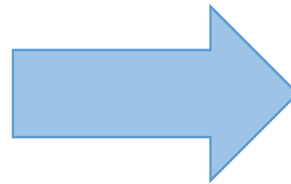
Instrument type: _____ Model: _____ Ser. No.: _____

Probe type: _____ Model: _____ Ser. No.: _____

Contamination Location on body	Initial contamination level (cps)	Decontamination method and material used (table A)	Final
			

Time decontamination was completed: _____

**INTERNATIONAL
OUTLINE
Of the
OPERATING
GUIDELINES
To improve
Coordination and
Cooperation**



INTERNATIONAL OUTLINE
of the
OPERATING GUIDELINES
to Improve Coordination and Cooperation

INTERNATIONAL OUTLINE

Includes general parts of
Operating Guidelines
=
starting point for
other countries



INDEX

Section 0
0.1 OVERC.O.M.E. Project
0.2 Operating Guidelines to improve coordination and cooperation
0.3 S.O.F.I.A.: (Operational Room France Italy Alpine Arch)
0.4 Prometheus CBRN
0.5 Interconnection between S.O.F.I.A. and Prometheus
0.6 Terms and definitions
0.7 Acronyms
Section 1 – Actors
Part A
Part B
Part C
Part D
Section 2 – Team Composition, Equipment and Tools
2.1 Training activities
2.2 Preparedness
2.3 Response
2.4 Sampling
2.5 Detection
2.6 Modeling
2.7 Decontamination



3.3 Recovery
3.4 Mitigation/Lessons Learnt
Section 4–Standardised CBRN Forms

To draw outline
for international actors
=
to build up
joint procedures
with other countries

THANK YOU!



OVERC.O.M.E.

Cross-border cOoperation
in Managing Emergency

Operating Procedures Coordinator and Main Evaluator: Paola Milano

IT CBRN Coordinator: Salvatore Corrao

ph: +39 050 941942

e-mail: infovercome@vigilifuoco.it

Comando VV.F., Viale delle Piagge, 1 - 56124 Pisa, Italy.



Co-funded by
the European Union