



ISFP-2017-AG- PROTECT
Under Grant N°: 814803
DG Migration and Home Affairs



MELODY

“A harmonised CBRN training curriculum for first responders and medical staff”

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Directive Board

International Master Courses in

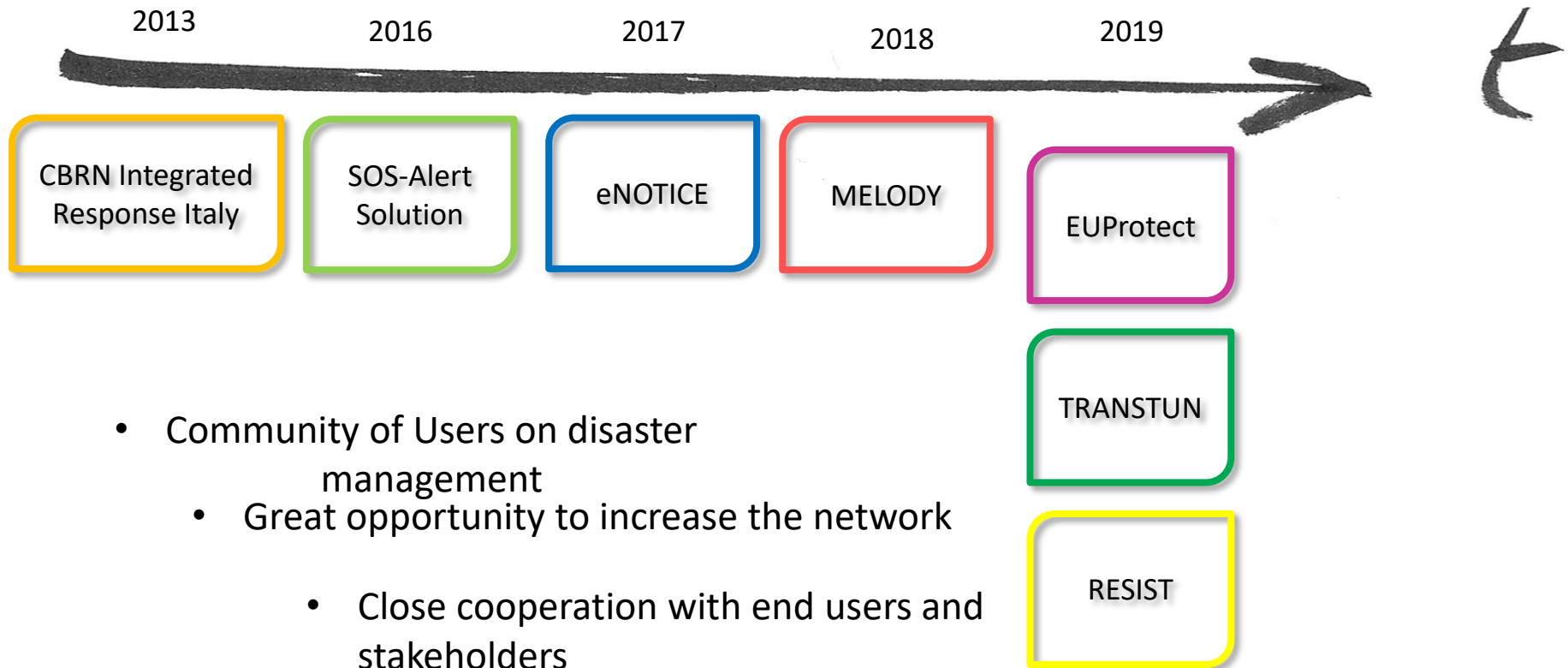
«Protection Against CBRNe events»

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International Master Courses
in «Protection Against CBRNe events»***

Our experineece with EU grants on CBRN





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The MELODY Consortium

Participant	Country
Studiecentrum Voor Kernenergie SCK CEN (Coordinator)	Belgium
Nederlandse Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek TNO	Netherlands
Rijksinstituut voor volksgezondheid En Milieu RIVM	Netherlands
Università Degli Studi Di Roma Tor Vergata UNITOV	Italy
UMEA Universitet	Sweden
International Security And Emergency Management Institute ISEMI	Slovakia
Autonom Provinciebedrijf Campus Vesta VESTA	Belgium
Rapid response and special police service	Hungary
Uniwersytet lodzki	Poland
Emergency Services Training Centre Foundation of West-Finland	Finland



CAMPUS VESTA





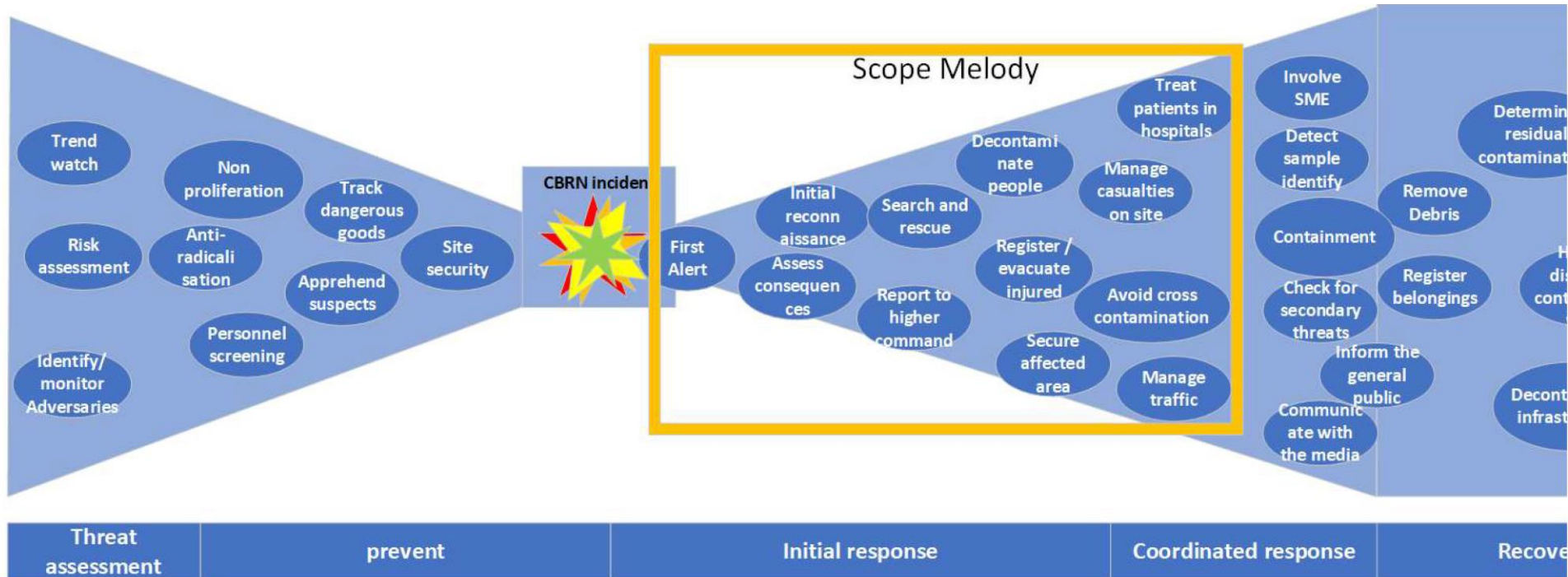
Work Packages

WP	WP title	WP objective
1	Management and Coordination of the Action	General management and coordination of the action including monitoring of the project.
2	Inventory of training curricula, practitioner needs and gap analysis	To create a comprehensive collection of existing CBRN training curricula and teaching materials. To identify professional training needs of CBRN first responders. To identify gaps in the existing CBRN training curricula and teaching materials compared to the obtained needs.
3	Development of a harmonised curriculum	To deliver a harmonised CBRN training curriculum, based on training needs of CBRN first responders, including a training guideline with user explanation.
4	Deployment of harmonised curriculum	To initially deploy and evaluate the training materials developed in WP3. To deploy and evaluate the training guide and training steps (theory, scenario-based training/table top exercise, operational training in field exercise) specified in WP3.
5	Strengthening of harmonised curriculum	To gain insight in materials' strengths and weaknesses. To produce improved training programs and materials.
6	Exercises using the harmonised curriculum	To present, test and evaluate the harmonised CBRN first responders training curriculum, the developed material and the methods.
7	Dissemination and demonstration	To showcase the activities of the project at all stakeholder levels. To organize demonstration activities in order to raise awareness on the project's accomplishments with the purpose of having EU MS include or develop plans to include the derived training curriculum and foreground knowledge.

Rationale of the project

- A. MELODY will consult and identify existing training curricula, materials and facilities in and outside the consortium, as well as end-users/practitioners' training needs.
- B. Based on this output, an initial curriculum will be developed. The envisaged curriculum consists of a modular approach, including different levels of knowledge and intensity to optimally match first responders training needs.
- C. Efforts will be spent in improving the developed training material with respect to the practitioner's experiences with (parts of) the curriculum during training and exercise activities as well as their additional needs.
- D. The CBRN training curriculum will be assessed and evaluated through a number of dedicated exercises and training activities which will lead to this set of improvements.
- E. A final WP has been devoted to demonstration and dissemination activities. The former will deal with showcasing the final product through a set of full scale exercises, whereas the latter will be a continuous effort in raising awareness on the project and its activities at all levels: from practitioner to policy makers.

Melody SCOPE



MELODY focusses on CBRN training for the EU first responders in the initial response phase of a CBRN emergency or disaster.

Users' training needs identification workflow

- A. The training needs of the first responders were collected through interviews and national and international workshops using a task-based approach.
- B. Based on the various tasks that need to be performed during a CBRN incident (Operational Functions - OF) in combination with the definition of a First responder, it was possible to identify the target audiences of the MELODY training curriculum.
- C. These target audiences consist of the responders that will arrive first at an incident scene (fire, police, ambulance), but also those (emergency medical personnel and general practitioners) that might be involved at other locations as (contaminated) patients are transported to health care facilities.
- D. The dispatch officer was included in the selected scope as their role is critical in the initial phases of a CBRN incident.



Description of the Operational Functions

✓ **Selection of operational functions (OF) for CBRN scenarios** (previously identified in the EU Practice project[1], (Descriptions in *italic* were adapted for use in MELODY)

OF number	Description of the Operational Functions (OF's)
4-1	(First) alert To be able to collect an initial alarm (audio, visual, electronic, ..) which announces an incident (or a serious threat) and to start-up assigning appropriate response capabilities.
4-2	<i>Initial reconnaissance</i> Determine scale of incident, propagation in time, appropriate security zones and level of response
4.5a	<i>Avoid cross contamination</i>
4-7	Report to higher command To be able to inform higher level stakeholders in the involved organizations about the incident.
4-12	Secure affected area To prevent people who are not needed at the incident location, from approaching the location for the timeframe that is requested, but also keeping people in that are not allowed to leave the incident scene.
4-13	Manage traffic (emergency transport, managing other traffic flows) To be able to (re)route any traffic in the vicinity of the incident location in such a way that responders are not hindered, and the handling of the incident can take place as smooth as possible.
4-18	Search and rescue To be able to search the incident scene for victims and safely (for responders as well as victims) get them out to enable appropriate medical care.
4-19	Manage casualties on-site (triage – treatment – stabilization) To be able to timely provide appropriate emergency medical care for victims of a CBRN-incident, taking into account all safety measures for responders.
4-20	Decontaminate people, (companion) animals, their equipment and vehicles To be able to remove CBRN contamination from those involved in a CBRN-incident, without long waiting times and taking into account the needed medical treatment afterwards and the timeframe in which this needs to take place.
4-21	Register and evacuate injured people To be able to identify people involved and injured in the incident, register all necessary information and transport them into a safe area.
4-22	Isolate infected people/animals To be able to identify people (and/or animals) involved in the incident, determine whether isolation is needed, appoint the appropriate amount of isolation capacity and transport people to this location.
4-23	<i>Receiving patients and (initial) treatment of patients in healthcare facilities</i> To be able to provide necessary medical care in hospitals.

Identification of the target audience

✓ Basing on **operational functions (OF)**, the potential target audience of first responders has been identified for the MELODY purposes

MELODY number	Operational function	First response organisation					
		Fire	Police	Ambulance	Emergency medical personnel	General Practitioners	Dispatch officer
	Overview of identified CBRN training needs of the identified training audiences						
OFM01	(First) alert	x	x	x			x
OFM02	Initial reconnaissance	x	x	x			
OFM03	Avoid cross contamination	x	x	x	x	x	
OFM04	Report to higher command	x	x	x			
OFM05	Secure affected area		x				
OFM06	Manage traffic (emergency transport, managing other traffic flows)		x				
OFM07	Search and rescue	x		x			
OFM08	Manage casualties on-site (triage – treatment – stabilization)			x	x		
OFM09	Decontaminate people, (companion) animals, their equipment and vehicles	x		x	x		
OFM10	Register and evacuate injured people		x	x			
OFM11	Isolate infected people/animals	x			x	x	
OFM12	Treat patients at health care facilities				x	x	
ADD01	CBRN harmonized Terminology	x	x	x	x		x
ADD02	Accidents and terrorism & management	x	x	x	x		x
ADD03	Own safety	x	x	x	x	x	
ADD04	Other agencies and responsibilities	x	x	x	x		x
ADD05	CBRN awareness	x	x	x			x
ADD06	Harmonized response awareness (in interaction with other first responder units)	x	x	x	x	x	x

End-users/practitioner's needs

- ✓ The training needs of the first responders were collected through interviews and national and international workshops using a task-based approach.

Generic questions

		Answers to be filled in by MELODY partner
G1	What is your current position / operational function? <i>(if possible/not mandatory, useful for checking if all respondent levels are covered. You may keep this for own purpose, no need for us to collect)</i>	
G2	Are you familiar with the term CBRN? What do you consider CBRN incidents?	
G3	What are your / your organisation/department current responsibilities in relation to CBRN incidents?	
G4	Other comments...	

Specific questions

		Answers to be filled in by MELODY partner
S1	Have you or your department ever been involved in a CBRN incident?	
S2	Was/were the response of involved responders adequate in your opinion <i>(probably sensitive info, should only be asked if atmosphere is good)</i>	
S3	Follow up questions on the different operational functions that is indicated above...	

End-users/practitioner's needs

- ✓ The training needs were collected in different countries using a standardized interview template focusing on the desired content as well as available time for training and desired format of the training.

Generic questions

		Answers to be filled in by MELODY partner
G1	What is your current position / operational function? <i>(if possible/not mandatory, useful for checking if all respondent levels are covered. You may keep this for own purpose, no need for us to collect)</i>	
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S1	Have you or your department ever been involved in a CBRN incident?	
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S3	Follow up questions on the different operational functions that is indicated above...	

End-users/practitioner's needs

Training questions

		Answers to be filled in by MELODY partner
T1	Do you or your personnel receive CBRN training?	If yes go to table TY / If no go to table TN
TY2	What subjects are part of the training?	
TY3	Does the training consists of multiple parts?	
TY4	How many hours/days was the training? (incl study load before/after training)	
TY5	What is the required entry level/prerequisite for participation?	
TY6	Is there an accreditation or are study points given for successful participation	
TY7	Do you consider this to be sufficient for your personnel? If no: what is needed additionally? (see also TN questions below)	
TY8	Amount time (hours/days/week) available for CBRN training (incl study load before/after training)	
TY9	Other comments...	

- ✓ The training questions were different for interviewee replying positively or negatively to question T1 on previous CBRN training personal experience

End-users/practitioner's needs

TN2	Is there a need for (additional) CBRN training within your department ?	
TN3	What kind of CBRN training do you think is needed in your field? (e.g. e-learning, hand-outs, field exercises,..)	
TN4	What elements should such training contain?	
TN5	-C awareness, B awareness, RN awareness -Awareness of the CBRN Terrorist threat -CBRN incident approaches -Personal protection -Tests and evaluation -Practical elements	Most important?
TN6	What do you consider as the most important (check list above)	See cells above
TN7	What should/could be the duration of the training? (minimum and desired)	
TN8	What level of difficulty needs to/can be achieved?	

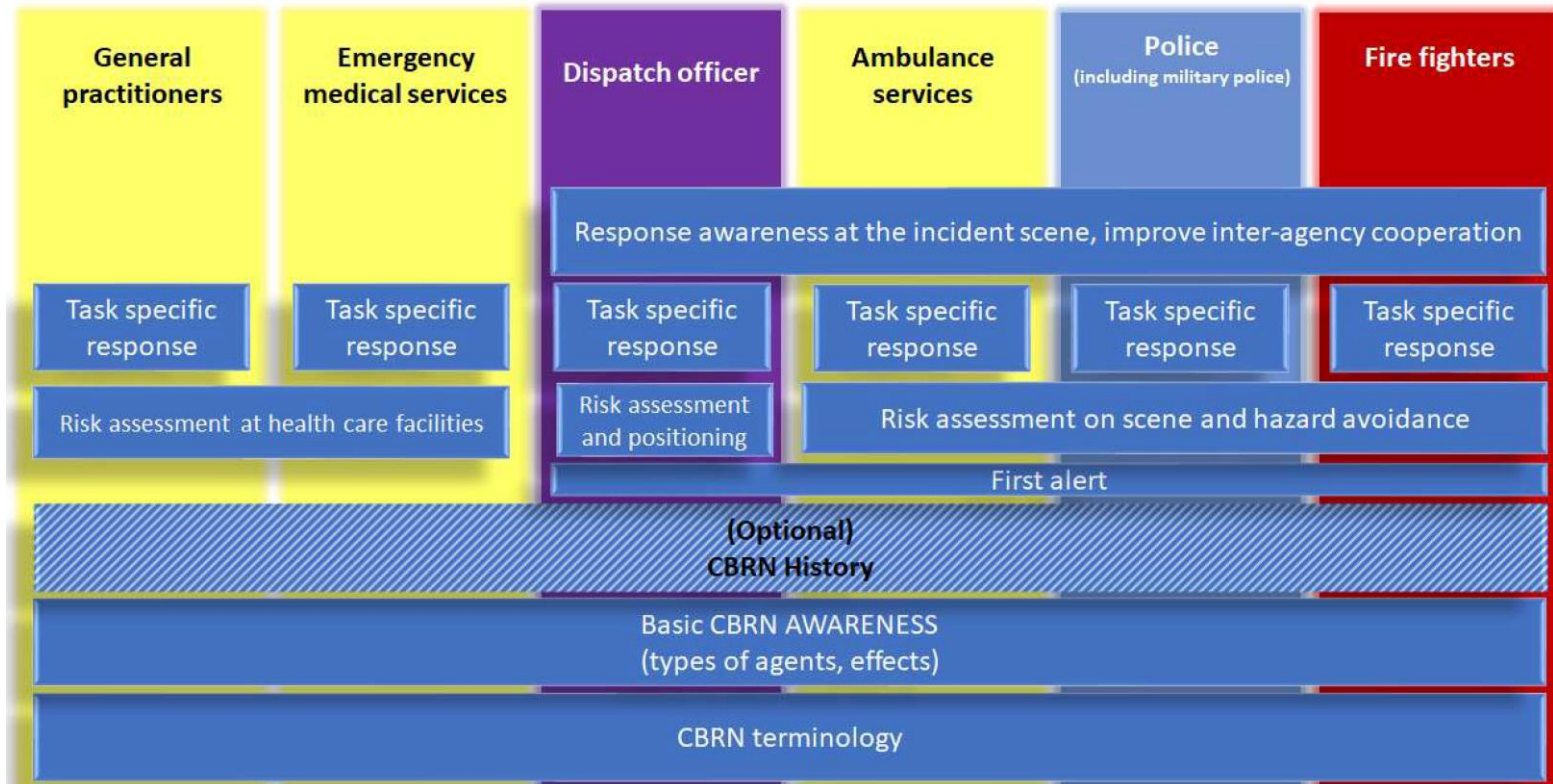
- E. The training needs were collected in different countries using a standardized interview template focusing on the desired content as well as available time for training and desired format of the training.

TN9	What language should the training be?	
TN10	Is there a preference for classical or individual training?	
TN11	Can the CBRN training be embedded in your existing Training & Education curriculum? And if not elaborate what limitations are	
TN12	Do you possess experts/instructors within your organization that are able to conduct such a training?	
TN13	If your staff / workforce receives CBRN training, what is needed to let them implement it in the work environment 'transfer from learning to work situation'	
TN14	Other comments...	

Also our CBRNe 1st
level Master's
Students
participated!

A MODULAR approach to training

Based on the results obtained, it was concluded that the EU first responder community does have specific training needs for CBRN training. Besides some common topics as CBRN awareness, which are mentioned by all services, there are also some specific training needs per service.



Roster of available training

✓ A survey has been conducted to find out about existing CBRN training in different Member States, identifying:

- **Scope**
- **Target audience**
- **Language**
- **Availability for re-use of the material**

Country	Total	Scope				Target audience						Language		Availability
		Basic	Specialized teams	Cooperation	Master degree	FR- generic	FR – Fire fighters	FR - police	FR- medics	FR – dispatch officers	Others	English	Native language	
Netherlands	16	4	6	2		3	2	2	4	1	11	4	9	10
Belgium	5	3	1				3	2					5	2
Poland	8		6		2		2	3			7	5	3	4
Slovakia	2	1	1				1				1		2	1
Sweden	13	7	5	1		2		3	1	1	10		13	
Italy	5		5			2	2	2	2		6	2	3	
Finland	4	4					4						4	

Note: Sometimes CBRN training is focussing on more than one target audience. Some training solutions are in available more than one language.

Gaps between FR training needs and existing training material

The differences between the needs inventory and supply inventory were analysed in order to identify gaps. (A gap in this context is a need, not covered by any available training solution).

- ✓ lots of the CBRN training materials are not available for the MELODY project members because of IP (intellectual property) issues
- ✓ the target audiences of the collected CBRN training were more focused on specialist CBRN responders rather than the first responders targeted in the MELODY project.
- ✓ most of the CBRN training components consist of Powerpoint presentations and Table Top Exercises

Gaps between FR training needs and existing training material

- ✓ In general, the material is not very richly illustrated, the content is mostly text based
- ✓ The PPTs should be extended with motivating learning approaches
- ✓ The material does not always have a clear and complete narrative that elaborates on the intended story
- ✓ Other learning formats like E-learning or gaming solutions were not found in the database
- ✓ It is not clearly described how much time is needed to conduct the CBRN training component
- ✓ The level of trainer expertise needed to perform the training is not clearly defined for all CBRN training components



Identified prerequisite to fill the gaps

- ✓ Use the available CBRN training components to develop an attractive and motivating MELODY training solution;
- ✓ Develop not yet existing CBRN training components, providing task specific CBRN training components and the ones focusing on collaborating between first responders in CBRN incidents
- ✓ Develop a CBRN training framework that is **flexible in time** and **select a training format** that meets the needs of the target audiences.

Methodology for a harmonized CBRN training curriculum - the Bloom's Revised Taxonomy model

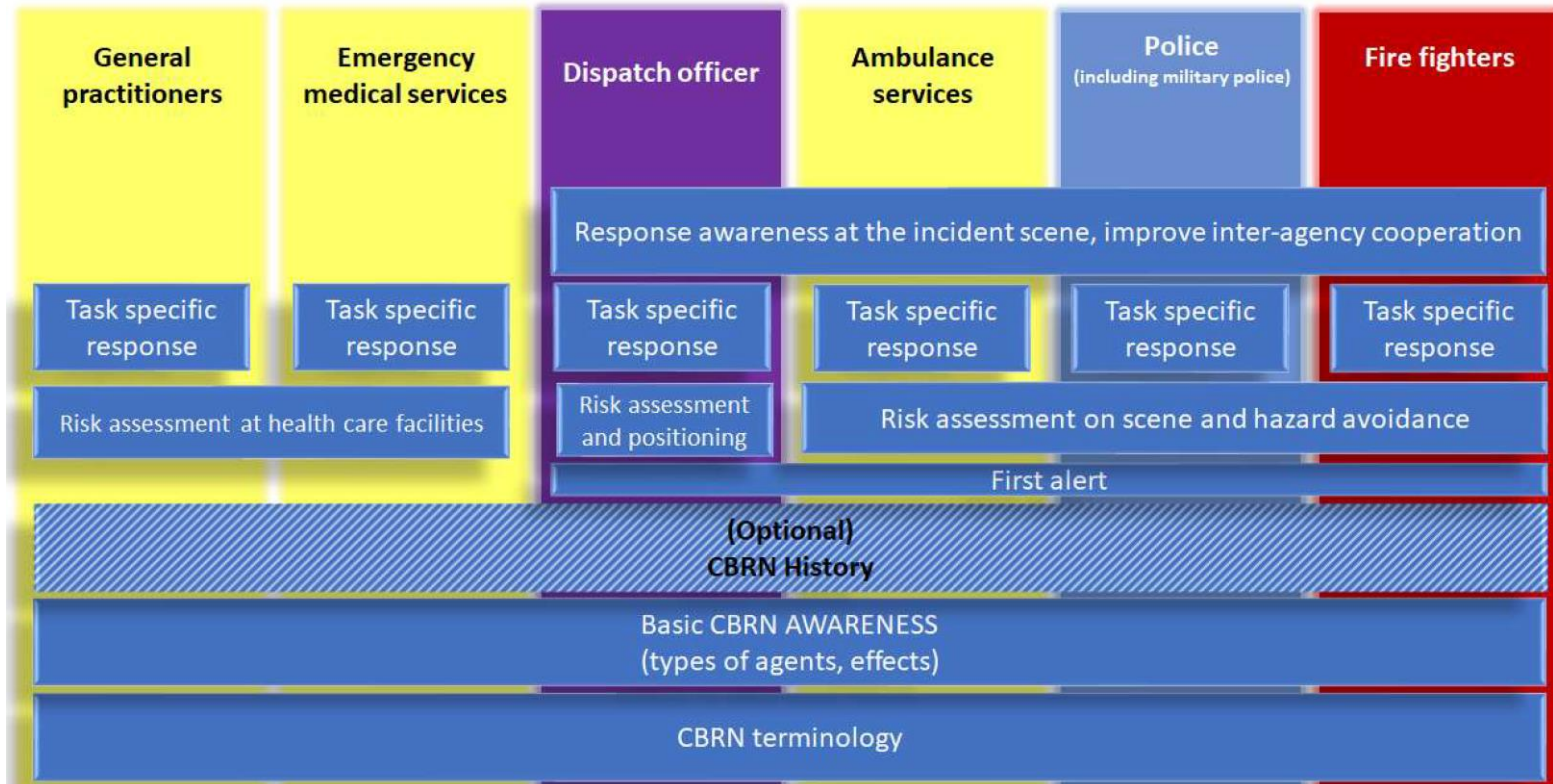
✓ Bloom's Taxonomy [1] is a classification of the different objectives and skills that educators set for their students (learning objectives).

Note: These are **learning objectives** – not **learning activities**. It may be useful to think of preceding each objective with something like, "students will be able to...."

	The Knowledge Dimension	The Knowledge Dimension	The Knowledge Dimension	The Knowledge Dimension
	Factual The basic elements a student must know to be acquainted with a discipline or solve problems in it.	Conceptual The interrelationships among the basic elements within a larger structure that enable them to function together.	Procedural How to do something, methods of inquiry, and criteria for using skills, algorithms, techniques, and methods.	Metacognitive Knowledge of cognition in general as well as awareness and knowledge of one's own cognition
The Cognitive Process Dimension	Remember + Factual	Remember + Conceptual	Remember + Procedural	Remember + Metacognitive
Remember Retrieve relevant knowledge from long-term memory.	List primary and secondary colors.	Recognize symptoms of exhaustion.	Recall how to perform CPR.	Identify strategies for retaining information.
The Cognitive Process Dimension	Apply + Factual	Apply + Conceptual	Apply + Procedural	Apply + Metacognitive
Apply Carry out or use a procedure in a given situation.	Respond to frequently asked questions.	Provide advice to novices.	Carry out pH tests of water samples.	Use techniques that match one's strengths.
The Cognitive Process Dimension	Analyze + Factual	Analyze + Conceptual	Analyze + Procedural	Analyze + Metacognitive
Analyze Carry out or use a procedure in a given situation.	Select the most complete list of activities.	Differentiate high and low culture.	Integrate compliance with regulations.	Deconstruct one's biases.
The Cognitive Process Dimension	Evaluate + Factual	Evaluate + Conceptual	Evaluate + Procedural	Evaluate + Metacognitive
Evaluate Make judgments based on criteria and standards.	Select the most complete list of activities.	Determine relevance of results	Judge efficiency of sampling techniques.	Reflect on one's progress.
The Cognitive Process Dimension	Create + Factual	Create + Conceptual	Create + Procedural	Create + Metacognitive
Create Put elements together to form a coherent whole; reorganize into a new pattern or structure.	Generate a log of daily activities.	Assemble a team of experts.	Design efficient project workflow.	Create a learning portfolio.

A MODULAR approach to training

Based on the results obtained, it was concluded that the EU first responder community does have specific training needs for CBRN training. Besides some common topics as CBRN awareness, which are mentioned by all services, there are also some specific training needs per service.



CBRN

Terminology

Awareness

(Extras/History)

First alert

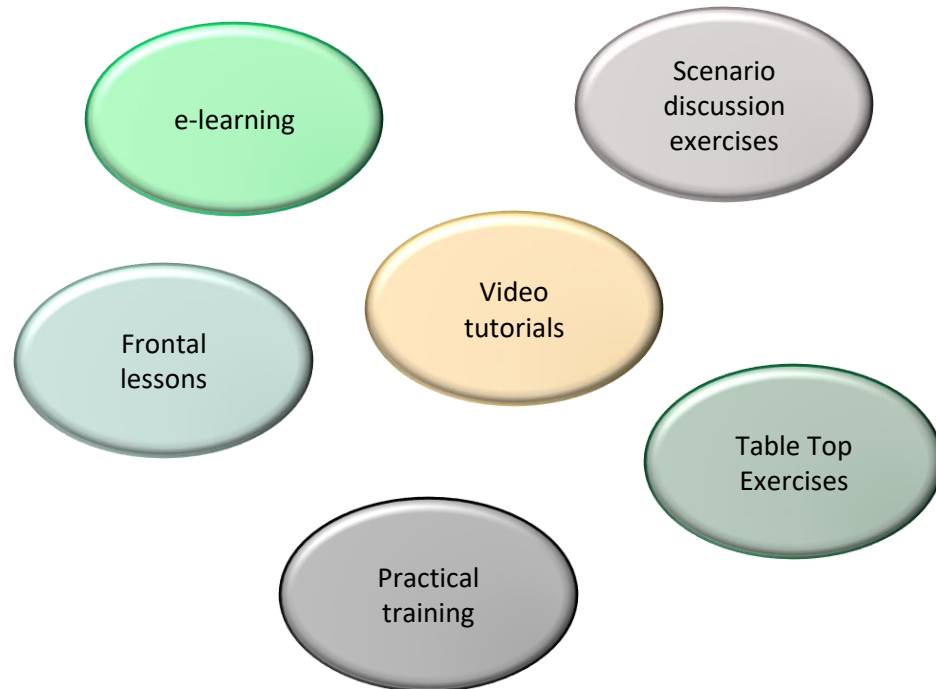
Risk assesment on scene and hazard avoidance

Risk assesment & Healthcare facilities

Task specific

Topics		Contents	Learning Objectives	Dispatch officer	Fire brigade	Military police	Ambulance services	Emergency Healthcare Providers	General practitioner	Estimated time (min)	REMARKS
1	CBRN terminology	What is CBRN (definitions; accidents v. attacks; C.v. B.v. RN)	To recognize CBRN terminology (to be able to speak a common language)	X	X	X	X	X	X	5	https://play.google.com/store/apps/details?id=europa.publications.cbcrne&hl=it
2.2	CBRN basics	Classification, properties, dispersion (including explosives), signs and triggers, etc.	To recognize the different groups of agents, their features and effects	X	X	X	X	X	X	10	
2.3	CBRN basics	Routes of exposure, symptoms, etc.	To summarize the different routes of exposure, to recognize the most relevant symptoms	X	X	X	X	X	X	10	
2.4	CBRN basics	Some relevant examples of incidents C (Sarin Tokyo), B (anthrax letters), R (Goiânia-incident), N (loss of nuclear material)	To list a C, B and R/N factual/historical incident	X	X	X	X	X	X	10	limited to one or two examples per (C,B,R,N) categorie
2.5	CBRN basics	Where can you find CBRN materials? (industry, health care, research facilities, etc.)	To recognize potential sources of CBRN agents	X	X	X	X			10	link to modules with in depth knowledge
2.6	CBRN basics	Dangerous goods and UN codes	To clarify signs of dangerous goods	X	X	X	X			10	link to modules with in depth knowledge
2.7	CBRN basics	How can you recognize illegal production or use of CBRN materials?	To recognize improvised production facilities	X	X	X	X			10	
2.8	CBRN basics	Dispersion of CBRN agents	To recognize a possible release	X	X	X	X			10	
2.9	CBRN basics	Arriving safe at the scene (access routes, hot zone, wind direction, etc.)	To clarify a safe arrival procedure	X	X	X	X			10	Link with additional topics (also in 4.1, 4.2, 5.3)
2.10	CBRN basics	Basic safety in the field (rules of thumb, zoning, etc.)	To recall how to act (do's and don'ts)	X	X	X	X			10	
2.11	CBRN basics	Own safety in the field (personal protection)	To recall what to do for own safety	X	X	X	X			10	
2.12	CBRN basics	Test questions?	To reflect on one's progress	X	X	X	X	X	X	10	Test questions for module 2: CBRN basics
3.1	CBRN Extras	Elaborated history; development of agents, actual incidents the past & context	To identify different scenario's	X	X	X	X	X	X	30	Including the history of the development of warfare agents and elaborated casusiek
3.2	CBRN Extras	Social, psychological & ethical issues (e.g. moral issues, rescue victims versus own risks, isolation/separation of possible contaminated people, child-parent separation,	To recognize ethical dilemmas, and to recognize social and psychological impact of CBRN incident response	X	X	X	X	X	X	30	Ethics should be integrated throughout the curriculum
3.3	CBRN Extras	Advanced information on C, B, R and N agents	To classify the different groups of agents	X	X	X	X	X	X	30	More and advanced information on CBRN as compared to the basics
3.4	CBRN Extras	Test questions?	To reflect on one's progress	X	X	X	X	X	X	30	Test questions for module 3: CBRN extra
4.1	First alert	Identify possible CBRN releases by asking the right questions to the person who makes the call, including issues such as meteo, wind, symptoms, and knowing which	To recognize signs of a potential CBRN release and (initiate first) responder(s)	X	X	X	X			30	We mean the person taking the call and activating the right services.
4.2	First alert	Test questions?	To reflect on one's progress	X	X	X	X			30	Test questions for module 4: First alert
5.3	Risk assessment on scene and hazard avoidance	Preparations for on-site arrival, en-route (upwind) approach, incident analysis, On-site risk/threat assessment.	To provide for a (as safe as possible) first arrival. To carry out an on-site Risk Assessment.	X	X	X	X	X		60	
5.4	Risk assessment on scene and hazard avoidance	Security of the area, upwind approach (including traffic control), hot zone, warm zone, cold zone	To carry out a security plan (zoning) for the area	X	X	X	X			60	More in depth than basics
5.5	Risk assessment on scene and hazard avoidance	Detection, Identification and Monitoring (DIM)	To list some DIM techniques and	X	X	X	X			60	This module can contain very simple or very advanced techniques and differs per country
5.6	Risk assessment on scene and hazard avoidance	Detection, Identification and Monitoring (DIM)	To familiarize with very simple Detection techniques in the field	X	X					60	
5.7	Risk assessment on scene and hazard avoidance	Personal protective equipment (PPE)	To recognize some different types of PPE	X	X	X	X			120	
5.8	Risk assessment on scene and hazard avoidance	Personal protective equipment (PPE)	To carry out some very basic techniques / strategies (if available - differs per country)	X	X					60	This module can contain very simple or very advanced techniques and differs per country
5.9	Risk assessment on scene and hazard avoidance	Forensic awareness	To carry out your work and prevent forensic disruption of scene	X	X	X	X	X	X	60	
5.10	Risk assessment on scene and hazard avoidance	isolate people and pet animals on scene	To carry out procedures regarding isolation of victims involved in a CBRN incident	X	X	X	X			60	What to do with the terrorist and the FRs after decontamination; where will the (loaded) guns be left behind
5.11	Risk assessment on scene and hazard avoidance	Decontamination (of people, pet animals)	To recognize basic decontamination procedures for people, pet animals	X	X	X	X	X		120	This module can contain very simple or very advanced techniques and differs per country
5.12	Risk assessment on scene and hazard avoidance	Decontamination (of people, animals)	To carry out basic decontamination procedures to people (including pets)	X	X	X	X	X		120	This module can contain very simple or very advanced techniques and differs per country
5.13	Risk assessment on scene and hazard avoidance	Registration of victims	To carry out procedures regarding the registration of patients for evacuation and medical care	X	X	X	X	X		60	
5.14	Risk assessment on scene and hazard avoidance	Upscaling: when should expert/higher authorities step in and what to do in the meantime? (strep/communication)	To recognize the need for subject-matter experts (secondary responders)?	X	X	X	X	X	X	60	Also included in 7
5.15	Risk assessment on scene and hazard avoidance	Test questions?	To reflect on one's progress	X	X	X	X	X	X	60	Test questions for module 5: Risk assessment on scene and hazard avoidance
5.16	Risk assessment & Healthcare facilities	Treatment methods of patients involved in a CBRN incident	To recognize appropriate medical care towards patients involved in a CBRN incident	X	X	X	X	X	X	120	
5.17	Risk assessment & Healthcare facilities	Treatment methods of patients involved in a CBRN incident	To apply appropriate medical care towards patients involved in a CBRN incident	X	X	X	X	X	X	120	
5.18	Risk assessment & Healthcare facilities	Test questions?	To reflect on one's progress	X	X	X	X	X	X	30	Test questions for module 5: Risk assessment & Healthcare facilities
6.1	Task specific response Dispatch	How to recognize possible CBRN release and initiate alarm protocol (COUNTRY BASED)	To differentiate a possible CBRN incident (from normal incident) and carry out appropriate procedures & protocols	X						30	(COUNTRY BASED) means that there is an indication that the information may differ per country and should
6.2	Task specific response Fire brigade	Mitigation methods to limit dispersion, including decontamination	To identify possible CBRN threats (e.g. disaim/explosives) and to mitigate the eff		X					60	Give FR some simple actions they can do to stop the incident getting worse.
6.3	Task specific response Ambulance services	Medical treatments, countermeasures and protection (see also 5.17)	To provide medical advise and to carry out medical care				X			120	
6.4	Task specific response Ambulance and EH services	Triage related to CBRN	To carry out a triage in relation to CBRN scenario's				X	X		120	
6.5	Task specific response Emergency Healthcare facilities	Medical treatments, countermeasures, protection and decontamination	To provide medical advise and to carry out medical care				X	X		60	
6.6	Task specific response General practitioner	Medical treatments, countermeasures and protection	To provide medical advise and to carry out medical care					X	X	60	
6.7	Task specific	Test questions?	To reflect on one's progress	X	X	X	X	X	X	30	Test questions for module 6: Task Specific
7.1	Response awareness at the incident scene, improve interagency cooperation	Elaborate on tasks of other responders at CBRN scene, and their value.	To reflect on the process and to clarify procedures. Use the other agencies stron	X	X	X	X	X	X	240	Also includes secondary threat's and non-CBRN threat's (explosives, weapons, etc.)
7.2	Awareness	Test questions?	To reflect on one's progress	X	X	X	X	X	X	30	Test questions for module 7: Awareness

Finding the good balance between theoretical and practical training



An example of Scenario discussion exercise

Scenario Discussion exercises overview and guidelines

For the purpose of performing On-site risk/threat assessment, as a first responder, ask the right questions to identify the type of incident, e.g. by using the **METHANE** protocol

M	Major incident	Scale of incident; what happened?
E	Exact location	Accurate description of the location
T	Type incident	Explosion, collapsed building, traffic incident, etc.
H	Hazards	What (CBRN) hazards are present or could occur?
A	Access	To what extent and how is the area accessible?
N	Number of casualties	Estimation of number and type of casualties
E	Emergency services	What services are already present and who is needed?

MELODY Px.xx Course title

5

MELODY Px.xx Course title

7

Scenario 5.3_1 Improvised laboratory in apartment

Key facts

- Alarmed by a strange smells from one of the apartments of a block of flats, a neighbor calls the emergency services.
- When the emergency services arrive, they find that the front door is opened, and the occupant standing by the door is having seizures.
- The house is filled with what seems to be the equipment for drug production.

Scenario 5.3_1 Improvised laboratory in apartment

The scene



MELODY Px.xx Course title

8

Scenario 5.3_1 Improvised laboratory in apartment

Which elements you look for to perform on-site risk/threat assessment?

- Do you think it is necessary to protect yourself first?
- Can it be a CBRN scene?
- Do you look for signs and symbols (ADR, UN, GHS symbols).
- Strange odor / smell at the scene.
- Any signs of poisoning?
- Etc...

MELODY Px.xx Course title

9

MELODY IS JUST HALF THE WAY!

The way forward:

Deploying the first (partial) version of the training curriculum during actual demonstration exercises

Elaborating results to refine the curriculum in an iterative process with end-users:

International Security And Emergency Management Institute
ISEMI, **Slovakia**

Autonom Provinciebedrijf Campus Vesta VESTA, **Belgium**

Rapid response and special police service, **Hungary**

Uniwersytet lodzki, **Poland**

Emergency Services Training Centre Foundation of West-Finland,
Finland



CBRN Integrated Response II

Strengthening CBRN-response in Europe by enhancing on-site cooperation between safety and security organisations: an Italian pilot

PARTNERS



ASSOCIATED
PARTNERS

- Comando Carabinieri per la Tutela dell'Ambiente
- Scuola Interforze per la Difesa NBC
- Italian National Civil Protection Department
- CRATI s.c.r.l.



PROTEZIONE CIVILE
Presidenza del Consiglio dei Ministri
Dipartimento della Protezione Civile



With the financial support of the Prevention of and Fight against Crime Programme European Commission - Directorate-General Home Affairs

OBJECTIVES

- Identify differences between national operational response frameworks of law enforcement and fire fighters to CBRN security incidents and critical issues existing in the coordination of first responders and law enforcement actions;
- Define **common approaches** to deal with the critical issues by building on the experience of other EU countries such as Estonia and the Netherlands;
- Develop **common guidelines** for response to national CBRN incidents and incoming assistance;
- Translate the guidelines into the outline of a **common training curriculum** for both first responders and law enforcement training institutes.



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DATA COLLECTION



CBRN
Integrated
Response
Italy

enhancing on-site
cooperation
between safety and
security
organizations

MAPPING REPORT



EU co-funded project - DG HOME
CBRN Integrated Response Italy

Table top Exercises Results
TTX-Pisa and TTX-Tallinn 2014

Esperia Consulting
Pavia Milano MSC
Mantova Toppoventi ILM MGO

1. Mapping Report



2. Table Top Exercises (TTX)



3. TTX results





CBRN RESPONSE: GAPS and Recommendations		
Evaluation parameter	GAPS	All EU Countries are encouraged to:
Coherent framework	Having a coherent framework represents a major goal to achieve an effective response to CBRN events	develop a coherent framework for CBRN response also by including the aspect of incoming assistance
Inclusion of explosives	Explosives are undeniably related to CBRN agents, nevertheless this aspect is not included in the CBRN normative framework of 64% of the EU Countries under Investigation	consider to treat explosives as part of this subject matter in their normative framework
Multi-agency coordination	Multi-agency coordination seems well defined at National level	improve multi-agency coordination at EU level through constant training and the definition of a common normative framework
Crisis and communication strategies	EU Countries approach this aspect in a very uneven manner. Furthermore, communication strategies comprehend both communication among first responders, law enforcement agencies, the command and control chain, and communication with the population. This aspect is even more relevant when considering the international dimension of a CBRN event and all the conventional and cutting edge media	implement databases, communication systems (ICT), intelligence and infrastructures among all EU countries to improve crisis/emergency communication; consider debating communication with the population within the EU HNSG to guarantee that differences at the National level do not affect the effectiveness of communication strategies, especially during the emergencies
Constant training	Constant training is paramount to face CBRN scenarios. Usually, training is directed to responders. Population is rarely considered as target of training activities. Nevertheless, a well informed and trained population can simplify the management of an emergency situation	promote training on international CBRN scenarios to develop a common EU response; inform and address training to the population
Incoming assistance	A common, consistent and comprehensive approach to incoming assistance is crucial to respond to a CBRN event, this aspect is still needs to be better defined at the EU level.	review the EU Host Nation Support Guidelines considering the CBRN e threats and the specific requirements needed to face this kind of events.

CBRN Integrated Response Italy

enhancing on-site cooperation between safety and security organizations

EU response to CBRN incidents: proposal for the integration of the EU Host Nation Support Guidelines

CBRN Integrated Response course – training programme

Module	
1	CBRN-IR Introduction 1.1 Course introduction and structure 1.2 CBRN incidents: terminology, causes and threats 1.3 Ethical and gender issues
2	International framework governing the response to CBRN incidents 2.1 International conventions, treaties and guidelines 2.2 CBRN incidents: EU Civil Protection Mechanism's tools 2.3 The EU Host Nation Support Guidelines – request and offer of assistance 2.4 EU member State's CBRN response system: an overview 2.5 Relation with Third Parties 2.6 Civilian-military cooperation
3	CBRN safety and security related issues 3.1 Forensic 3.2 Hazardous materials and waste management 3.3 Protection from CBRN agents: Personal and Collective Protective Equipment 3.4 Management of sensitive and classified information related to CBRN incidents 3.5 Communication: means and procedures 3.6 Risk assessment and zoning and risk maps reading 3.7 Information to the population
A	CBRN Case studies a.1 CBRN incidents case studies and lessons learnt a.2 Open discussion
B	Discussion based exercises (DBE) b.1 Exercise on CBRN scenarios requiring international assistance b.2 Debriefing and open discussion

4. **GAP** Analysis Report

5. Proposal for the Integration of EU HNSG

6. Proposal for a Common Training Curriculum



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Some ongoing interesting projects



Addressing new challenges for the Fire & Rescue, research, innovation and standardisation communities. The ultimate objective of the FIRE-IN project is to raise the security level of the EU citizens by improving the Fire & Rescue services capabilities to address various forms of hazards, natural or manmade.



To improve its resilience to new CBRN attacks and threats, the EU needs a specialized, competitive, efficient and sustainable industry. Capitalizing on its experience in the EDEN Demonstration Project, other CBRN relevant projects, and in the CBRN market and supply chain, the ENCIRCLE consortium proposes an innovative approach to reach this goal in a short to long term perspective. Once achieved it will allow SMEs and large industries to deliver and invest in the best innovations on the market.



Tools for Detection, traceability, triage and individual monitoring of victims.

YOUR
LOGO
HERE

Additional information



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Master courses
in Protection against CBRNe Events

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