



PReparedness against CBRNE threats through cOMmon Approaches
between security praCTitioners and the Vulnerable civil society

CBRNe terrorism in Europe and beyond: Human Factors analysis of preparedness and response

Dale Weston, Holly Carter, Charlotte Hall,
Louise Davidson, Richard Amlôt
Public Health England (PHE)



Overview

- Overall objectives.
- Findings from systematic review of public perceptions and responses.
- Findings from systematic review of current policy for mitigation and management of CBRNe terrorism.
- Guidelines and Recommendations for Mitigation and Management of CBRNe Terrorism.
- Next steps.



Overall Objectives

- Identify factors that are associated with effective pre-incident public information campaigns for CBRNe terrorism.
- Understand factors that may increase public compliance with both recommended prevention and protection measures.
- Understand public perceptions of security measures that are in place to prevent and mitigate the effects of CBRNe terrorism.
- Understand current policy and practice in preparation for and management of CBRNe terrorism across different organisations and countries.
- Identify gaps in order to develop an optimised strategy for terrorism mitigation and management, including effective pre-incident information.

Overview

Findings from systematic review of public perceptions and responses

- Systematic literature review of strategies for CBRNe preparedness, including public perceptions of such strategies.



Aims

Findings from systematic review of public perceptions and responses

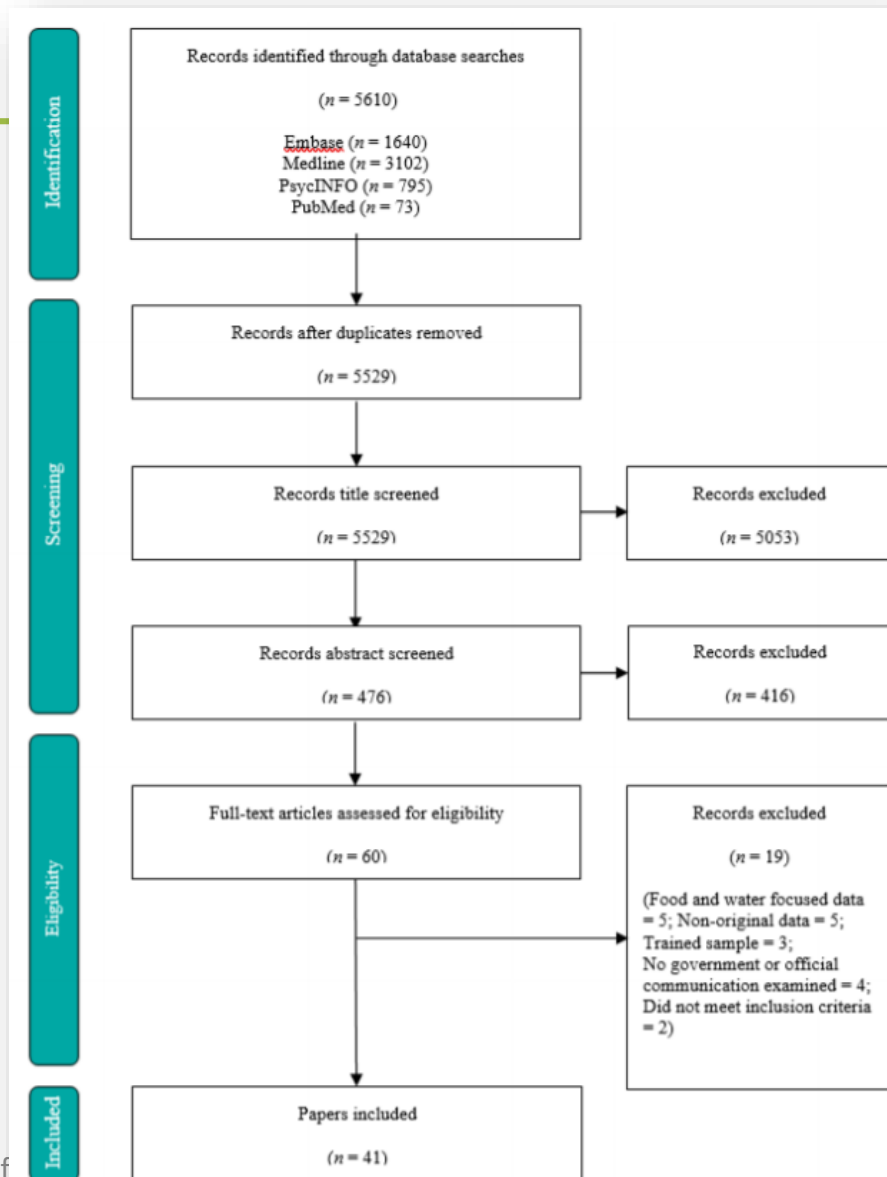
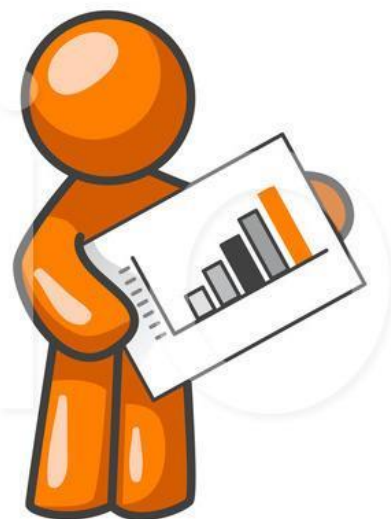
- To establish the baseline level of knowledge and understanding of CBRNe prevention and management strategies within the general population;
- Identify factors that are associated with effective pre-incident public information campaigns for CBRNe terrorism;
- Understand factors that may increase public compliance with both recommended prevention measures (prior to an incident occurring) and recommended protective measures (during an incident);
- Identify and understand insights from literature concerning other types of incidents which may be of relevance for CBRNe preparedness.

Method

Findings from systematic review of public perceptions and responses

Systematic review

- 41 academic papers included
 - Thematic analysis of extracted data



Results

Findings from systematic review of public perceptions and responses

- Public's **understanding** of CBRNe prevention and management strategies is **very low**.
- **Effective** pre-incident communication was **easy to understand, disseminated in multiple ways, delivered by a credible spokesperson** and **incorporated psychological constructs**.
- Factors which may increase willingness to engage pre-incident: **demographics, prior knowledge and psychosocial factors**.
- Factors which may increase compliance with official instruction during an incident: **trust, provision of information, emotional responses; efficacy and relationships**.

Overview

Findings from systematic review of current policy for mitigation and management of CBRNe terrorism

- Systematic literature review of tools, SOPs, guidance and policy for management of CBRNe incidents.



Patient Decontamination in a Mass Chemical Exposure Incident: National Planning Guidance for Communities



If you think someone has been exposed to a **HAZARDOUS SUBSTANCE**
Use caution and keep a safe distance to avoid exposure yourself.

TELL THOSE AFFECTED TO:

 <p>REMOVE THEMSELVES... ...from the immediate area to avoid further exposure to the substance. Fresh air is important. If the skin is itchy or painful, find a water source. REPORT... use M/ETHANE</p>	 <p>REMOVE OUTER CLOTHING... ...if affected by the substance. Try to avoid pulling clothing over the head if possible. Do not smoke, eat or drink. Do not pull off clothing stuck to skin.</p>	 <p>REMOVE THE SUBSTANCE... ...from skin using a dry absorbent material to either soak it up or brush it off. RINSE continually with water if the skin is itchy or painful.</p>
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Aims

Findings from systematic review of current policy for mitigation and management of CBRNe terrorism



- To establish the current policy and practice in the preparation for and management of CBRNe terrorism in different organisations and across different countries;
- The current guidance and strategies for communicating with members of the public about CBRNe preparation and management; and
- The potential impact of current policy and practice in the preparation for and management of CBRNe terrorism on members of vulnerable groups.



Method

Findings from systematic review of current policy for mitigation and management of CBRNe terrorism

- 95 documents identified from 18 different countries.
 - Framework approach



Patient Decontamination in a Mass Chemical Exposure Incident: National Planning Guidance for Communities



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Results

Findings from systematic review of current policy for mitigation and management of CBRNe terrorism

- Across guidance documents there is a **heavy reliance on practical and physical** aspects of CBRNe management, yet documents tend to **lack recognition for psychosocial aspects**.
- There are **discrepancies** in the information that is provided in guidance documents both **within and between countries**.



Overview

Guidelines and Recommendations for Mitigation and Management of CBRNe Terrorism



- Leader: Public Health England.
- Synthesise findings from the two reviews to improve understanding of:
 - Current policy and practice for CBRNe terrorism
 - Public perceptions of current mitigation and management strategies for CBRNe
 - Factors affecting public willingness to comply with recommended preventative and protective measures.



Aims

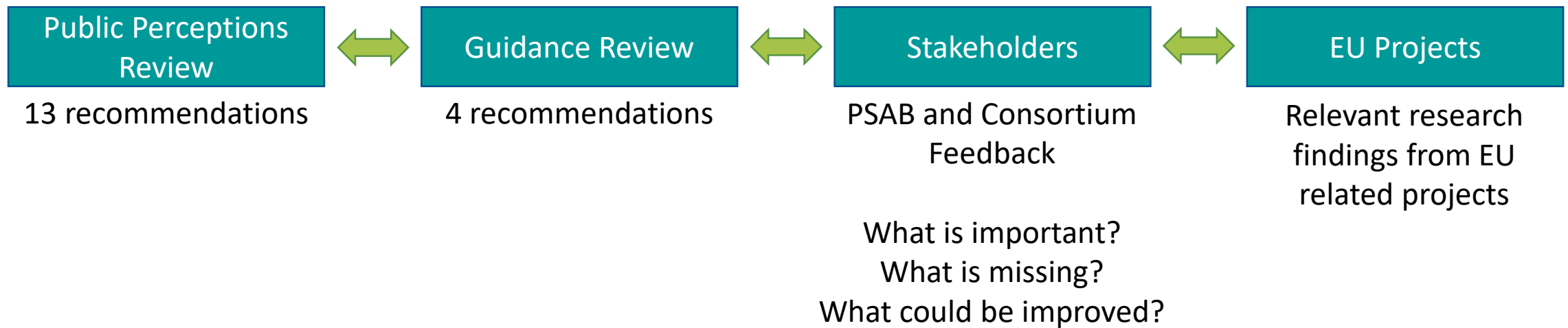
Guidelines and Recommendations for Mitigation and Management of CBRNe Terrorism



- Improve understanding of: current policy and practice in the mitigation and management of CBRNe terrorism; public perceptions of current mitigation and management strategies for CBRNe terrorism; and factors that affect public willingness to comply with recommended preventative and protective measures for CBRNe terrorism.
- Reveal the role of the HF and provide insights into behavioural research regarding CBRNe incidents.
- Facilitate the identification of the worst possible attack scenarios and generation of recommendations for effective policy and practice in the mitigation and management of CBRNe terrorism.



- Data synthesis
 - Realist Framework Approach



Recommendations

Guidelines and Recommendations for Mitigation and Management of CBRNe Terrorism



Aim	Recommendation
Guidance	Guidance documents should seek to be uniform in instruction, particularly when released in the same country.
	Guidance documents should provide evidence-based advice on communicating with the public which can be followed by authorities in the event of a CBRNe incident.
	Guidance documents should provide evidence-based advice about likely public behaviour, emphasising that the way in which practitioners manage an incident will affect the way in which members of the public behave.
	Guidance documents should provide evidence-based advice on strategies to increase public compliance in the event of a CBRNe incident.
Counter low Knowledge	Guidance documents and SOPs should inform responders about the needs of vulnerable groups and include plans for dealing with such groups in the case of a CBRNe incident.
Dissemination	Information campaigns and education to build CBRNe public knowledge should be implemented.
	Messages should be pitched at an appropriate level (in terms of language and complexity).
	Official communication should be honest, empathic, assertive and reliable.
	Information should be available in writing (i.e. print form), where possible, using non-complex language.
Communication with the Public	Multiple platforms should be used to communicate with the public, with consistent information being provided across platforms.
	Information provided by authorities should be pre-planned, where applicable, to ensure prioritisation and consistency, provide uniformity and advocate cohesion.
	Responders should communicate effectively (in-line with recommendations in the communication section, above) and demonstrate respect for public needs.
	Communication should: 1) inform the public about loved ones' whereabouts in relation to family, friends and pets; 2) provide information about active police and security efforts to apprehend terrorists; 3) provide information on the importance of complying with instruction (including health specific information to address public health concerns; 4) and be delivered by a credible spokesperson (e.g. local resources, hazard groups and health departments).
Vulnerable Populations	Communication should aim to reduce anxiety, by providing information to enhance self-efficacy.
	Official sources should communicate honestly and accurately in detailing risks associated with an incident, as this will allow the public to make an informed decision as to whether they wish to comply with official instruction or recommended behaviour.
	Information should be provided in multiple languages, pictographic form, and sign language.
	Policy and procedure for the management of CBRNe incidents should remain culturally appropriate and be respectful of religion and religious values.
	More consideration should be given to developing policy and procedures to assist those with mobility issues (e.g. relating to service animals and essential mobility aids) during CBRNe incidents.



Available here:

- <https://proactive-h2020.eu/>

WP1	CBRNe terrorism in Europe and beyond: Human Factors analysis of preparedness and response
D1.1	Findings from systematic review of public perceptions and responses
D1.2	Findings from systematic review of current policy for mitigation and management of CBRNe terrorism
D1.3	Guidelines and recommendations for mitigation and management of CBRNe terrorism



PReparedness against CBRNE threats through cOMmon Approaches
between security praCTitioners and the Vulnerable civil society

Engagement of the civil society including vulnerable citizens

Per-Erik Johansson
Åsa Burlin

Umea University (UMU)



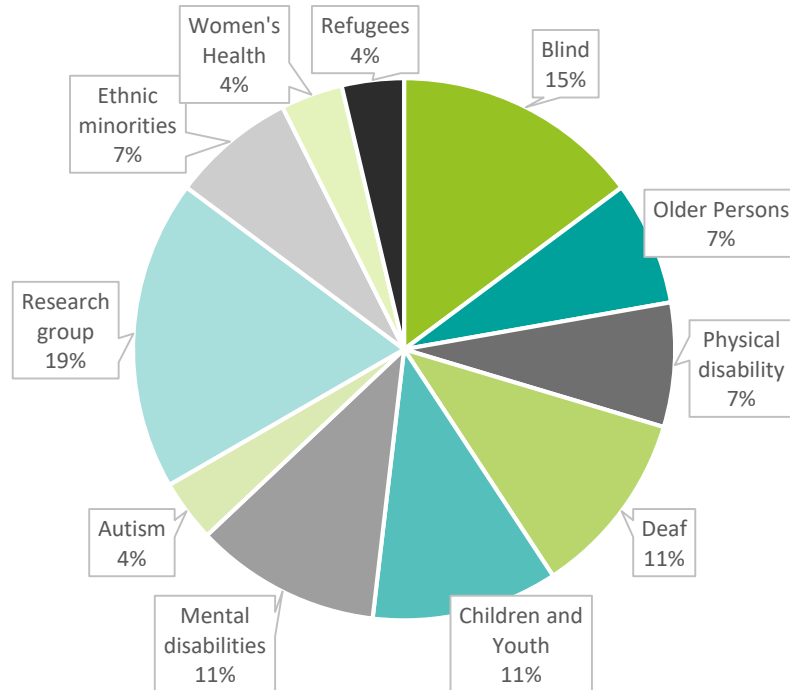
Who are the vulnerable citizens?

- Children, elderly people, hearing impaired, vision impaired, mobility restricted, chronically ill, mental disorders, pregnant women, ethnic minorities, people with insufficient skills of local language, etc.
- Those who are (more) likely to need extra attention, resources and support in a CBRNe incident
- Represented in the CSAB by organisations, associations, individual experts, researchers, etc.



Civil Society Advisory Board

- 30+ members



The CSAB & the PSAB



(Practitioner Stakeholder Advisory Board)
First responders,
Police, Fire brigades,
Paramedics, etc.



(Civil Society Advisory Board) organisations,
social groups,
experts, etc.

WHAT the CSAB is doing



HOW the CSAB is doing this

- Surveys
- Workshops
- Acting as observers
- Feedback on reports
- Etc.



Ongoing survey

- <https://proactive.limequery.com/725689>
- Available in 9 languages
- Deadline 15 November
- Fill it in or share it with your network





PReparedness against CBRNE threats through cOMmon Approaches
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Engagement of Law Enforcement Agencies and other Practitioners

Andreas Arnold, Danielle Carbon, Thomas Görgen
German Police University (DHPol)



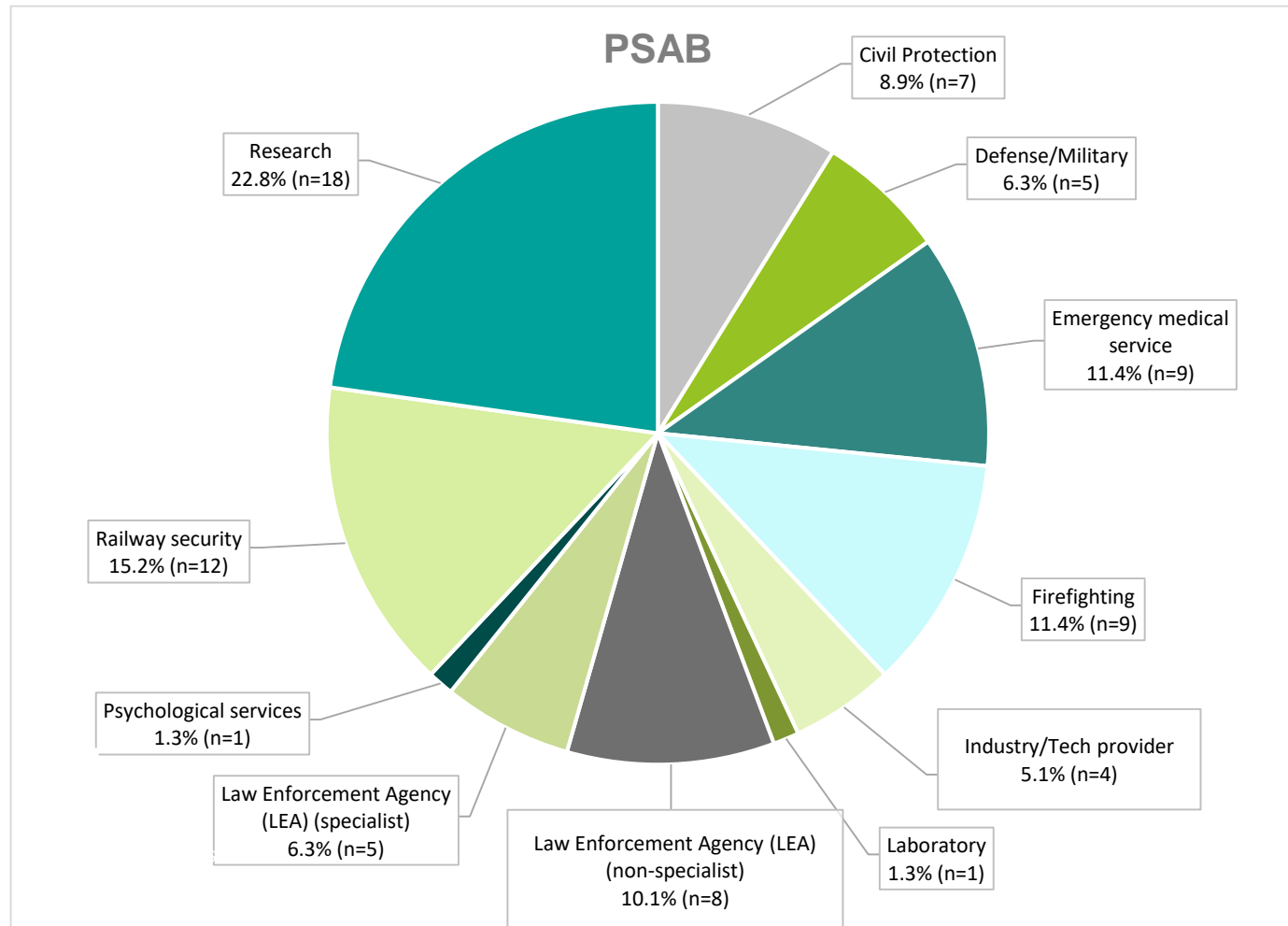
Agenda

- Practitioner Stakeholder Advisory Board (PSAB)
 - Creation of the PSAB / Role of the PSAB
 - Composition of the PSAB
 - PSAB contributions to the project
- Online survey and interview study with law enforcement agencies (LEAs) and other practitioners
 - Introduction to the studies (objectives, methodology etc.)
 - Results and recommendations
- Identification and analysis of SOPs

Creation and role of the PSAB

- A Practitioner Stakeholder Advisory Board (LEAs, first responders, etc.) was set up as part of the project.
- **Role** of advising and providing input to various key tasks of the project.

Composition of the PSAB



At present, the PSAB has **79 members**



PSAB contributions to the project

- Participation in an online survey on CBRNe Preparedness / CBRNe Response.
- Support for the development of a mobile application for LEAs and first responders.
- Involvement in scenario development for 3 CBRNe field exercises within the project and participation in the exercises.

Online survey and interview study with LEAs and other practitioners - Objectives

- Analysis of commonalities and differences between countries and between professions in preparing for and responding to CBRNe incidents.
- Special focus: **Consideration of vulnerable citizens** in preparedness for and response to incidents.

Online survey and interview study with LEAs and other practitioners – Methodology and Sample

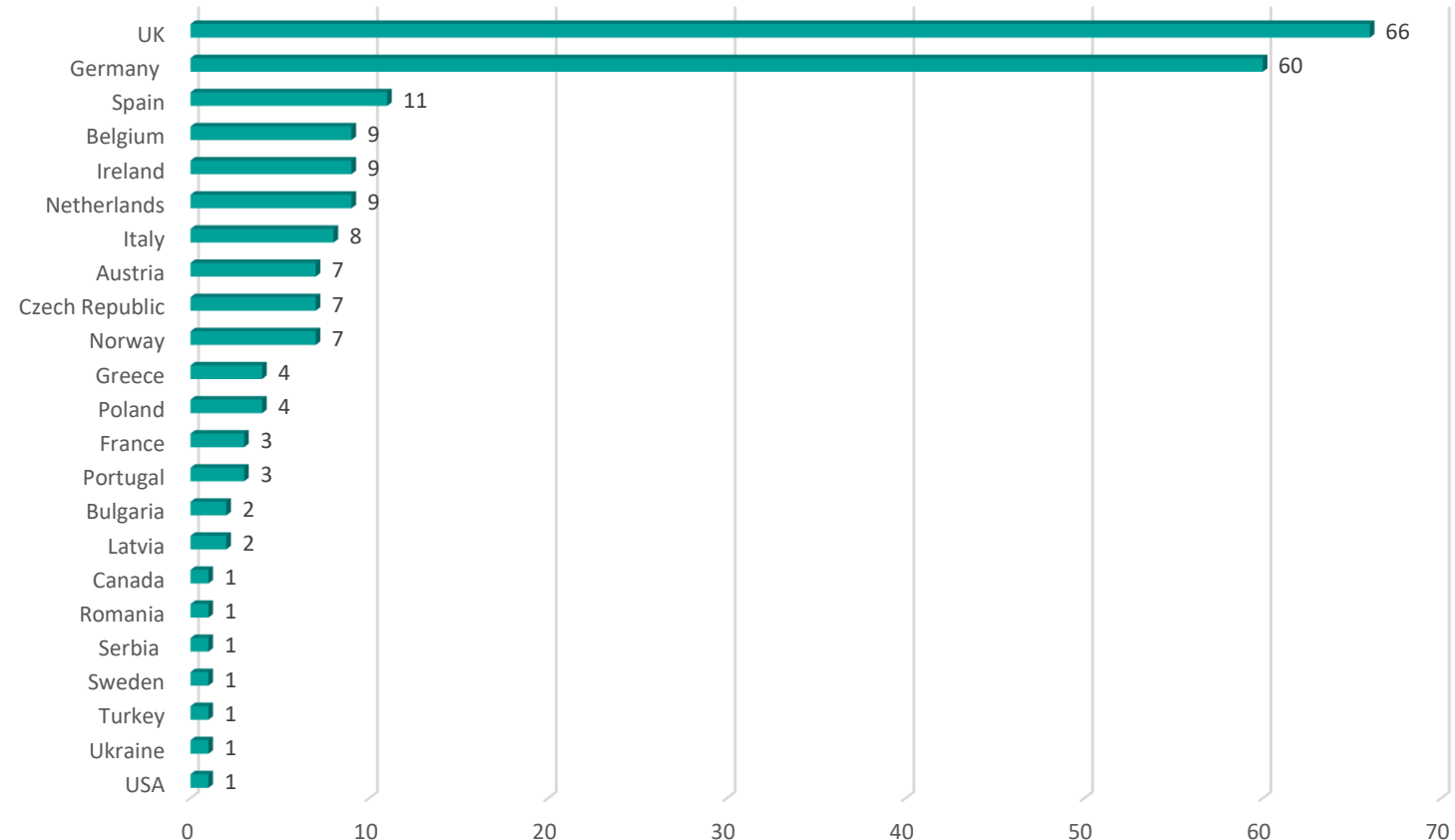
- Quantitative standardized survey - Online questionnaire (223 participants from 23 countries)
- Qualitative study - Semi-structured interviews with representatives of LEAs (18 interviews / 13 countries)

Sample of quantitative standardized online survey with LEAs and other practitioners

Number of participants:

Professional Area	Participants
LEA	86
Health Service	50
Fire Brigade	49
Civil Protection	15
Other	22
	222

Participants by country



Results

Almost half of the respondents rated their organisation's level of preparedness for a CBRNe incident as very high or rather high. No major differences were found between countries or between professional groups.

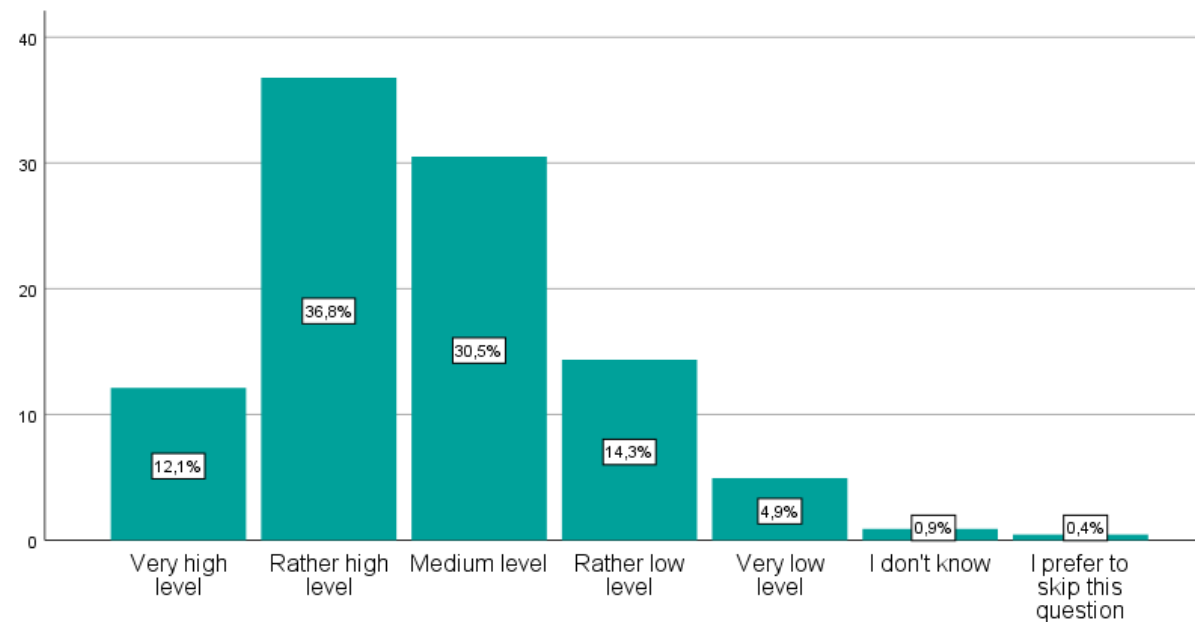


Figure 1: Assessment of the organisational level of preparedness for a CBRNe incident (n=223)

Results

Overall, more than half of the participants rated the equipment of their organisation for a CBRNe incident as completely sufficient or rather sufficient. However, there are significant differences between professional groups (firefighters versus law enforcement).

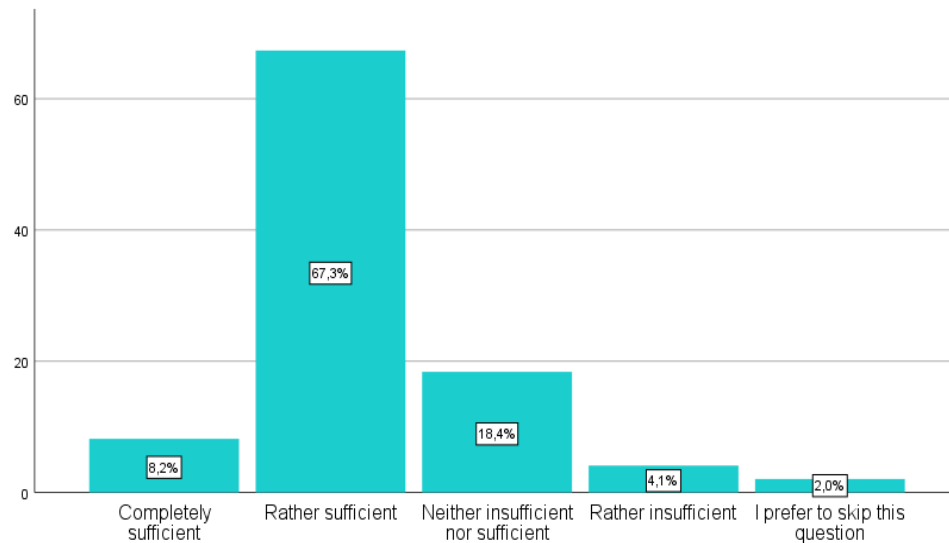


Figure 2: Assessment of the organisational equipment for a CBRNe incident (**Results for Firefighters only**) (n= 49)

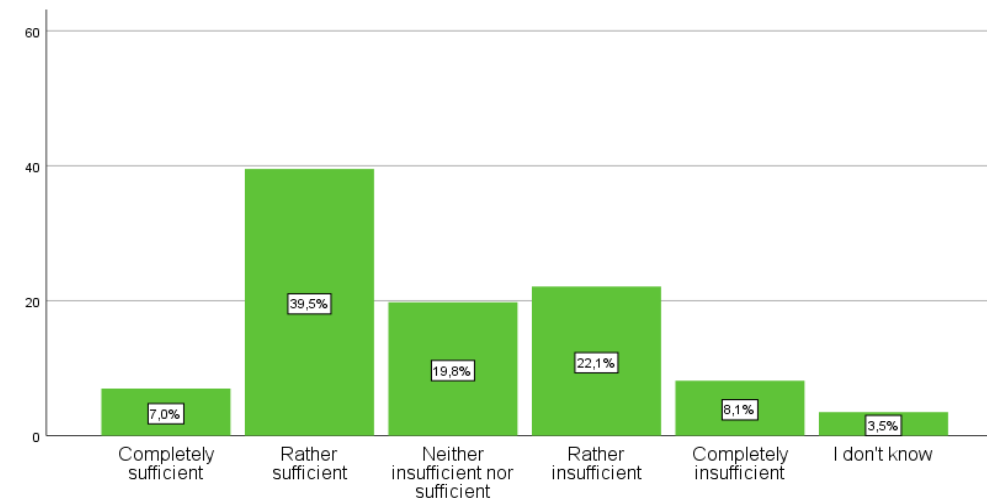


Figure 3: Assessment of the organisational equipment for a CBRNe incident (**Results for LEAs only**) (n= 86)

Results

The interview study and online study have shown that the Standard Operating Procedures (SOPs) (for CBRNe incidents) of the organisations surveyed very rarely take vulnerable groups into account.

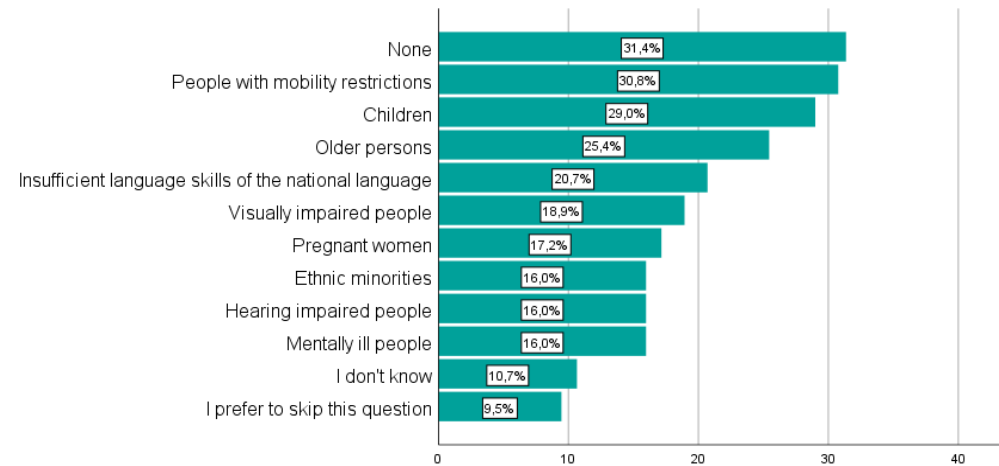


Figure 4: Vulnerable groups considered by the respective organisation through CBRNe SOPs; multiple selection option (n=169)

Results

However, significant differences were found between the countries included in the survey, especially between the UK and Germany.

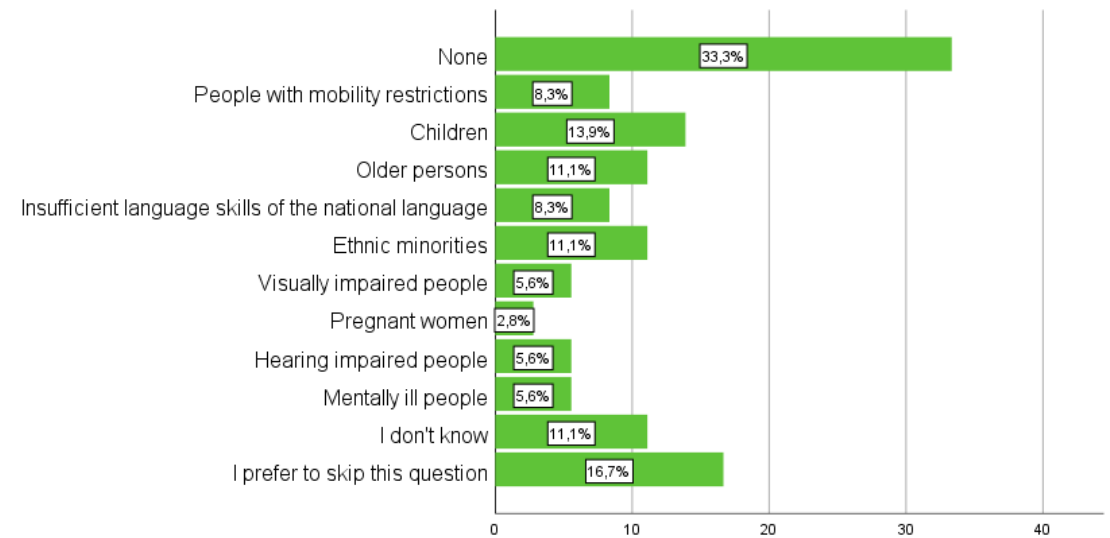
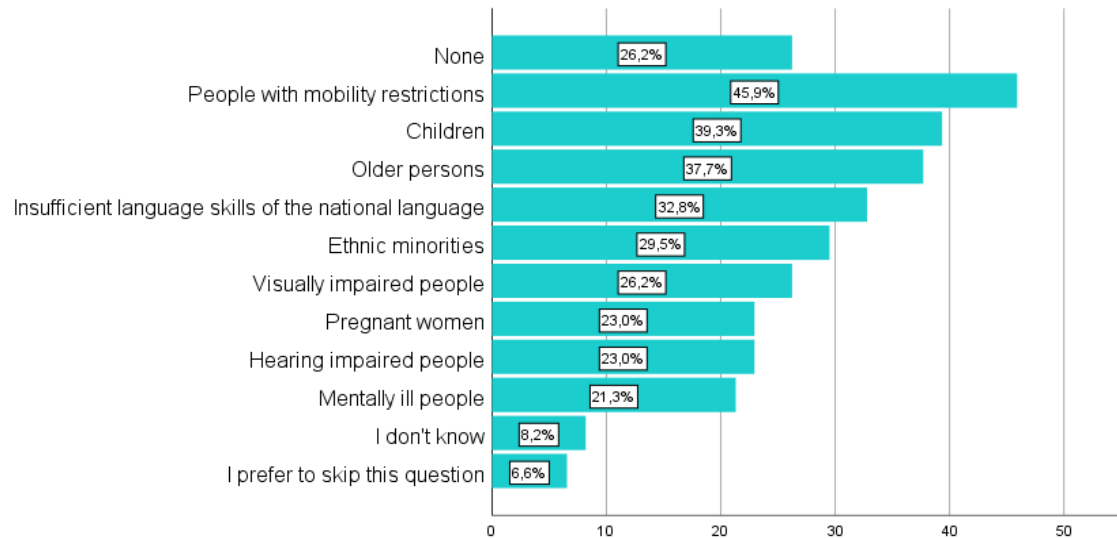


Figure 5: Vulnerable groups considered by the respective organisation through CBRNe SOPs (**Results for UK only**); multiple selection option (n=61)

Figure 6: Vulnerable groups considered by the respective organisation through CBRNe SOPs (**Results for Germany only**); multiple selection option (n=36)

Recommendations

Based on the results of the studies, 18 recommendations for practitioners were developed, including the following:

Recommendation 1: In addition to a general increase in the consideration of vulnerable groups in CBRNe related SOPs, ethnic minorities, hearing impaired people and mentally ill people in particular should receive more attention.

Recommendation 2: An increase in regular CBRNe exercises is desirable for LEAs and healthcare professionals.

Recommendations

Recommendation 3: Inter-institutional CBRNe exercises should be performed more regularly to enhance coordination between the emergency services during a CBRNe incident.

Recommendation 4: Unforeseen challenges in dealing with vulnerable civilians might be decreased by strengthening the exchange of knowledge between First Responder organisations and Civil Society organisations.

Recommendation 5: The amount of information material in additional formats should be increased and be stronger implemented, especially in regard to hearing and visually impaired people.

Identification and analysis of SOPs

- Analysis of LEAs SOPs important for a successful coordinated response to CBRNe threats focused on:
 - taking evidence – e.g. hazard detection, threat assessment, sampling plan, identification of CBRN agents, decontamination,
 - scene management, victim care and victim management including vulnerable groups,
 - crisis communication towards and among first responders and communication with the public, including the media.

Identification and analysis of SOPs

- Analysis of publicly accessible SOPs and facts found in previous phases of project are complemented by questionnaire survey (November 2020)
 - In cooperation with project LEAs and PSAB experts
 - Detailed information on key aspects of intervention (answers or documents identification)
 - LEAs SOPs are often sensitive to provide as a whole
- Recommendation for SOP adaptation and best practice trials during field exercises

Thank you

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PReparedness against CBRNE threats through cOMmon Approaches
between security praCTitioners and the Vulnerable civil society

Toolkit for LEAs, security Policy Makers and Civil Society

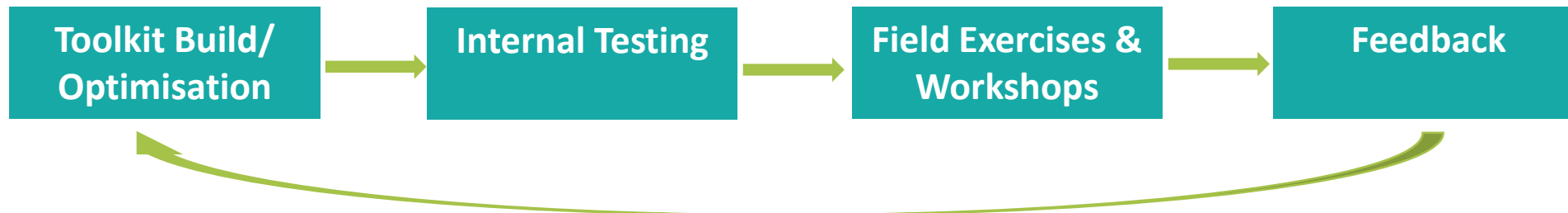
Natasha McCrone (RINISOFT)

Dale Weston and Holly Carter (PHE)



Purpose of the of the Toolkit

- Build Technological Tools facilitating communication and cooperation in the form of a;
 - Web Collaborative Platform and Mobile Application for LEAs
 - Mobile Application for Vulnerable Citizens
- Develop Pre-Incident public information materials for CBRNe terrorism

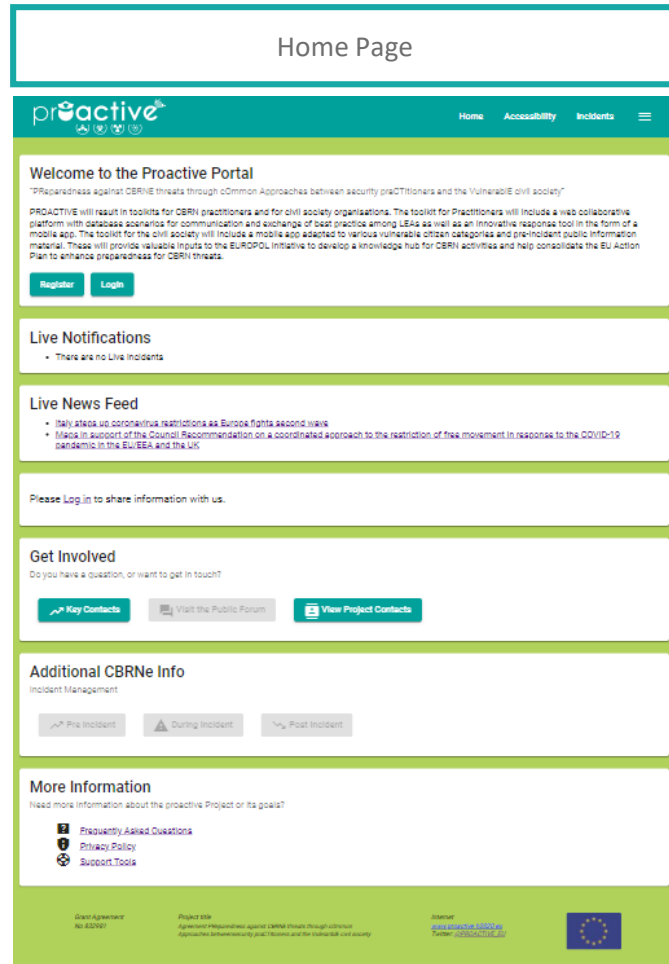


Requirements of the Toolkit

Functionality	LEA's	Security Policy Makers	Vulnerable Citizens
Display EU flag and Grant Number	Yes	Yes	Yes
Privacy Policy, data protection and access to potential data, consent form and disclaimer	Yes	Yes	Yes
Register/ Login (only email addresses) Option to subscribe to additional information (tick box)	Yes - mandatory	Yes – mandatory	Yes – not mandatory
Link to 'About PROACTIVE' Page	Yes	Yes	Yes
Contacts Page (LEA's/ Policy Makers/ Hospitals/ Health Advisors etc)	Yes	Yes	Yes
Link to Direct Messaging	Yes	Yes - will vary per scenario	Yes - will vary per scenario

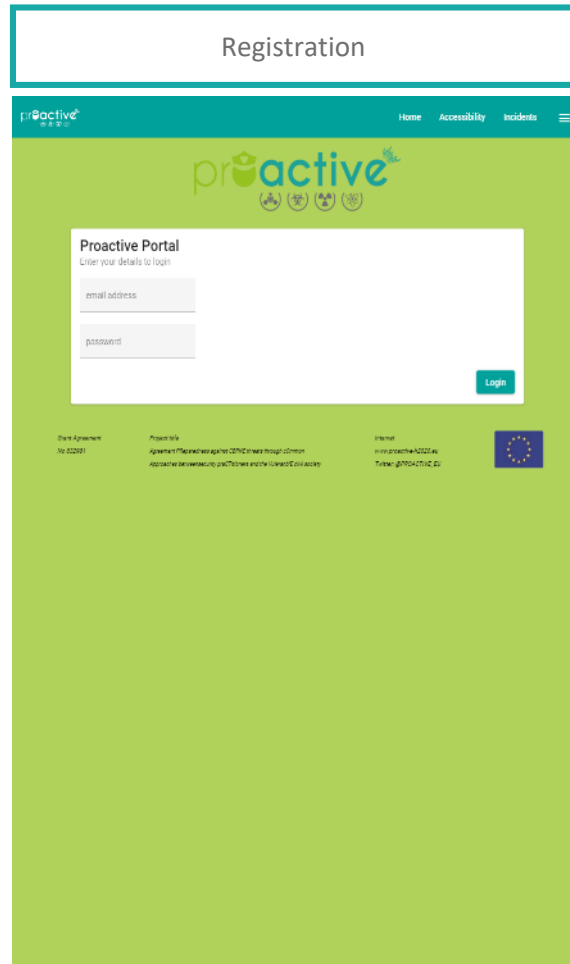
Functionality	LEA's	Security Policy Makers	Vulnerable Citizens
Link to Forums	Yes	Yes	Yes
Link to CBRNe Information	Yes (to include operational and policy information)	Yes (to exclude operational information if confidential)	Yes – only public facing information
Link to Available Support Tools (Existing Apps/ websites)	Yes	Yes	Yes
Link to push notifications (automated early warnings)	Yes (multiple data formats)	Receive only (multiple data formats).	Receive only (multiple data formats).
Link to available News Channels	Yes	Yes	Yes
FAQ page (pre, during and post incident)	Yes	Yes	Yes

Mobile Applications: Home Page



- Consistent design between Web Collaborative Platform and Mobile Applications
- Main Page to Access all Key functionality
- Varying levels of access depending on stakeholder & registration
- Links to All CBRNe related information will be accessed from the home page
- Links will be available to the Data Protection, Consent forms and FAQ pages

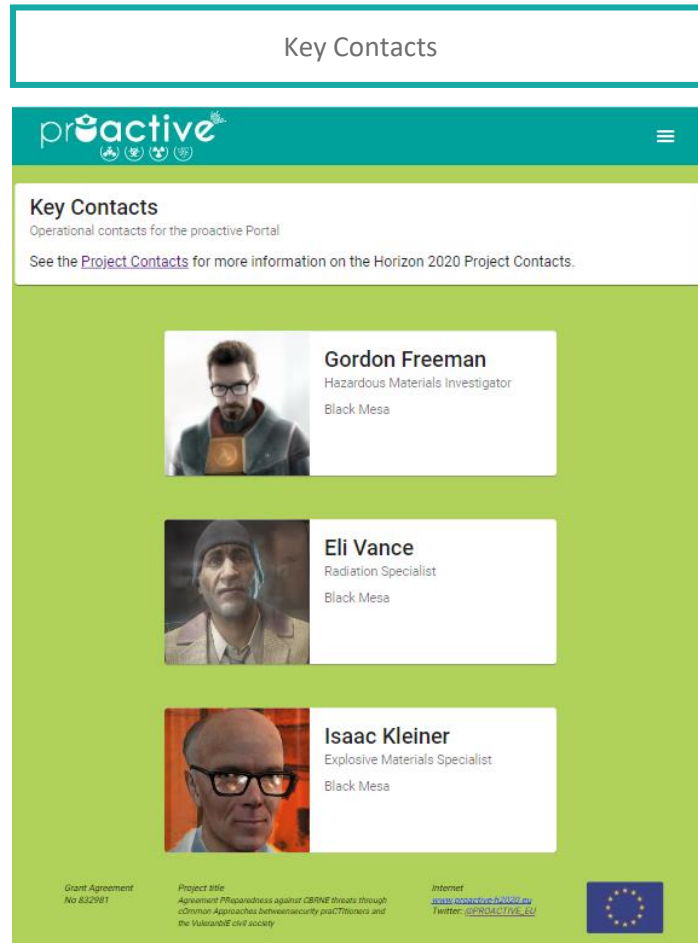
Mobile Applications: Registration & About Us



- Registration is not mandatory for Citizens, access to all pre-incident CBRNe related information will be accessible to all
- Registration is mandatory for LEAs and Security Policy Makers to allow access to key functionality
- Data Protection, Privacy Policies and Consent Forms will be available at point of Registration
- All PROACTIVE project related information will be available through the Toolkit, including the abstract, website and social media links



Mobile Applications: Key Contacts



- Contacts to be divided into 2 categories;

PROACTIVE Contacts

Coordinator

Technical

CSAB Representative

PSAB Representative

Key Contacts

LEAs

NGOs


Charities

Hospitals

- Contacts to be scenario specific, administered by the LEAs
- Data Protection, Privacy Policies and Consent Forms will be available at point of Registration

Mobile Applications: Share Information

Share Information




Share Information
Follow all instructions given by the Emergency Services.
Ensure you are in a safe place before stopping to share information.

About the Incident
Select an Incident

Information you are Sharing
Photos
 No file chosen

Your Information

Grant Agreement No 852981 | Project title: Agreement Preparedness against CBRNE threats through eCommon Approaches between security practitioners and the vulnerable civil society | Internet: www.proactive-b2020.eu | Twitter: @PROACTIVE_EU



- Only Registered Users can share information regarding CBRNe incidents
- Upon identifying an incident, the Citizen can share it through the PROACTIVE Mobile Application, describing what they have seen and adding an image if available
- All incidents are submitted to a holding queue where the LEA representative can view and verify the incident.

User Submissions			
Filter			
Id	Incident	Submitted	
1	N/A	2020-10-21 15:37	<input type="button" value="View"/>
2	N/A	2020-10-21 15:39	<input type="button" value="View"/>
3	N/A	2020-10-21 15:40	<input type="button" value="View"/>

Mobile Applications: Share Information


User Submitted Information

Submitted At: 2020-10-20 10:39
Submitted By: a.person@email.com

Incident

Incident Id 1	Reported Date 2020-10-20 10:39	Resolved Date 2020-07-01
Incident Ongoing	Reporter a.person@email.com	Incident Type Biological
Status In Progress		

Photos

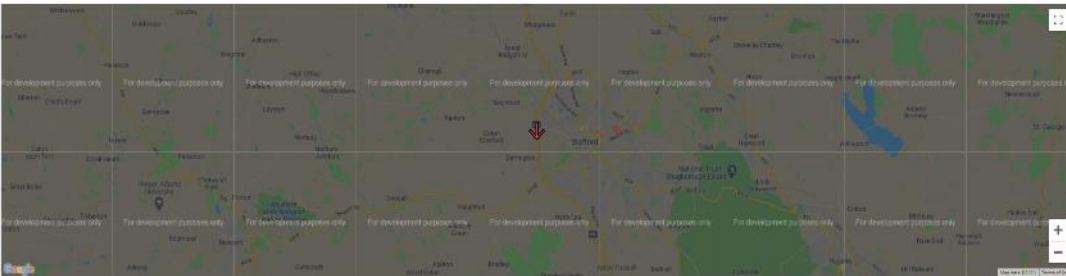


Description

*ent Submission

- The LEA representative can select each incident to view the details and any images
- Following a verification period and internal processes the LEA can then chose to publicise the incident
- The incident will then appear on the map detailing the incident and relevant images
- The LEA can that release a Live Notification via the PROACTIVE homepage including;
 - Incident Details & how it is being addressed
 - Next Steps the public should follow
 - Links to relevant CBRNe information

Incident Map



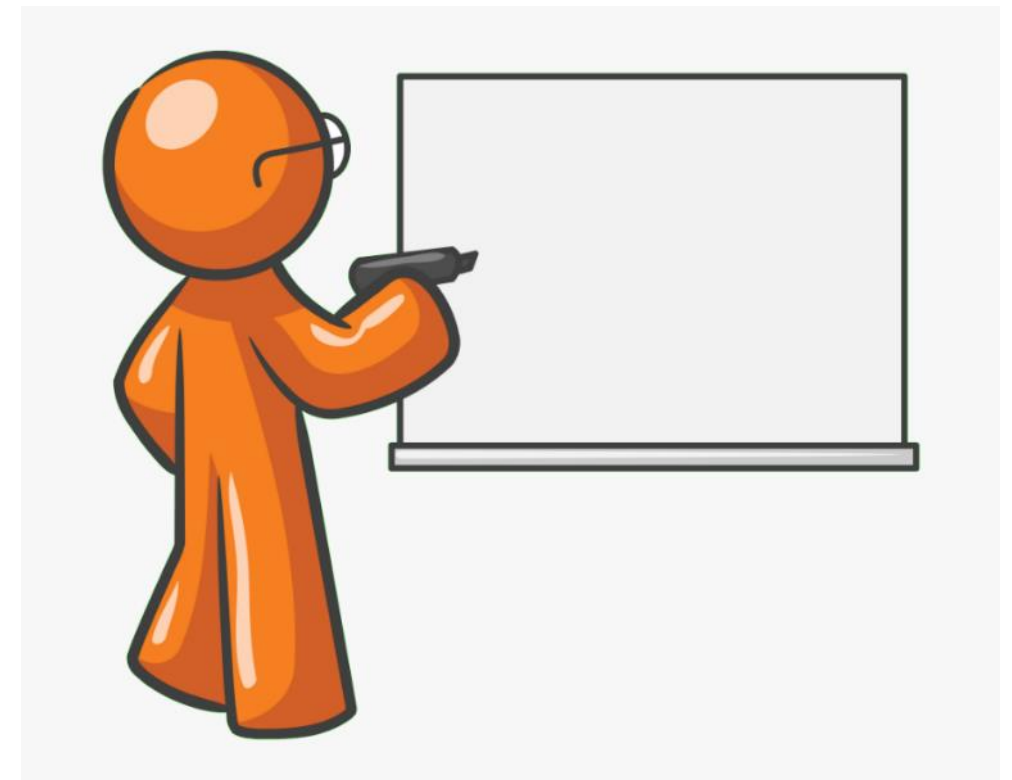
Selected Incident

Incident Id 1	Reported Date 2020-10-20 10:39	Resolved Date 2020-07-01
Incident Ongoing	Reporter a.person@email.com	Incident Type Biological
Status In Progress		

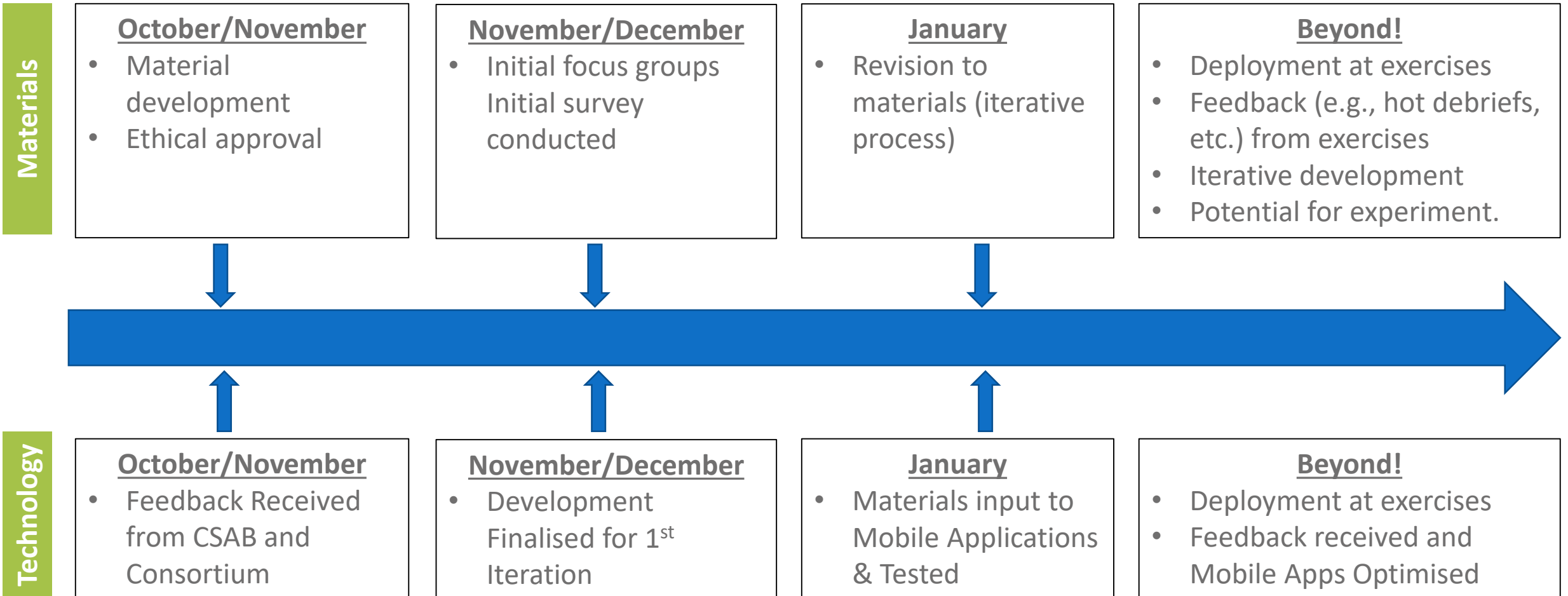
[View on Map](#)

Pre-Incident Material Development

- Development of pre-incident public information materials for CBRNe terrorism
- Campaign Development
 - Based on insights from PROACTIVE
- Focus Groups
 - Vulnerable groups & general population
 - 4-6 groups, approx. 8 people each
- Surveys
- Pre-, post-, follow-up (e.g., 3m, 6m)

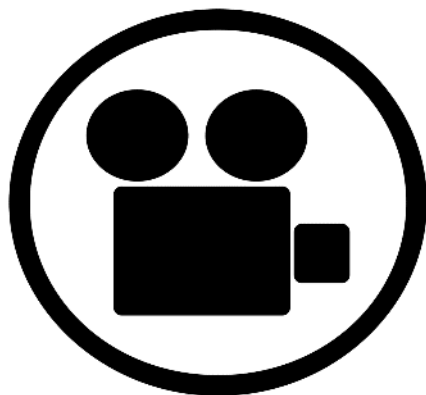


Timeline for Development



Pre-Information Material Development

- Insights from previous PROACTIVE work suggests that this material should include the following (among other things):
- Information on how to distinguish fake news
- Information on who to turn to for support and further information in the event of an incident (including pro-active social media campaigns)
- Information designed to enhance self-efficacy
- Information designed to build CBRNe public knowledge (including how a CBRNe incident may play out)



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ACID ATTACK

REPORT
dial 999

REMOVE
contaminated clothing carefully

RINSE
Immediately in running water



PReparedness against CBRNE threats through cOMmon Approaches
between security praCTitioners and the Vulnerable civil society

Joint exercises, evaluation and validation of the tools

Tony Godwin
CBRNE Ltd



Field Exercises

To carry out three CBRN Field Exercises to:

1. Evaluate the perception among the citizens as to the effectiveness of processes and procedures used by practitioners.
2. Evaluate the usefulness of tools used by practitioners for dealing with the public and vulnerable citizens.
3. Evaluate the effectiveness of tools developed within the project.
4. Host workshops (hot debrief) immediately after each field exercise to get feedback from members of the public on their experience.

Joint Activity with eNOTICE

PROACTIVE/eNOTICE Joint Activity Strategic Objective

In partnership with eNOTICE evaluate the effectiveness of responses to a CBRNe incident focusing on harmonisation of procedures and tools that support the needs of civil society, including those citizens that are vulnerable.

Field Exercises - Considerations

1. Cultural differences

- Relationship between first responders (Interoperability)
- Relationship with first responders (Public perceptions)
- Operational response
- Political influence

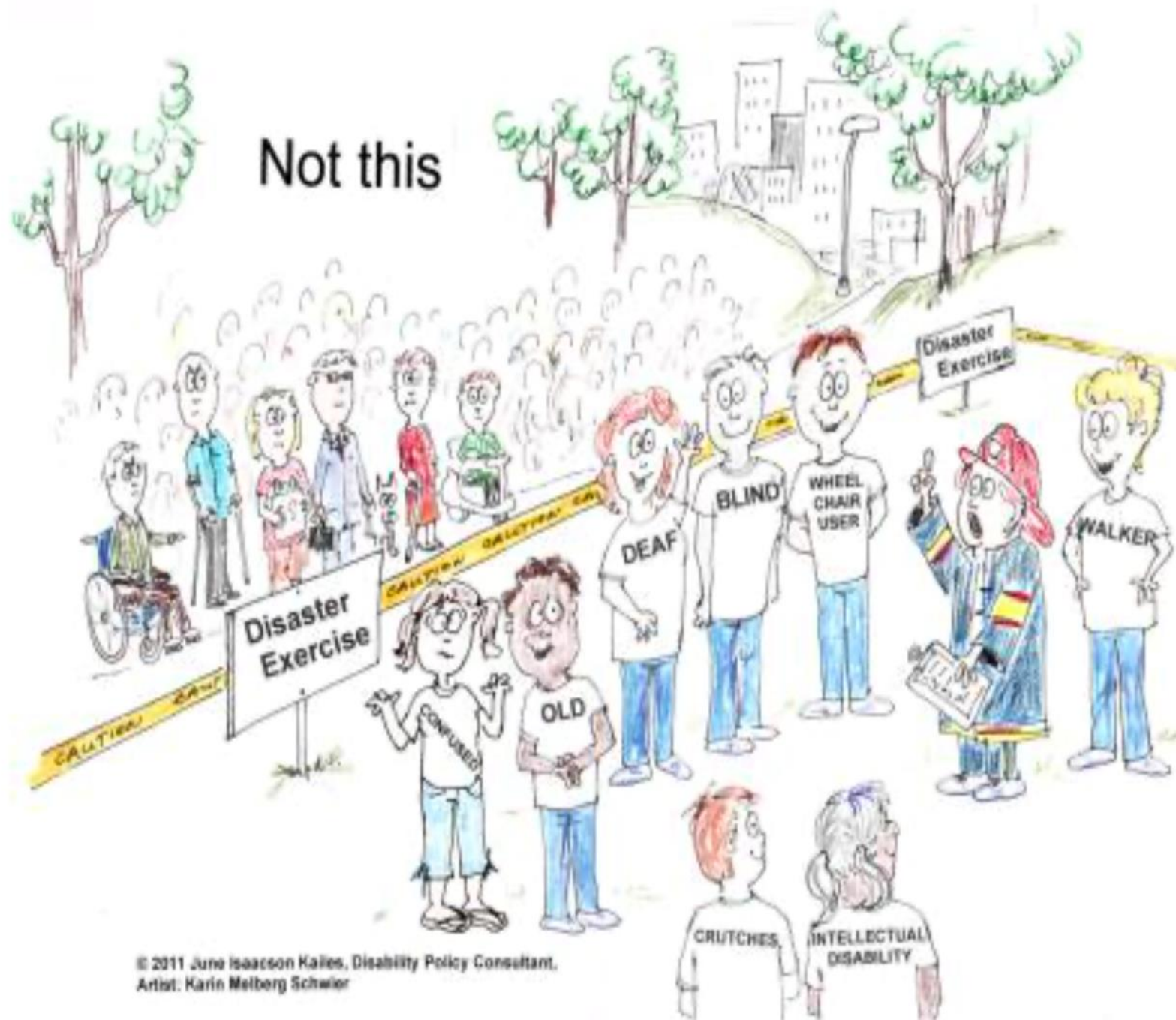
2. Joint Activity Exercises

- Multiple Objectives
- Hierarchy of decision making
- Public involvement
- Different methodology
- Identification and engagement of vulnerable groups



Do this

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Artist: Karin Melberg Schwiler

Exercise Planning

1. Timetable has been affected by COVID-19
2. First field exercise (October 2020) postponed
3. Planning process was suspended
4. Contingency planning and negotiation with eNOTICE
5. Revised timetable agreed
6. Planning process recommenced September 2020
7. Contingency planning ongoing through consultation.

Exercise Timetable

1. First Field Exercise – Rieti (Italy)
 - 28th April 2021
 - Initial response
 - Railway scenario
2. Second Field Exercise – Dortmund (Germany)
 - September 2021
 - Specialist response - decontamination
 - Railway scenario
3. Third Field Exercise – Ranst (Belgium)
 - May 2022



Rieti Field Exercise – 28th April 2021

1. Planning meetings re-established
2. Scenario outline agreed
3. First versions of the PROACTIVE App to be field tested with Civil Society volunteers
4. Pre-incident education being considered
5. Contingency planning - COVID-19 pandemic
 1. Involvement of Civil Society
 2. Travel restrictions
 3. Live streaming
 4. Alternatives to live exercise

Thank you

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PReparedness against CBRNE threats through cOmmon Approaches
between security praCTitioners and the Vulnerable civil society

Legal, Ethical and Acceptability Requirements

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Objectives

- To point out and **frame the ethical and legal aspects** of PROACTIVE,
- To examine the **data protection** aspects in PROACTIVE from both Privacy by Design and post assessment approaches,
- To **provide stakeholders and partners with the appropriate guidance** on the above aspects,
- To carry out an **acceptability study for the proposed toolkit** in order to assure its sustainability,
- To **avoid any negative social impact during the project's execution** or in future deployments based on this research.

Structure

- **Legal, Ethical and Acceptability Requirements (M8)**
- **Operationalization of legal requirements, ethical requirements and acceptability study into recommendations (M12)**
- **Ethics Briefing Pack for project fieldwork (M17)**
- Ethical and Societal Impact Assessment of project outputs (M36)
- Policy-making toolkit to improve CBRNe preparedness in the European Security Model (M35)

Legal, Ethical and Acceptability Requirements

- The main objective of this activity was to provide partners with a useful analysis of the legal frameworks that apply to the activities carried out within the context of PROACTIVE. The idea is to minimize the risk of having to make adjustments due to a lack of legal compliance.

Description of Legal report (D8.1):

- I. Discussion of the legal framework: *Human rights; Privacy and data protection; CBRN standards and regulations;*
- II. Discussion of the ethical framework: *General framework; Vulnerable subjects, Dual use and misuse;*
- III. Practical references (similar projects, best practices).

Operationalization of legal requirements, ethical requirements and acceptability study into recommendations



- The main objective is to translate the legal requirements and ethical principles into actionable recommendations that can be implemented by partners with a more technical background while developing the toolkit for practitioners. Also, it integrates the results of the acceptability study carried out during the exercises.

Description of operationalization (D8.2):

Methodology: Literature review, Surveys with technical partners; collaboration with Rinisoft; Analysis: going beyond legal in terms of proactivity, scientific against fake news based knowledge/information.

- I. Summary of legal framework and requirements in PROACTIVE;
- II. Acceptability in PROACTIVE;
- III. Legal and ethical based recommendations;
- IV. Increasing the acceptability of PROACTIVE;
- V. Conclusions and recommendations by group: LEAs, first responders and vulnerable collectives.



Ethics Briefing Pack for project fieldwork

- The main objective of this activity is to ensure the compliance of PROACTIVE with EU regulatory framework, as well as with ethical principles, during the fieldwork and the overall development of the project. Also will support the training that the consortium members receive on how to detect and tackle privacy and ethical issues during the exercises.

Description of the ethics report (D8.3):

- I. **Regulatory framework;**
- II. **Management of volunteers in an ethical manner:** Criteria for identification and recruitment of participants; Guidelines for selecting volunteers from 'role play' disaster victims; Ethical principles guiding the recruitment; Informed Consent; Briefings; Welfare support; The right to withdraw
- III. **Insurance Cover;**
- IV. **Health and Safety;**
- V. **Ethics supervision during the field exercises.**

Other activities conducted

- Supporting **fieldwork activities** (development, peer review and translation of survey with CSAB). Material to be used in:
 - Ethical and Societal Impact Assessment of project outputs (M36)
- Ethics and data protection **review of Deliverables**
- Providing insights and guidance on data protection and human participants for the **project exercises**.
- Developing/updating the **consent protocol** for the project activities (e.g. questionnaires, CSAB, PSAB meetings, Mid-term meeting)

Additional EC Requirements

- A separate work package sets out the 'ethics requirements' that the project must comply with.
- All requirements **were due in M8 (December 2019)**.
- Their content complements the Data Management Plan.

Description of requirements

Name	Description of deliverable
Requirement No. 1. Recruitment	<p>The procedures and criteria that will be used to identify/recruit research participants were submitted as a deliverable. The informed consent procedures that will be implemented for the participation of humans were submitted as a deliverable. Templates of the informed consent/assent forms and information sheets (in language and terms intelligible to the participants) keep on file.</p>
Requirement No. 2. Security measures unauthorized access	<p>A description of the security measures that will be implemented to prevent unauthorised access to personal data or the equipment used for the processing were submitted as a deliverable.</p>
Requirement No. 3 Appoint DPO	<p>The host institution confirms that it has appointed a Data Protection Officer (DPO) and the contact details of the DPO will be made available to all data subjects involved in the research. Already addressed for UMU and NPH.</p>

Description of requirements

Name	Description of deliverable
Requirement No. 4. Data minimization principle	The beneficiary explained in a deliverable how all of the data they intend to process are relevant and limited to the purposes of the research project (in accordance with the ‘data minimisation’ principle).
Requirement No. 5. Technical safeguards	A description of the technical and organisational measures that will be implemented to safeguard the rights and freedoms of the data subjects/research participants were submitted as a deliverable.
Requirement No. 6. Informed consent	Detailed information on the informed consent procedures with regard to data processing were submitted as a deliverable. Templates of the informed consent forms and information sheets with regard to data processing (in language and terms intelligible to the participants) were submitted as a deliverable.
Requirement No. 7. DPIA	The beneficiary evaluates the ethics risks related to the data processing activities of the project. This also includes an opinion if a data protection impact assessment should be conducted under art. 35 General Data Protection Regulation 2016/679 or Directive 2016/680. The risk evaluation and the opinion were submitted as a deliverable.

Research ethics

1. DMP and research ethics (to be updated M18)

Section 5: Research ethics:

- Section 5.5: Ethical screening of PROACTIVE research and deliverables
- Section 5.6: Research Ethics Protocol

2. Procedures and criteria used to identify/recruit research participants

3. Informed consent procedures with regard to data collection and processing

Recruitment of volunteers including vulnerable people

Procedures and criteria used to identify/recruit research participants

- The number of volunteers that will participate in each exercise will be established through discussions with the organisers of the exercise
- The group size could vary between a minimum of 25 to a maximum of 150 volunteers, considering the scenario and logistical limitations of the site of the exercise (~30 in Rieti)
- The volunteers with apparent vulnerabilities will represent 10-15 % of the total number (~5-6 in Rieti)

Criteria of selection & profile of the vulnerable people group

The methodology for establishing the criteria for selection of the volunteers (including the vulnerable groups) will be based on the function need approach (Kailes & Enders, 2007).

This approach leads to a common framework that “can relate functional support to functional needs, targeted at improving resource management in any type of incident”.

The framework is build on five function-based needs: **communication, medical needs, maintaining functional independence, supervision and transportation (C-MIST)**.

Addressing functional limitations includes both people who identify as having a disability and “the larger number of people who do not identify as having a disability but have a functional limitation in hearing, seeing, walking, learning, language and/or understanding”

Criteria/Profile of the group

- Disability status /(psychological or physiological disabilities; autism, wheelchair, walking stick, blindness, deafness etc.)
- Health constitution status (young children, older people, pregnant women, general sick people having a cold or something like that etc.)
- Language proficiency status (illiterate, foreigners etc.)
- Social status (poor, ethnic minorities)

Consent

Informed consent procedures with regard to data collection and processing

- Prior to the collection of any data, the research coordinator is required to complete the appropriate Research Ethics Protocol and to obtain any necessary ethical approvals for the research. The Protocol is to be followed during the PROACTIVE exercises as well.
- A copy of the Research Ethics Protocol with the task number (Cover Sheet, Questionnaire/ Interview Guide, Consent Form, Information Sheet, Risk Assessment to prevent the misuse of research findings, and any other documents) shall be submitted to the PROACTIVE PEO (Dr Irina Marsh irina.marsh@cbrneltd.com, CC: Mariano Martin Zamorano martin@eticasconsulting.com) for approval one week prior use.
- Templates for Cover Sheet, Consent Form and Information Sheets are part of the 10.6 Data Management Plan and Research ethics
- It is recommended that the task coordinators to engage with PROACTIVE PEO for advice and support at the beginning of the research activities (including interactions with STAB and CSAB) and that the appropriate ethics requirements are fulfilled in due time (Dr Irina Marsh irina.marsh@cbrneltd.com, CC: Mariano Martin Zamorano martin@eticasconsulting.com)

Thank you

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