

## eNOTICE

### European Network Of CBRN Training Centres

## D2.3 Mapping and needs and gaps analysis of the CBRN stakeholders

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PU	Public	X
PP	Project Private, restricted to other programme participants (including the Commission Services)	
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CO	Confidential, only for members of the consortium (including the Commission Services)	

### Document Information

Grant Agreement n°	<b>740521</b>
Project Title	European Network of CBRN Training Centers
Project Acronym	eNOTICE
Project Coordinator	Université catholique de Louvain (UCL)
Document Responsible Partner	UCL
Document Number	D2.3
Document Title	Mapping and needs and gaps analysis of the CBRN stakeholders
Dissemination Level	Public
Contractual Date of Delivery	Month 8 (April 30, 2018)

### Partners involved in the Document

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## **Executive Summary**

This document is Deliverable 2.3 (Mapping and needs and gaps analysis of the CBRN stakeholders) of eNOTICE, a European Horizon 2020 EC funded project, under the Grant Agreement n° 740521.

This document provides the report on eNOTICE corresponding activities aimed at description of the groups of stakeholders relevant to the network of CBRN training centres, and identification of their needs, expectations, interests in the network, as well as obstacles and challenges for the network creation or participation in it.

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## 1 Objectives and scope

The current Deliverable 2.3 presents the results of the work under Task 2.2 Mapping, needs and gap analysis of the CBRN stakeholders, future network members. The scope of the work comprises the findings on the CBRN stakeholders categorization, presentation of the information on the collected needs and challenges related to creation of the network of CBRN training centers, systematization and interpretation of the results, outlining the way forward on how to overcome the obstacles on the way of building a successful European network of CBRN training centres.

The work in Task 2.2 is conducted in parallel and in collaboration with the task of mapping the EU CBRN training capabilities, which is primarily addressed in Task 2.1.1 Roster of CBRN TC, testing and demonstration sites' capabilities and facilities (to be provided on Month 9). The first list and description of stakeholders from different categories was collected within Task 3.1 Dissemination activities to promote and enhance the web based platform and project results, and was described in Deliverable 3.1 Dissemination plan (Month 3).

Task 2.2 identifies the profile of the network stakeholders (other than training centres), and possible motivations to join the network, such as the needs for innovation of civil security practitioners and the expectations of the research and innovation providers in order to be able to fulfil these needs. These categories of stakeholders that might have an interest in joining a CBRN Training Network, such as competent authorities, security stakeholders in search for innovations, industry and service, technology, process and products innovation providers, etc. are being identified and invited to join the network.

The collected information on the needs, gaps, challenges and obstacles for the network has been grouped according to the categories of stakeholders expressing their points of view. The identified needs and challenges were grouped and associated to categories of stakeholders according to the needs. The acquired knowledge was systematised, all the information has been categorised and represented in the form of a matrix showing all the links between all pieces of knowledge, associating the expert knowledge of the partners with functional information and stakeholders mapping, identifying the categories, information classes, concepts, and their attributes. The database associating the expressed views with individual contacts, is kept for internal use of the project consortium, and this public report provides the findings and analysis of the needs and gaps without stating individual contacts (which is certainly available for the European Commission services when requested).

The exact knowledge of the needs and concerns of different groups of stakeholders is necessary for:

- Elaboration of the more efficient mechanism of the network organisation, framework and collaboration between its members, so that the needs and expectations of stakeholders are met (WP2);
- Better focused dissemination, adaptation of dissemination materials targeting precisely the audience needs (WP3)
- Improved representation of the network and activities on the information and communication platform developed in WP3.

This report is structured as follows: after presenting the scope and objectives of the work in Section 1, Sections 2.1 and 2.2 proceed with discussing the importance of synergy of stakeholders in the field of CBRN and relevance of this eNOTICE work objectives to the European policy. Section 2.3 presents the main identified categories and subcategories of stakeholders, explains the reasons behind their distinction, while also noting that many organizations can combine different profiles and thus belong to different categories at the same time. Section 3 explains the applied method of collecting the information for the current study,

presents the identified gaps, needs, expectations, challenges and ways to overcome them, from perspective of all corresponding groups of stakeholders. The last section provides the insights on the major identified challenges, reasons for them, possible solutions and way forward for the eNOTICE consortium en route to the network creation.

## **2 Mapping of the CBRN stakeholders related to the eNOTICE network of CBRN training centres**

### **2.1 The importance of synergy in the field of CBRN**

Over the past years, the threat of CBRN intentional attacks, technological accidents or natural hazards has led governments and international organisations to adopt far-reaching regulations and programmes to defend populations against the associated risks, while complementing national measures that address existing gaps and promote exchanges of information and best practices. The CBRN policy stated in the CBRN Action Plan builds on a number of different measures which have been taken forward recently both by Member States and by the European Union. Among various aspects related to CBRN preparedness and response, the CBRN Action Plan calls for strengthening cooperation, unification of efforts and synergies between all the involved actors. Mapping of the stakeholders and understanding the needs of each group of stakeholders as well as their expectations from the network of CBRN training centres that eNOTICE is building is a major important task ensuring success of the network. At the same time, along with contacting and mapping the stakeholders of different groups described in detail in Section 2 below, all stakeholders were asked to openly express their concerns, vision of challenges and possible obstacles for the creation of the network and participation in it. From the point of view of eNOTICE consortium, the only possible way to build a strong operational network is through genuine efforts for synergy among all stakeholders. The goal of the synergy is to address the heterogeneity of CBRN stakeholders and their opinions by providing a structured link between national and European organisations representing public and private sectors, users and suppliers, under supervision of policy-makers, defending the needs of each sector and each side, and striving for common interests and joint solutions.

The problems of creating an efficient dialogue and synergies between practitioners, technology suppliers and policy makers have been discussed in the CBRN community for several years. Common understanding of all stakeholders' goals, their challenges and concerns, mutual wish to overcome all obstacles and build true cooperation is the objective to achieve benefit for all actors. Peculiarities of innovation management processes in the CBRN field, variety of users demanding the technological solutions, technology suppliers' capabilities, marketing opportunities wrapped up in national and EU policies and regulations – all these versatile factors need to be taken into account when analysing the experience and perspective of CBRN synergy building and creation of the European network of CBRN training centres that involves many actors.

### **2.2 Relevance of eNOTICE objectives to the European policy**

With regards to CBRN, the key EU policy is represented by the CBRN Action Plan [1] (DG HOME). This Action Plan builds upon the work launched in the EU with the 2010-2015 CBRN Action Plan [2]. It addresses the gaps identified in its implementation and takes into account emerging threats. At EU level, the Action Plan has led to a better understanding of the threat, more information sharing (development of a CBRN Glossary [3]) and inclusion of CBRN

incidents in the European Bomb Data System), and achievements such as the development of an EU training infrastructure (European Nuclear Security Training Centre – EUSECTRA). The biological area has also seen an important legislative development with the adoption of Decision 1082/2013/EU on serious cross-border threats to health. eNOTICE monitors all these initiatives and regulations aimed at strengthening CBRN preparedness, training and response planning in the EU.

eNOTICE activities are in line with CBRN Action Plan priorities in mapping of existing EU training activities and providing cross-border and cross-sectoral trainings and exercises:

*"2.1 Strengthen EU CBRN preparedness and response through cross sectorial training and exercises. The Commission in cooperation with Member States will strengthen training and exercises for first responders from the law enforcement, civil protection, health structures and, where relevant, borders and customs authorities and military partners. Training and exercises will be carried out through existing financial instruments and operational tools, in particular the Union's Civil Protection Mechanism (UCPM), CEPOL and the ISF-Police. The development of a common EU CBRN training curriculum will be promoted in close cooperation with EU Member States' experts." [1]*

To improve coordination at EU level, the new CBRN Action Plan [1] puts forward an EU CBRN security network that will pool together all CBRN actors at both strategic (policy-making) and operational levels to overcome the fragmentation of efforts. It will bring together Member States, EU institutions and relevant agencies, and where appropriate key international partners and the private sector. The network will rely on three pillars: 1) an advisory group bringing together all CBRN security coordinators of the MS, 2) a support network composed of existing CBRN centres across the EU and associated countries and 3) a CBRN knowledge hub set up in the European Counter-Terrorism Centre (ECTC) in Europol.

Its objectives will be to (1) maintain a comprehensive and updated understanding of CBRN risks coming from inside and outside EU and to support the formulation of policies and initiatives to address identified gaps; (2) develop cooperation and coordination at operational level (e.g. information exchange, exchange of best practices); and (3) facilitate civil-military cooperation in areas which are mutually beneficial.

Other EU policies include CBRN as a focal point, namely in the sectors of Civil Protection and humanitarian Aid (DG ECHO), Health and Food Safety (DG SANTE), as well as Energy Infrastructure and Transport Networks (DGs ENER and MOVE), Customs (DG TAXUD), Environment and Industrial Risks (DG ENV) and International Cooperation, e.g. CBRN Centres of Excellence (DG DEVCO).

Complementary to EU policies, international policies are also active in Disaster Risk and Crisis Management. In the case of CBRN-E, various conventions exist, namely the United Nations Security Council Resolution 1540, the Chemical Weapon Convention (CWC controlled by the Organisation for the Prohibition of Chemical Weapons, OPCW), the Biological and Toxin Weapon Convention (BTWC without control mechanisms), and the Nuclear Non-proliferation Treaty (NPT controlled by the International Atomic Energy Agency, IAEA). In the field of Disaster Risk Management, Disaster Risk Reduction has been the core action line of the United Nations Hyogo Framework for Action on how to mitigate the impact of natural and man-made disasters, now continued by the Sendai Framework for Action setting priorities for the 2015-2025 period, among which the promotion of a better understanding of disaster risk management through the building, sharing and development of knowledge and the strengthening of the policy-science interface at local, national, regional and global levels.

The implementation of these policies represents a complex and ambitious challenge as they involve a wide variety of players whereas each Member State often follows specific national

approaches (national action plans) for dealing with crises and is also specifically organised in terms of disaster risk management capabilities. The EU framework represents a means and a real opportunity to discuss possible ways to improve coordination among the various national approaches and develop a common EU vision strengthened by a joint strategy in this field.

CBRN threats can arise from both inside and outside the Union. Working beyond the Union as well as building stronger partnerships and closer internal-external security links are an inherent part of the EU's strategy to counter-terrorism and CBRN risks. The call for a more “joined-up Union” between the internal and external dimensions of security policies is a key priority in the EU Global Strategy [4] and in the context of the 2016 EU-NATO Joint Declaration [5].

CBRN security needs to be mainstreamed in the EU's external action, through the development of capacities in third countries (notably in neighbouring countries), enhancing cooperation with strategic partners as well as specialised international organisations, such as Interpol, IAEA, OPCW building on the renewed commitment of the UN Security Council to prevent terrorists from acquiring weapons of mass destruction. There is also a need to develop closer links between activities undertaken within the framework of EU CBRN Centres of Excellence, led by DG DEVCO.

### 2.3 Key actors / Levels

*Key groups of stakeholders* who have a role and interest in the objectives and implementation of the network of CBRN training centres include the following main categories:

1. The first category is **eNOTICE partners/beneficiaries**. This group is distinguished temporarily for the five years of the project duration, for the internal purposes of self-assessment, of initial analysis of the needs and gaps, while later on all eNOTICE partners will be considered as Customers of the created network, as it should be sustainable and enduring over the project's end. Now the eNOTICE beneficiaries are the core of the network, these are those enthusiastic starters who believe in the success and are doing all their best for building the corresponding operational community. The eNOTICE beneficiaries are:

- training centres and training professionals, who have profound knowledge and experience in various aspects of CBRN training. The needs of these partners, their opinions and expectations from the network, their understanding of the goals, of the challenges, of the existing gaps and the possible ways to fill the gaps, largely reflect the needs of the future network.

- non-training centre partner (UPB) who support the consortium by developing the web-based information and communication platform, thus understanding and analysing in deep all the requirements of the community to ensure that the platform will become an efficient tool and real facilitator of the community building and network creation.

Some partners have a combined profile: UCL Centre for Applied Molecular Technologies (UCL-CTMA) is the eNOTICE Coordinator. UCL-CTMA is a mixed academic-clinical-military biotechnological platform, it tightly integrates the bio technology R&D pillar, it is a CBRN-Defence Laboratory Department for the BE Defence (DLD/BE-MOD) for military CBRN research and CBRN operational pillar working for DLD; and St Luc academic hospital (Cliniques Universitaires St Luc, Brussels) provider for clinical development and testing in molecular genetics and associated clinical research. UCL-CTMA has developed and owns an operational light deployable analytical capacity for rapid identification of life-threatening pathogens with extensive practical use of the mobile capacity (such as during the recent deployment in West Africa in 2014-2015 in response to Ebola outbreak), and international



training exercises. Thus UCL-CTMA combines the vast experience as a practitioner and training activities related to the mobile capacity, the related technology development expertise, has internal expertise and receives extensive support of the university administration in EU collaborative projects management. VESTA, the eNOTICE Technical coordinator, is a large training centre with an established research department. ARMINES and METU are research and development partners bringing their expertise and developments in simulations and serious gaming as well as their CBRN training network.

These combined profiles of some eNOTICE beneficiaries prove that strict categorisation referring an organisation to a particular type of stakeholders is often not possible, while many organisations can be related to different categories at the same time. Specific profiles that fit in multiple categories should also be taken into account.

**2. Customers (results beneficiaries, users).** This group consists of several sub-groups of the stakeholders who benefit from the results of eNOTICE project and network:

a) **Training centres.** Currently this group are the CBRN training centres located in Europe, who are not partners of eNOTICE consortium. However, after the end of the project, the consortium TCs will move to this group, being the core of the network. Naturally, the TCs are the main targeted focus of attention of eNOTICE network, it is exactly the TCs who are being contacted by eNOTICE partners to describe their training facilities, perspectives and to express their needs and hopes for the network participation. TCs have all the necessary infrastructure and resources to train users of all disciplines.

b) **Practitioners and operators.** Training centres and training professionals are tightly connected to practitioners and technology operators, as they organize trainings for them. TCs work with practitioners every day. Practitioners of all disciplines – fire brigades, rescue teams, police forces, medical services, civil protection, security and defence experts, logistic services deployed for incident management, competent authorities, information and communication experts, specialized services (water management, hazmat, etc.) – they all benefit from trainings organized at TCs, thus they are an integral part of the eNOTICE network.

c) **Technology suppliers, research and innovation providers.** These are representatives of research and development organisations, large industry, small and medium enterprises (SMEs), academia, research institutes, research units linked to ministries or agencies, etc. – all those who design and develop technologies used by practitioners and operators in their everyday work. TCs, testing and demonstration sites are an excellent testing playground for practitioners to test new technologies, products, services and provide immediate feedback to the technology suppliers.

d) **Policy-makers.** Policy makers and regulators – regional, national, EU authorities, agencies - members of European, intergovernmental and/or governmental regulatory agencies that ensure compliance with laws, regulations, established rules, as well as individuals who set the plan pursued by a European, intergovernmental and/or governmental institution level, having the authority to set the policy framework of an organization. Especially those who influence the decisions to use CBRN TCs services, technology or facilities as field capacities in CBRN preparedness activities to fund research and use of the TCs. Regulatory bodies underpin all the groups and activities.

**3. Society.** This group are EU citizens who benefit from the security technologies, products, services and processes and pay for them indirectly (e.g. through paying taxes, buying products, paying for health care services, drugs and vaccines, etc.) and are ultimate end-user for all security-related activities. These are public at large, NGOs, Civil Society Organisations, education (schools) and training organizations. General public includes everyone who wants to know more about the project according to their own personal interests and concerns, be it an

interested citizen, an end-user that has not been identified yet as a stakeholder by the project, or be it other projects that are dealing with similar issues and where synergies might be explored. General public can be reached, for instance, through dissemination of the information at the project website or through announcements and interaction in social media. The general public today has increasing opportunities to influence the design, introduction and trajectory of new technologies and services in both private and public sectors. People also have the ability to directly influence innovation and encourage the development of new technologies. In recent years, there has been a growing emphasis by governments on the importance of collaboration with citizens and service users as drivers for innovation to improve service delivery [6]. This group of stakeholders was not approached so far, because the present study is focused on the opinions of experts directly involved in CBRN field. However, representatives of the Society will be interviewed during the lifetime of project, e.g. during the project exercises involving role-play volunteers.

These different categories and subcategories of stakeholders are illustrated in Figure 1.

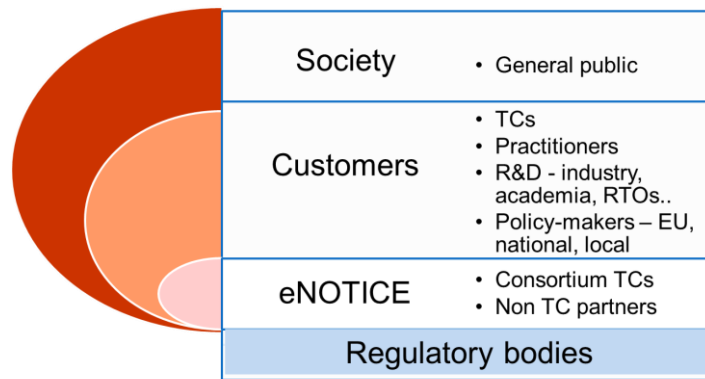


Figure 1. Stakeholders of the network of CBRN training centres.

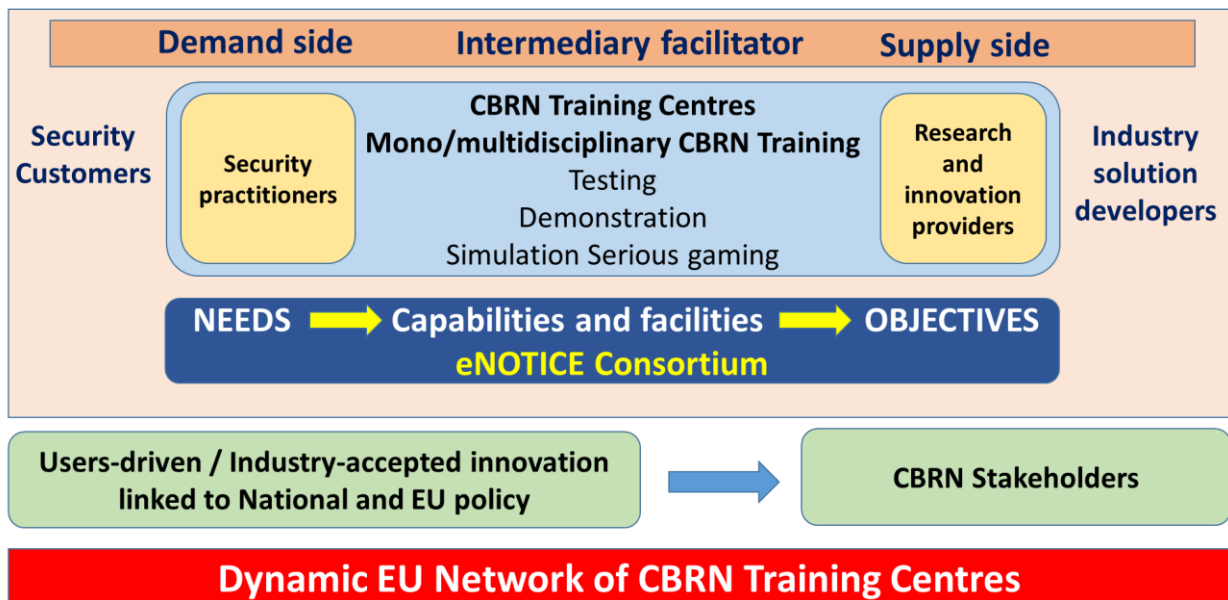


Figure 2. Key actors of the network of CBRN training centres

The list of particular stakeholder organisations from all groups was presented in Deliverable 3.1 Dissemination Plan. This list contains stakeholders of all groups except for CBRN training

centres, because the work on listing the training centres themselves is in progress, and it is one of the primary objectives of the Deliverable 2.1 Catalogue of CBRN TC, testing and demonstration sites, to be provided at Month 9.

### **3 Identification of gaps, needs, expectations, challenges and perspectives for the European network of CBRN training centres**

There is an observable lack of cooperation between different training facilities in the EU and its partner nations, even knowledge about the existence of these facilities is often absent. Having identified this gap, the eNOTICE consortium gathered to start the collaboration between the training centres and all related stakeholders. Still, in order to reach the ambitious goals and create a successful network that never existed before, it is vitally important to understand the reasons why such a network never existed – is it due to the lack of information, or lack of need for the network, or the need is there, but there are practical obstacles on the side of different actors? Are stakeholders actually interested to join the network? If yes, then why? If not, then why not?

The findings for the present study have been collected and integrated from many heterogeneous sources:

- The initial discussions were held and questionnaires were distributed among participants of the meetings of Community of Users on Safe, Secure and Resilient Societies organized by DG HOME, combining points of view of practitioners, representatives of industry, academia and policy makers. The CoU dedicated event on CBRN-E Synergy Building gathered various stakeholders, and eNOTICE was presented followed by an extensive discussion on the central operational role of training centres in the area of CBRN stakeholders synergy.
- The eNOTICE consortium partners contacted individually the practitioners, training professionals, industrial and academic experts, representatives of local, national and European authorities from their own networks of contacts. The contacts represent the organisations listed in D3.1 Dissemination Plan and some more that were added after the submission of the deliverable. Each eNOTICE participant identified representatives of each group of the target audience within their network of contacts. This is a dynamic list of contacts, established initially and updated regularly – adding new contacts and removing those which are not relevant anymore throughout the project. The consolidated contacts are being contacted to collect information about the network needs, to distribute the information about the project, the updates on the project activities, progress of the network creation, invitations for Joint Activities, Annual Workshops, Policy Meetings and conferences relevant for individual contacts.
- Responses from training centres were collected from the comprehensive surveys prepared and distributed within Task 2.1.1 - Roster of CBRN TC, testing and demonstration sites' capabilities and facilities.
- Representatives of industry and academia, members of the CBRN Cluster Industrial and Technological Community and Practitioners and Customers Community, developed by H2020 ENCIRCLE - European CBRN Innovation for the Market Cluster project (coordinated by UCL) were contacted with the questionnaires concerning their possible role, expectations and market advantages benefiting from the network. Participants of H2020 projects DRIVER+ - DRiving InnoVation in crisis management for European

Resilience and TOXI-Triage - Tools for Detection, Traceability, Triage and Individual Monitoring Of Victims were also approached.

- Face-to-face formal and informal discussions, as well as interviews by phone and Skype were held with various contacts representing different organizations, with different background, experience and specialty.
- Discussions on the needs and challenges were active during the two workshops “Practitioner Innovation in Security Research” organized between eNOTICE and other current SEC-21-GM networks of practitioners FIRE-IN – Fire and Rescue Innovation network, I-LEAD - Innovation - Law Enforcement Agencies Dialogue, ILEAnet - Innovation by Law Enforcement Agencies networking, DAREnet - DANube river region Resilience Exchange network.
- Findings from previous projects on the mapping and roles of CBRN stakeholders, collaboration between practitioners and technology suppliers, innovation management practices involving practitioners at early stage of technology development and facilitating dialogue between all relevant actors, role of training professionals in the practical collaboration between actors were all integrated in the present study. The previous projects that conducted extensive studies on stakeholders mapping, needs and gaps analysis, innovation management practices are: FP7-CBRN Map - Road-mapping study of CBRNE Demonstrator, FP7-ARCHIMEDES – Support to Security End-Users, FP7-PRACTICE - Preparedness and Resilience Against CBRN Terrorism using Integrated Concepts and Equipment, FP7-EDEN - End-user driven DEMO for cbrN, FP7-MIRACLE - Mobile Laboratory Capacity for the Rapid Assessment of CBRN Threats Located within and outside the EU, H2020-PANDEM - PANDEmic risk and Emergency Management, H2020-Reaching Out - demonstRation of EU effective lARge sCale tHreat and crIsis maNaGement OUTside the EU, ESA IAP/ARTES20 B-LiFE - Biological Light Fieldable Laboratory for Emergencies.

The contacts approached by the eNOTICE consortium partners received the information about eNOTICE goals, scope, vision, project partners, objectives, envisaged ways to reach the objectives, details and schedule of the project joint activities and plans for the network creation. All additional information that contacts asked for, was readily provided by the consortium partners who conducted the interview or the discussion.

The responses were not anonymized, all the contacts were asked to precise their name, organization, function in the organization and contact details. The database with all contacts and individual responses is kept in the eNOTICE consortium.

The purposes of the questions were to:

- identify needs, motivations and expectations of potential members of the network of CBRN training centres;
- identify obstacles, challenges, gaps preventing potential members from joining the network;
- identify possible solutions to overcome the challenges.

The questions were simple and they were deliberately kept open, not to prompt the answers, but to cover the subject in the most objective way. The following questions were asked and discussed with the contacts:

Questions related to needs and expectations:

- If you consider to join a network of CBRN Training Centres, what would be your motivation?

- In what way can you benefit from such a network?
- What type of information do you need to be available in order to find a suitable CBRN Training Centre? (Profile of their network: rescue & fire fighting, police, medical, judicial, defence; Infrastructure: exercise village, metro station, high buildings, industrial facility; Type of training courses: theoretical/practical; Announcement of activities open for external participation (e.g. annual field exercise with practitioners as part of their annual training program, workshops for emergency planners, alumni activities, ...); Location; Type and statute of organization; Hotel accommodation and capacity; Other).

Questions related to obstacles and challenges:

- Are there any obstacles that would prevent you or your organization from collaboration with Training Centres? Please specify
- Other criteria of relevance for you to consider/facilitate the collaboration with a CBRN Training Centre?

All contacts were asked for the follow up options:

- Are you interested to join the network or participate in its activities? The respondents were asked to specify if they are interested to participate in the eNOTICE exercises and joint activities as a Project or as Observer/invited expert; to receive newsletters; to be visible for other members at the eNOTICE web platform; to participate in eNOTICE annual workshops; any other form of participation.

When approaching the contacts with these questions, no particular expectation was formed in advance. The eNOTICE consortium partners were well aware of the gap - lack of knowledge and collaboration between training centres and corresponding stakeholders. Thus, negative or sceptical answers would be not a surprise. However, the analysis of responses showed a lot of optimism and positive thinking, which can be summarized with the words of one of the respondents: “*There are no obstacles that can't be solved, as collaboration is a necessity*”.

Some responses were very brief, some more extended, but the length of the comments did not correlate to the positive or negative attitude, because, as mentioned above, the answers were largely positive and very constructive. Thus, the length of comments might be related to the time available for a respondent, or to enthusiasm and concentration at a given time, or features of personality. In any case, analysis of this factor is beyond the scope of the present study. We analyse only the contents of the answers.

The following section provides the received generalized answers of various groups of stakeholders.

### **3.1 Needs and expectations**

#### *eNOTICE project beneficiaries – training centres*

The needs expressed by the training centres – beneficiaries of the eNOTICE consortium were to:

- Gain visibility at the EU level;
- Share good practices and lessons learned in preparation & organization of CBRN exercises;

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- Share good practices and lessons learned from other first responders in CBRN crisis management;
- Study and rationalize the internal procedures of the TCs by means of the project activities;
- Compare SOPs, align procedures, build common operational procedures in case of cross-border crises;
- Collaborate and synergize between partners from single and multiple disciplines, cultures and backgrounds;
- Create synergies with other TCs and stakeholders from aligned curricula;
- Have access to, observe and study lessons learnt across same or different disciplines; to improve the knowledge on briefing and debriefing activities;
- Consider the network as a platform for data collection from various type of exercises;
- Learn from other CBRN TC, which face the same limitations and hurdles (e.g. in managing the financial resources, environmental concerns, etc.);
- Exchange lecturers and trainers;
- Explore possible synergies between civil and military CBRN stakeholders and create unique momentum to become the operational intermediary between all CBRN actors, EU relevant bodies, networks and policy-makers;
- Pool and share resources for organization of exercises; pool training resources in a financially restrained environment;
- Build confidence through interaction, collaboration, motivation of TCs;
- Develop a user-friendly website and a common communication platform with up-to-date information on exercises agendas and objectives of training;
- Get access to funding, monitor EU calls for collaborative projects;
- Join a network of CBRN experts in preparation and organization of exercises.

It was noted that such a network as eNOTICE project is building, can launch a new generation of training centres, for instance, by the involvement of various technologies (such as serious gaming), this network can improve the use of new technologies. Moreover, NTS (Non Technical Skills) are also targeted in knowledge sharing between training centres.

*eNOTICE project beneficiaries – non-training centres*

The needs for the network expressed by the beneficiaries of the eNOTICE consortium other than training centres were to:

- Have access to users and interact with them closely to know the requirements for the developed technology, to best meet their needs;
- Build and connect communities in order to support emergency management;
- Build a technical framework supporting those communities: communication, cooperation, collaboration (wisdom of the crowd, crowd sourcing);
- Support the preparation, operation and analysis of physical and virtual exercises;
- Bridge the gap between technology providers, end users, scientific research;

- Get to know people, who share these objectives.

### *Training centres and training professionals*

The needs expressed by the training centres and training professionals external to the eNOTICE consortium were to a large extent similar to the vision of TCs of the consortium. The differences were related to the fact that external TC do not (yet) have the benefits of close cooperation as consortium members do. The needs expressed by the training centres and training professionals are listed here in the order from most frequently stated to least frequent. So they expressed the strong wish to:

- Share good practices and lessons learned in preparation & organization of CBRN exercises;
- Share good practices and lessons learned from other first responders in CBRN crisis management;
- Study and rationalize the internal procedures of the TCs by means of the project activities;
- Have the possibility to know who is doing what, compare SOPs, align procedures, build common operational procedures in case of cross-border crises; seek harmonization and/or standardization of training, testing and validation procedures, good practices, SOP and guidelines across Europe;
- Collaborate and synergize between partners from single and multiple disciplines, cultures and backgrounds;
- Participate in or conduct research as an extension to the exercise setting of field exercises (for instance: add simulated social media feed in order for participating parties to test social media as source for information management);
- Participate in the eNOTICE exercises and workshops;
- Provide possibility for the clients (public and private sector) to cooperate with emergency services, governments, neighbouring organisations, etc. in large scale multi-disciplinary exercises;
- Have a potential opportunity to test and gather feedback about innovative web software prototypes for disaster management (for instance: E2mC project platform “Witness” <https://www.e2mc-project.eu/about-e2mc-project> ) in order to assess alignment with end user needs.

The training centres, when describing their capabilities, are expected to:

- Properly address the confidentiality of the exercise and data protection policy;
- State the language capabilities, i.e. in what language they can provide the training;
- State which types of exercises (e.g. table top vs. field exercise) they conduct;
- Know availability and costs of TCs when and where to send first responders for training;
- State background of trainers;
- Possibilities to customize the training programme;
- Possibility to employ external trainers;
- State the incident Command System used;

- State which of the actual organisers are open to add some of the innovative, specialized new features listed above in their ongoing exercise settings, adding these aspects to the existing setting. While they do bring added (realistic) dynamics and certainly added value (e.g. making the simulations more realistic), these also add more complexity to a “traditional” exercise setting. Example: when adding a simulated social media feed to a field exercise, cooperation with “on site figurants” (victims, people affected, people impacted on, people involved) is to be set up in order to gather on scene pictures. Just as in reality, these can be shared on the simulation tool to allow all disciplines to monitor them for information (possibly allowing participating comm. teams to set up simulated information actions to citizens).

These and other questions for TC capability description were included in the survey for TCs. The detailed analysis of the roster of the training capabilities and the contents of the survey filled by TCs will be described in Deliverable 2.1 Catalogue of CBRN TC, testing and demonstration sites.

It is worth noting that a few TCs whom the eNOTICE consortium approached with the questions of their willingness to join the network, are rather careful with commitment, and prefer to first observe and see how the network will function before joining. This understandable cautious attitude stems from the main gap stated above – that such a network of CBRN training centres never existed before, so many stakeholders, including TCs as primary customers, do not yet know what to expect from it. It is the mission of eNOTICE to bring the network to success, make the benefits of membership obvious, ensure its sustainability and attract all valuable participants.

### **Practitioners:**

The general motivation of the practitioners regarding joining the network was expressed in the opinion of a representative of the Belgian police: *“As an end user, it is vital to have good and close contacts with Training Centres, no matter what the subject is. In order to create good education and have realistic trainings and exercises, end users and Training Centres need to work together in good partnership. It is therefore essential to create such networks.”*

Practitioners of various disciplines expressed the following needs and expectations from the network (listed from most frequently stated to least frequent):

- Participate in trainings and courses, get a chance to participate in different kinds of CBRN exercises;
- Find a capacity matching the needs in or outside their country; Find a facility for training with special infrastructure or special options according to the needs. Comments – “A network or collaboration could enable us to have a “based on specific needs” training (different types of areas have different types of risks: ex.: cities vs more rural areas. “Different areas” implies “different needs” and thus different training). If a Centre nearby could not provide us with what we need, the Network of CBRN Training Centres could easily guide us to the correct facility.”
- Have the opportunity for trainings that cannot be provided in their station, town or (maybe) land by using the advantages of a location or the opportunities that arise, e.g. from less strict regulations
- Get more versatile training benefiting from different approaches in different countries and settings by having access to a broad spectrum of CBRN training possibilities;



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- Exchange information on available training capacities; Get an overview of training capabilities and capacities of CBRN Training Centres;
- Facilitate information exchange on best practice solutions; Share information in order to augment mutual expertise;
- Assess current practices, technologies and systems for CBRN training and testing;
- High level and high quality education and exercises (mono- and multidisciplinary) with specialized training centres;
- Possibility to learn from different kind of approaches to CBRN issues.
- Heightening of knowledge and skills by using other TCs or exchanging experiences;
- Identify contacts for cooperation; possibility to access direct contact information (experts you can contact with specific questions);
- Network with other stakeholders of the same and different disciplines;
- Create a platform for joint, multidisciplinary CBRN exercises;
- Push practitioners-driven research and innovations that will surely meet their needs through collaborative design of technologies; help to optimize trainings;
- Get to know and staying up-to-date with most recent trends and R&D technologies that are possible to test;
- International and multidisciplinary networking opportunities;
- Network with SMEs, transfer the knowledge.

*Technology suppliers and innovation providers*

The generalized needs and expectations of representatives of industry and research are the following (listed from most frequently stated to least frequent):

- Gain new market opportunities for the developed technologies;
- Networking (as such) with other stakeholders in CBRN and security domain; ability to bring together different stakeholders “under one roof”. These stakeholders could include tool providers, practitioners, evaluators, local and national authorities and role play volunteers;
- Gain access to practitioners to test and validate the developed technologies;
- Learn more about the actual needs, requirements and SOPs of practitioners; understanding the practitioner’s needs in a direct dialogue;
- Direct product marketing by successful tests and demos; fast-track innovations;
- Gain new knowledge and experience from the interaction with the specialist from CBRN Training Centres. The opportunity to cross reference research and development with a number of different training centres to identify national variations in processes and procedures;
- Access to subject matter experts within the particular host training centre;
- Exercises engaging with multiple training centres to get joined up thinking between different Member States
- Opportunity to offer relevant Company products for the test sites and training programs;

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- Monitoring the state of art in the technology domain of the Company;
- Focused vision and specification of further product development and enhancement based on feedback from practitioners;
- Investigate CBRN requirements for particular technologies development, required to test possible existing solutions or to develop tailored tools;
- Better understand the threats, identify the vulnerabilities to suggest new technology solutions;
- Being part of such a network could result in opportunities, e.g. participating in projects, being hired as expert, or could result in maintaining knowledge level and awareness of new developments;
- Test and demonstrate innovative technologies in relevant environment; Better fit of the company products to standard operational procedures;
- Selection of training sites across Europe, possibility to test band demonstrate developed technology to various users; Maintain a network of business contacts in CBRN field;
- Develop projects, driven by users' needs;
- Participation in the exercises and workshops;
- Build new business opportunities by interacting with end-users (potential customers) as well as industrial partners;
- Get in contact with the main players and perhaps new players or new staff;
- Be updated about new developments;
- Cost savings;
- Diversity of training programs, objects and facilities for industrial firefighting teams. Such trainings can be very complimentary to the tactical and strategic crisis & emergency management trainings for industrial facilities;
- The training centres should have programmes and expert trainers that have an offer for the private sector. Training centres for public service fire brigades tend to be 'locked in' to the public fire service mode of operation, process and are less agile to work with. At the same time it is an ideal environment for cross fertilization;
- Trainings such as incident response by industrial firefighting teams in security scenario's (explosion and suspect package or intruder found) are currently lacking. There is a need to introduce this kind of training;
- Broad range and more diverse operational trainings to be able to recommend training programmes and facilities to clients. Ideally that expertise can then be trained in a full scale exercise with the crisis management team of the facility;
- Observe exercises for specific scenarios and coach or test methodologies for crisis and emergency management with CBRN scenarios;
- It would be useful to have a standard procedure requesting to join the network for organisations, and for collaboration for R&D projects;
- Contribute by acting as an invited lecturer or instructor, or to write test protocols or test reports.

### *Policy-makers – EU, national, local authorities and funding bodies*

The vision of policy makers on their needs and expectations from the network of CBRN training centres is important for the project direction and adaptation of the strategy if needed. Opinions of policy-makers will be collected all through the project during dedicated policy meetings held once a year and associated to several project joint activities. Several DGs – HOME, DEVCO, ECHO are working on the task of mapping of CBRN training capacities inside and outside the EU, and the need for the mapping, based on a comprehensive questionnaire enabling training centres to describe their capability in detail, is the matter of collaboration between eNOTICE and the Commission services. For now, the needs and expectations are the following:

- Have a clear comprehensive picture of all available training capacities;
- Improve European preparedness, resilience and incident response to CBRN incidents;
- Lay the foundations of a harmonised interoperable European capacity for cross border crises response;
- Create repository of best practice, experiences, collateral and cascading effects after a disaster or attack;
- As the scope of CBRN risks is very broad, and specialized formation, training and exercises may be needed, the network of training centres should provide the necessary interconnections to reorient actors involved in emergency plan to the right centre depending on the type of formation, training, exercise needed (based on description of needs);
- Have access to the diversity of the scenarios that can be played in the TC;
- Being able to cooperate with an integrated environment regarding CBRN training centres is a necessity in order to organize formation, training and exercises for all actors (strategic, operational) involved in emergency plans;
- The national training centre(s) should serve as “connection” with foreign training centres for better collaboration between operational experts, knowledge and training centres and emergency plan coordinators.

### **3.2 Challenges, obstacles and ways to overcome them**

Even with many positive answers of stakeholders and declared absence of any real crucial obstacles from joining the network, we are far from believing that the process of the network creation is going to be smooth and obstacle-free. We are interested to know the opinions of various groups of stakeholders on what are the challenges from their point of view – in general and for their organization in particular, and if there are any ways to overcome these challenges. The generalized answers are presented below, again ranged from most frequently stated to less frequent.

#### *Training centres - eNOTICE project beneficiaries and external TC*

- Restrictions in sharing of classified internal information (data protection, vulnerable data);
- The language issue: Cross-border links, exercises and other activities presume good communication with participants from other countries, while many practitioners speak only their native language. This issue can be solved in different ways: a) involvement of translators at every exercise; b) development of foreign language learning among practitioners.

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- Difficulty to identify all existing training capacities, testing and demonstration sites;
- Sufficiency of the national niche;
- Lack of understanding of added value of joining the network;
- Lack of experience with EU projects (including administrative issues), lack of existing thinking in terms of the necessity of international cross-border cooperation. This issue might be overcome by means of creating a “new generation culture”, which includes the EU-scale training, summer schools on CBRN training, encouraging of sharing expertise between nations, encouragement of language learning.
- Fatigue after having been invited to several other initiatives to establish CBRN networks or communities, out of which most never reached a sufficient maturity;
- Bureaucracy in opening the TC to external participants;
- Unclear exercise target objectives (for instance, too generic, while users might need more specific training);
- On the other hand, sometimes there are too many objectives targeted by one exercise and too many actors participate in an exercise;
- It is often difficult to integrate innovations (new technologies, products, processes) into existing “traditional” procedures that proved to be good;
- The everyday duties, operational activity of the organization may hamper/delay participation in common work;
- Different national regulations and directives on CBRN issues in Member States. This challenge can be mitigated by consultations at the level of national CBRN coordination focal points and the CBRN Advisory Group in DG HOME;
- Different levels of operation in different Member States (local, regional, national);
- Competition and marketing might represent a key issue;
- Cultural differences – related to the way of organisation of trainings, organisational culture, the level of importance attached to tasks handling; differences in civilian and military approaches.

### *eNOTICE project beneficiaries – non-training centres*

The most critical challenge will likely be getting a “critical mass” of users into the network. Once this is achieved, the network should be self-sustaining. The biggest opportunity to overcome this challenge is seen with the TCs inside eNOTICE consortium who will of course be the initial members of the network and could already be enough to achieve this critical mass.

### *Practitioners:*

- Funding and costs of participation in training is one of the biggest obstacles. There is a lack of resources to participate in training, especially abroad. E.g. if it’s necessary to reach the TC by airplane and to stay in a hotel for several days it would be probably too expensive, together with the payment for training itself. Many practitioner organizations cannot afford to send their staff abroad. This issue could be addressed by “train the trainer” system – where trainers receive the necessary instruction abroad and certificates that they can train other people, and then they train the staff in their countries;

- Physical distance to TC – many TCs are located very far from major transportation nodes, which makes them difficult to reach, and requires travel budget;
- Difficulty to share classified procedures, needs, reveal capability gaps. Confidentiality of shared information has to be guaranteed at all time;
- Language. Cross-border links, exercises and other activities presume good communication with participants from other countries, while many practitioners speak only their native language and need to receive instructions in their first language;
- Many trainings offered by TCs are too generic, a long course “about everything on earth” where specificities are lost, and the course is not customized to the needs of practitioners. Practitioners need specific training. TCs often do their best to meet the requirements of practitioners, but it often takes time to adapt or revise the training course;
- Sometimes courses offered by TCs are too theoretical, while more specific practical hands-on training would be good;
- Lack of information about existing training opportunities, focus only on known TCs;
- Lack of experience with EU projects and initiatives – both in terms of contents (cross-border cooperation) and in terms of administrative and legal rules and procedures;
- Absence of innovation management knowledge, experts or a department that would help to monitor possibilities and new technologies;
- Sticking to existing practices and resistance against innovative technologies or processes;
- Ethical issues, such as, e.g. training in the handling of minors or vulnerable groups of population, that are handled in different way in different MSs, have to be agreed upon.

### *Technology suppliers and innovation providers*

- Focusing only on “known” users, with whom the company has been working since long time ago;
- Too strict requirements for Intellectual Property Rights (IPR) protection and legal issues, because one thing is to give a ready and close-to-ready product to users to test, and another thing is to present a raw solution which is not yet protected. This is a major challenge in involving users early in the development. This issue can be solved by signing non-disclosure agreements, and can be solved if the benefits from precise feedback on the technology helps to develop it in the best way for practitioners, and thus will guarantee the market. IPR issues for both users and technology suppliers can be aligned and balanced as well, so that they do not become a bottleneck in the collaboration;
- Costs of participation in exercises, tests and demonstrations, travel and accommodation expenses;
- Users need long training before they can be able to test and use the new technology, otherwise users tend to reject innovations if they do not have enough time to get themselves familiar with its functionality and are not convinced of its advantages. Time to give and support training the practitioners so that they can adequately use and test the technology shall be taken into account. This factor can be a challenge when involving technology suppliers in the exercises. Possible way to overcome it – to dedicate time to training before the exercise, and to encourage technology developers to design their

products in the most user-friendly usable way so that it does not require long training, but this certainly depends on the technology and can be solved case-by case;

- Conflict of interest with competitors;
- Reluctance to involve users at early stage of development;
- Responsibility of equipment broken at exercises – the company should have resources for “spare” equipment. Suppliers take reasonable risk when providing equipment for tests, the benefits overcome expenses;
- Organisational conservatism of TCs and practitioners when asked to test something new;
- Duration the equipment can be used by the training centre.

All technology suppliers put forward the costs of participation in exercises as a major challenge. But, on the other hand, they all admit that if the networking brings significant results for visibility of their company or institution, better marketing and provides more chance for acceptance of their technology, product, service or process if directly tested and approved by practitioners, then the costs are worthy.

#### *Policy-makers – EU, national, local authorities and funding bodies*

- Difficulty to have a real honest picture of all available capacities to be sure that nobody exaggerated their capabilities. This challenge can be overcome by combining the “bottom-up” approach when eNOTICE consortium partners contact their peers in their countries and in neighbour countries, thus creating the map of existing facilities, with the “top-down” approach going through EC-facilitated contacts with the national CBRN focal points who know everything about the training facilities existing in their countries. The combination of efforts would give the best result and the most comprehensive clear picture of available capacities;
- Difficulty to predict the quality level of the organized activities;
- Lack of interest in the results of EU projects, lack of information about current initiatives, projects in their country and in other MS;
- Match between the needs of the actors involved and the possibilities offered by a training centre or by the network of training centres must be guaranteed.

## **4 Conclusions and way forward**

The analysis of the gaps in the field of CBRN training centres networking and the study of needs, concerns and expectations of the stakeholders, challenges and obstacles on the way to build a successful operational network showed that mostly stakeholders see a lot of benefit for them in participation in the network. The processed results indicate that the needs and concerns are in fact common for many stakeholders, the major challenges identified by all stakeholders are actually similar, but they are expressed from different angles, be it from the demand side, the supply side or policy-makers side. The major identified reciprocal transversal challenges are related to:

- **Lack of experience of training centres and practitioners in projects and initiatives at European level:** Key factor for success of users synergies with technology suppliers, entering R&D projects, participating in the innovation management process would be presence

at the users' side of people or an office that has a relevant manager profile and can navigate in the sophisticated EU project legal and administration environment, and can ensure efficient communication with technology suppliers and policy makers. Another possibility is to hire (external) experts who would do the job on linking and communication with R&D, manage R&D projects, contribute to writing deliverables, etc. for end-user organisation. For this, once the need is recognized, user organisations can be supported by local authorities, who would create a position and fund this position in the user organisation. The authorities have to recognize the need, and to know clearly what profile of new staff is needed and for what purposes. Also, end-users networks can define common needs and gaps, to be then transmitted to technology suppliers. Systematic collaboration should find its way into the business culture of both, users and suppliers organisations.

- **Language barrier:** Considering that training is usually provided only in national language, but for cross-border links interaction in a common language (typically English) is necessary for collaboration. Participation of English-speaking trainers or other staff members at the exercises to provide translation, or hiring professional translators (whose services are usually costly), or promoting foreign language courses for practitioners (which is a good long-term investment, however requires a lot of motivation to learn a foreign language in addition to the primary duties of e.g. first responder), or practical participation in training abroad - all these are possible solutions to the problem. Each of the solution has its advantages and drawbacks, and usually depends on the policy within a particular organisation, which is more oriented at the national market, or is looking broader for cross-border collaboration.

- **Very often actors find the national market sufficient, and consider cross-border collaboration out of their scope and out of their business.** In order to attract such actors in the network, it is necessary to provide them information about the benefits of visibility at the EU level, exchanging trainers and practitioners, sharing expertise, comparing practices, and enhancing knowledge and practical skills. This is a serious real challenge for eNOTICE to show the advantages of the network to national players. It has to be overcome by proper dissemination, communication, and creation of convincing mechanisms for collaboration.

- **Difficulty in sharing internal, confidential or classified information, especially for military TCs and governmental organisations.** This challenge is handled by eNOTICE in the following way: the project does not require any exchange of confidential information, as such information is not considered essential for networking purposes. eNOTICE only requests the TCs to provide sufficient information to describe their available capability to become known to the community. All TCs are encouraged to provide only the information that they are willing to share with other stakeholders. When they identify any most interesting contacts for collaboration, then they can work together directly and share any kind of information by concluding, e.g. non-disclosure agreements, or under any other mechanism acceptable for the particular organisations.

- **Lack of human and financial resources for participation in trainings, especially abroad, travelling and accommodation abroad.** This very common challenge can be solved in several ways, such as systematic monitoring of national and European funding possibilities, introduction of a “train of trainers” system with certification of trainers so that they can provide training to their staff members in their countries, or centralized European mechanism for cross-border training and exercises through the network of national CBRN coordinators.

All actors recognize the necessity of collaboration and synergies in the CBRN field, it is necessary to bring together the demand side and supply side of innovations to the place where

they can work together naturally, to achieve uptake of the innovations that exactly meet the users' requirements and are well adapted to real operational conditions.

In the CBRN domain, active involvement of end-users is necessary for successful innovation as a condition for future acceptability. Demand – defined as 'end-users preferences and needs' – is a key driver of innovation, but strengthening the dialog between the demand and supply side to ultimately obtain the best innovation result fully meeting the needs of end-users requires efforts from both sides. This dialog is not working in an optimal way yet. Effective communication is critical to the cost-effective and efficient interactions between various parties seeking a mutually beneficial partnership.

It is necessary to raise the competence of CBRN practitioners as demanding end-users. To encourage them to suggest innovations and explain their preferences, needs, and gaps in their communication with technology suppliers could stimulate innovation and reach the optimal balance between "technology push" and "users' requirements pull" approaches. Also the continuous dialog would improve understanding of limitations of immature technology and provide realistic expectations.

CBRN technology suppliers might increase their competitiveness and innovation delivery efficiency if they better incorporate end-users in their innovation process. At the users' side there is a willingness to participate in innovation, but rather at the level of enthusiastic individuals than at the level of the organization. The involvement of end-users is highly desirable at all stages of innovation management. In the field of CBRN events response end-users are welcome to explore solutions so that performance requirements, functional, design, material specifications correspond to their needs, and this approach meets the expectations both from the supply and the demand side.

Another factor of complexity is the fragmentation of national or regional entities due to a combination of barriers, such as local regulations, residual preference for national industries, all reinforced by the fact that governmental users are playing a key role in security innovation process.

European and national policy makers in charge of boosting CBRN innovation with public funding need to improve the effectiveness of their communication both with the technology suppliers and end-users. The key is to establish strong communication so that security technology suppliers have access to policy views about immediate necessity, short-term and long-term strategies related to innovation opportunities, and the public sector knows capabilities and needs of all the actors in the field. Evidently, the tools, schemes and rules for systematic cooperation with CBRN end-users shall be introduced into the business culture of both supply and demand side of the process.

The conditions should be created for long-term collaboration of technology suppliers with users rather than instant marketing. Such a close collaboration presumes co-production of innovation through dialogue, and mutual education between the supply and the demand side. A step forward in this direction is using training centres as a vehicle for innovation and true dialogue between practitioners and suppliers, with active involvement of policy-makers. Training centres can be and must be used as a vehicle for stakeholders' synergy and innovation. TC have all the necessary facilities, infrastructure, resources, knowledge and access to various categories of practitioners coming in TC every day for regular exercises. Training professionals are the right people to train and educate practitioners for new innovative technologies, to compare different technological solutions, taking into account all the operational, functional, performance and material requirements, as well as ethical and legal issues that shall be considered during the development and use of the innovation. Training centres are such a place where different stakeholders meet and collaborate in the conditions close to real-life, as it is the core business



of training centres to provide such conditions. The main task here is to inform all stakeholders about the opportunity, attract them in the network and make it easy and efficient for them to use this network. The eNOTICE approach to innovation is bottom-up: practitioners' needs-driven and industry-pushed, wrapped in national and EU policy. This network is being developed by training centres for training centres and practitioners, with very "down to earth" consideration of all the expressed needs and concerns. It is important to avoid a too "scientific approach", to keep the balance between too broad generalisation and too detailed specification, but to make the network operational.

The eNOTICE project will build a European network of CBRN training centres, where the training professionals are seen as a natural operational link between CBRN practitioners who undergo training and technology suppliers who provide their products to be tested, validated and compared by practitioners. The dialogue and networking between all the stakeholders will be facilitated by means of practical numerous joint exercises organised by the project partners-training centres at their premises that they will open to invited research projects, policy-makers and all interested stakeholders. That is why the project conducts this study on exploring various groups of stakeholders and their interests in the network.

Any successful collaboration often starts with enthusiastic individuals who are open-minded and prepared to do something new, who are willing to transform challenges into opportunities and can attract other interested players in the initiative. The main need, requirement and prerequisite for successful synergy and collaboration is **information**. It is highly critical to raise awareness for all categories of stakeholders about available possibilities, capacities, capabilities, good practices, results and those that are possible to create. Usually people do not or cannot collaborate not because they do not want it, but because they do not know what opportunities are available. Good examples of synergies shall be made known to all actors as encouraging and inspiring examples to follow. Plans and results have to be clear, transparent, disseminated to all stakeholders. All plans, such as multidisciplinary exercises in training centres, have to take into account needs and interests of all actors – practitioners, technology suppliers, policy makers and play on common interests if they want to bring them together for common goals.

eNOTICE is developing the web-based information and communication platform that will become the eNOTICE Community Centre (ECC) bringing together all interested stakeholders, involving 1) Training Centres to present their training, testing and demonstration sites capacities and share good practice, 2) technology developers to find the relevant end users and appropriate training facility to test and demonstrate their tools, 3) practitioners to provide feedback about the eNOTICE network, participate in project events and find innovative solution providers, 4) policy makers to closely monitor the state of the art in the community, and to track the requirements, needs and points of view of stakeholders. The ECC's primary aim is to provide information and communication tools to the whole community.

The stakeholders are interested to have the full picture of available training capabilities and be able to choose training centres and training courses customizable according to their needs. eNOTICE is undertaking extensive efforts on mapping the training capabilities, as well as the project activities seek harmonization and/or standardization of training, testing and validation procedures, good practices, SOP and guidelines across Europe. It lays the foundations of a harmonised interoperable European capacity for cross border crises response. Mechanisms for certification of TCs, e.g. within the DG ECHO Civil Protection Mechanism, can be considered in the future, to ensure the transparency of the available capacities and modular interoperability for cross-border response.

The current results on the stakeholders' needs and concerns have been collected in the beginning of the project, to know what to pay attention to and on what basis to build the

network. During the lifetime of the project, when the network building results start to get shape, we are planning to repeat approaching various stakeholders with the same questions, present the initial replies to various groups of stakeholders and see how the replies evolve with the evolution of the network. The Delphi technique [9] might be applied to iterative gathering and comparing the results from different groups of respondents. In fact, the process of monitoring the feeling and the opinions of stakeholders will be continuous throughout the project, the evolving opinions will be discussed in the project progress reports (D5.4, D5.5, D5.7, D5.11, D5.12, D5.15, D5.16); and in Recommendations for CBRN R&D and CBRN policies (D4.8 – D4.12).

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