eNOTICE
European Network Of CBRN TraIning CEntres

D2.1 Catalogue of CBRN TC, Testing and Demonstration Sites

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Executive Summary

This document is the first draft of the eNOTICE Catalogue of CBRN training centres, testing and demonstration sites – CBRN TCs. eNOTICE is a European Horizon 2020 EC funded project, under the Grant Agreement n° 740521, which aims at building a European network of CBRN TC.

This Catalogue is the first cornerstone of Task 2.1, which aims to make an inventory of the capabilities and facilities of the CBRN TCs, which will act as the key actors of the eNOTICE CBRN TC network. The outcome of Task 2.1.1 is a Roster and a Catalogue.
The **Roster** includes the list of European CBRN TCs, identified so far (May 2018).
The **Catalogue** gives an overview of the capabilities and facilities of the CBRN TCs which were willing to share this information. By doing so, these TCs expressed their interest in becoming a member of the eNOTICE network of CBRN TCs.

This document describes the objectives of this task, the methodological approach for the identification of CBRN TCs in the EU member states and the collection of information on their capabilities and facilities:

- Task 2.1.1 objectives (Chapter 1.1, 1.2)
- The methodological approach for the Roster and the Catalogue (Chapter 1.3)
- Reflexions on the process, including the opportunity to collaborate with the DG Devco's initiative of Centre of Excellence (Chapter1.2.2, 1.4)
- The results so far, May 2018 (Chapter 2)
- Conclusions and the way forward (Chapter 3)

In the coming months, the CBRN TCs which joined the network will be visible on the eNOTICE web based platform. Through a search function, users will be able to find a TC that matches their needs. The search function will be based on the key characteristics of the Capacity label, which is elaborated in parallel in Task 2.1.2. These key characteristics will be identified, based on the information on capabilities and facilities in the Catalogue.

Both the Roster and the Catalogue of CBRN TCs will be continuously updated in Task 5.2.4 - Evaluation of the quality label, web based search function and recommendations for certification (start M12).

The possibility for other TCs to join the network will remain during the whole duration of the project (2017-2022).

Nomenclature & acronyms

API: Application Programming Interface

CBRN: Chemical, Biological, Radiological, Nuclear

DB: Database

EC: European Commission

FTE: Full Time Equivalent

eNOTICE: European Network of CBRN Training Centres

ID: Identifier

TC: Training Centre

OSM: OpenStreetMap

Figures and Tables

List of Figures

List of Tables

1 Objectives and methodology

1.1 Overall objectives of eNOTICE and scope of WP2

The overall goal of the eNOTICE project is to establish a European network of CBRN training, testing and demonstration centres – CBRN TCs.

This CBRN TCs network aims at enhancing CBRN training capacity for improved preparedness and incident response. This will be achieved by building a bridge between R&D and technology providers and practitioners, who are the end users of innovative solutions for improved preparedness and response.

The CBRN TCs are strategically placed in the core of the network as they are the natural operational link between all CBRN stakeholders. They are important intermediary players between these stakeholders, because of their core business in training practitioners and the availability of infrastructures for training and exercises in real case settings.

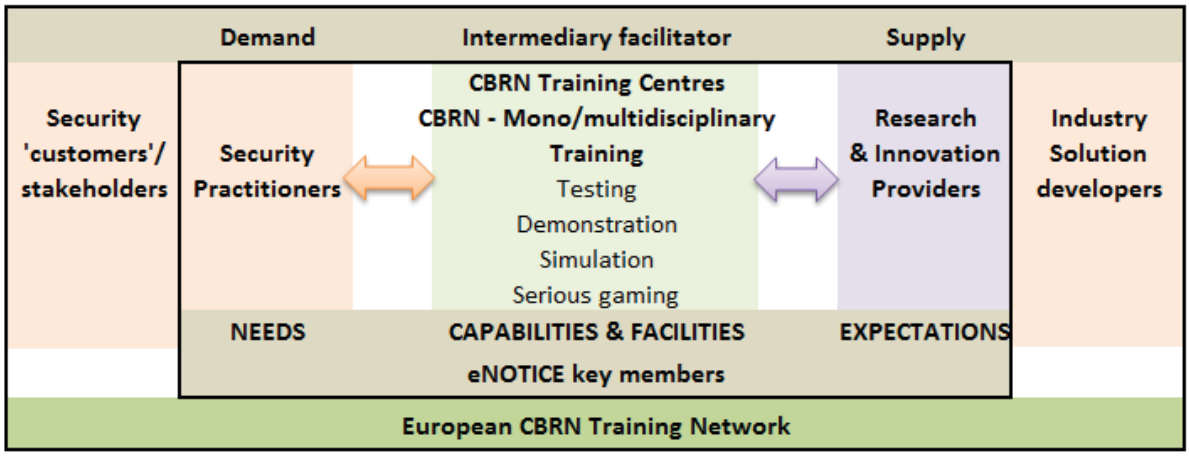

Figure 1. The key actors of the European Network Of CBRN TrainIng, Testing and Demonstration Centres

1.2 Objectives and scope of Task 2.1.1

Task 2.1.1 aims to identify the European CBRN TCs and to map their capabilities, facilities, specificities, and geographical location, as well as their professional, economic and legal links (eNOTICE Subobjective 1.1).

The objectives of Task 2.1.1 are defined in the DoA as followed:

Task 2.1 makes an inventory of the capabilities and facilities of the key actors, the CBRN TC, who will

act as intermediary facilitator in the network.

*'**Capability**' relates to the type of activities: expertise to organise tests, table top and full scale exercises, demonstrations, training, incl. simulations and serious gaming, etc. for chemical, biological, radiological, nuclear incidents and/or large scale incidents requiring multidisciplinary coordination.*

*'**Facilities**' refers to their infrastructure such as specific equipment, the variety of objects required for CBRN training, testing and demonstration.*

As part of the mapping, a survey amongst all stakeholders will identify current activities of CBRN TC that can be opened up to other organisations as joint activities, serving multiple purposes, such as annual training exercises combined with tests, validations or demonstrations of new products, tools or technology. This mapping is a preliminary condition to be able to propose, in a later stage, mechanisms which enable a dynamic interaction and exchange between the stakeholders (scope of Task 4.2). Yearly updates of information are included in Task 5.2.4.

The expected Deliverable for this task is a ***Catalogue of CBRN TC, testing and demonstration sites*** (D 2.1).

1.2.1 Link between Task 2.1.1 and other eNOTICE tasks

The Catalogue of CBRN TCs will serve as input for other Tasks:

- The TCs which expressed their interest in becoming a member of the network will be made visible on the eNOTICE webbased platform (Task 3.2) through an overview of their location, showing the geographical spreading of these Centres, as well as through a descriptive presentation of their organisation and main characteristics ;
- The information on Capabilities and Facilities will be used for the elaboration of a Quality/ Capacity label (Task 2.1.2); which will in turn provide for the basis a search function on the eNOTICE webbased platform (Task 3.2) ;
- All information will be continuously updated as part of Task 5.2.4 - Evaluation of the Capacity label[1], web based search function and recommendations for certification. This includes : the identification of new Centres, receiving new Centres as member of the network, updates of the information on capabilities and facilities, etc.

[1] The label was initially (in the DoA) referred to as Quality label. As part of the elaboration process in Task 2.1.2, the term Capacity label was proposed because of the key criteria of the label, which go beyond quality aspects and focus specifically on capabilities and facilities for testing and demonstration.

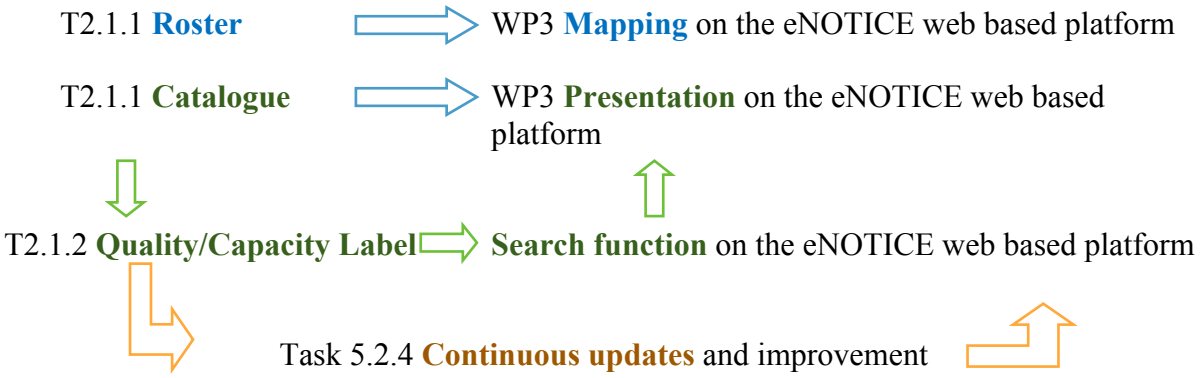

Figure 2 Links between eNOTICE Tasks

1.2.2 Extension of the scope to European Commission third parties outside the EU

eNOTICE activities are in line with the CBRN Action Plan priorities in mapping existing EU training activities and in 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.*"[2]

During the works under Task 2.1.1. and preparation of this deliverable, eNOTICE entered into close collaboration with the European Commission CBRN Centres of Excellence Initiative (DG DEVCO), whose purpose is to map CBRN training capabilities outside the EU, and to identify European training centres that are ready to provide CBRN training or courses to third parties. Such a collaboration is considered of high strategical value, because it aligns the initiatives of the eNOTICE project and the European Commission, thus avoiding duplication of effort. Moreover, a more comprehensive picture of these Centres, a better knowledge of their activities, as well as their needs will be possible, which will result in an operational benefit for all stakeholders.

[2] Action Plan to enhance preparedness against chemical, biological, radiological and nuclear security risks, 18.10.2017. COM(2017) 610 final. Available at https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-security/20171018_action_plan_to_enhance_preparedness_against_chemical_biological_radiological_and_nuclear_security_risks_en.pdf

As a result of this collaboration between the eNOTICE consortium and the European Commission, TCs from non-EU countries will be invited by the European Commission to join the eNOTICE network in case they are part of European Commission initiatives such as the network of CBRN Centres of Excellence or other initiatives of direct relevance to civil protection or humanitarian assistance.

The questionnaire developed by the eNOTICE consortium within Task 2.1.1, that was initially used only for TCs inside the EU, will be also launched by the European Commission to other training organisations of their choice. Thus, the Questionnaire will be used for rostering and mapping training centres both inside as well as outside the EU. The latter mapping activity remains the exclusive responsibility of DG DEVCO.

Moreover, DG HOME has expressed the wish to support the eNOTICE efforts on mapping of CBRN TCs inside the EU through Member States representatives of the CBRN Security Advisory Group, given the relevance of the collected data with regard to the EU CBRN Action Plan. By means of this collaboration, the bottom-up approach to data collection exercised by eNOTICE (when TCs contact their peers) will be complemented and validated by the top-down approach with data provided by the Member States.

1.3 Methodological approach

The Roster and Catalogue of CBRN TCs have been established, based on the following methodological approach.

1.3.1 Roster of CBRN TCs

As a first step, TCs falling within the scope of the project were identified, relying on the network of the consortium partners and national contact points and completed with publicly available information and open source data, such as the TCs public websites. An instrumental definition of a CBRN Training Centre was elaborated to ensure a common understanding of the target group and to dispose of a criterion to determine whether or not an organisation falls within the scope of the project.

Moreover, the definition served to show the TCs at the first contact why they are identified as CBRN TC and therefore invited to join the network.

This instrumental definition consists of a general description and is additionally clarified referring to the focus, ambition and rationale of the eNOTICE network.

CBRN Training Centres
A CBRN Training Centre is a civil or military organisation that provides education and training in the field of public safety and security. The Training Centre can be monodisciplinary, such as firefighting, medical, police or military academy and/or multidisciplinary, including incident/emergency/disaster management. Education and training covers the thematic areas Chemical, Biological, Radiological and Nuclear.

eNOTICE focus
The eNOTICE project focuses on those Training Centres with a CBRN thematic capacity and corresponding infrastructure to organise exercises for first responders or civil protection practitioners such as demonstrations, tests, table tops, field exercises, simulations and serious gaming.

eNOTICE ambition
One of the ambitions of the eNOTICE project is to promote these Training Centres as a facilitator for Innovation, Research and Development through their exercises which can be joined for the purpose of observation to obtain a better understanding of end user needs and requirements, for technical testing, technical and scientific validation and demonstration to a broad audience.

eNOTICE rationale
The combination of the Training Centres' network of practitioners, their available infrastructure and their annual program of practical training and exercises provides for unique opportunities for R&D solution providers to observe and participate in real case scenarios, to engage structural collaboration with practitioners and end users and to strengthen mutual understanding.

eNOTICE instrumental definition of a CBRN Training Centre

For the identification of TCs, the decision was made to focus on European Union member states and Turkey. Associated countries, EFTA members and countries outside the EU were not included in this first phase of the project. Although there has been no active search into other countries, they will however not be excluded from the Roster, nor the future network.

The list of organisations, identified as possible CBRN Centres, matching the eNOTICE definitions is referred to as the 'Roster'.

1.3.2 Catalogue of TCs' capabilities and facilities

As a next step, the relevant information to be included in the Catalogue was determined, based on two sources: 1) a (partial) questionnaire of a French study of the Ministry of Interior with similar objectives (non-disclosed document); and 2) the requirements imposed by the project's ambitions, i.e. the collected information will be used to:

- gather a better understanding of the profile of these centres which will be key members in the future network;
- create visibility for these centres to all public safety and security stakeholders and to promote their activities, including their possible participation as partner in H2020 and

other national, European and international R&D projects, led by universities, industry or competent authorities ;

- elaborate a Capacity label, describing the training capacity and infrastructure and a search function to facilitate the search for a TC that matches the needs and requirements of the user.

Different feedback loops ensured that all partners could provide their input on the content and the approach to establish the Catalogue. All relevant aspects were collected in an Information Sheet.

A balance had to be found concerning the amount of information to be recorded. Asking a broad range of questions would give the most adequate image of a TCs' capabilities, which would give the further development of the Capacity label a solid foundation to build upon. On the other hand, it was considered that TCs might be reluctant to fill in a very broad set of questions, especially when some information might be sensitive to share. Therefore, the option to mark a box 'confidentiality' is provided for the questions about capabilities and training facilities.

It was decided that no question is obligatory to answer, so that TCs would not withdraw from the survey when they decided not to share certain information. A clear statement ensured that this would not have any repercussions on joining the network: *"Leaving a question blank or a negative answer will not prevent you from joining the eNOTICE-TC network and from being part of it."*

The main categories of the Information Sheet cover:

- General information : name, contact person, address, etc. ;
- General information on the centre : short presentation ;
- Characteristics of the centre : legal status, competent authority, etc. ;
- Capacity : number of FTE in different departments ;
- Partnerships : contractual or informal partnerships for training, research, etc. ;
- Research projects : track record in (inter)national or EU research projects ;
- Training and Exercise Capability : type of training, type of exercises ;
- General facilities : offices, classrooms, etc. ;
- Training facilities : type of areas (fire, rescue, HAZMAT), facilities for exercises (urban, transportation, chemical, etc.) ;
- Accommodation : on-site and off-site lodging capacity etc. ;
- Activities eligible to open up for external partners ;

- Legal and other restrictions : for training, storage, transportation, etc. ;
- Interests in joining the network.

A word version of the Information Sheet is included in Annex 1.

The final version served as the basis for an online questionnaire. An online survey was considered the most user-friendly way to collect the information and it also facilitates the storage and re-use of the collected data for other purposes, such as publication on the website, the Quality/Capacity label and dissemination.

1.3.3 Online questionnaire – Survey Tool Selection

As the project uses surveys not only in Task 2.1.1 but also in many other tasks (for example Task 5.2.1), a special emphasis has been put by UPB on identifying a suitable survey tool that can be used until the eNOTICE platform provides this functionality. To this end, criteria for a survey tool have been defined based on the project's requirements and well-known survey tools have been evaluated and compared using the defined requirements.

1.3.3.1 Criteria

The following criteria for the survey tool were defined based on the requirements in eNOTICE:

- **Easy usability for creating a survey**: The editor for the survey should be easily usable, requiring only few work from the survey creator.
- **Easy usability when filling out a survey**: To maximize the number of responses, the filling out of the survey should be as easy as possible for the end-user.
- **Hosted**: The platform should be provided and hosted by a third party, thus reducing the maintenance and operational cost for the eNOTICE consortium.
- **Free**: Even when the platform is hosted and maintained by a third party, it should ideally be free to use for eNOTICE.
- **Support data export in a suitable format**: As the results of the survey must be used for the eNOTICE platform, they must be exportable in a computer-readable and open format (e.g. xlsx).
- **Privacy**: As some answers to the survey might be sensitive, the survey tool must adhere to the relevant EU privacy regulations.

1.3.3.2 Comparison

Several well-known and widely used survey tools were researched and compared based on the previously defined criteria:

- **LimeSurvey**: LimeSurvey is an open-source survey solution that can be self-hosted. UPB's IT department provides a hosted LimeSurvey, although access is only available to UPB employees, making use of the hosted version was infeasible. While LimeSurvey supports data exports in suitable data formats and adheres to privacy regulations when using the self-hosted version, the interface is not intuitive to use.
- **Google Forms**: Google Forms is the only platform available as a free, hosted version, is easy to use and supports data format in several open data formats. However, some survey participants might be reluctant to input data into Google Forms due to complex privacy issues.
- **EUSurvey**: EUSurvey is an open-source survey solution provided by the European Commission. The EC also provides a free hosted version that features a drag-and-drop survey editor for easy usability and the ability to export survey data in several open data formats. Being hosted by the EC, EUSurvey can be expected to adhere to all relevant privacy regulations.
- **Typeform**: Typeform is a commercial software that is only available as a hosted version. As it is offered by a Spanish company, adherence to EU privacy regulations can be expected. Typeform is easy to use and provides an API for accessing the survey data. However, the free version is limited to 100 responses per month and 10 questions per survey, making it unsuitable for use in eNOTICE.

1.3.3.3 Results

Although many tools fulfil many of the criteria, only EUSurvey fulfils all criteria as it is easy to use, free, has no maintenance cost, supports a wide range of data formats and adheres to the EU privacy regulations. Therefore, EUSurvey will be used as the survey tool in eNOTICE.

1.3.3.4 Survey process description

For each identified TC, a unique password was provided by which the TCs could gain access to the questionnaire.

The survey can be consulted at the following web page:
https://ec.europa.eu/eusurvey/runner/af769422-adef-efc6-2919-c8f30da9aea3
using the demonstration password: f4b804fd-c069-4d29-9090-5ce9550fa702.

1.3.3.5 Mapping between TC list and questionnaire answers

A mapping between the TCs listed in the Roster (Excel sheet) and the answers to the questionnaire is required to match the questionnaire answers to the TCs. This mapping creates a unified data basis and allows eNOTICE to e.g. track which TC has already answered the survey. Although doing this by hand is also possible, it is impractical for the more than 200 training centres.

Figure 3 shows a graphical representation of how this process works. First, the eNOTICE participants add basic TC data to the TC list in Roster Excel. The survey editor is used to generate a random token (or password) for every TC in the Roster. Each token can only be used once and is used to uniquely identify the TC responding to the survey.

When an eNOTICE participant contacts a TC, the TC also receives "their" unique token, which is required to access and answer the survey. The survey tool stores a "contribution ID", which is equal to the token, alongside with each answer. This ID can then be matched with the Excel TC list and is also exported, along with other survey answers, to the post-processing where the data are prepared for usage in the eNOTICE platform (eNOTICE Community Center).

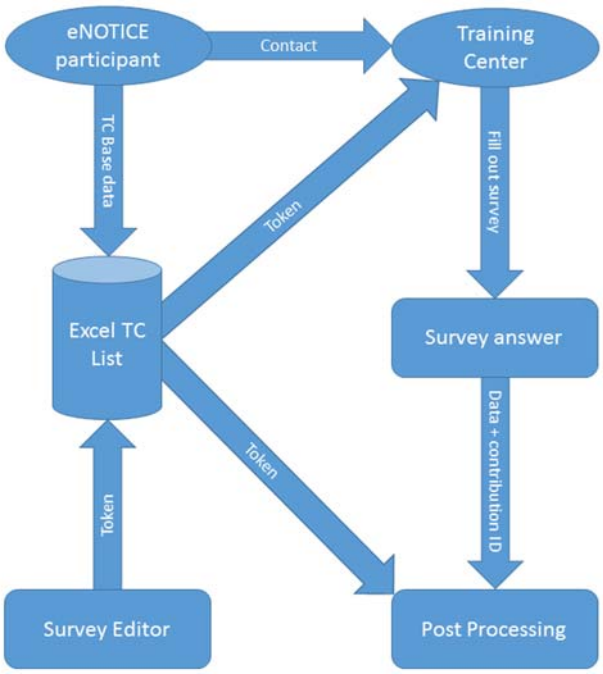

Figure 3 A graphical representation of the mapping process

1.3.3.6 Data post-processing

The raw survey answers need to be processed further before they can be used in the eNOTICE Community Center. They need to be converted into a suitable data format and geographic locations of the TC must be added to each answer. This process is shown in Figure 4.

In order to not make filling out the survey too difficult, the respondents were only asked to input the address of their TC, but not the exact geographical coordinates (latitude, longitude). However, exact geographical coordinates are required when displaying the TCs on a map. Therefore, a process called "geocoding" must be used to convert the unstructured address data into geographical coordinates. To achieve this, an "OpenStreetMap Nominatim" server was set up. OpenStreetMap is a crowd-sourcing, open map database and Nominatim is a server using OSM data for geocoding. To enhance the precision of the geocoding results, Nominatim was instructed to only search within Europe for the input addresses.

The survey answers, enriched with geo-coordinates, are then stored in a central eNOTICE Core DB which will be used by the eNOTICE Community Centre for the roster web presentation.

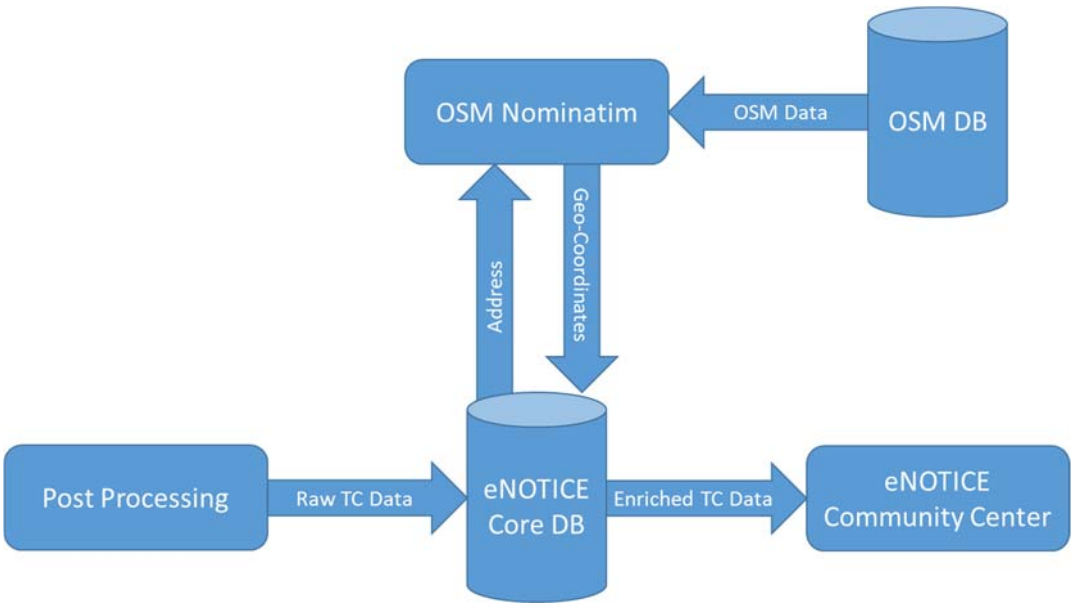

Figure 4 The post-processing dataflow

1.4 Invitation to join the CBRN TC Network & Follow up

The initial invitation to become a member of the eNOTICE CBRN TC and the request to fill in the questionnaire were sent by email to all the TCs identified in the Roster. Two documents were prepared to inform the TCs on the background of this request: 1) a document with a summary of the eNOTICE objectives, the list of eNOTICE partners and the provisional calendar of activities; 2) an argumentation letter, explaining the reason why they are contacted and invited to fill in the questionnaire on capabilities and facilities and to become a member of the CBRN TCs' network. The argumentation letter is included in Annex 2.

The initial invitations and requests by mail were send in November-December 2017 to +/- 200 organisation, identified as possible CBRN TCs.

In January 2018 it became clear that the response rate was very low. In answer to more than 200 requests, only 3 organisations filled in the survey. Several initiatives were taken to increase the response:

- For the Military Centres, a new argumentation letter was elaborated, taken their specific concerns into account. This letter was signed by the project coordinator, Jean-Luc Gala; see Annex 3;

- All partners started contacting the centres individually, giving extra clarifications by phone whenever relevant, and visiting the centre if they required to have a meeting with the management team, Board of Directors, or other responsible echelons.

The interim result at the time of writing this Deliverable, mid May 2018, is a positive response of 33 TCs (who filled in the online questionnaire). These results are shown in more detail in the following paragraphs.

2 Results

2.1 Results of the Roster

The so-called Roster is an Excel sheet with the contact details of all the organisations identified as possible CBRN TC.

It is a living document, continuously updated with new centres, elimination of doubles and centres wrongly identified as CBRN TC (red), and indication of the answers: green for centres which filled in the survey, orange for refusals, yellow for pending responses (see screen shot). As this is not a complete and accurate list, it is not very useful to integrate these results in this report. Moreover, detailed information about these centres cannot be given in a public document, since all the contacts who refused to become a member, all the pending contacts and the contacts who have not responded yet, did not give their consent for publishing their contact details. Especially because some of them cannot be found in open source data and have been identified because they are part of the personal network of eNOTICE partners.

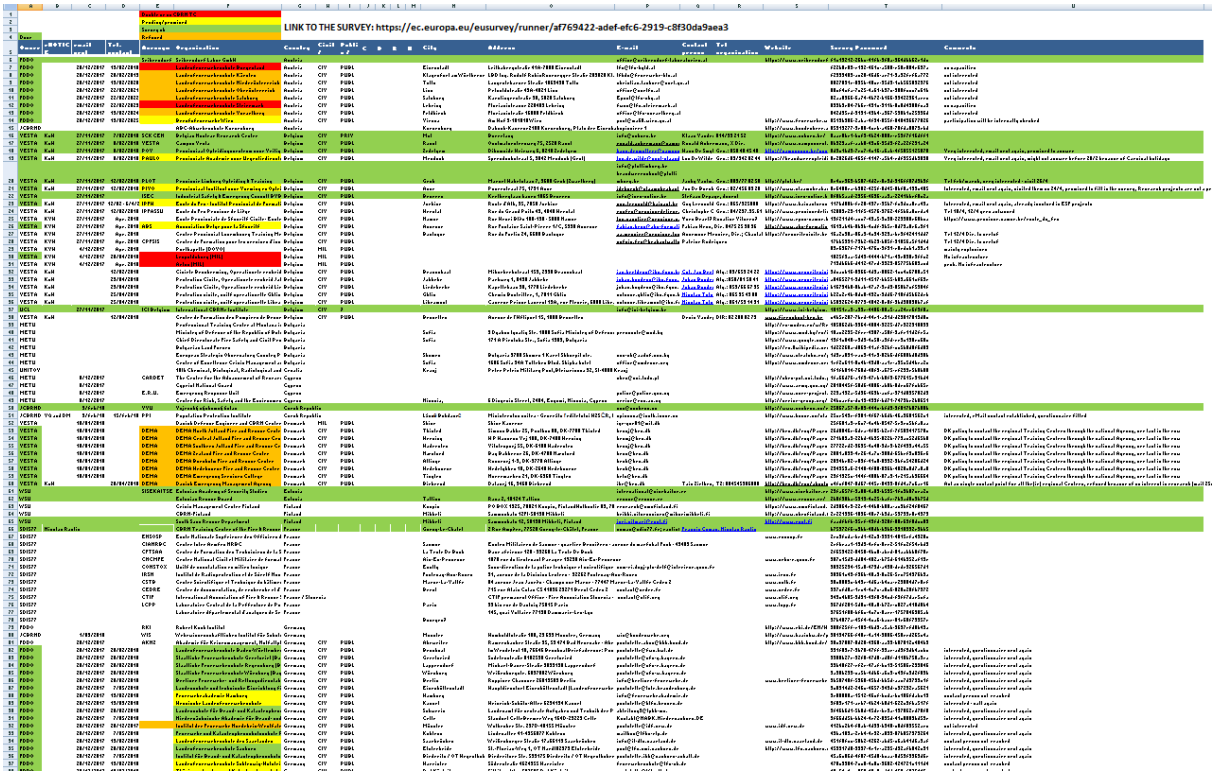

Figure 5 Excel Sheet with the contact detail and contact status of all TC, identified as possible CBRN TC

To present the results globally, an overview of the progress is given in a table in Annex 4. A distinction is made between TCs with fixed installations for training, demonstration, testing, etc., including simulations and serious gaming – indicated as 'fixed' and organisations with a mobile capacity – indicated as 'mob'.

'Pending' means that there has been a personal contact and that the invitation to join the network is internally considered.

Summarising the mapping results in the Roster:

- 215 TCs in total have been identified, the table in Annex 4 gives a detailed overview per country ;
- 191 were identified as Centres with a fixed installation, 24 were identified as mobile;
- The ratio civil versus military centres can not be concluded because for more than 50% of the Centres that information in not publicly available ; the same observation applies to the private or public charachter of the TC (it can only be assumed in some cases).

Summarising the response rate:

- 33 Centres (15 %) filled in the survey, they all expressed their interest in becoming member of the TC network ; 19 TC have a fixed installation, 3 a mobile capacity;
- 53 (24 %) requests are pending ; these Centres promised to fill in the survey after a personal contact with one of the consortium partners;
- 23 Centres (11 %) refused because of no interest in the network, 14 Centres (6 %) refused because they lack the capacity that is required according to the eNOTICE definition of CBRN Training Centres;
- For 82 Centres no direct, personal contact has been established so far and there was no spontanuous response to the questionnaire sent by mail.

18 organisations were initially listed in the Roster and have been identified as doubles or organisations or units which no longer exists.

2.2 Results of the Catalogue

The Catalogue of CBRN TCs capabilities and facilities includes all the information provided by the Centres by filling in the online questionnaire or word document. By doing so these Centres expressed their wish to become a member of the eNOTICE network of CBRN TC Centres. May 2018, 33 TCs filled in the online questionnaire.

2.2.1 Overview of the eNOTICE network members

The following list gives an overview of the 33 eNOTICE CBRN TCs' network members with some indications on the type of organization

Country	Organisation Name	Public website	City	Legal status
Austria	**Seibersdorf Labor GmbH**	www.seibersdorf-laboratories.at	Seibersdorf	Private
Belgium	**Provinciaal Opleidingscentrum voor Veiligheidsdiensten**	www.campuspov.be	Zedelgem	Public
Belgium	**PLOT - Provincie Limburg Opleiding en Training**	www.plot.be	Genk	Public
Belgium	**Provinciaal instituut vorming en opleiding Vlaams-Brabant (PIVO)**	www.pivo.be	Asse	Public
Belgium	**Belgian Nuclear Research Centre SCK•CEN**	www.sckcen.be	Mol	Public
Belgium	**Campus Vesta APB**	www.campusvesta.be	Emblem	Mixed
Belgium	**ISEC - Industrial Safety & Emergency Consult**	www.isec-online.be	Melsele-Beveren	Private
Belgium	**International CBRNE Institute**	www.ici-belgium.be	Les Bons Villers	
Belgium	**Centre de Technologies Moléculaires Appliquées - CTMA**	https://uclouvain.be/fr/instituts-recherche/irec/ctma	Bruxelles	Public
Czech Republic	**Vojenský výzkumný ústav s.p.**	www.vvubrno.cz	Brno	Public
Estonia	**Sisekaitseakadeemia; Estonian Academy of Security Sciences**	www.sisekaitse.ee	Tallinn	Public
Estonia	**Estonian Rescue Board**	www.paasteamet.ee	Tallinn	Public
Finland	**South-Savo Fireservices**	www.espl.fi	50130 Mikkeli	Public
France	**Cedre**	www.cedre.fr	Brest Cedex 2	Mixed
France	**Seine-et-Marne District Fire and Rescue Department**	www.sdis77.fr	GURCY-LE-CHATEL	Public

Germany	**Ausbildungszentrum der Feuerwehr Dortmund**	www.feuerwehr.dortmund.de	Dortmund	Public
Germany	**Training Base Weeze GmbH & Co. KG**	www.trainingbaseweeze.com	Weeze	Private
Germany	**NATO School OBERAMMERGAU**	www.natoschool.int	Oberammergau	Mixed
Hungary	**National University of Public Service, Faculty of Military Sciences and Officer Training**	https://hhk.uni-nke.hu/oktatasi-egysegek	Budapest	Public
Hungary	**HDF CBRN Area Control Centre**	-	Budapest	Public
Hungary	**Hungarian Defence Forces Medical Centre Mobile Biological Laboratory**	www.honvedkorhaz.hu	Budapest	Public
Hungary	**HDF 93rd CBRND BN**	-	Székesfehérvár	Public
Italy	**CISAM**	www.marina.difesa.it/conosciamoci	Pisa	Public
Italy	**JOINT NBC ITA DEFENCE SCHOOL**	www.difesa.it/SMD_/EntiMI/ScuolaNBC	Rieti	Public
Poland	**Centrum Naukowo-Badawcze Ochrony Przeciwpożarowej - Państwowy Instytut Badawczy**	www.cnbop.pl/	Józefów	Public
Poland	**CBRN Defence Training Centre of War Studies University**	www.akademia.mil.pl	Warszawa	Public
Poland	**Epidemiological Response Centre of The Polish Armed Forces**	www.cresz.wp.mil.pl	Warsaw	Public
Romania	**CBRN Defence Training Base "MUSCEL"**	www.scoalanbc.ro	Câmpulung Muscel	Public
Serbia	**Vinca Institute of Nuclear Sciences**	www.vinca.rs	Belgrade	Public

Slovenia	**Ministry of defense, Slovenian armed forces**	www.mo.gov.si/	Ljubljana	Public
SPAIN	**INTA**	www.inta.es	Madrid	Public
UK	**National CBRN Centre**	none	Coventry	Public
Ukraine	**State Scientific and Research Institution 'Chornobyl Center for Nuclear Safety, Radioactive Waste and Radioecology'**	www.chornobyl.net	Slavutych	Public

Table 1 Overview of all members of the eNOTICE network of CBRN Training Centres (May 2018)

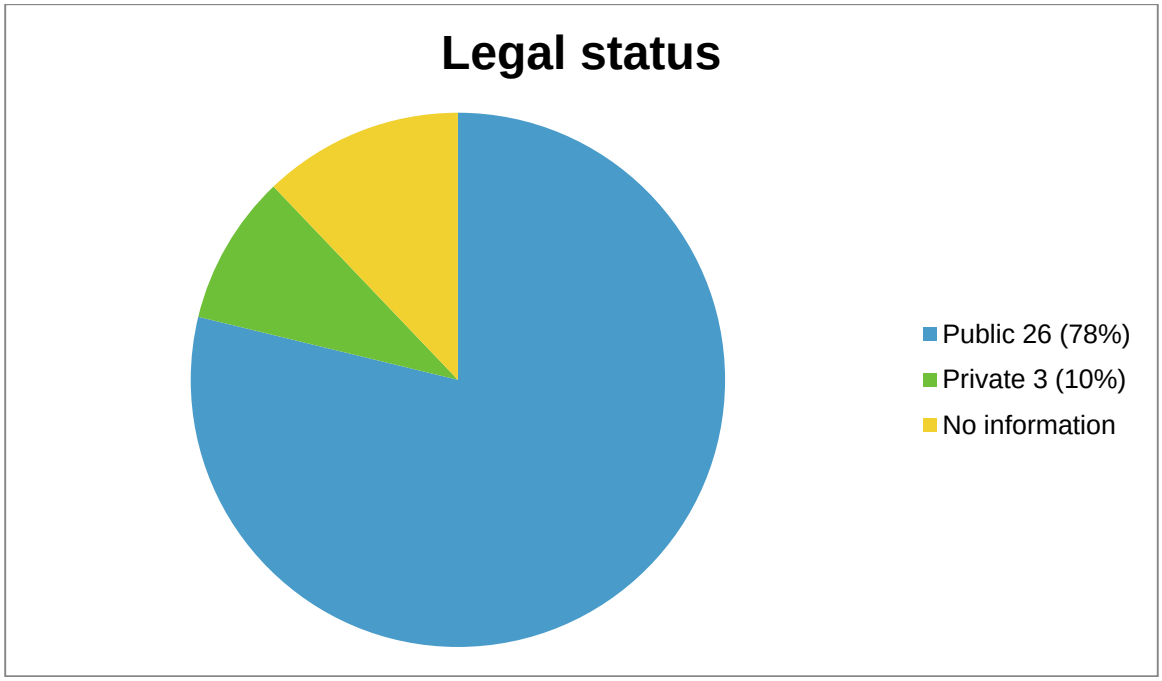

Figure 6 Statistical overview of the legal status of the network members

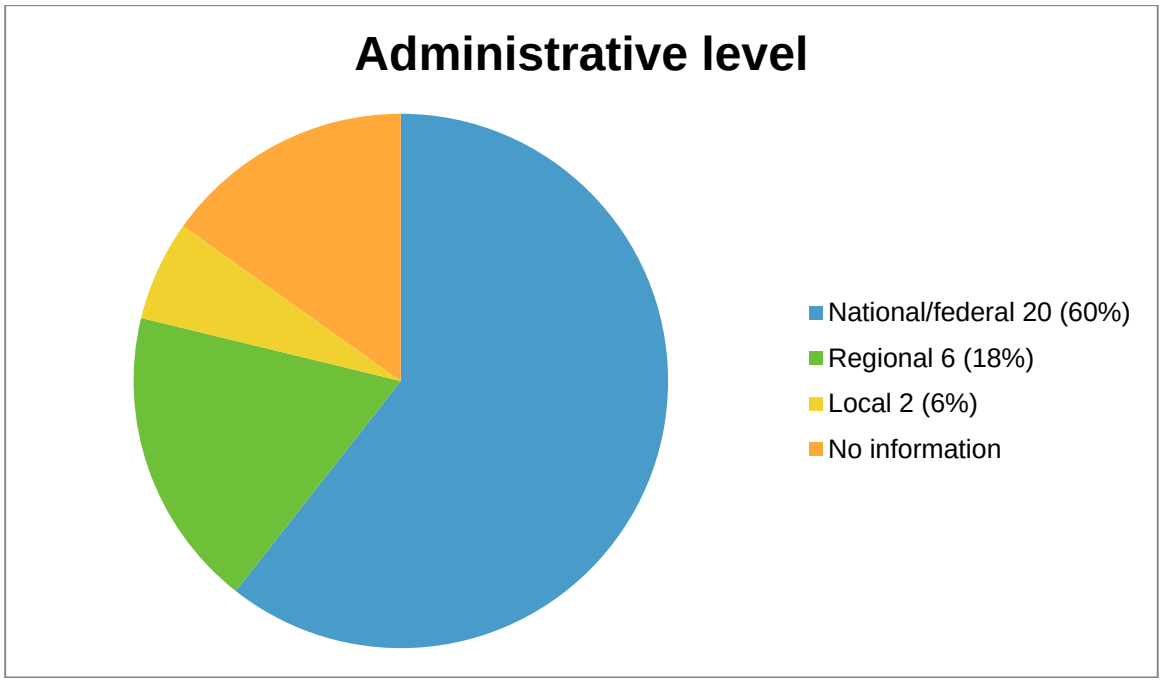

Figure 7 Statistical overview of the administrative level of the competent authority

2.2.2 *Mapping of the CBRN TCs*

A geographical overview of all the CBRN TCs which joined the network, gives the following picture (map by Google maps):

2.2.3 Summary overview of thematic expertise

The following table gives an overview of the thematic expertise per TC.

Country	Organisation Name	Thematic areas covered
Austria	**Seibersdorf Labor GmbH**	Fire;Urban search and rescue;Radiological (R);Police;Nuclear (N);Medical
Belgium	**Provinciaal Opleidingscentrum voor Veiligheidsdiensten**	Chemical (C);Rescue and relief;Fire;Police;Medical
Belgium	**PLOT - Provincie Limburg Opleiding en Training**	
Belgium	**Provinciaal instituut vorming en opleiding Vlaams-Brabant (PIVO)**	Chemical (C);Explosives (E);Rescue and relief;Fire;Urban search and rescue;Police;Medical;Other
Belgium	**Belgian Nuclear Research Centre SCK•CEN**	Radiological (R);Nuclear (N)
Belgium	**Campus Vesta APB**	Chemical (C);Explosives (E);Rescue and relief;Biological (B);Fire;Urban search and rescue;Radiological (R);Police;International humanitarian actions;Medical;Other
Belgium	**ISEC - Industrial Safety & Emergency Consult**	Chemical (C);Fire
Belgium	**International CBRNE Institute**	Chemical (C);Explosives (E);Rescue and relief;Biological (B);Fire;Urban search and rescue;Radiological (R);Police;International humanitarian actions;Nuclear (N);Medical;Other
Belgium	**Centre de Technologies Moléculaires Appliquées - CTMA**	Biological (B)
Czech Republic	**Vojenský výzkumný ústav s.p.**	Chemical (C);Rescue and relief;Fire;Radiological (R);Police
Estonia	**Sisekaitseakadeemia; Estonian Academy of Security Sciences**	Chemical (C);Explosives (E);Rescue and relief;Fire;Urban search and rescue;Police;Medical
Estonia	**Estonian Rescue Board**	Chemical (C);Explosives (E);Biological (B);Radiological (R)

Finland	**South-Savo Fireservices**	Chemical (C);Explosives (E);Rescue and relief;Biological (B);Fire;Urban search and rescue;Radiological (R);Nuclear (N);Medical
France	**Cedre**	Chemical (C)
France	**Seine-et-Marne District Fire and Rescue Department**	Chemical (C);Rescue and relief;Biological (B);Fire;Urban search and rescue;Radiological (R);Nuclear (N);Medical
Germany	**Ausbildungszentrum der Feuerwehr Dortmund**	Chemical (C);Explosives (E);Rescue and relief;Fire;Radiological (R);Nuclear (N);Medical
Germany	**Training Base Weeze GmbH & Co. KG**	Chemical (C);Explosives (E);Rescue and relief;Biological (B);Fire;Urban search and rescue;Radiological (R);Police;International humanitarian actions;Nuclear (N);Medical;Other
Germany	**NATO School OBERAMMERGAU**	Chemical (C);Biological (B);Radiological (R);Nuclear (N)
Hungary	**National University of Public Service, Faculty of Military Sciences and Officer Training**	Chemical (C);Biological (B);Radiological (R);Nuclear (N)
Hungary	**HDF CBRN Area Control Centre**	Chemical (C);Biological (B);Radiological (R);Nuclear (N)
Hungary	**Hungarian Defence Forces Medical Centre Mobile Biological Laboratory**	Biological (B)
Hungary	**HDF 93rd CBRND BN**	Chemical (C);Radiological (R)
Italy	**CISAM**	Radiological (R);Nuclear (N)
Italy	**JOINT NBC ITA DEFENCE SCHOOL**	Chemical (C);Biological (B);Radiological (R);Nuclear (N)
Poland	**Centrum Naukowo-Badawcze Ochrony Przeciwpożarowej - Państwowy Instytut Badawczy**	Chemical (C);Explosives (E);Rescue and relief;Fire
Poland	**CBRN Defence Training Centre of War Studies University**	Chemical (C);Biological (B);Radiological (R);Nuclear (N)
Poland	**Epidemiological Response Centre of The Polish Armed Forces**	Biological (B)

Romania	**CBRN Defence Training Base "MUSCEL"**	Chemical (C);Biological (B);Radiological (R);Nuclear (N)
Serbia	**Vinca Institute of Nuclear Sciences**	Chemical (C);Biological (B);Radiological (R);Nuclear (N)
Slovenia	**Ministry of defense, Slovenian armed forces**	Chemical (C);Biological (B);Radiological (R);Nuclear (N)
SPAIN	**INTA**	Chemical (C);Explosives (E);Biological (B);Radiological (R);Nuclear (N)
UK	**National CBRN Centre**	Chemical (C);Biological (B);Radiological (R);Nuclear (N)
Ukraine	**State Scientific and Research Institution 'Chornobyl Center for Nuclear Safety, Radioactive Waste and Radioecology'**	Radiological (R);Nuclear (N)

Table 2 Overview of the thematic expertise of each TC

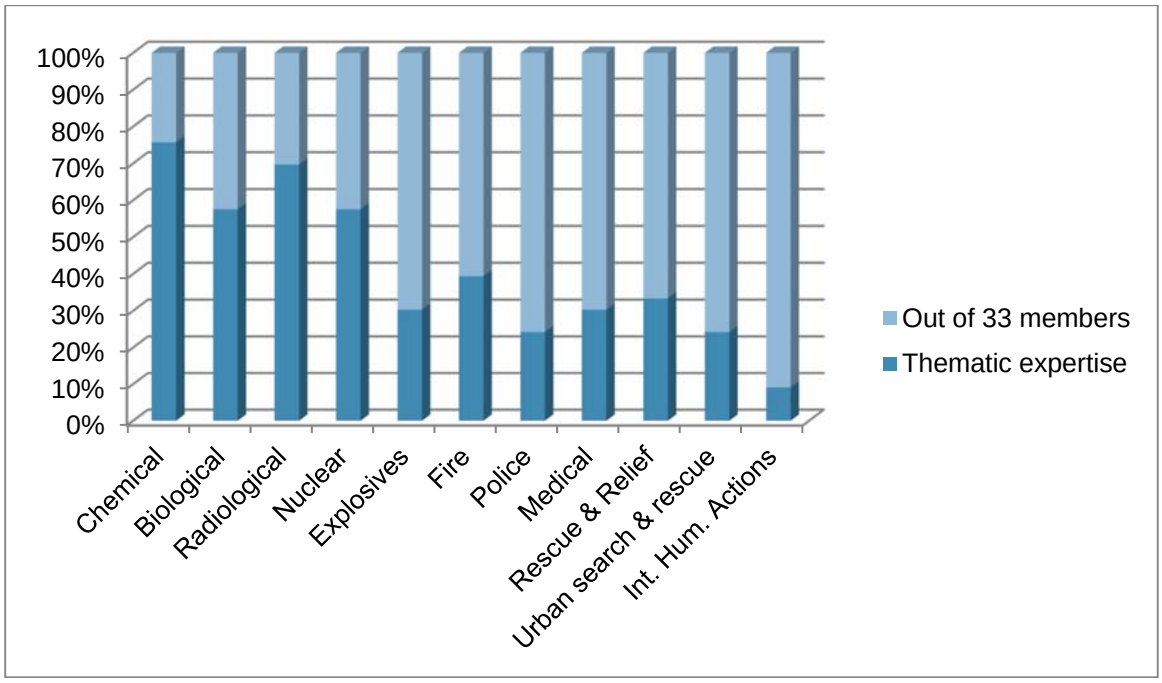

Figure 8 Statistical overview of the thematic expertise of the network members

2.2.4 Quantitative[3] overview of Capabilities

Training and Exercise Capabilities

Training	Yes	No	Confidential	No answer
Fire: General	14	8	2	9
Fire: HAZMAT	13	8	2	10
Police	13	10	2	8
Military	13	7	2	13
Person Rescue Training	14	6	2	11
Training for search and rescue dogs	6	10	2	15
Other	9	4		

Table 3 Training and Exercise Capabilities

As 'other', the following capabilities were mentioned: Fieldable laboratory, Rope access and rescue, medical training, Oil and HNS accidental water pollution, Command staff exercises and integrated response training, Theoretical courses on scientific subjects related to the RN risk, Training dedicated to OPCW inspectors or NATO entities, warning and reporting for

[3] The sum of all answers might be different per row, as sometimes the 'confidential' box was marked without answer (as in 'we don't provide this information because its confidential nature'), and sometimes the confidential' was marked next to an answer (as in 'we provide you the answer but don't want this information to be published for our organization')

civilian personnel, Monitoring of the situation after the radiation accident. Analysis of radionuclides.

Language: 12 Centres indicated that they provide training in other languages than the official languages of the country of establishment, such as French, Spanish, Greek, Italian, Polish, English, Ukrainian and Russian. 12 Centres mentioned English as alternative language for training courses.

In the Survey, they listed what type of training course is organised in another language.

Field exercises	C	B	R	N	E	Confidential	Blank
Monodisciplinary	18	7	13	18	4	2	14
Multidisciplinary	18	8	14	12	3	3	14
Live agents	10	1	12	6	5	3	7
Simulant agents	22	6	12	13	5	2	5
Detection	24	8	16	13	7	2	7
Individual and collective protection	25	13	17	16	7	2	5
Decontamination	24	12	17	17	4	2	16
Medical treatment	13	6	10	9	5	2	15
Command and control	22	11	15	18	6	2	8
Other	1	0	0	0		2	

Table 4 Field Exercise Capabilities

Other: Response techniques on the water surface, road and shoreline

Table Top	C	B	R	N	E	Confidential	Blank
Command and Control	17	10	12	10	6	4	8
Operational	19	13	13	10	5	4	8
Strategic	14	9	9	6	5	2	15
Other	0	0	0	0	0	2	31

Table 5 Table Top Capabilities

Serious Gaming	C	B	R	N	E	Confidential	Blank
Protective equipment testing	6	4	6	4	2	2	23
Detector testing and air monitoring method development	6	2	3	3	2	2	24
Decontamination, mitigation and survivability	4	3	3	2	1	2	25
Residual hazard analysis modelling	2	1	1	1	1	1	30
Agent characterisation	3	2	0	0	0	1	27
Explosives, ammunition and armament	1	1	1	1	4	1	27
Test method and test infrastructure development	2	1	1	1	1	1	28
Other	1		1	1	1	1	32

Table 6 Serious Gaming Capabilities

The one other capability mentioned is under development for serious gaming, within the scope of a research project

Other	C	B	R	N	E	Confidential	Blank
Use of unmanned aerial vehicles – UAV's for CBRN detection	6	2	5	3	1	3	23
Other					1		

Table 7 Other Training Capabilities

Other: use of UAV's for explosives and mines detection

2.2.5 Quantitative overview of Facilities

Training Facilities – Fire	Yes	No	Confidential	No answer
Fire plate	11	7	1	15
Containers	12	8	1	13
Other	6	6	1	20

Table 8 Training Facilities - Fire

Other: tunnel, chemical plant, train, technical platform (2,5 ha), houses, buildings, diving pond, etc.

Training Facilities – Rescue Area	Yes	No	Confidential	No answer
Confined space	9	10	1	14
Cave complex	4	12	1	17
Other	2	5	1	25

Table 9 Training Facilities – Rescue Area

Other: open park-like area for searching radioactive sealed sources, masts for heights rescue, EMS training facility, container building

Training Facilities – HAZMAT	Yes	No	Confidential	No answer
Mobile laboratory	8	8	3	15
Respiratory protection	16	3	2	13
Chemical protection suits	15	3	3	13
Mobile mass Decontamination unit	6	9	3	16
Decontamination vehicle	9	9	3	13
Decision Support Software	8	7	3	16
Tactical equipment	12	5	3	16
Other	2			

Table 10 Training Facilities- HAZMAT

Other: large hangar for live training with open radioactive substances, decontamination capabilities for biological materials

Training Facilities – Field exercises - Urban facilities	Yes	No	Confidential	No answer
Houses	13	6	1	14
Tower bloc	9	8	1	16
Sports stadium	2	13	1	18
Cinema	2	14	1	17
Warehouse	8	10	1	15
Office building	12	7	1	14
Hospital wing	5	11	1	17
School	5	11	1	17
Courthouse	1	13	1	19
Hotel	4	11	1	18
Electricity network	5	11	1	17
Solar panels	3	13	1	17
Gas station	7	11	1	15
Other	**3**	**3**	**1**	

Table 11 Training Facilities – Field Exercises – Urban Facilities

Other: confined hangar for live training with open radioactive substances; Fieldable laboratory (3 tents - 29-42-42 m²); outdoor swimming pool

Training Facilities – Field exercises - Transportation	Yes	No	Confidential	No answer
Country road	12	9	1	12
Highway	3	13	1	17
Crossroad	7	12	1	14
Underground parking	3	13	1	17
Tunnel	3	14	1	16
Railway station	4	13	1	16
Train	7	11	1	16
Subway	3	14	1	16
Plane	5	14	1	14
Other	2			

Table 12 Training Facilities – Field Exercises – Transportation

Training Facilities – Field exercises - Chemical	Yes	No	Confidential	No answer
Chemical plant	7	9		17
Clandestine laboratory	7	11		15
Intermodal container for dangerous goods	7	10		16
Tank farm	6	10		17
Chemical simulators	11	8		14
Other	1	4		28

Table 13 Training Facilities – Field Exercises – Chemical

Other: real oil can be spilled on our facilities designated to run exercises in real situation

Training Facilities – Field exercises - Biological	Yes	No	Confidential	No answer
Biological simulators	4	13	2	15
Biological laboratory	6	12	2	14
Other	0	6	1	16

Table 14 Training Facilities – Field Exercises – Biological

Training Facilities – Field exercises - Nuclear	Yes	No	Confidential	No answer
Nuclear plant	3	14	1	16
Radiation simulators	8	12	1	13
Radiation emitter	9	11	1	13
Other	1	8		24

Table 15 Training Facilities – Field Exercises – Nuclear

Training Facilities – Table Top Infrastructure	Yes	No	Confidential	No answer
Command and Control Centre	13	5	1	15
Office space	18	3	1	12
Conference rooms	19	2	1	
Other	0	7		26

Table 16 Training Facilities – Table Top Infrastructure

Training Facilities – Table Top Equipment	Yes	No	Confidential	No answer
Internet connectivity	23	1	1	9
Direct telephone lines	21	1	1	11
Geographic information	19	2	1	12
Radios	18	4	1	11
Information technology	22	1	1	10
Other	0	6		27

Table 17 Training Facilities – Table Top Equipment

Training Facilities – Serious Gaming Software	Yes	No	Confidential	No answer
AVR Technology	2	13	1	18
Heads-up display	2	12	1	19
Command and Control Software	7	10	1	16
Decision support tools	9	9	1	15
Other	0	0		33

Table 18 Training Facilities – Serious Gaming Software

Training Facilities – Serious Gaming Equipment	Yes	No	Confidential	No answer
Training weaponry	5	12	1	16
Radios	11	7		16
Other		8		

Table 19 Training Facilities – Serious Gaming Equipment

2.2.6 Confidentiality

Confidentiality box

For information on capabilities and facilities, the option was given to mark a box 'confidential'. 11 TCs used that option.

In the overview below, an indication is given how often they marked information as 'to be kept confidential'.

- 4 TCs only used this option once ;
- 3 TCs used this option less than 10 times ;
- 4 TCs used this option, resp. 12, 27, 36 and 69 times.

These figures need to be considered with caution. Not all TCs used this option, but some did not fill in whole chapters, such as on capabilities and facilities. From the comments or other (additional) information, it cannot be concluded that they did so because they have no relevant capabilities nor facilities (they could have indicated 'no' instead of leaving the cases blank), or their reluctance to share this type of information.

Willingness to share information about costs

Only 7 (out of 33) TCs declared to be willing to share information about costs. As this question was added to the Survey in January 2018, not all TCs might have seen this question (those who filled in the Survey immediately after receiving the information, those who filled in the Information Sheet on a word document).

7 other TCs marked this information as Confidential.

Only 1 TC uploaded information.

2.2.7 Summary overview of other characteristics

National versus international Centre

6 TCs indicates being an international Centre. Looking at these TCs and their activities, it is not sure the question was correctly understood. The question aimed at International versus national organisations in terms of legal statute and did not ask for the range or coverage of activities. This aspect might need clarification.

Funding resources

4 TCs have exclusively commercial activities, 9 TCs have mixed resources (public grants + commercial activities), 15 TCs only have public funding and 4 TCs did not provide information on this aspect.

Certified training

8 TCs organise national certified training, 1 TC marked this as confidential information.

1 TC organises EU certified training, 2 TCs marked this as confidential information.

3 TCs organise internationally certified training, 2 TCs marked this as confidential information.

Staff and training days

21 TCs provided information on their staff and allocation to different departments.

The number of FTE[4] in the TCs varies from 5 to 1500.

11 TCs have an Innovation Department, with FTE varying from 2 to 45.

FTE in the training department range from 3 to 80. This number is completed with guest lecturers for theoretical training and guest trainers for practical training (from 3 to 750).

There is a big variety in training days: from less than 10 for 2 TCs to more than 300 for 4 TCs.

Partnerships

27 TCs have concluded EU or international partnerships. They mostly cover theoretical and practical training, 15 include Research, 10 include Innovation.

24 TCs have concluded national partnerships. They mostly cover theoretical and practical training, 12 include Research, 8 include Innovation.

24 TCs have concluded partnerships with public authorities. These cover theoretical (19) and practical training (20), Research (10) and Innovation (10).

24 TCs have concluded partnerships with first responders. These cover theoretical (19) and practical training (24), Research (6) and Innovation (8).

22 TCs have concluded partnerships with first responders. These cover theoretical (10) and practical training (12), Research (13) and Innovation (14).

[4] Full Time Equivalent

Research projects

19 TCs are currently involved in research projects, such as CREATIF, IMPACT, RACED, DECOTESSC1, EDEN, B-LIFE, PANDEM, TOXI-TRIAGE, FIRE-IN, CASCEFF, E2Mc, etc.

These TCs participate in different roles such as project or technical coordinator, partner for technical developments, partner for end user representation and partner for the organisation of testing, demonstrations and the organisation of focus groups.

The thematic areas covered by the projects that were mentioned are very diverse and cover different aspects of multidisciplinary and CBRN emergency or incident management.

Accommodation

10 TCs have on-site lodging. The number of available rooms range between 10 and 130. Prices vary between 10 and 150€ per room.

23 TCs mention off-site lodging. The average distance ranges from 2 to 10km from the Centre. Prices vary between 30 and 114€ per room.

The total capacity on and off site varies from 40 to 1000 rooms.

19 TCs provide on-site dining, with a capacity between 60 and 500 persons.

25 TCs have Wi-Fi access; 10 TCs have a Computer lounge.

10 TCs have a Gym, 7 have a Recreation room.

Accessibility

All TCs are accessible by car. The distance to the nearest highway is 5 to 60 km; to the nearest train station 2-15 km. Only a few TCs are located near to a high speed train station. The distance to the nearest airport varies between 3 to 160 km.

26 TCs have an on-site parking with a capacity between 5 and 400 spots. For 21 TCs a security authorisation is required.

23 TCs dispose of a storage capacity for equipment.

Other

Other information, not statistically mentioned in this report, relates to:

- general facilities (number of offices, classrooms);
- ICT support (collaborative platform/online resources, E-learning platform);

- The possibility and legal or other restrictions for chemicals, biological and radioactive sources: for training, for storage and for transportation;
- The possibility to light an open fire, and legal or other restrictions;
- The possibility to train with fake weapons, to use training ammunition and legal or other restrictions or permissions.

2.2.8 Activities eligible to open up for external partners

17 TCs filled in information about activities that could be opened up for participation of external partners.

The type of activities proposed are: large scale full continuous field exercises of the EC ECHO/UN INSARAG, fire and rescue training, different types of mono- and multidisciplinary field exercises, table tops, simulation exercises, evacuation training, etc. Scenarios include i.a. chlorine exposure, BWA attack, food and water chain contamination (bio)

11 TCs gave concrete information on planned activities, the purpose of the activity (including evaluation criteria), the scenario, the profile of participants (first responders, military personnel). (This type of information on activities could be published on the eNOTICE website).

2.2.9 Needs and expectations expressed by the Centres

32 TCs expressed their interest in receiving updates on the network's activities, by newsletter or newsfeed

28 TCs would like to participate in one of the project's network-building activities:

- 27 as observer to a CBRN Exercise, the so-called eNOTICE Joint activities
- 25 would like to receive an invitation for the annual meetings

25 TCs would like to contribute to reflecting on the network's goals and activities

25 TCs are interested in sharing expertise on CBRN related topics with other training Centres

19 TCs are open to the use of their infrastructure by CBRN experts to use the infrastructure, for the purpose of training or innovation.

26 TCs are willing to participate in initiatives to adapt the current national training practice to more harmonised training procedures and guidelines across the EU, including Joint Exercises.

24 TCs are willing to participate in initiatives towards a European certification process aiming to build a European training capacity focusing on "cross-border crises"

14 TCs shared their specific expectations (listed in the wordings of the Centres):

- Cooperation (Governmental and Commercial) and sharing Information and Project possibilities ;
- sharing knowledge and expertise ;
- To be fully involved in this network and share the experience with other stakeholders ;
- Shared knowledge and expertise to be more resilient to threats facing public safety ; forum of creative ideas in CBRN field ; possibility to join exercises and workshops that is available from different partners in this project.
- combining our expertise in CRN with others disciplines like B and E ;
- Popularization of the Chornobyl Center activity in the area of the trainings ; development of the capabilities and receiving a new experience in this area ;
- Sharing of knowledge and participation in joint projects ;
- An open source data search platform where TCs can network, share, trade and innovate ;
- Knowledge of the different capabilities of each one of the centres belonging to the network; Sharing best practices and existing procedures; Sharing human and materials resources in case an European CBRN threat could appear and in case national capabilities could be overwhelmed ;
- Common collaboration with other centres to improve the management in the area of providing of CBRN trainings ;
- CBRN Warning & Reporting; Sampling procedures of CHEM and RAD Agents, and related laboratory analysis (operational level) ;
- To increase our capability for response at NBC crisis; To upgrade our equipment at EU and NATO standards ;
- Information sharing platform, exchange of briefers/speakers; possibility to increase the number of students for a better networking.

3 Conclusions and way forward

Mid May 2018, the mathematical results of the efforts to map the CBRN TCs in Europe and to welcome them on board as member of the network are:

- 215 TCs identified all over Europe, including 24 organisations with a mobile training capacity
- 33 network members, including 8 eNOTICE consortium partners

In the coming months, this number will increase as 53 TCs promised to fill in the questionnaire. These answers are expected and mentioned in the report as pending.

Both the Roster and the Catalogue will be continuously updated. A specific Task (5.2.4) has been dedicated to this in WP5 to ensure that eNOTICE partners continue to search proactively for new TCs and to encourage them to join the network.

The visibility of the network members on the website (by the end of May 2018 only for the eNOTICE partners, from June for all other members after they have given their explicit consent for publication) and the ongoing dissemination activities will support the promotion of the network. As more information on the project becomes publicly available at the eNOTICE webbased platform, it is expected that candidate members will more easily see the benefits of the network and thus more likely be motivated to join.

This will be enhanced by the search function, based on the Capacity label, which will be available and fully operational by the end of 2018.

Regular updates of both the Roster and the Catalogue will be included in the Deliverables of Task 5.2.4.

eNOTICE Information Sheet: Capabilities and Facilities CBRN Training Centres

This Information Sheet is a part of the Horizon2020 project eNOTICE and aims to collect some general information about your Training Centre (TC), its facilities and capabilities. We also look into your expectations and needs to build a CBRN Training Centres Network.

Not all questions are obligatory to answer, although we recommend filling in the questionnaire as thoroughly as possible. This will make further collaboration more efficient.

Leaving a question blank or a negative answer will not prevent you from joining the eNOTICE-TC network and from being part of it.

Thank you for your contribution.

General information	
Organisation name:	
Contact person:	
E-mail address:	
Phone number:	
Public website:	
Street + nr.:	Zip Code:
Country:	City:

Historical evolution circa 200 words

Specialties		
Theoretical courses:		
Practical courses:		
Thematic areas covered:	Chemical (C)	☐
	Biological (B)	☐
	Radiological (R)	☐
	Nuclear (N)	☐
	Explosives (E)	☐
	Fire	☐
	Police	☐
	Medical	☐
	Rescue and relief	☐
	Urban search and rescue	☐
	International humanitarian actions	☐
	Other:	

Characteristics of the centre						
Legal status:	Public body ☐		Private company ☐		Mixed ☐	
Competent authority[5]:	Local ☐		National/federal ☐			
	Regional/provincial ☐		Other:			
What is the legal form according to the applicable law?						
Funding *(such as public grants, 100% commercial, mixed,..)*:						
Type of organisation	National ☐		International ☐			

Training grounds		
Total area of the site in m² (approximately) :		
Is the site a coherent[6] area?	Yes ☐	No ☐
	Number of different locations:	
If applicable, detail the existing locations and distance between them:		
Location:		
Distance to main site:		

Buildings
Date of the opening of the site:
Date of the last renovation:

Capacity	
Number of Full Time Equivalent (FTE) attached to the centre:	
Number of staff in the innovation department:	
Number of staff in the training department:	
Number of staff in theoretical training:	
Number of staff in practical training:	
Number of permanent professors/lecturers:	
Number of temporary or guest lecturers:	
Number of training days (year -1):	
Number of theoretical training days in total (year – 1):	
Number of theoretical training days on CBRNe topics (year – 1):	
Number of practical training days in total (year – 1):	
Number of practical training days on CBRNe topics (year – 1):	

[5] Only applicable if legal status = public body. Competent authority/administrative level: type of hierarchical authority (legally)

[6] Is the site a coherent area or does it consist of two or more separate areas?

Partnerships					
Does your organisation maintain any formal, contractual or informal partnerships?					
At European and international level?			Yes ☐	No ☐	
If yes, what type of activity is covered by this partnership?					
Theoretical training	☐	Practical training	☐		
Research	☐	Innovation	☐		
Other:					
With other national institutions (on CBRNe risks)?			Yes ☐	No ☐	
If yes, what type of activity is covered by this partnership?					
Theoretical training	☐	Practical training	☐		
Research	☐	Innovation	☐		
Other:					
With public authorities?			Yes ☐	No ☐	
If yes, what type of activity is covered by this partnership?					
Theoretical training	☐	Practical training	☐		
Research	☐	Innovation	☐		
Other:					
With first responders?			Yes ☐	No ☐	
If yes, what type of activity is covered by this partnership?					
Theoretical training	☐	Practical training	☐		
Research	☐	Innovation	☐		
Other:					
With industry?			Yes ☐	No ☐	
If yes, what type of activity is covered by this partnership?					
Theoretical training	☐	Practical training	☐		
Research	☐	Innovation	☐		
Other:					
Other:					

Research projects		
Are you currently involved or have you previously been involved in (inter)national or EU research projects?	Yes ☐	No ☐
Project name:		
Topic:		
Role in the project:	Partner for end user representation	☐
	Partner for technical development	☐
	Technical coordinator	☐
	Partner for the organisation of testing/focus groups etc.	☐
	Formal project coordinator	☐
	Other:	

Capabilities								CONF.[7]
Training	Fire							
	General							
	HAZMAT							
	Police							
	Military							
	Person rescue training							
	Training for search and rescue dogs							
	Other:							
			C	B	R	N	E	CONF.
Field exercise	Live agents							
	Simulant agents							
	Reconnaissance / detection							
	Individual and collective protection							
	Decontamination							
	Medical treatment							
	Command and control							
	Other:							
Table top	Command and control							
	Operational							
	Strategic							
	Other:							
Serious gaming	Protective equipment testing							
	Detector testing and air monitoring method development							
	Decontamination, mitigation, and survivability							
	Residual hazard analysis modelling							
	Agent characterisation							
	Explosives, ammunition and armament							
	Test method and test infrastructure development							
	Other:							
	Existing scenario's for virtual situations:							
Other	Use of UAV[8]'s for CBRN detection							
	Other:							

General Facilities			CONF.
Number of offices:			
Number of classrooms for theoretical education:			
Specific classrooms:			
	Aula/auditorium/ampitheatre	☐	
	Crisis management room	☐	
	3D simulation centre	☐	
ICT support:			
	Collaborative platform / online resources	☐	
	E-learning platform	☐	

[7] CONF. = confidential: mark this column with a 'X' if you do not wish this information to be publicly available.
[8] UAV = unmanned aerial vehicle

Training Facilities				
Training	Fire area	Fire plate	☐	
		Containers	☐	
		Other:	☐	
	Rescue area	Confined space	☐	
		Cave complex	☐	
		Other:	☐	
	HAZMAT	Mobile laboratory	☐	
		Respiratory protection	☐	
		Chemical protection suits	☐	
		Mobile Mass Decontamination Unit	☐	
		Decontamination vehicle	☐	
		Decision Support Software	☐	
		Tactical equipment	☐	
		Other:	☐	
Field exercises	Urban facilities	Houses	☐	
		Tower bloc	☐	
		Sports stadium	☐	
		Cinema	☐	
		Warehouse	☐	
		Office building	☐	
		Hospital wing	☐	
		School	☐	
		Courthouse	☐	
		Hotel	☐	
		Electricity network	☐	
		Solar panels	☐	
		Gas station	☐	
		Other:	☐	
	Transportation	Country road	☐	
		Highway	☐	
		Crossroad	☐	
		Underground parking	☐	
		Tunnel	☐	
		Railway station	☐	
		Train	☐	
		Subway	☐	
		Plane	☐	
		Other:	☐	
	Chemical	Chemical plant	☐	
		Clandestine laboratory	☐	
		Intermodal container for dangerous goods	☐	
		Tank farm	☐	
		Chemical simulators	☐	
		Other:	☐	
	Biological	Biological simulators	☐	
		Biological laboratory	☐	
		Other:	☐	

	Nuclear	Nuclear plant	☐	
		Radiation simulators	☐	
		Radiation emitter	☐	
		Other:	☐	
Table top	Infrastructure	Command-control centre	☐	
		Office space	☐	
		Conference rooms	☐	
		Other:	☐	
	Equipment	Internet connectivity	☐	
		Direct telephone lines	☐	
		Geographic information	☐	
		Radios	☐	
		Information technology	☐	
		Other:	☐	
Serious gaming	Software	AVR technology	☐	
		Heads-up display	☐	
		Command & control software	☐	
		Decision support tools	☐	
		Other:	☐	
	Equipment	Training weaponry	☐	
		Radios	☐	
		Other:	☐	

Accommodation			
Accommodation	On-site lodging	☐	
	If applicable,	Number of rooms:	
		Average price for a room:	
	Off-site lodging	☐	
	If applicable,,	Hotels in the area:	
		Average distance to the nearest hotels:	
		Average price for a room:	
	On-site and off-site combined, what is the estimated lodging capacity within a 10 km radius from the centre?		
	On-site dining	☐	
	Wi-Fi access	☐	
	Computer lounge	☐	
	Gym	☐	
	Recreation room	☐	
Accessibility	By car	☐	
		Closest highway exit:	
	By train	☐	
		Station:	
		Distance to centre:	
	By high-speed train	☐	
		Station:	
		Distance to centre:	
	By plane	☐	
		Airport:	
		Distance to centre:	
	By shuttle	☐	
		Capacity of the shuttle(s):	

	Type of transfer service:		
	By bus ☐		
	Bus line:		
	Closest bus stop:		
	On-site parking ☐		
	Capacity:		
	Is site security authorisation a requirement?	Yes ☐	No ☐
Logistics	Available storage for equipment	Yes ☐	No ☐
	If applicable, type and size of storage(s):		

Activities eligible to open up for external partners
What kind of activities (tests, validations, demonstrations, mono- or multidisciplinary training and exercises, simulations, serious gaming, etc.) are part of your annual planning and might be eligible to open up for external partners?
Type of exercise: ex. field exercise, table top, simulation, serious gaming,...
Planned date(s): Objective: Evaluation criteria: Scenario: Profile of participants: Additional information:
Type of exercise: ex. field exercise, table top, simulation, serious gaming,...
Planned date(s): Objective: Evaluation criteria: Scenario: Profile of participants: Additional information:

Legal and other restrictions			
Chemical	Possibility to train with chemical materials	Yes ☐	No ☐
	Are there any legal restrictions?		
Biological	Possibility to train with biological materials	Yes ☐	No ☐
	Are there any legal restrictions?		
Radioactive	Possibility to train with radioactive materials	Yes ☐	No ☐
	Are there any legal restrictions?		
Fire	Possibility to light an open fire	Yes ☐	No ☐
	Are there any legal restrictions?		
Other	Possibility to train with (fake) weapons	Yes ☐	No ☐
	Are there any legal restrictions?		
	Possibility to use training ammunition?	Yes ☐	No ☐
	Are there any legal restrictions?		
Other:			

Interests in joining the network					
Are you interested in receiving updates on the network's activities, by newsletter/ newsfeed?		Yes	☐	No	☐
Would you like to participate in one of the project's network-building activities?		Yes	☐	No	☐
	Interests: Observer to a CBRN exercise (called joint activity)		☐		
	Invitation for the annual meetings		☐		
Would you like to contribute by reflecting on the network goals and activities?		Yes	☐	No	☐
Additional information:					
Is your organisation interested in sharing expertise on CBRN related topics with other training centres?		Yes	☐	No	☐
Additional information:					
Is your organisation interested in allowing CBRN experts to use the infrastructure of your TC for the purpose of training, observation, etc.?		Yes	☐	No	☐
What would be your **expectations** from a CBRN Training Centres' network?					
Are you willing to participate in initiatives to adapt your current national training practice to more harmonised training procedures and guidelines across the EU, including joint exercises?		Yes	☐	No	☐
Are you willing to participate in initiatives towards a European certification process aiming to build a European training capacity focusing on "cross-border crisis"?		Yes	☐	No	☐

Please enter strong points of your centre

Is there anything else you would like to share with us?

Leaving a question blank or a negative answer will not prevent you from joining the eNOTICE-TC network and from being part of it.

Annex 2 – Argumentation Letter to join the CBRN TC Network

Dear Madam, Dear Sir,

On 1st September 2017, a new project in the EU Horizon 2020 Research & Development Programme started: eNOTICE. It aims at building a dynamic, functional and sustainable pan-European Network of CBRN Training Centres (TC) and seeks to improve preparedness, resilience and incident response to CBRN attacks and emerging threats, including cross-border incidents.

As your organisation is mentioned in open source data and it appears that you have an extensive expertise in the field of CBRN training, we believe you would be a highly valuable network member and invite you to join us.

The main goals of eNOTICE[9] are to build a network and to develop a web based platform to support the network activities. eNOTICE will promote the activities of CBRN TCs by making them visible to the Public Safety and Security Community, such as practitioners, competent authorities and the R&D community. We will promote the added value of the TCs as partners in the development of end user driven innovation for enhanced preparedness. We will create opportunities to develop, share and discuss best practices, establish close multidisciplinary interactions between stakeholders and practitioners and improve overall efficiency through collaboration.

One of the key activities of eNOTICE will be the organisation of Joint Activities such as multidisciplinary field exercises, table top exercises, serious gaming and simulations, open for participation of external stakeholders (e.g. CBRN preparedness and response experts, training professionals, policy makers, R&D project managers, industry, research representatives). These Joint Activities will provide unique opportunities for the identification and development of user-driven technological solutions. As the network further develops, participatory collaboration will create an even broader range of these.

The first phase in the project, i.e. identifying and mapping the CBRN TC, includes of course, collecting all TCs needs and expectations towards this user-driven network.

We hope that your organisation is interested in joining the eNOTICE network of CBRN TC, and that you might be willing to share your organisation's capabilities, capacities and facilities. Therefore, we attach to this mail an information sheet/link to an online survey with questions related to your organisation, in particular including your needs and expectations towards the network. This information is gathered for the purpose of mapping the type of expertise featuring each member, and to establish further collaboration in the near future. It will exclusively be used for this purpose; the project's guidelines ensure that no information indicated as confidential will be shared or made public. We will be happy to provide you with more detailed information, so please do not hesitate to contact us with any questions, comments or suggestions.

We are looking forward to hearing from you soon!

Kind regards,
name, email contact

[9] See eNOTICE Objectives, partner list and calendar of activities in a separate document

Annex 3 – Argumentation Letter for military centres

To: name, function, address

Subject:

Invitation to join eNOTICE – the European Network of CBRN Training Centres.

Reference:

eNOTICE – European Network of CBRN Training Centres (H2020 SEC-21–GM-2016-2017)
Horizon 2020 project eNOTICE (Grant Agreement No. 740521)

Dear …

On behalf of the consortium of the European Union Horizon 2020 project eNOTICE – the European Network of CBRN Training Centres, and as coordinator of this project, I would like to invite your XXX to join this network, which is currently being established under the Horizon 2020 framework. This project relates to the EU CBRN Action Plan and aims at building a dynamic, functional and sustainable pan-European network of military and civilian CBRN training centres, testing and demonstration sites (CBRN TC). One of the network's objectives is to enhance the EU capacity building in CBRN training and user-driven innovation and research, based on well-identified practitioners' needs.

The establishment of eNOTICE is strongly supported by the European Commission because it is fully in line with the EU CBRN Action Plan: eNOTICE includes research and operational development aiming at the improvement of European preparedness, resilience and incident response to CBRN cross-border attacks and emerging threats through close stakeholders and practitioners' interactions.

Practically, the network is developing multiple joint activities such as field exercises, table top exercises, serious gaming and simulation events organised at the premises of those training centres, which are members in the project consortium (inter alia, the 13 consortium members include CBRN TC in Belgium, Czech Republic, France, Germany, Italy, Poland, Sweden, Turkey and the United Kingdom).

During the network's establishment phase, European CBRN TC are invited to fill a survey questionnaire that will enable all network participants to learn about each other and to better understand what their individual capacities and specificities are. No sensitive information is requested, though, and each CBRN TC is free to decide to what level of detail it will fill the questionnaire. The participation in the network is totally free of charge or formal commitments. The main benefit for the participants will be the opportunity to cooperate at European level, to exchange and compare best practices and guidelines, to extend networking into all categories of EU stakeholders and NATO partners, and finally to participate in the above mentioned joint activities hosted by the consortium members.

I thank you in advance for considering my request on behalf of the eNOTICE project consortium.

Yours sincerely,

Prof. Jean-Luc Gala (MD, PhD, COL [ret])
eNOTICE Coordinator
Director of the Centre for Applied Molecular Technologies (CTMA)
Université catholique de Louvain (UCL) & Defence Laboratory Department of the Belgian Armed Forces (DLD)
Clos Chapelle-aux-Champs, 30
B-1200 Brussels PO BOX UCL/B1.30.24

Annex 4 – Complete overview per country of the type of TCs listed in the Roster and the response rate per country

Country	# identified	# Civil TC	# Military TC	# Public TC	# Private TC	Refused: No interest	Refused:No capacity	No response/ contact	Pending	Survey ok= member
Austria **fixed**	10	8	1	9		5	2	1	2	1
Austria **mob**	1							1		
Belgium **fixed**	23	20	3	22	1		2	11	4	6
Belgium **mob**	2	2		2					1	1
Bulgaria **fixed**	6							6		
Bulgaria **mob**	0									
Croatia **fixed**	1		1	1				1		
Croatia **mob**	0									
Cyprus **fixed**	4							4		
Cyprus **mob**	0									
Czech Republic **fixed**	2		2	2						2
Czech Republic **mob**	2	1	1					2		
Denmark **fixed**	9	8	1	9		8		1		
Denmark **mob**	0									
Estonia **fixed**	2		2							2
Estonia **mob**	0									
Finland **fixed**	3		3	3				2		1
Finland **mob**	0									
France **fixed**	13	9	4				1	2	9	1
France **mob**	4	4						4		
Germany **fixed**	27	21	6	26		4		8	12	3
Germany **mob**	0									
Greece **fixed**	6	1	3	3				4	2	
Greece **mob**	0									
Hungary **fixed**	7		7	7					4	3
Hungary **mob**	1									1
Ireland **fixed**	3	2	1	3				3		
Ireland **mob**	0									
Italy **fixed**	11					1	1	1	5	2
Italy **mob**	1							1		
Latvia **fixed**	2	1	1	2				2		
Latvia **mob**	0									

Country	# identified	# Civil TC	# Military TC	# Public TC	# Private TC	Refused: No interest	Refused:No capacity	No response/ contact	Pending	Survey ok= member
Lithuania **fixed**	2	1	1	2				2		
Lithuania **mob**	0									
Luxemburg **fixed**	1		1					1		
Luxemburg **mob**	0									
Malta **fixed**	1							1		
Malta **mob**	0									
(The) Netherlands **fixed**	18	10	4	10	2		1	12	4	1
(The) Netherlands. **mob**	1							1		
Poland **fixed**	6	2	4	6				2	2	2
Poland **mob**	1		1	1						1
Portugal **fixed**	1	1		1					1	
Portugal **mob**	0									
Roumania **fixed**	2	2		2					1	1
Roumania **mob**										
Slovakia **fixed**	5	5		7		2		2	1	
Slovakia **mob**	0									
Slovenia **fixed**	1	1		1					1	
Slovenia **mob**	1	1		1						1
Spain **fixed**	3	2	1	3		1		1		1
Spain **mob**	0									
Sweden **fixed**	3							3		
Sweden **mob**	1	1		1				1		
Turkey **fixed**	9					2	7			
Turkey **mob**	0									
United Kingdom **fixed**	9							5	3	1
United Kingdom **mob**	0									
Serbia **fixed**	1			1						1
Ukraine **fixed**	1			1						1

Table 20 Summary overview of the Roster Results (Status May 2018)