

eNOTICE

European Network Of CBRN Training Centres

**D5.19 eNOTICE evaluation report on the CBRN TC
quality label and web-based search function and
recommendations for certification**

Leading authors:

Daniele Di Giovanni (UNITOV)

Grace Xerri (UNITOV)

**Contributors: **

Eugen Schmidt (SIC)

Olga Vybornova (UCL)

Luc Calluy (VESTA)

Elizabeth Benson (WMP)

Wolfgang Karl-Heinz Reich (JCBRND COE)

Tomas Michalcik (JCBRND COE)

Adam Bagniewski (WSU)

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| 6 | Safety Innovation Center (SIC) | X |
| 7 | Joint CBRN Defence Centre of Excellence Vyškov (JCBRND COE) | X |
| 8 | Middle East Technical University (METU) | |
| 9 | University of Rome Tor Vergata and The Italian Joint NBC Defense School (UNITOV) | Task leader |
| 10 | West Midlands Police, National CBRN centre (WMP) | X |
| 11 | War Studies University, CBRN Defence Training Centre (WSU) | X |
| 12 | Scientific and Research Centre for Fire Protection (CNBOP-PIB) | |

Executive Summary

This document is the final report for eNOTICE Work Package 5 on **project management and quality monitoring**. This report falls under Task 5.2.4: *Evaluation of the quality label, web-based search function, and recommendations for certification*.

This report aims to evaluate the **development of the eNOTICE quality label**, a unique web-based search tool, first elaborated in Work Package 2 (*Framework for a sustainable European CBRN TC network*) through the deliverable D2.2 “CBRN Training Capacity quality label”. In the research conducted for D2.2, it was determined that the term ‘Capacity Label’ rather than ‘Quality Label’ should be used to refer to the identifiers found in the eNOTICE Catalogue of Training Centres. This decision was based on analysis of the main objectives of the tool, through which it was determined that the goal was not to conduct evaluations of the quality and services of the Training Centres, but rather to provide a list of their relevant characteristics, capabilities, and facilities.¹ Therefore, the term ‘**Capacity Label**’ will be used herein to describe the abovementioned tool and its related functions.

The main objectives of this document are to **assess the functionality and use of the Capacity Label and the web-based platform** (Catalogue of Training Centres) and provide **recommendations for certification** as a European CBRN Training Centres network tool.

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The objectives of this report will be attained through the following process:

- Overview of the **current identifiers or labels** (characteristics, facilities, services, etc.) available in the search function of the eNOTICE Catalogue of Training Centres.
- Background research on **existing European Standards** and relevant **frameworks for CBRN network-related services**.
- Analysis of **user data and traffic of the project’s website** as reported in the five eNOTICE semestrial reports (D3.10-3.14).
- Results of an ad-hoc **user-satisfaction survey**, providing insight into the current state of the Catalogue and input which may be significant to its continued development.
- Recommendations based on the evidence presented, identifying **necessary criteria for potential certification** of the eNOTICE Capacity Label.

¹ D2.2 – Section 1.4 (pages 14 & 15)

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Nomenclature

| | |
|----------------------|--|
| CBRN | Chemical, Biological, Radiological, Nuclear |
| CEN | European Committee for Standardization |
| CENELEC | European Electrotechnical Committee for Standardization |
| CNBOP-PIB | Scientific and Research Centre for Fire Protection – National Research Institute |
| CWA | CEN-CENELEC Workshop Agreement |
| DoA | Description of Action |
| ECC | eNOTICE Community Centre |
| EN | European Standard |
| eNOTICE | European Network of CBRN training centres |
| ETSI | European Telecommunications Standards Institute |
| FDDO | Fire Department of the City of Dortmund |
| JA | Joint Activity |
| JCBRND COE | Joint CBRN Defence Centre of Excellence |
| PPE | Personal Protective Equipment |
| R&D&I | Research & Development & Innovation |
| SME | Small and Medium Enterprise |
| TC | Training Centre |
| WSU | War Studies University |

1. Introduction

1.1 eNOTICE scope and objectives

The objective of the eNOTICE project – European Network of CBRN Training Centres - is to build a dynamic, functional, and sustainable European network of CBRN Training Centres, testing and demonstration sites (CBRN TC), aiming at enhanced capacity building in training and users-driven innovation and research, based on well-identified needs.

eNOTICE seeks to improve European preparedness, resilience, and incident response to CBRN attacks and emerging threats through close multi- (stakeholders) and single-discipline (practitioners) interactions. Considering the variety of disciplines involved in managing CBRN risks, collaboration has always been quite challenging. CBRN TC can act as the perfect operational intermediary between all civilian and military CBRN actors, EU relevant bodies and policymakers, and thus serve as the best cradle for expansion of a CBRN network of professionals.

To set up such a network that is both efficient and meets the needs of different security actors, several lines of action will be followed within the five-year timeframe of eNOTICE in order to develop a network that will be viable, attractive as well as sustainable.

eNOTICE relates to the ‘SEC-21–GM-2016-2017: Pan European Networks of practitioners and other actors in the field of security’. Of the four distinct categories of practitioners SEC-21-GM aims at, this project addresses the need for a network for ‘*entities from around Europe that manage demonstration and testing sites, training facilities, including simulators or serious gaming platforms in the area of CBRN and for first responders or civil protection practitioners*’².

The work program proposes three lines of actions: 1) establish and maintain a roster of capabilities and facilities, 2) organise the best way to share expertise, and 3) plan to pool and share resources with a view to optimise investments.

These lines will serve as a baseline for the project (see Figure 1) and will be complemented by a range of activities aiming at:

- 1) preparing a **structural, sustainable technical platform** to enable the partners to support the proposed actions, hence, to provide a solid basis to expand to any other relevant activity;

² European Commission. 24 April 2017. *Horizon 2020 Work Programme 2016-2017: 14. Secure Societies - Protecting freedom and security of Europe and its citizens.*

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-security_en.pdf

- 2) a well-informed, sound, conceptual based **sustainability plan** for the platform, considering the profile, needs and expectations of the targeted members, as well as an appropriate strategy to overcome existing barriers and difficulties in creating a CBRN Training Centres’ network;
- 3) a **mix of complementary activities** to strengthen the effect of the three proposed lines of action and to maximise opportunities provided and created by the CBRN platform.

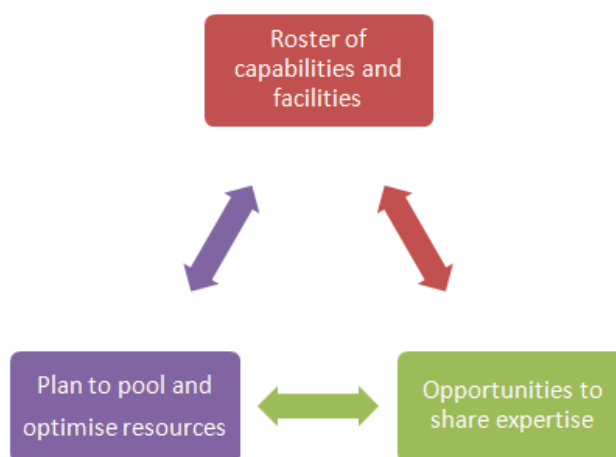


Figure 1 Three lines of actions in eNOTICE (eNOTICE DoA 2016)

The three lines of actions are covered by the eNOTICE Objectives and Sub-objectives. A summary overview is included in the first Progress report (p. 9), as well as an overview of the mix of eNOTICE activities in these three lines of action (p. 8).

1.2 eNOTICE Project report’s scope, objectives and methodology

1.2.1 Scope

This report relates to Task 5.2.4: *Evaluation of the quality label, web-based search function, and recommendations for certification*. The objectives of this report are to **evaluate the eNOTICE Catalogue of Training Centres and its related ‘Capacity Label’**. The aim is to analyse the **efficiency and usefulness** of the Catalogue to find relevant information on the eNOTICE network Training Centres (TC). In doing so, the Catalogue offers the possibility to **identify specific**

capabilities, services, and infrastructure to increase TC’s visibility, expand CBRN training opportunities, and enhance the overall sharing of knowledge, skills, expertise, and resources.

Structure of D5.19

This deliverable is structured in the following manner:

- **Chapter 1** introduces the aims of the eNOTICE project, the objectives of Task 5.2.4, and its relation to previous project tasks and deliverables.
- **Chapter 2** provides an overview of the existing Catalogue of Training Centres, including the eNOTICE Capacity Label and the web-based search function.
- **Chapter 3** involves background research on European standards and provides a greater understanding and potential framework for future certification of the eNOTICE Capacity Label.
- **Chapter 4** discusses the results of an ad-hoc survey to provide first-hand input from CBRN stakeholders on the strengths and weakness of the Catalogue of Training Centres and offer critical insights for improvement.
- **Chapter 5** provides recommendations for certification of the eNOTICE Capacity Label, based on the desk research and user feedback demonstrated in the preceding chapters.

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1.2.2 Links to other tasks

The work of this report is related to several tasks and their correlated deliverables which have contributed collectively to the overall development of the eNOTICE project between the years 2017 and 2023.

Task 3.2 - Development of a web-based platform to share information and encourage communication

The aim of the eNOTICE web-based platform as well as the search function found in the Catalogue of Training Centres is to **increase communication and visibility** of the services and activities of the network members. As part of Task 3.2, the network’s communication and website use have been periodically monitored to obtain useful analytical information (geographical location, information accessed, etc.) necessary to further the exploitation and visibility of the network over time. Task 5.4.2 will be developed based on the data reported on a semestral basis in deliverables D3.10, D3.11, D3.12,

D3.13, and D3.14 (*Semestrial reports 1-5 on the use of the eNOTICE information and communication platform*).

Task 2.1.2 – Elaboration of a capacity label and development and preparation of a search function at the CBRN web-based information and communication platform

The focus of Task 5.4.2 extends from the development of the Capacity Label and the corresponding web-based search function as part of Task 3.2. The specifics of this tool were first elaborated in report D2.2 (*CBRN Training Capacity quality label*). A deeper understanding of the methodology and framework used to develop the eNOTICE Capacity Label is necessary to provide an effective analysis of its functionality and assess its ability to meet the needs and objectives of both network members and external CBRN stakeholders.

Task 4.4. – Plan to pool resources and optimise investments for increased CBRN training capacity

Part of the overall strategy to pool resources, optimise investments, and ensure sustainability of the eNOTICE network involves an **evaluation of all the network’s tools and services to assess stakeholder needs for future development**. As described in D4.13 (*eNOTICE Plan to pool resources and optimize investments for increased CBRN Training Capacity*), the resource pooling and sustainability plan includes evaluating the public information and tools available on the eNOTICE website as well as the private members-only eNOTICE Community Centre (ECC). The effective design and continued use of the Catalogue of Training Centres (through a strategic Capacity Label) contributes to increased CBRN training capacities, knowledge sharing, and communication by providing a search function enabling the quick and efficient identification of specific Training Centres to fit stakeholder needs.

1.2.3 Methodological approach of this report

Chapter 1 offers a brief summary of the Task 5.2.4, to be elaborated in this document, and its relation to previous tasks and deliverables of the eNOTICE project. In doing so, it sets the framework by which this document aims to achieve the task objectives.

Chapter 2 will discuss in detail the development of the eNOTICE Capacity Label as outlined in D2.2. A clear understanding of the current state of the web-based search function will be useful in determining any necessary aspects of concern, areas of improvement, and useful additions to be explained further in the succeeding chapters.

In **Chapter 3**, a detailed outline of European Standards for certification will be developed. This information will be based on desk research conducted to determine the criteria for EU labels, qualifications, expectations, and standards for tools and services, and specifically those provided by a CBRN-related network.

The results of an ad-hoc survey distributed to numerous CBRN stakeholders will be discussed in **Chapter 4**. The aim of this survey was to determine current user satisfaction with the Catalogue of Training Centres, by better understanding stakeholders' interpretations of the search function tool, opinions on its user-friendliness, and recommendations to increase its effectiveness for network members and CBRN stakeholders.

The final chapter, **Chapter 5**, will provide a summary of the evidence and research presented in this document in order to develop a set of recommendations for the eNOTICE network to ensure sustainability of the Capacity Label and related web-based search function by adhering to common European standards and obtaining certification for this specific network service.

2. Overview of the eNOTICE Catalogue of Training Centres

2.1 Development of the Capacity Label and its framework components

This section refers to the work completed in D2.2 (*CBRN Training Capacity quality label*) for the development of the eNOTICE Capacity Label and the individual components which have been used to create the search function of the Catalogue of Training Centres. In order to evaluate its effectiveness and usefulness over time, it is necessary to understand the specific elements which comprise the current framework of the Catalogue³.

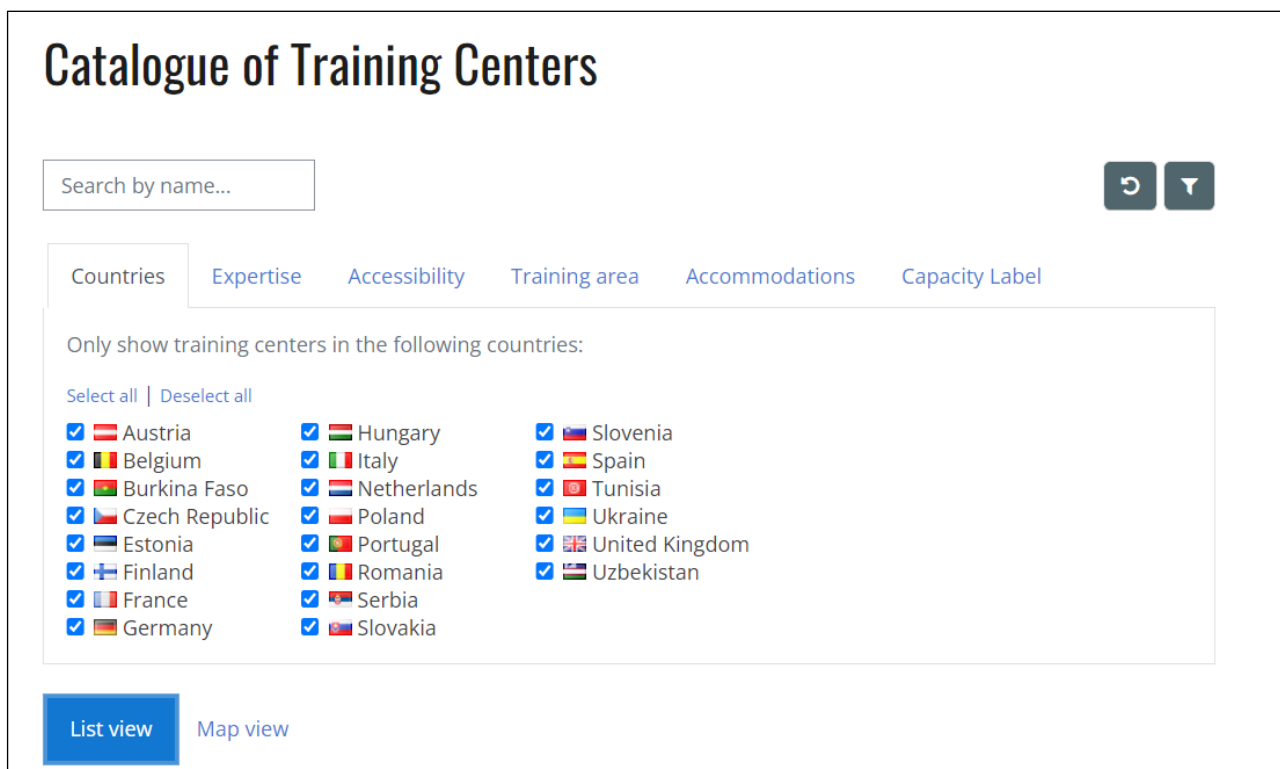


Figure 2 Image of Main Page - Catalogue of Training Centres

The above image demonstrates the **six main elements of the search function** which make up the Catalogue of Training Centres: **Countries, Expertise, Accessibility, Training Area, Accommodations, and Capacity Label**. Each of these aspects can be filtered to search within a specific country or number of countries according to the user's needs. The search function can also be viewed either in 'List view' or in 'Map view', offering different modalities of visualizing the information which is filtered according to the selected search parameters.

³ <https://www.h2020-enotice.eu/static/catalogue.html>

Countries

The first parameter allows the user to **identify Training Centres** located within a specific country or selected countries. In D2.2 it was determined that Training Centres (TC) can be considered eligible for representation in the eNOTICE Catalogue if they meet the following **three criteria**⁴:

1. The TC has **specific expertise** in one or more areas related to CBRN.
2. The TC **must own infrastructure** enabling it to conduct CBRN-specific training exercises and/or activities.
3. The TC **must comply with the eNOTICE project’s methodology** for the organisation of Joint Activities.

Following this approach, the current Catalogue hosts information on TCs from a total of **22 countries worldwide**. This information provides users with the opportunity to explore an extensive geographical range of expert Training Centres on multiple continents and with varied training capabilities.

Expertise

The specific expertise of the TCs listed in the eNOTICE Catalogue is of explicit importance; this is a crucial aspect concerning a **TC’s eligibility** to be listed in the Catalogue and this filter is also a vital element in the user’s **search for a specific training capacity**. In the eNOTICE TC Catalogue, specific details about each TCs’ expertise are searchable with a **filter function**. This function has been divided into two categories: **Thematic and Professional expertise**.

Training centers must have expertise in one of the following areas:

| Thematic | Professional |
|---|---|
| <p>Select all Deselect all</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Chemical <input checked="" type="checkbox"/> Biological <input checked="" type="checkbox"/> Radiological <input checked="" type="checkbox"/> Nuclear <input checked="" type="checkbox"/> Explosive | <p>Select all Deselect all</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Fire <input checked="" type="checkbox"/> International humanitarian actions <input checked="" type="checkbox"/> Medical <input checked="" type="checkbox"/> Police & Counter-terrorism <input checked="" type="checkbox"/> Rescue & relief <input checked="" type="checkbox"/> Urban search & rescue <input checked="" type="checkbox"/> Other |

Figure 3 Image of TC 'Expertise' search filter

⁴ D2.2 – Section 2.2 Eligibility Criteria

Accessibility

For many prospective clients and partners, an important aspect of a TC’s offer involves its **accessibility**. A TC’s location and the ease with which it can be reached by potential trainees is crucial in the step to **determining the best facility to organise a training exercise or activity** in an external location. For this reason, a search filter involving a varied range of **transportation methods** has been included in the Catalogue to ease users in the identification process.

Figure 4 Image of Search Filter for TC Accessibility Methods

Training area

The **size of a TC’s facility** can also **influence the capacity building opportunities and training offer** to external stakeholders. The search filter allows a user to find the appropriate TC according to facilities size by searching for a specific minimum and/or maximum area in square metres (m²). There is also the possibility to select area ‘**coherency**’, identifying only TCs where the declared training area is located in one coherent space.

Accommodations

A TC’s accommodation capabilities contributes to the number of external stakeholders and trainees which can be hosted and catered to directly on-site for organised events or activities. This includes the type of infrastructural **services and goods available for guests** to utilise while attending an exercise or course at a respective TC. For the eNOTICE Catalogue, the critical elements of a TC’s accommodation capacities which can be filtered are demonstrated in the following image:

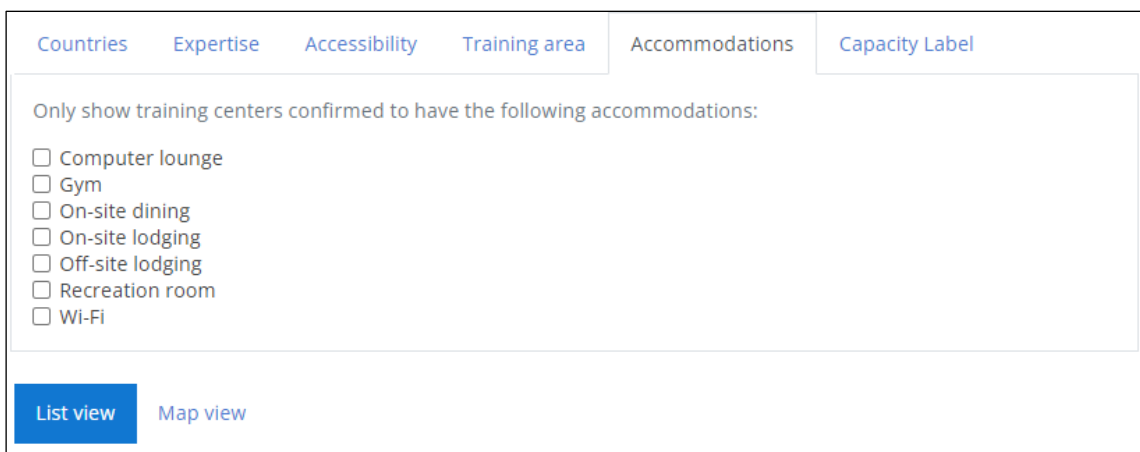


Figure 5 Image of Filter Selection for TC Accommodations

To ease visual perception of these and other relevant filters, **specific icons** have been assigned to indicate certain aspects of the accommodation details of a TC. A TC’s accommodations are divided into various categories, including **hosting capacity, on-site lodging capacity, and additional amenities such as WI-FI and dining**. The following tables outline the various distinctions made in the accommodation services offered by the TCs and demonstrates the icon representations for each category as are found in the Catalogue of Training Centres:

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Table 1 Levels of TC Hosting Capacities and Icon Representations⁵

| Hosting level label | Description | Logo |
|---------------------|-------------------------------|------|
| 0 | Off-site | |
| 1 | On-site, up to 50 people | |
| 2 | On-site, up to 100 people | |
| 3 | On-site, more than 100 people | |

Table 2 Levels of TC Lodging Capacities and Icon Representations⁶

| Lodging level label | Description | Logo |
|---------------------|--|------|
| 1 | Room standard: basic without toilet/shower | |
| 2 | Room standard 1 + shower & toilets | |

⁵ Borrowed from D2.2 (page 25)

⁶ Borrowed from D2.2 (page 26)






| | | |
|---|------------------------|---|
| 3 | Room standard 2 + TV |  |
| 4 | Room standard 3 + WiFi |  |

Table 3 Levels of TC Dining Capacities and Icon Representations⁷

| Dining level label | Description | Logo |
|--------------------|---|---|
| 1 | Self-service |  |
| 2 | Level 1 + Restaurant facilities |  |
| 3 | Level 2 + capacity to organise prestige meals & social events |  |

Capacity Label

The final category of the search function in the Catalogue of Training Centres is the **Capacity Label**. The Capacity Label enables a user to filter TCs according to a **specific area of focus (C, B, R) or training specialisation (i.e., serious games), within the field of CBRN**. The Capacity Label also includes a TC’s eligibility to take part in the eNOTICE network, as well as a description of the number of EU-funded projects in which they have experience as a participating member.

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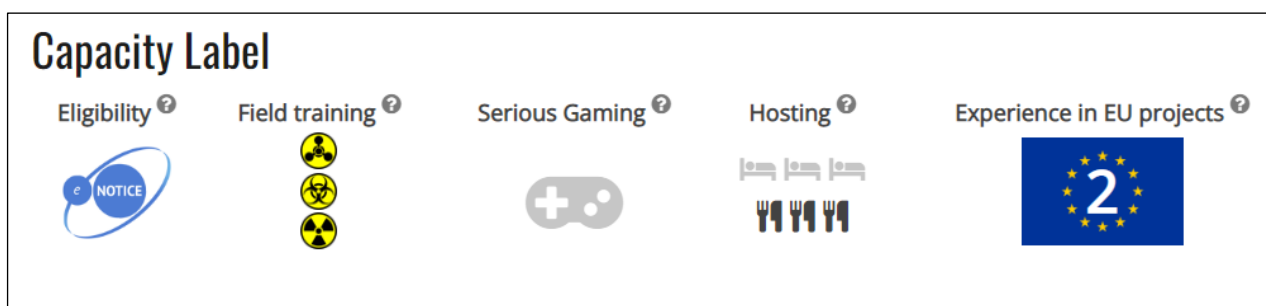


Figure 6 Example of a TC's Capacity Label

2.2 Analytical assessment of the Capacity Label web traffic

This section focuses on analysis of ad-hoc data on use of the search function of the eNOTICE Catalogue of Training Centres.⁸ The reporting period analyses web traffic of the Catalogue beginning

⁷ Ibid.

⁸ Data extrapolated by eNOTICE consortium partner - SIC

in January 2022, correlating to the time in which the Capacity Label function was made live on the Catalogue webpage. The following charts describe the extrapolated data, exhibiting the use of the search function and highlighting the specific selections made in each filterable section.

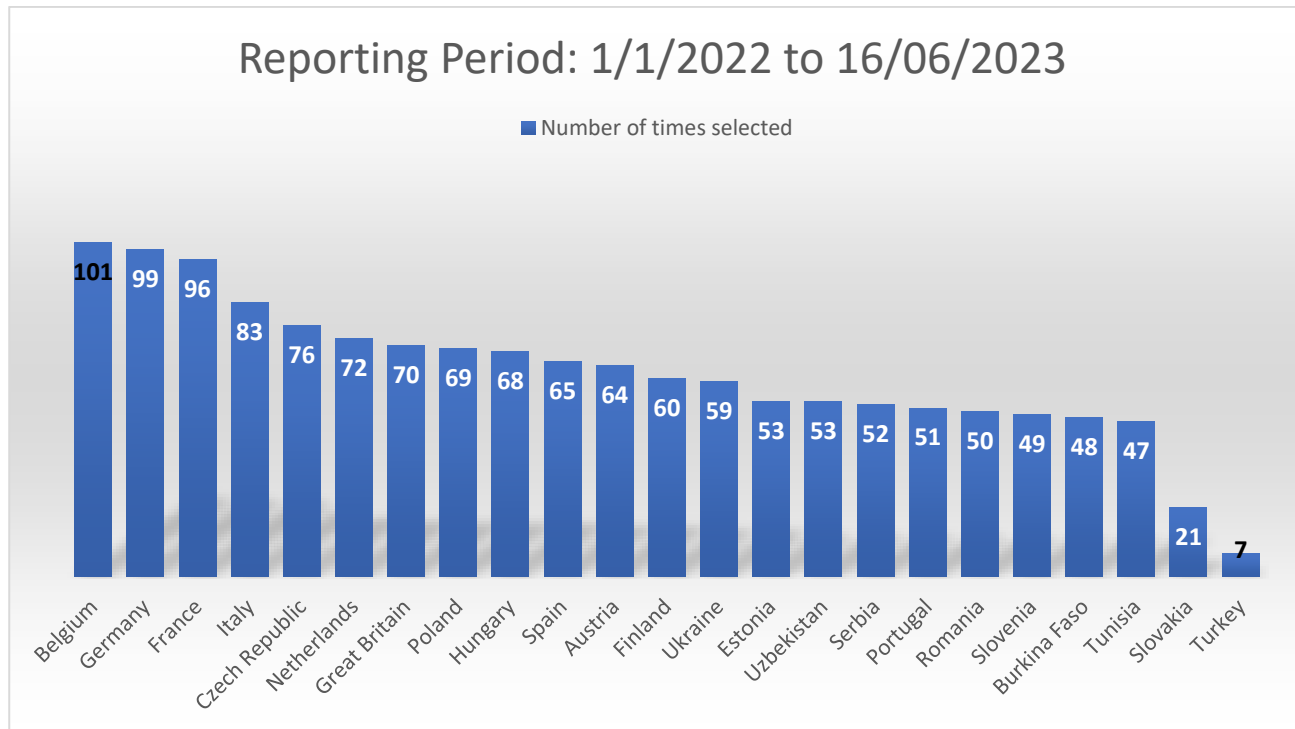


Figure 7 Countries Selected in the Search Function 1/2022-6/2023

Figure 7 demonstrates the number of times that users have searched for TCs in specific countries. The country most searched has been Belgium, with a total of 101 selections in the period from January 2022 to June 2023. The least searched country was Turkey, which has been selected 7 times in the mentioned reporting period.

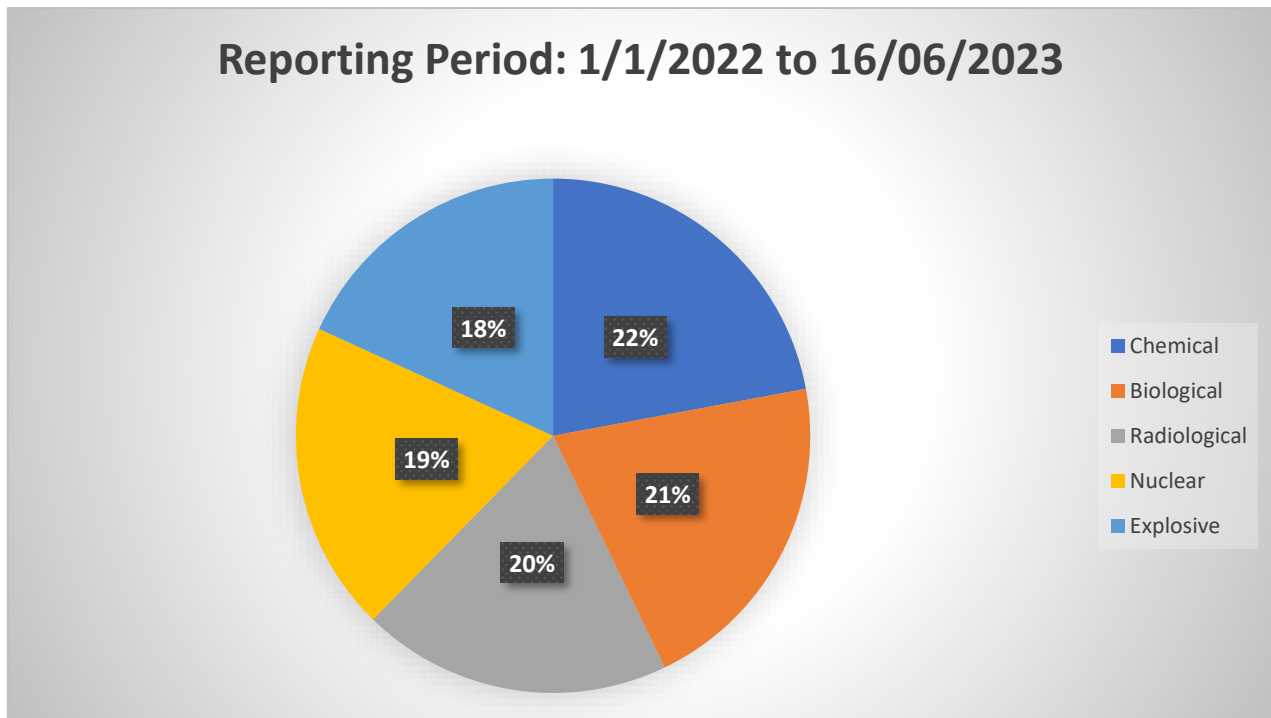


Figure 8 Thematic Expertise Selected in the Search Function

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The above Figure 8 demonstrates the search tendencies of users according to specific Thematic Expertise. This chart highlights that there is a nearly equal importance given by users to each area of training focus in the field of CBRNe. In the reporting period from January 2022 to June 2023, ‘Chemical’ was selected 17 times, ‘Explosive’ 16 times, both ‘Biological’ and ‘Radiological’ 15 times, and ‘Nuclear’ 14 times.

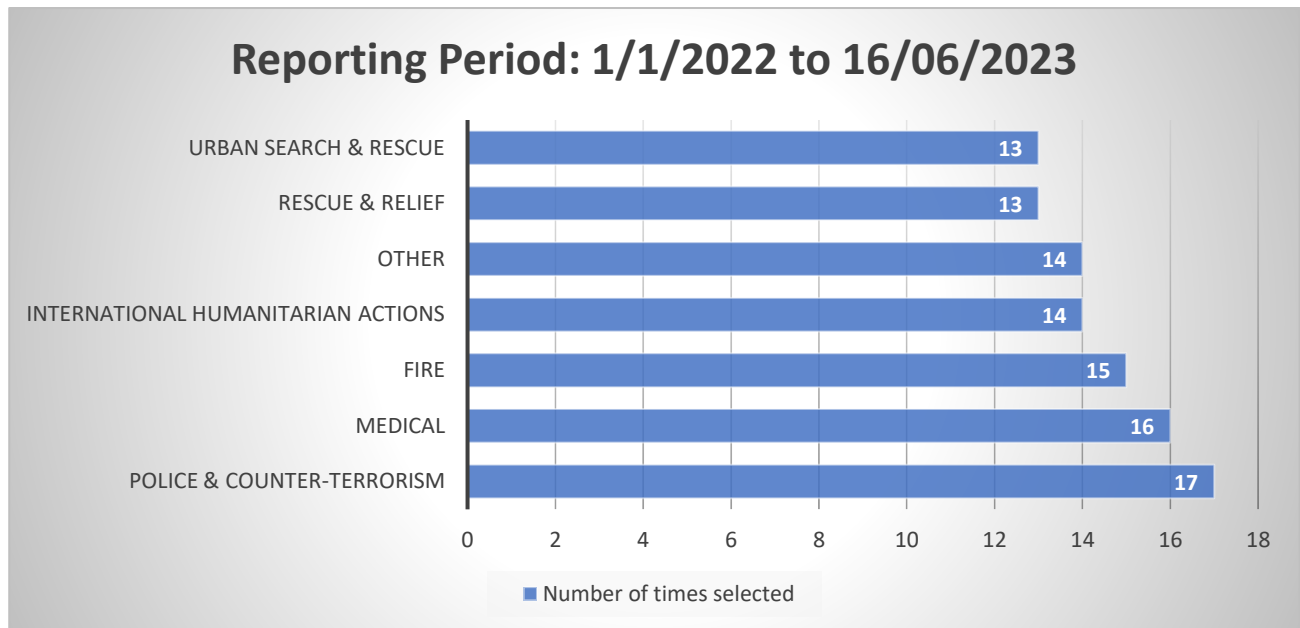


Figure 9 Professional Expertise Selected in the Search Function

During the identified time period, the Professional Experience most searched was ‘Police & counter-terrorism’ which was selected a total of 17 times. ‘Rescue & relief’ and ‘Urban search & rescue’ were selected the least with a total of 13 hits each. These selection tendencies highlight that law enforcement, counter-terrorism, medical, and fire are the top focus areas for stakeholders seeking a CBRNe training centre. On the other hand, the data also indicates that rescue and relief services either may not be a main training priority and/or may not be a top necessity for specialised outsourced training.

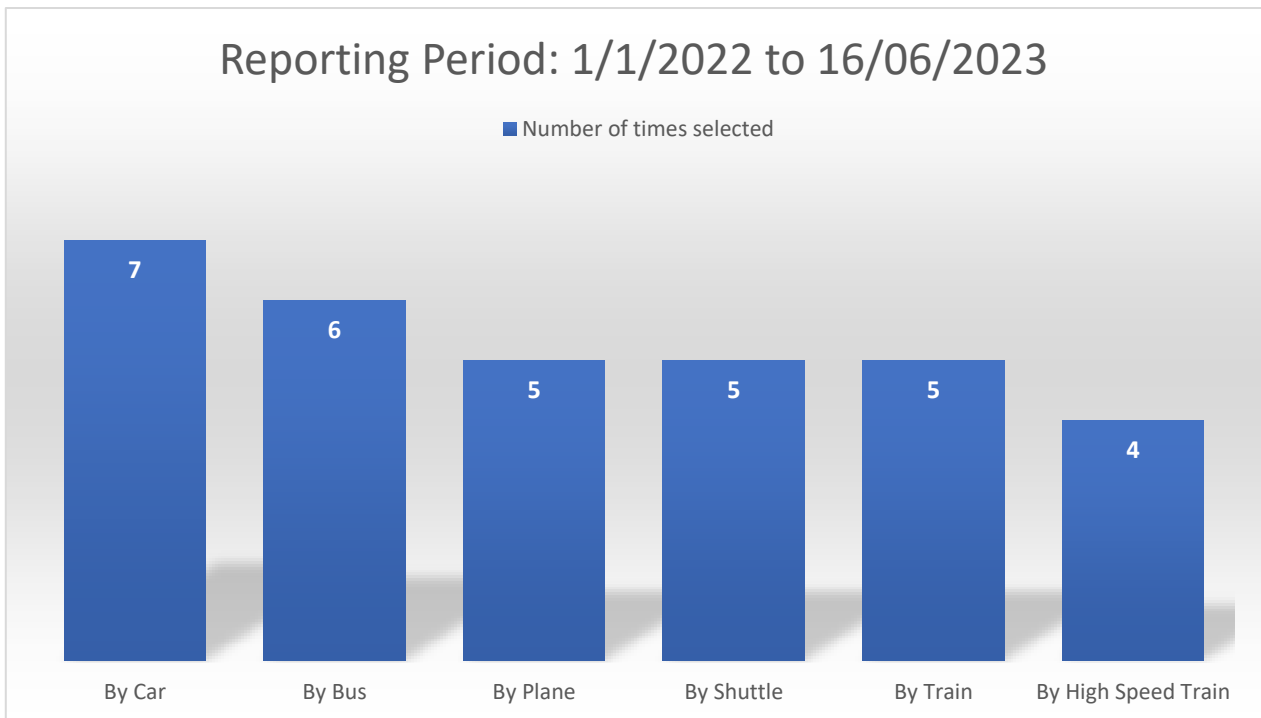


Figure 10 Accessibility Selected in the Search Function

Figure 10 demonstrates user selections of the Accessibility methods to reach a specific TC. According to the data for the reported period, the most selected option was the ability to arrive by car, while high speed train was the least selected option. The second option most selected was the ability to arrive by bus, indicating that users may prefer TCs that are easily accessible by personal and/or local means of transportation.

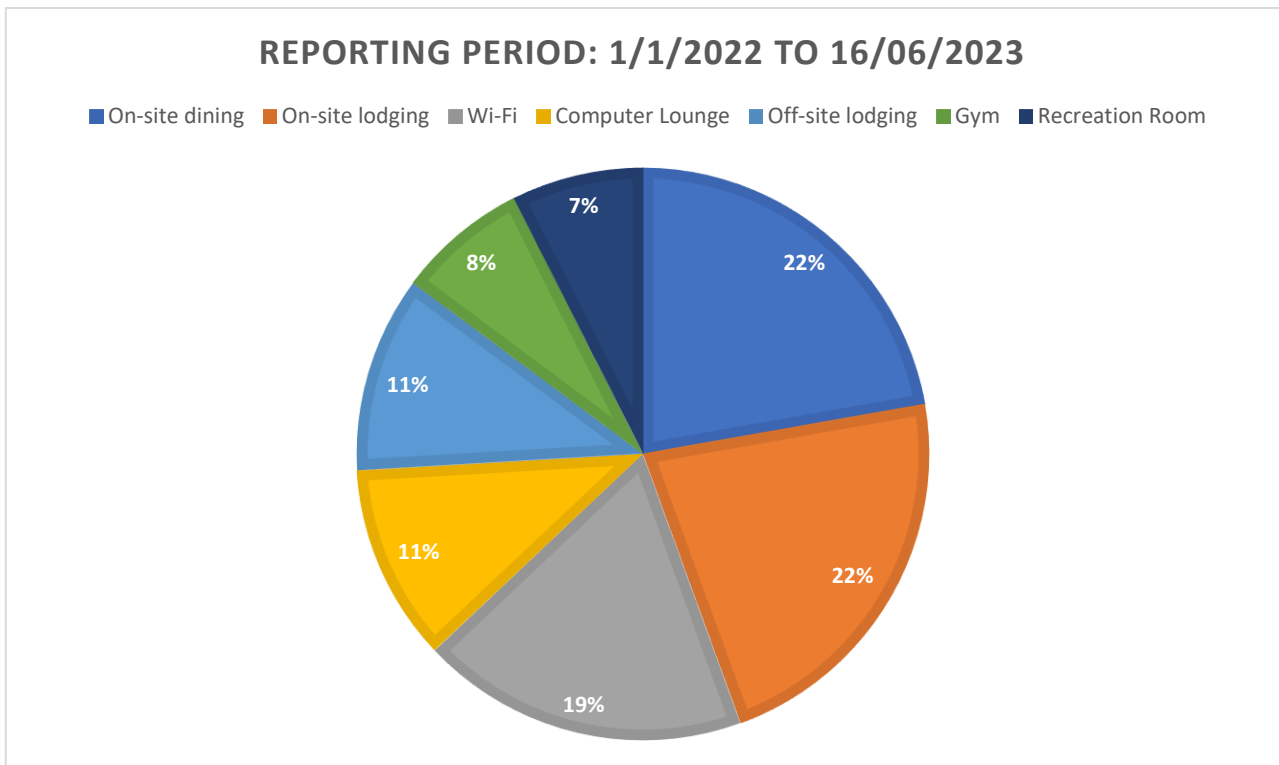


Figure 11 Accommodations Selected in the Search Function

22

As exhibited by the above graph, the accommodation elements about the TCs that were most searched by users were ‘on-site lodging’ and ‘on-site dining’. This clearly indicates that there is a specific interest in identifying TCs that can provide both accommodation and catering services to trainees on location. The least selected conditions related to accommodation were ‘Gym’ and ‘Recreation Room’, demonstrating that these aspects may not be crucial in evaluating a specific TC for potential training activities.

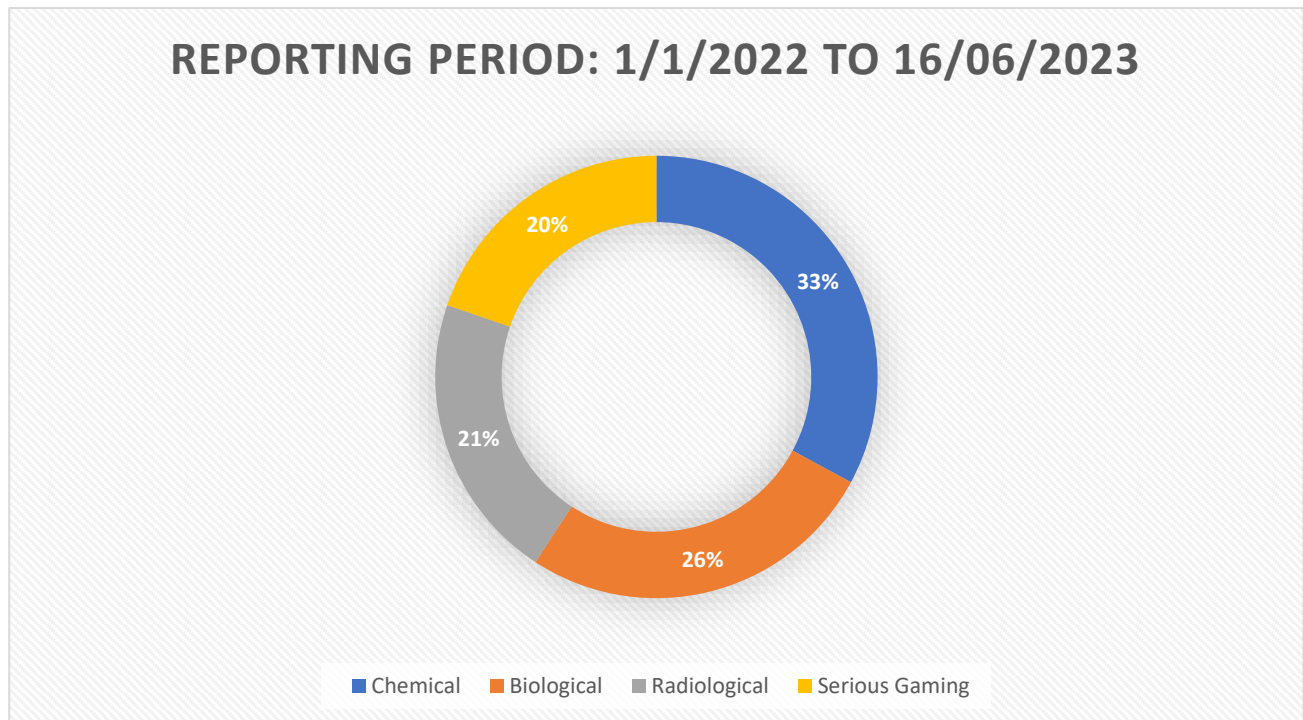


Figure 12 Capacity Label Selected in the Search Function

23

The above figure highlights users' search tendencies related to the training capacities of the TCs. Similar to the selection trends reported in Figure 8, users demonstrated 'Chemical' as the top search criteria in identifying a specific CBRNe TC. This was followed by 'Biological' then 'Radiological', as was also the case with the Thematic Expertise selections exhibited in Figure 8. 'Serious Gaming' received the least number of selections by users for the given reporting period.

3. Standards for certification of network tools & services

The eNOTICE network plays a vital role in the **European defence and security sector**, by creating **synergies between the fundamental actors in CBRN preparedness, protection, response, and recovery**. Through its inception, eNOTICE has brought to the forefront the importance of **standardisation and harmonisation in training capabilities**, and in the **sharing of resources and infrastructure to increase resilience** among the EU Member States. It is therefore critical, as the eNOTICE project continues in its transition from EU project to self-sustaining network, that the network takes calculated steps to implement necessary elements, adhere to **European standards**, and ensure the **long-term sustainability and quality** of its tools and services.

3.1 Definition & development of a European Standard

3.1.1 European Standards

The **European Committee for Standardization** (CEN) defines a standard as:

“A TECHNICAL DOCUMENT DESIGNED TO BE USED AS A RULE, GUIDELINE OR DEFINITION. IT IS A CONSENSUS-BUILT, REPEATABLE WAY OF DOING SOMETHING. STANDARDS ARE CREATED BY BRINGING TOGETHER ALL INTERESTED PARTIES SUCH AS MANUFACTURERS, CONSUMERS AND REGULATORS OF A PARTICULAR MATERIAL, PRODUCT, PROCESS OR SERVICE...[AND] PROVIDES, FOR COMMON AND REPEATED USE, RULES, GUIDELINES OR CHARACTERISTICS FOR ACTIVITIES OR THEIR RESULTS, AIMED AT THE ACHIEVEMENT OF THE OPTIMUM DEGREE OF ORDER IN A GIVEN CONTEXT.”⁹

The European Standard (EN) is **recognised by 34 nations**¹⁰, who collaborate to develop and build the European market by implementation of these central principles: **coherence, transparency, openness, consensus, voluntary application, independence from special interests and efficiency**.¹¹ CEN, together with **CENELEC** (European Electrotechnical Committee for Standardization) and **ETSI** (European Telecommunications Standards Institute) make up the governing bodies responsible for overseeing standardisation requests and proposal implementations.

The goal of European Standards is to **facilitate harmonisation of the quality and safety of products, technology, goods, and services available on the European market**. Standards enable efficient and quicker **access to information, guarantee reliability and safety** of fundamental infrastructure and the environment, **enhance public health benefits**, and ensure **business integrity** across the nations.¹²

A **Harmonisation Standard** is a type of European Standard, developed by CEN, CENELEC, or ETSI, following a request from the European Commission. Harmonised Standards are used to **demonstrate compliance with EU legislation** and have been developed in several areas for processes, services, and products dealing with specific themes, including website accessibility, chemicals, management systems, construction, consumers and workers protection, energy efficiency,

⁹ <https://www.cencenelec.eu/european-standardization/european-standards/>

¹⁰ Ibid.

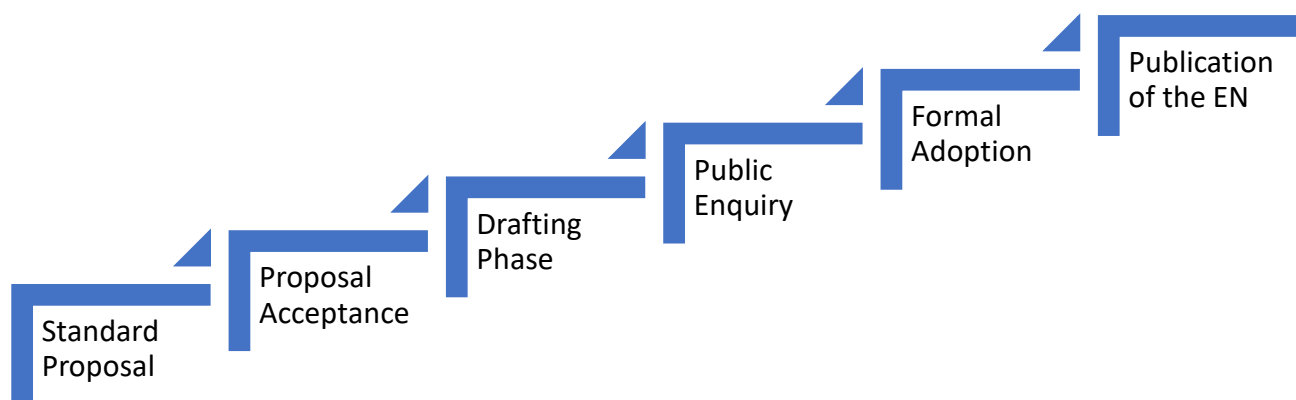
¹¹ <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:316:0012:0033:EN:PDF>

¹² <https://www.cencenelec.eu/european-standardization/european-standards/> & https://europa.eu/youreurope/business/product-requirements/standards/standards-in-europe/index_en.htm

electric and electronic engineering, healthcare engineering, measuring technology, mechanical engineering and means of transport, services, and sustainability.¹³

A European Standard, once ratified, becomes a **national standard**. The application of this standard is **voluntary**; however, if accepted, **minimum requirements** or compliance standards may be implemented through **national laws and regulations**.¹⁴

The process to develop a European Standard involves six core steps:



25

Figure 13 Six Steps to Develop a European Standard¹⁵

Standard Proposal

Any CEN/CENELEC Working Group (made up of individual experts) or the European Commission can submit a proposal to develop a European Standard.

Proposal Acceptance

Review of this proposal is assigned to a Technical Committee which is qualified to evaluate the request according to the given field. Once accepted, national production related to the proposal area is put on hold while the standard is developed.

¹³ https://single-market-economy.ec.europa.eu/single-market/european-standards/harmonised-standards_en

¹⁴ Ibid.

¹⁵ <https://www.cencenelec.eu/european-standardization/european-standards/>

Drafting Phase

After acceptance of the proposal, experts from the Technical Committee are tasked with drafting the specifics of the standard.

Public Enquiry

Once a draft has been completed, a request is released to the public, whereby interested parties or stakeholders have the opportunity to review the proposal idea and suggest revisions or make comments to the draft. These evaluations are then collected and reviewed by the CEN/CENELEC members.

Formal Adoption

A weighted vote is then assessed by the Technical Committee and a standard is adopted when it achieves 100% acceptance. If, upon analysis, further modifications are needed to reach full agreement, these are developed and reviewed by the Technical Committee before subjecting the draft to a secondary vote.

Publication of the EN

26

After receiving formal unanimous approval, the standard is officially published. Published European Standards must subsequently receive national adoption by all member countries.

3.1.2 Certification

Certification refers to the process by which a **qualified third-party** provides a **formal guarantee** that a product, service, tool, etc., which falls within the purview of a specific standard, **adheres to the related EN**. Verification of compliance with an EN is performed through a **certification inspection**.¹⁶ The certification awarded by a certification body, and which indicates standards conformity, is referred to as a **certification programme**.¹⁷ Certification may be marked by a specific label, such as the ‘CE’ marking which will be discussed further in the proceeding sections.

¹⁶ <https://www.fao.org/3/y5136e/y5136e07.htm>

¹⁷ Ibid.

3.1.3 Accreditation

Accreditation involves an authoritative (usually national) body which **verifies the procedures and evaluation system** belonging to a specific certification programme. Accreditation by these bodies is based on the harmonised standards which **determine conformity to technical and/or sector-specific requirements**.¹⁸ Accreditation requirements are outlined in the EU *Regulation 765/2008: setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93*.¹⁹ In the EU, the national accreditation bodies are part of a **European co-operation for accreditation (EA)** in collaboration with the European Commission. The EA is responsible for managing the peer evaluation system of its member accreditation bodies and provide technical assistance.²⁰ Accreditation is a **not-for-profit process**, which enables markets to provide **objective proof of compliance with EN specifications**. Obtaining accreditation is especially **valuable to industry and businesses** that seek to stand out among competitors.²¹

3.1.4 European Labels

A specific process, service, system, etc., that is compliant with European Standards receives a **marker**, called a **European Label**.²² One example of a European Label is the ‘CE’ marking which is used to **identify manufactured products that meet specific industry and production standards** in the European Union.²³ To obtain the ‘CE’ marking, technical documentation must be presented that demonstrates compliance with these required European standards. This type of label is generally applied to consumer products such as electric/electronic equipment, medical devices, personal protective equipment (PPE), machinery, construction materials, toys, etc.²⁴

¹⁸ https://single-market-economy.ec.europa.eu/single-market/goods/building-blocks/accreditation-conformity-assessment-bodies_en

¹⁹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008R0765>

²⁰ https://single-market-economy.ec.europa.eu/single-market/goods/building-blocks/accreditation-conformity-assessment-bodies_en

²¹ <https://european-accreditation.org/accreditation/for-industry-economy/>

²² Project RESIST, D6.1 (pages 9-10)

²³ https://europa.eu/youreurope/business/product-requirements/labels-markings/ce-marking/index_en.htm

²⁴ <https://www.sherpa-certification.com/en/european-certification>



Figure 14 Example image of the European CE marking²⁵

Other labels, indicating certification and standards compliance in Europe are applied to demonstrate that a product or process meets requirements in areas such as energy efficiency, food agriculture and production (including fish and organic food products), and chemical substances.²⁶

3.1.5 International Standardisation

Internationally recognised standards are developed and published by the **International Organization for Standardization (ISO)**. ISO standards, developed for products, processes and/or services aim at **establishing internationally accepted standards** for quality management, environmental management, health and safety, energy management, food safety, and IT security.²⁷ The ISO standards also seek to **implement requirements or procedures** which aim to contribute to the effective achievement of the **17 Sustainable Development Goals (SDG)** set by the United Nations in 2015. The concept of “**multi-stakeholder partnerships**” falls within the SDG #17 – *Partnerships for the Goals: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development* which,

“RECOGNIZES MULTI-STAKEHOLDER PARTNERSHIPS AS IMPORTANT VEHICLES FOR MOBILIZING AND SHARING KNOWLEDGE, EXPERTISE, TECHNOLOGIES AND FINANCIAL RESOURCES TO SUPPORT THE ACHIEVEMENT OF THE SUSTAINABLE DEVELOPMENT GOALS IN ALL COUNTRIES, PARTICULARLY DEVELOPING COUNTRIES. GOAL 17 FURTHER SEEKS TO ENCOURAGE AND PROMOTE EFFECTIVE PUBLIC, PUBLIC-PRIVATE AND CIVIL SOCIETY PARTNERSHIPS, BUILDING ON THE EXPERIENCE AND RESOURCING STRATEGIES OF PARTNERSHIPS.”²⁸

²⁵ Ibid.

²⁶ https://commission.europa.eu/business-economy-euro/product-safety-and-requirements/eu-labels_en

²⁷ <https://www.iso.org/standards.html>

²⁸ <https://sdgs.un.org/topics/multi-stakeholder-partnerships>

The objectives and vision of the eNOTICE network pertain to the SDG #17 framework and can further contribute to **strengthening national capacities** by supporting and participating in related ISO standards.

3.2 Standardisation framework for the eNOTICE Capacity Label

The previous section introduced the concept of standardisation and the six-step process to obtain a European Standard. Creating a standard for network services, such as a web-based search function, would establish a certain set of expectations for **transparency and organisation** to ensure and maintain a **harmonised process**. Standardisation of the eNOTICE Catalogue of Training Centres provides added value to this online service, by guaranteeing that the methodology and procedures **meet minimum requirements**.

The implementation of a standardisation framework for the eNOTICE Capacity Label contributes to ensuring **equal opportunity for visibility, promotes non-discrimination, and avoids exclusion of eligible TCs**. Standardisation of both the minimum expectations and the process for listing TCs in the Catalogue assists in affirming the mission and vision of NOTICE and authenticates this network tool as a **not-for-profit service**.²⁹

Implementation, modification, and/or improvement of certain aspects would contribute to the **positive development and standardisation of this network tool**. The following points offer some steps to achieve an eNOTICE Capacity Label standardisation framework:

²⁹ https://youth.europa.eu/sites/default/files/european_solidarity_corps_guide_2022_en_v2.pdf

Table 4 Focus areas and steps to develop a standardisation framework

| | |
|---|---|
| <p>Standardisation</p> | <ul style="list-style-type: none"> • Create a set of minimum standards corresponding to each fundamental category listed in the Catalogue (e.g. A minimum number/type of beds that a TC must have on-site to be listed as having accommodation facilities for trainees) |
| <p>Harmonisation</p> | <ul style="list-style-type: none"> • Create a guide (formal request form) for TCs to request a listing in the Catalogue |
| <p>Transparency</p> | <ul style="list-style-type: none"> • Publish a hyperlink to the eNOTICE project page with definition of network mission, vision, objectives, and framework • Create a page for Catalogue eligibility criteria indicating the minimum requirements for TCs to become affiliated with eNOTICE and listed in the TC Catalogue |
| <p>Monitoring & Evaluation</p> | <ul style="list-style-type: none"> • Establish a formula for 'duration of eligibility' & a review system and/or calendar cycle (e.g. every 2 years), to ensure all TC information listed in the Catalogue is consistently accurate and remains current • Develop a set of regulations whereby a TC may be considered for removal from the Catalogue • Establish a warning protocol/procedures to assist TCs in taking remedial measures if determined no longer compliant with eNOTICE principles and/or EU expectations |

Standardisation

The Catalogue of Training Centres plays an integral part in the eNOTICE network's objective to **increase resource sharing and optimise investments**. The goal of the Capacity Label is to provide a **comprehensive listing of eligible TCs aiming to increase visibility and assist stakeholders in identifying potential partnerships and training opportunities**. To achieve this objective, standardisation of the criteria for listing in the TC Catalogue will contribute to **increased efficiency** in the listing process and **enhance transparency** by better **understanding the characteristics used to determine eligibility** for each label area. Further understanding of this will be highlighted in the steps to increase transparency (see section below). The following table outlines suggestions to implement this standardisation framework:

Thematic Expertise: To be listed as having specific C-B-R-N-E expertise, the TC must declare ability to offer one or more of these training capacities:

Table 5 Standardisation Framework Suggestions for Criteria Indicating TC CBRNe Expertise

| Chemical & Explosives Expertise: | Biological Expertise: | Radiological/Nuclear Expertise: |
|---|--|--|
| <ul style="list-style-type: none"> Offers theoretical courses and/or TTXs dealing with chemical & explosives scenarios. | <ul style="list-style-type: none"> Offers theoretical courses and/or TTXs dealing with biological scenarios. | <ul style="list-style-type: none"> Offers theoretical courses and/or TTXs dealing with radiological scenarios. |
| <ul style="list-style-type: none"> Has chemical detection, identification, & sampling equipment & PPE to conduct specific contamination drills. | <ul style="list-style-type: none"> Has biological detection, identification, & sampling equipment & PPE to conduct specific contamination drills. | <ul style="list-style-type: none"> Has radiation detection & identification equipment & PPE to conduct specific contamination drills. |
| <ul style="list-style-type: none"> Has infrastructure on-site to organize full-scale training exercises. | <ul style="list-style-type: none"> Has infrastructure on-site to organize full-scale training exercises. | <ul style="list-style-type: none"> Has infrastructure on-site to organize full-scale training exercises. |
| <ul style="list-style-type: none"> Offers Live Agent Training dealing with CWA/TIC. | <ul style="list-style-type: none"> Offers modelling & simulation training for prediction and/or management of a chemical scenario. | <ul style="list-style-type: none"> Offers Live Agent Training dealing with RAD sealed/unsealed sources. |
| <ul style="list-style-type: none"> Offers modelling & simulation training for prediction and/or management of a chemical/explosives scenario. | <ul style="list-style-type: none"> Has a multi-player VR training facility with basic/advanced-level & operator-specific biological scenarios. | <ul style="list-style-type: none"> Offers modelling & simulation training for prediction and/or management of a radiological scenario. |
| <ul style="list-style-type: none"> Has a multi-player VR training facility with basic/advanced-level & operator-specific or multidisciplinary chemical/explosives scenarios. | | <ul style="list-style-type: none"> Has a multi-player VR training facility with basic/advanced-level & operator-specific or multidisciplinary radiological scenarios. |




Accessibility methods to reach a specific TC can have a direct impact on an entity or organisation’s ability to organise a training activity at that centre. For this reason, it is important to clarify the **specific criteria** under which the relevant selections are listed. For a TC to be listed as accessible by one or more of the selected methods, the following table outlines suggestions for the related criteria:

Table 6 Standardisation Framework Suggestions for Criteria Indicating TC Accessibility

| By bus: | By car: | By plane: | By shuttle: | By train: | By high-speed train: |
|---|--|--|--|--|---|
| <ul style="list-style-type: none"> The training centre has a public transportation bus station nearby (within 10 mins. walking/up to 1 km distance.) | <ul style="list-style-type: none"> The training centre can be reached by car and parking is available on-site. | <ul style="list-style-type: none"> There is an airport located within XXX km of the training centre’s location. | <ul style="list-style-type: none"> The training centre can be reached by pre-organised shuttle bus. | <ul style="list-style-type: none"> There is a train station located within XXX km of the training centre’s location. | <ul style="list-style-type: none"> There is a train station located within XXX km of the training centre’s location. |
| <ul style="list-style-type: none"> The neighbourhood or town/city of the training centre can be reached by local bus. | <ul style="list-style-type: none"> The training centre can be reached by car and public/street parking is available in the vicinity of the training centre. | | | <ul style="list-style-type: none"> The neighbourhood or town/city of the training centre can be reached by local train. | <ul style="list-style-type: none"> The neighbourhood or town/city of the training centre can be reached by high-speed train. |

Characteristics related to **accommodation facilities** at a given training centre can also have a significant impact on the **frequency and capacity** of training activities, courses, exercises, etc. organised. Therefore, as a vital search filter, it is important to underline the specific elements associated with these capabilities.

Suggestions for standardisation of TCs characterised as possessing ‘On-site lodging’ in their profile:

- Minimum capacity → 10 beds
-  → up to 50 beds
-  → between 50 and 100 beds
-  → over 100 beds

Suggestions for standardisation of TCs defined in the Catalogue as not having ‘On-site lodging’:

- The TC can be considered eligible for listing if there are off-site accommodation possibilities within **30 km** distance.
- TCs with no accommodation options within **1 km** from the site (i.e. within walking distance) must have the possibility to provide their own or arrange a private shuttle bus service.

Suggestions for standardisation of eligibility for listing of ‘On-site dining’ capabilities:

- If the TC has on-site accommodations, the dining facility must have enough capacity to match the declared lodging capacity.
- Dining should be specified as an internal service (i.e. cafeteria) or external service (i.e. catering company).
- Dining capabilities should be categorised:
 - Breakfast
 - Lunch
 - Dinner
 - Coffee breaks

Harmonisation

In addition to the implementation of the abovementioned standardisation framework for eligibility in the TC Catalogue, a **harmonised application form** should be made publicly available to increase the transparency and assist with the standardisation process. This form should provide details about the Catalogue’s goal, specific criteria, and request that the TCs respond to a standard list of questions providing information linked to the categories provided by the Catalogue search function.

Transparency

Transparency of the eNOTICE Catalogue of Training Centres tool is another critical aspect in ensuring the **long-term sustainability** of the network and its resources. To increase transparency, the Catalogue page should contain **hyperlinks** which clearly direct the audience to external pages containing information related to the network and its services. These links would ensure that stakeholders have **easy and quick access to vital information**, including the network’s objectives and mission, as well as to a clearly defined methodology for the eligibility of Training Centres to be part of the network and/or the conditions which must be met in order to be listed in the Catalogue. It

should also be made clear that the goal of the eNOTICE Catalogue of Training Centres is **not to provide quality assessment or evaluation of the facilities, services, training, or expertise of the centres listed**. Increasing access to this type of information enables stakeholders to have a deeper understanding and fosters focused and appropriate use of the tool for its intended purpose.

Suggestions for eligibility conditions include:

- The Training Centre offers training in one or more areas in the field of CBRNe.
- The Training Centre operates under standard international safety measures.
- The Training Centre is open to international and multidisciplinary collaboration.
- The Training Centre follows GDPR or other similar privacy rules to protect the data and information of trainees.
- The Training Centre meets the minimum requirements for accommodations, facilities, and training capabilities.
- For public/military centres : the Training Centre is mandated and supported by public authorities.
- For private/civilian centres : the Training Centre meets national standards & follows appropriate regulations/legal statutes.
- The activities and objectives of the Training Centre align with the mission and goals of the eNOTICE network.

Monitoring & Evaluation

The creation of a framework for the **Monitoring & Evaluation (M&E)** of the eNOTICE Catalogue of Training Centres directly impacts the sustainability of this tool by **guaranteeing that the conditions of eligibility are maintained**, and that the standardisation methodology proposed above is followed. To achieve this objective, a structured monitoring and evaluation procedure should be put in place to ensure that all information available remains accurate and that eligible centres continue to meet the needs and standards of the network’s stakeholders.

Suggestions for M&E framework:

- Upon receiving expression of interest by submitting the **formal application** the appointed party(ies) of the eNOTICE network are responsible for reviewing and approving/denying any requests to be listed in the TC Catalogue.

- **For Acceptance:** the candidate TC will receive an official letter of acceptance & listing in the TC will become effective within one month of approval.
- **For Rejection:** the candidate TC will receive an official letter of rejection stating the reasons for which the request has been denied. Rejected TCs are offered to possibility to re-apply once the missing standards have been addressed and/or rectified.
- Initial review of an accepted TC is scheduled after three years.³⁰ **Renewal** is contingent upon the TC continuing to meet the standards and expectations of the eNOTICE network and its stakeholders. The second review will take place five years after the first renewal and continue every five years thereafter.
- Upon formal review of the TC, if the TC no longer meets the required standards, the TC will receive an official **letter of warning** and is given 30 days to rectify any pending issues. Following the 30-day warning period, if the TC has not revised the issue, it will be immediately removed from the Catalogue. The TC must then re-apply to be considered for listing again.
- Any existing network member, stakeholder, or other TC may formally **report a TC** that has allegedly failed to maintain the required standards. Upon receipt of such a report, an investigation will be conducted.

3.2.1 Obtaining Certification

Following the detailed description on the objectives and creation of European Standards in the previous section, it is evident that the eNOTICE Capacity Label, although a useful and innovative tool in the field of CBRN training and development, does not fall within the category of goods and services which would require standardisation and implementation at the national and EU levels. However, as outlined in the preceding section, the proposed standardisation framework is the first step to ensuring the **sustainability and strategic development** of this tool and **continued expansion of the eNOTICE network**. To further this objective, the creation of a CEN-CENELEC Workshop Agreement (CWA) will assist in **facilitating standardisation** and ensure that this tool addresses the needs and expectations of the European and global CBRN communities. The goal of a CWA is to

³⁰ [https://www.coe.int/en/web/youth/ql-how-to-apply1#{%2239921680%22:\[5\]}](https://www.coe.int/en/web/youth/ql-how-to-apply1#{%2239921680%22:[5]})

provide opportunity to European projects to **elaborate on the results of a programme, technology, or service and ensure its alignment with European standards.**³¹

To create a CWA emanating from a European project, a **Secretariat** that belongs to a CEN/CENELEC Member State must be appointed.³² Both the proposing party and the secretariat are responsible for ensuring financial support enabling the full completion of the proposed project/plan. A CWA proposal should be submitted to a relevant Technical Committee for a 30-day consultation period. If the proposal is accepted, a draft project plan should be created. This draft must include:

- A **dissemination strategy** to involve interested parties after the CWA has been published.
- **Participation criteria** outlining a plan for accepting stakeholders in the CWA.
- An outline of **voting rules**, if necessary for the intended CWA.
- Selection of the **CWA language** and identification of any additional publication languages.
- Indication of an **open commenting phase** for CWAs dealing with safety aspects.

The draft proposal plan is then published on the CEN/CENELEC websites within 15 days of completion of the abovementioned steps and a kick-off meeting is announced. The publication of the draft lasts for a period of 30 days and is open to the public for comments. The kick-off meeting is then held at least 30 days after the publication of the draft. During this meeting, the CWA is agreed upon by all interested parties. Following the kick-off meeting, the CWA will undergo a process of drafting, commenting, revision and final approval. There is no specific indication of the time frame required to complete this process.³³ A CWA is not a EN, but rather an agreement among participating parties pertaining to the work programme of a specific Technical Committee. For the eNOTICE Capacity Label, a CWA could be established within the framework of the related **CEN Technical Committee - CEN/TC 391: Societal and Citizen Security**.

The main objective of CEN/TC 391 is,

“TO ELABORATE A FAMILY OF EUROPEAN STANDARDS, STANDARD-LIKE DOCUMENTS (E.G. PROCEDURES, GUIDELINES, BEST PRACTICES, MINIMAL CODES OF PRACTICE AND SIMILAR RECOMMENDATIONS) IN THE SOCIETAL AND CITIZEN SECURITY SECTOR INCLUDING ASPECTS OF

³¹ <https://boss.cen.eu/media/Guides/CEN-CLC/cenclcguides29.pdf>

³² <https://www.cenelec.eu/media/Guides/CEN-CLC/cenclcguides29.pdf>

³³ Ibid.

PREVENTION, RESPONSE, MITIGATION, CONTINUITY AND RECOVERY BEFORE, DURING AND AFTER A DESTABILISING OR DISRUPTIVE EVENT.”³⁴

To date, this Technical Committee has published 11 standards and 5 work programmes related to **crisis management and CBRN operations**.³⁵ This TC has three Working Groups. CEN/TC391 Working Group 2 deals specifically with the **standards and programmes focused on CBRN-related activities**. Within the scope of this Technical Committee is the standardisation of activities such as **products or services focused on societal and citizen security**. As a tool to increase CBRN training capacities, identify stakeholder needs, and provide TC support, the eNOTICE Catalogue of Training Centres could be considered for standardisation under this field-specific framework.

Furthermore, eNOTICE recently joined an informal CBRN and Standardisation Cluster (CSTAC) of DRS research projects, led by PEERS project - Practice Ecosystem for standaRdS, the cluster aiming at promoting good practice in research and standardisation, through collaboration and recognising opportunities for efficiency wherever appropriate through combined activity.

4. Results of an ad-hoc survey to evaluate the eNOTICE Capacity Label and web-based search function

The main objective of the eNOTICE Capacity Label is to **provide visibility for TCs** which adhere to **EU standards** and operate in accordance with the **core principles of the eNOTICE network**. This visibility is a fundamental step in the **resource pooling process** among both network members and external CBRN stakeholders, enabling **multidisciplinary and cross-border collaboration, information sharing, and expertise exchange**. For this reason, it is crucial that the Capacity Label meet the expectations and needs of the eNOTICE network’s stakeholders, the primary actors in the CBRN defence industry – nation-states, practitioners, TCs, R&D&I, and policy makers.

To assess if the current Capacity Label and web-based search function are in line with these needs, an ad-hoc survey was distributed to a large **network of CBRN stakeholders**. This network consists of a diverse range of **practitioners, TCs, industries, researchers, and members of other EU-funded CBRN-related projects** including Bullseye, Holozcan, VERTIgO, and PROACTIVE. For statistical purposes, and to ensure objectivity in the evaluation process, the survey was not distributed

³⁴ https://standards.cencenelec.eu/dyn/www/f?p=205:7:0:::FSP_ORG_ID:680331&cs=1D102578ADD777D09EAC5ED07F4632E32

³⁵ Ibid.

to any current members of the eNOTICE consortium. The request to participate in the evaluation survey was sent to over 130 contacts and received a 9% response rate, providing a limited yet focused perspective on the Catalogue of Training Centres. The survey, which was issued via Microsoft Forms, comprised a total of **nine (9) questions** aimed at gathering **practical insight from potential users on the functionality of the Catalogue**. All questions required a response which were recorded anonymously.

Question 1: Which CBRN stakeholder do you represent?

The first question aimed to gain an understanding of the **professional responsibilities and role** within the field of CBRN of each individual respondent. Of the **12** responses received, **3** people reported to represent a CBRN Training Centre, **3** represent a Research Institute, **2** represent an Academic Institution, **1** represents a Nation-State, and **1** represents a Small-Medium Enterprise (SME). **2** individuals selected ‘Other’ and self-reported representations of **1** Horizon 2020 project and **1** NGO for civil society. Although no responses were received from stakeholders representing large industries or policy makers, there was a sufficient range in stakeholder profiles to obtain a varied assessment based on differing perspectives and needs.

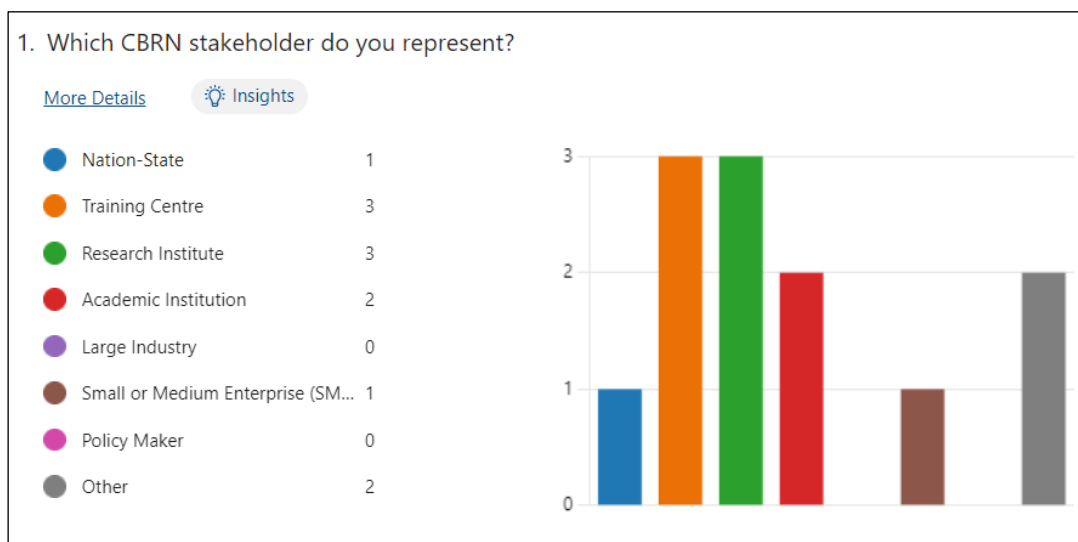


Figure 15 Results of Survey Question #1

Question #2: Were you previously familiar with the eNOTICE ‘Catalogue of Training Centres’?

The goal of the second question was to **identify the range of previous knowledge of the eNOTICE Catalogue**. This aspect contributes to a more thorough results assessment, by understanding if respondents are providing an evaluation during their first time reviewing the Catalogue and its search

functions, or if their evaluation stems from previous use and familiarity with the platform. Of the **12** responses received, **10** reported having previous knowledge of the Catalogue, while **2** reported no prior familiarity. Based on these results, it is assumed that most respondents have used the search function previously and have therefore formed an individual opinion on its functionality over a more extended period of time.

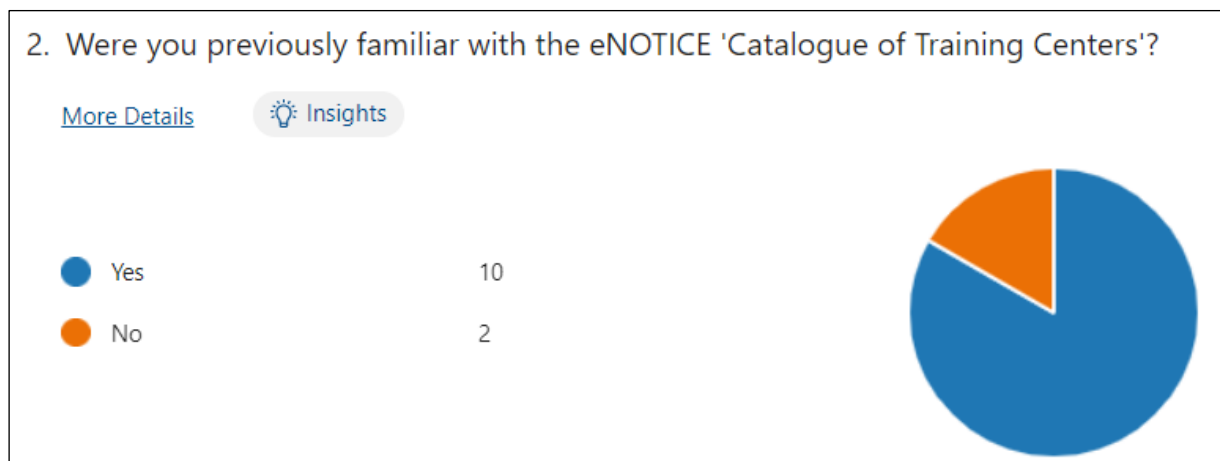


Figure 16 Results of Survey Question #2

Question #3: Do you find the current labels (Countries, Expertise, Accessibility, Training Area, Accommodations, & Capacity Label) useful to categorise the capacities of network Training Centres?

The third question aimed at obtaining a rapid and simple response to gather **initial reactions to the various search filter labels** found in the existing eNOTICE Catalogue. For this question, respondents could answer either ‘Yes’, ‘No’, or ‘I’m not sure’. Out of the **12** responses, **10** respondents selected ‘Yes’, **2** answered ‘I’m not sure’, and none (**0**) selected ‘No’. This positive feedback assists in understanding the overall perception of the Catalogue as a network tool and in recognising the specific benefits of this service for both internal and external stakeholders.

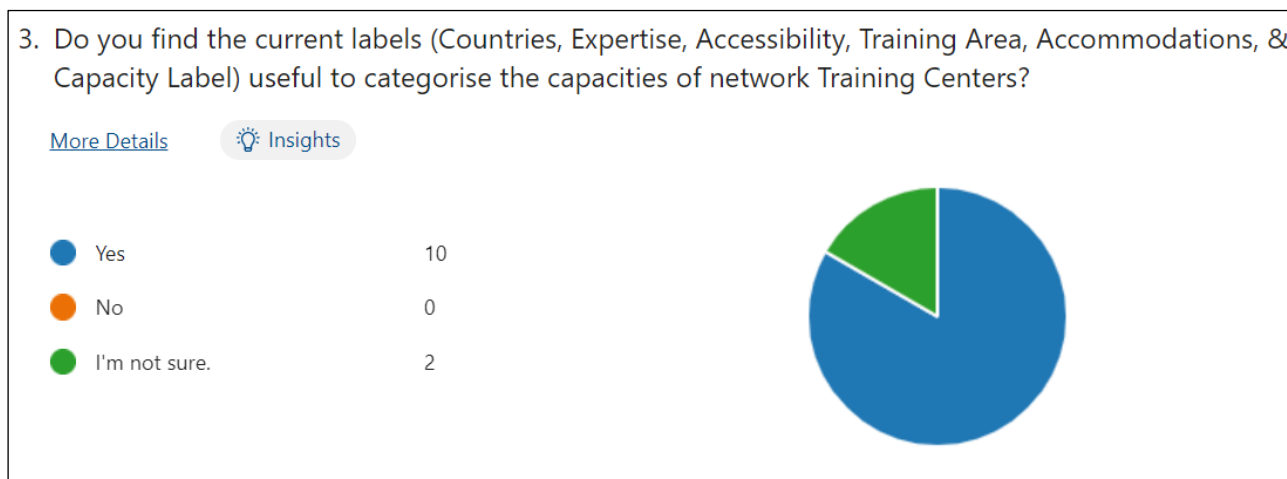


Figure 17 Results of Survey Question #3

Question #4: Please explain your previous answer.

This question required respondents to offer an explanation on their selection from the previous question. This individual elaboration provides **personal views on the Capacity Label** in its current form, enabling **strategic assessment** according to **user perspectives and reported needs**. This question received a mixed range of responses, which were the following:

40

Table 7 Results of Survey Question #4

| Respondent No. | Response: |
|----------------|---|
| #1 | None needed |
| #2 | It would be beneficial to make the online training element more searchable in the catalog. |
| #3 | Very good, I would better clarify what “field exercises” means, since it may be perceived as live agents training. |
| #4 | The meaning of the labels “Countries” and “Capacity Label” are not so clear. |
| #5 | Common training initiative in case of need |
| #6 | It seems like the information collection is not complete. Half of the sites lack information regarding the topics covered in point 3. Does this mean that they (e.g. West Midlands Police, UK) lack CBRN expertise etc.? The labels exclude capabilities of training sites if not all information is collected, and it seems like it is half completed at the same time as it gives the impression that they lack the commitment for the eNOTICE initiative if they don’t even take the time to share basic information with the project. Also, there is no definition of expertise. For example, both Campus Vesta and SKC●CEN state that they can provide expertise in R/N. |

| | |
|-----|---|
| | Are they equal in R/N expertise or does one possess more expertise than the other? As an exercise director, in what way would it differ to set up an exercise in these sites? When looking at the list and reading through the information of each site does not clarify in what way the expertise in each site would give an added value to an exercise that I may plan to organize. |
| #7 | Useful! |
| #8 | The labels are straightforward! But in the categories, why is serious gaming a capacity label? |
| #9 | Very good overview on necessary basic information, self-explanatory presentation (little exception on first view: difference between thematic expertise and capacity label not quite clear to me, I see the different sub-points, but I didn't catch the different meanings of the two tabs) |
| #10 | I find the labels relevant and well done. |
| #11 | Easy to understand. |
| #12 | The categorization helps the identification of main characteristics of the training centre thus supporting a proper understanding of how each centre works. |

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Responses from the 12 survey participants indicate that there is **overall satisfaction** with the eNOTICE Catalogue of Training Centres. However, a few responses demonstrated **confusion with understanding the existing label structure and categorisation of the filters** found in the web-based search function. In these cases, respondents indicated that the **tool is useful but could use some strategic adjustments** to improve the user experience.

Question #5: Are there other details (capacities, information, etc.) about the Training Centres that you would like to see in the Catalogue?

Question number 5 aimed at gathering individual and personalised responses to better understand **what additional information about the TCs** that potential stakeholders would like to have at their disposal through the Catalogue. This question enabled respondents to identify other critical categories that they deem missing from the current Capacity Label, and to provide suggestions on what could be added to **enhance the organisation and quality of information** found in the eNOTICE TC database. There was a diverse scope of responses to this question, as demonstrated below:

Table 8 Results of Survey Question #5

| Respondent No. | Response: |
|----------------|---|
| #1 | Availability of interpreters & availability of civilian volunteers. |

| | |
|-----|---|
| #2 | It would be beneficial to indicate the presence of e-learning and the location of classroom training. Alongside serious games, simulation-type training can be presented. Practical training and theoretical training can be identified based on their respective locations. Where webinars and workshops are typically advertised on the training centre’s websites. |
| #3 | Videos if possible, and examples of training sessions already implemented. |
| #4 | “Testing”, “Environment” |
| #5 | Experience of trainers dealing with real cases. |
| #6 | Access to volunteers (playing victims). Type of volunteers (also including vulnerable groups). Access to equipment. Type of first responder branch (Fire, Pol, Amb, Mil, etc.). |
| #7 | Maybe adding information about the trainings given would be useful as well. |
| #8 | Maybe a category of “VR” training – although not important now it will be more important in the future. |
| #9 | Participant number limit for courses/trainings/exercises. |
| #10 | No |
| #11 | No |
| #12 | No |

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For this question, respondents indicated that their **main priority in using the eNOTICE Catalogue is to search for and identify TCs with specific experience, infrastructure, and/or training capabilities**. This highlights the **importance of the role of TCs**, especially within the scope of the eNOTICE network, in **meeting the needs of relevant stakeholders** to increase training opportunities, knowledge, and research in the field of CBRN defence.

Question #6: Please rank the current categories in order of importance to you.

For this question, respondents were asked to **rank the six categories** found in the search function of the eNOTICE Catalogue of Training Centres, in order of importance. This question provided insight on the needs of stakeholders by demonstrating **the identifiers that they deem more important** and for which they seek detailed information about the TCs. The responses highlighted ‘**Expertise**’ as the **most important** area to underscore through the Capacity Label. ‘**Accommodations**’ was ranked the **least important** point of focus about the TCs as a filter of the search function.



Figure 18 Results of Survey Question #6

Question #7: Are the icon labels practical and self-explanatory? Please rate your opinion (1 = not good / 5 = excellent) of the different icon types and ad-hoc explanation of each service’s levels.

The goal of question number 7 was to obtain **stakeholder impressions of the icons** used in the Catalogue to **visually demonstrate the Capacity Label of the TCs**. Of the twelve responses received, **5 (42%)** individuals rated the labels a 5, **5 (42%)** gave a rating of 4, and **2 (17%)** rated the labels a 3. **No** respondents gave a rating of 1 or 2.

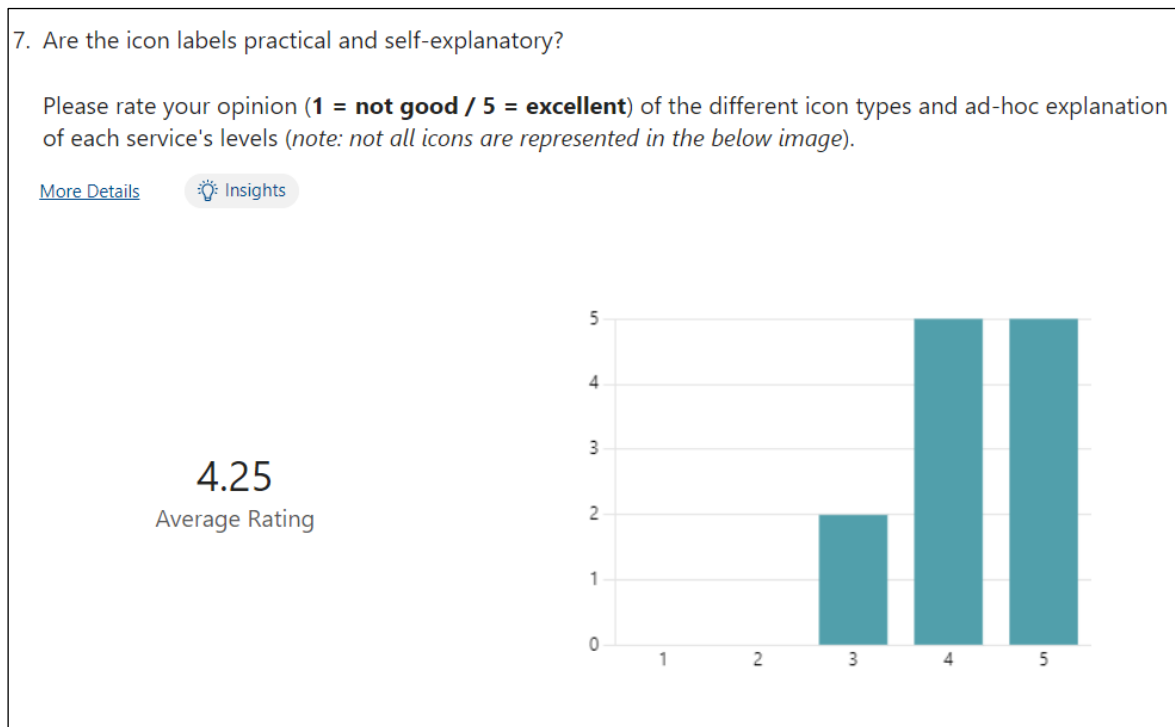


Figure 19 Results of Survey Question #7

Question #8: On a scale of 1 (not) to 5 (very), please rate the user-friendliness of the Catalogue and web-based search function.

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Question 8’s goal focused on obtaining impressions of the **usability of the Catalogue and its search functions**. In doing so, it aimed to understand what CBRN stakeholders perceive of the organisation and functionality of the webpage, to determine any specific aspects which have the potential to be improved or modified to **increase the intended outcomes of this network tool**. The **12** responses revealed an overall satisfaction with the eNOTICE Catalogue of Training Centres. Specifically, **4** (33%) respondents rated it a 5, **7** (58%) gave a rating of 4, and **1** (8%) rated it a 3. There were **no** respondents who selected a rating value of either 1 or 2.

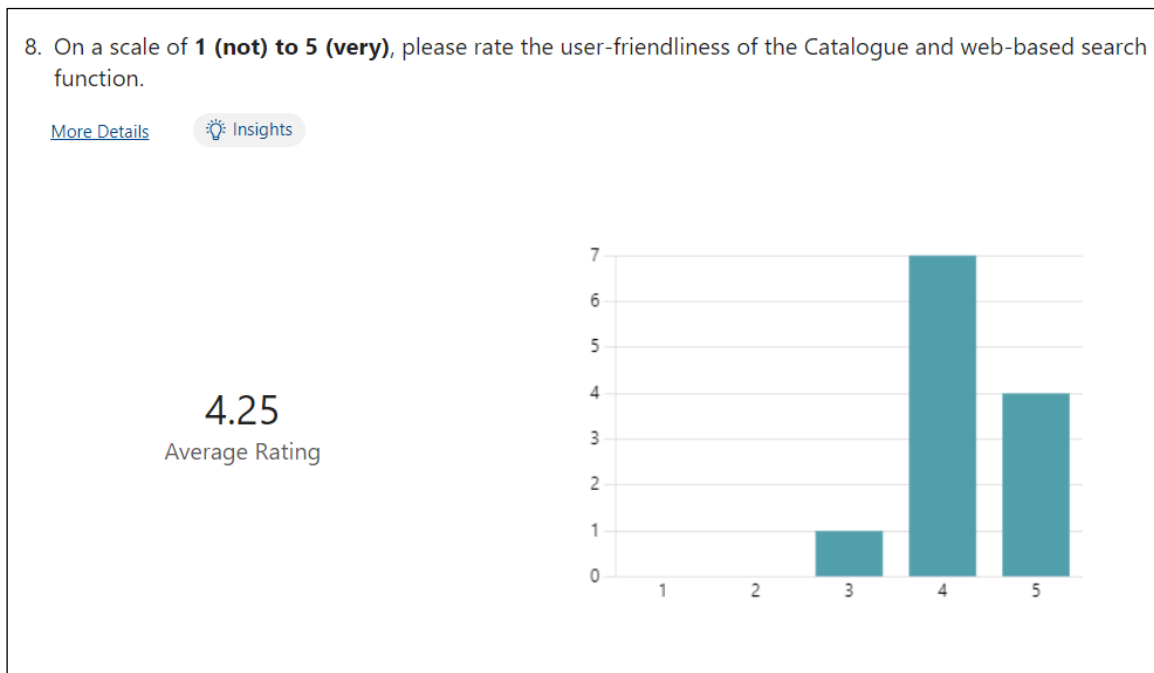


Figure 20 Results of Survey Question #8

Question #9: Please provide any additional recommendations or comments you would like to share with us.

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The aim of the final question of this survey was to elicit any additional ideas, suggestions, or opinions by the potential CBRN stakeholders to improve the eNOTICE CBRN Capacity Label. As a unique and useful tool within the CBRN defence industry, recommendations for improvement help ensure that the eNOTICE network’s services **meet the quality, standards, and expectations of its members and any potential users**. The following table outlines the provided responses to this question:

Table 9 Results of Survey Question #9

| Respondent No. | Response: |
|----------------|--|
| #1 | None. |
| #2 | -- |
| #3 | Change the icon of serious gaming, possibly creating one for serious gaming and one for Virtual (or Extended) Reality. |
| #4 | N.A. |

| | |
|-----|--|
| #5 | No. |
| #6 | Potential users of the catalogue would do so because they lack basic knowledge of training sites in their own/other countries. More information accessible through the catalogue would be helpful (see point 5) as many components are necessary for an exercise (as I am sure you know). |
| #7 | Keep up the good work. |
| #8 | Centres that have no symbols get a little lost, because they take less space (e.g. CBRN Defence Training Base “MUSCEL”); I reckon to give each centre the same line height. |
| #9 | Maybe: some additional explanation on the “search” conditions; i.e. written search: “chemical” yielded two hits (when: all countries selected, all thematic expertise selected / all prof. expertise deselected) no hit (when: additionally all thematic expertise deselected), two hits (when: all countries selected, all professional expertise deselected and only chemical as thematic expertise selected)...so, the hits seem not to be complete – but the use of the search might be my misunderstanding. |
| #10 | I would add that the approach to the training in the centres gives special attention to the many representative categories of diverse sensitivity and ability. |
| #11 | Helpful web page. |
| #12 | No comment. |

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The responses highlight the **importance of implementing a standardised method for reporting TC information within the Catalogue database**, to ensure that each TC provides a standard level of information and subsequently receives equal representation for stakeholders to reference. The responses also indicate the potential for both **aesthetic and contextual improvement** to the functionality of the search function and the icon representations of the Capacity Label.

5. Recommendations and Conclusions

5.1 Recommendations for the Capacity Label based on user feedback

Input received from CBRN stakeholders through the nine-question survey, has demonstrated that the eNOTICE Catalogue of Training Centres is a **useful tool and unique service** within the CBRN defence field, offering visibility of the eligible TCs and **providing opportunity for capacity building, training, and multi-lateral partnerships development**. This feedback has highlighted the specific benefits of offering individual TC information, including location, specialisation, facility size, and other defining elements necessary to identify the best TC for a given training need. However,

this input has also revealed that some aspects of the web-based search function may not be as clear to an external user as they are to those who contributed to its development. For example, several users reported confusion in **distinguishing the difference between the elements** listed in the ‘Expertise’ filter with those in the ‘Capacity Label’ section. Similarly, some stakeholders expressed the **desire to see additional and critical information** about the TCs which is currently not included in the Catalogue, such as the **specific training offer(s)** related to their thematic expertise type. To meet the requests and expectations of these and other potential stakeholders, a slight modification to the web-based search function could be advantageous, by adopting a more **user-friendly approach** and simultaneously **increasing the visibility and market appeal of the TCs**. The following provides an example of the modifications which, if implemented, could benefit the overall outcomes of the Catalogue tool:

Filter by:

Country: Choose an item.

Austria
Belgium
Italy...

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Area of expertise: Choose an item.

Professional occupation: Choose an item.

Training offer: Choose an item.

Training area:

Minimum area

Maximum area

Coherency: Area must be coherent

Accessibility: Choose an item.

Accommodations: Choose an item.

On-site lodging
Off-site lodging
On-site dining
Off-site dining

Amenities: Choose an item.
 Computer lounge
 Gym
 Recreation room
 Wi-Fi

Capacity Label: Choose an item.

Taking into consideration the feedback from survey responses, the two sections which are currently identified as ‘Expertise’ and ‘Capacity Label’ could be divided and rearranged into four critical aspects: ‘Area of Expertise’, ‘Professional Occupation’, ‘Training Offer’, and ‘Capacity Label’. This modification would improve the search function for users by providing more focused searchable details according to what has been deemed by some stakeholders as the most critical elements of the TCs to be found in the Catalogue.

Table 10 List of Modified Catalogue Search Categories

| Area of Expertise | Professional Occupation | Training Offer | Capacity Label |
|--|-----------------------------------|--------------------------|---------------------------|
| Chemical | Fire Brigade | TTX | eNOTICE Eligibility |
| Biological | Emergency Medical Services | Theoretical Courses | Experience in EU Projects |
| Radiological / Nuclear | Police / Law enforcement | Drills | Legal Status |
| Explosives | Military | Full-Scale Exercises | Organization Type |
| International / Cross-border Cooperation | Special Forces & Operations | Live Agent Training | Competent Authority |
| Counterterrorism | HAZMAT | Extended Reality (VR/AR) | |
| Search & Rescue | Civil Protection | Serious Games | |
| DVI / Forensic Investigations | International Humanitarian Actors | Modelling & Simulations | |
| Other | Other | | |

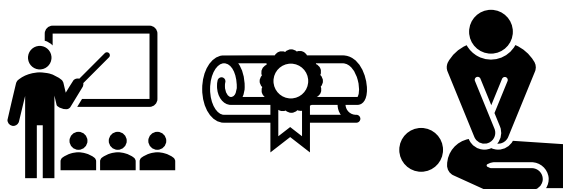
What should be particularly noted from this adapted search function, is the modification to the search categories covered under the filter of ‘Capacity Label’. Based on some user’s feedback citing

redundancy between the ‘Thematic Expertise’ and ‘Capacity Label’ filters, it has been noted that there are some discrepancies in the results which appear when selecting between these various filters. One potential solution to this could be a modification, as indicated above, which aligns critical details about the TCs reported in each individual profile page with that which can be filtered through the search function. In doing so, vital elements such as whether a TC is a public or private institution, has previous research experience in EU-funded projects, and is strictly military or civilian, can be more easily identified and filtered by a potential stakeholder. Furthermore, the Capacity Label would comprise of a specific **set of icons which offer visual representation of the abovementioned search selections**. Some of these icons would remain those which were previously developed in D2.2 and which are currently used to identify specific TC capacities including thematic expertise, facilities, training focus, and experience with EU-funded projects. However, a few modifications and additions could contribute to the overall visual representation offered by the Capacity Label.

1. The addition of **professional occupation**-based icons (such as the examples below³⁶)




2. The addition of **training offer**-based icons (such as the examples below³⁷)



³⁶ Microsoft 365 open-access icons

³⁷ Ibid.

3. Modification of the current icon from the serious gaming symbol³⁸  (which has been attributed by some as strictly pertaining to video games, rather than to all Extended Reality technologies) to more **suggestive symbols** that indicate **Virtual Reality-** and **Augmented Reality-** based training capabilities³⁹:



Furthermore, a division between the elements found in the current 'Accommodations' section could provide added value and increase the ease of the search functionality by dividing these details between the more fundamental aspects and those which could be considered as optional benefits. In this case, when clicking on the 'Accommodations' column, the user would see these concepts divided into two columns:

Table 11 Modifications to Accommodation Search Function

| Accommodations | Amenities |
|------------------|-----------------|
| On-site lodging | Computer Lounge |
| Off-site lodging | Gym |
| On-site dining | Wi-Fi |
| Off-site dining | Recreation Room |



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Additionally, further development of the Catalogue as a web-based search engine could involve a homepage with a detailed explanation of these vital components:

- The **eligibility criteria and application process** involved in order for a TC to be included in the eNOTICE Catalogue.

³⁸ <https://www.h2020-enotice.eu/static/catalogue.html>

³⁹ Microsoft 365 open-access icons

- **Definitions of the icons and various levels** represented by each icon (e.g. the difference between one bed  and two beds  as indicators of specific accommodation capacities).

5.2 Conclusions: implications and next steps

The eNOTICE Catalogue of Training Centres is a web-based search function, offering a **unique tool** to stakeholders, partners and others invested in CBRN training. The Catalogue provides opportunity for these stakeholders to consult a **comprehensive database of information**, providing visibility to Training Centres and fostering partnerships for increased international and multidisciplinary training activities and exercises. The search function is currently divided into several major categories which can be filtered to help the user **identify specific TCs according to selected characteristics**, thus enabling a quick and efficient method to search for a qualified facility and locate opportunities outside of the scope of one's own resources. Beginning in January 2022, the 'Capacity Label' was implemented in the Catalogue of Training Centres, providing added value to this search function, by creating a visual representation of capacity aspects related to C-B-R-N and/or serious gaming expertise, as well as indicating additional details such as the number of EU-funded projects in which the centre has participated. At present, the Catalogue allows users to **search and filter** through various categories, allowing for explicit selection of a specific country, expertise type, professional area of focus, accessibility methods, size of the training area, accommodation aspects, and the Capacity Label.

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Contributing to Task 5.2.4: *Evaluation of the quality label, web-based search function, and recommendations for certification*, the objective of this deliverable was to conduct an **evaluation of the web-based search function and of the Capacity Label**, with the perspective of ensuring its long-term sustainability as a network tool and means for increasing resource pooling and sharing among stakeholders in the field of CBRN defence and security. To achieve this, an **ad-hoc survey** was sent to a network of practitioners, researchers, other EU project consortia, TCs, and industries. CBRN is a small niche in the European defence and security sector, resulting in a relatively small cluster of experts involved in research, development, operations, management and training. For this reason, it is common to receive little feedback despite close collaboration and partnerships among members in the field. However limited, the responses received for this survey provided an external perspective on the **functionality of the Catalogue of Training Centres** and offered valuable insight to evaluate alternative means to **improve the scope and outcomes of this distinctive service**.

According to the responses, users expressed a TC’s expertise as its most important aspect. The location and size of the training area were viewed as the most important, following the expertise. Some respondents also raised concerns about the existing icon used to represent serious gaming and VR training, expressing a desire to see a more applicable symbol to indicate if a TC offers VR training capabilities. Additionally, several respondents noted that in addition to a TC’s expertise, it could be helpful to include specific training types among the current search categories. Based on these and other observations, suggestions were made to modify the characteristics associated with each of the Capacity Label categories, **adding to the efficiency of the search tool and providing new and crucial elements to be integrated into the Catalogue**. The aim of these recommendations is to enhance the user experience while simultaneously improving the results process and increasing the overall functionality of the webpage. Future development of this will involve linking the existing webpage to other pages of information on the eNOTICE website, as well as the creation of several ad-hoc documents, such as:

- eNOTICE Catalogue of Training Centres Application Form
- Acceptance Letter to the eNOTICE Catalogue of Training Centres
- Notice of rejection from the eNOTICE Catalogue of Training Centres
- Renewal Letter
- Notice of warning due to missing criteria after previous acceptance
- Report to notify the eNOTICE network of a TCs alleged non-compliance

Another objective of the eNOTICE network in seeking to ensure sustainability and maintain the long-term quality of its services, is to **establish standardisation of its methodology and tools**, including the Capacity Label. Standardisation at the European level guarantees that a specific product, service, or procedure meets minimum expectations for use by and/or distribution to the public. To achieve this, some recommendations have been made to establish a **standardisation framework**, aimed at implementing **harmonised and transparent procedures to develop, monitor and maintain the database of TCs** according to clearly defined criteria and protocols. In addition, the creation of a European **CEN-CENELEC Workshop Agreement (CWA)**, within the framework of **CEN/TC391** for ‘societal and citizen security’, could provide an effective means for facilitating standardisation of the Capacity Label and **support its future development** in addressing the training needs and expectations of CBRN stakeholders.

Evaluation of the eNOTICE Capacity Label following the COVID-19 pandemic has enabled **new perspectives** to emerge on the **flexibility of services and needs** of both Training Centres and their stakeholders. At its inception, the Capacity Label was envisioned as a tool strictly pertaining to focused demands in training expertise and infrastructure. **New and evolving perceptions on the impact of online and virtual collaborations** as alternative and complementary methods to these capacities provides and even greater opportunity to enhance network resources by **no longer providing geographical or accessibility limitations to organise activities**. Many TCs are beginning to adapt to these expectations by integrating these virtual methods into their training curriculum and offer of expertise. As this continues to develop globally, the inclusion of these services as specific training types and areas of focus on the Catalogue of Training Centres will need to be considered in the future.