

eNOTICE

European Network Of CBRN Training Centres

D5.10 eNOTICE evaluation report on the preparation/ organisation, evaluation and follow up of exercises combined with tests, validations or demonstration. Report 1

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5	Fire Department Dortmund (FDDO)	X
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Executive Summary

This document is the first evaluation report on the preparation, organisation, evaluation and follow up of the Joint Activities carried out during the eNOTICE project until August 2020. The Joint Activities considered are: Gurcy 2017, Nîmes 2018, Brussels 2018, Rome 2018, Vyškov 2019, Gurcy 2019, Birmingham 2019, Dortmund 2019 and Ankara 2020.

This report aims at evaluating the methodology and templates, elaborated in Task 4.1, and used in Task 4.2 for the preparation, organisation, evaluation and follow up of exercises, combined with tests, validations, or demonstration.

It is expected that a standardised approach will improve the preparation and organisation of the Joint Activities and will encourage and facilitate lessons learnt to be shared and to initiate follow up actions, including for the identification of end user needs for R&D. Therefore, it is believed that both a standardised methodology and well-defined templates could create an added value, as effective practice, beyond the duration of the project.

Lessons learnt from the Joint Activities are analysed after each of the activities and the results are used to improve the preparation, organisation, evaluation and follow up of the succeeding exercises.

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The Joint Activity Planning Reports of the previous JAs (D4.2, D4.3, D4.4 and D4.5) were used to collect evaluation, feedbacks and lessons learnt on the eNOTICE methodology and templates originally proposed in D4.1 and improved as the project progressed and new Joint Activities were carried out. These reports were fundamental to identify any eventual shortcomings of the methodology and templates, or barriers that limit their adoption among the network members, and appropriate countermeasures when necessary.

This analysis highlighted how this approach is effective as, during the progression of the project, the eNOTICE templates have been modified and adapted according to the indications collected from previous JAs and the methodology seems to be improving thanks to this approach. However, the necessity to continue with the improvements during the rest of the project is evident, in order to reach a quality level suitable for the standardisation of the procedures in different TCs.

The process of collecting information and adaptation of methodology and templates will be continuously iterated for the duration of the project. The result of the monitoring activity will be presented in the future deliverables D5.14 and D5.17.

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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’*¹.

The work program proposes three lines of actions: 1) establish and maintain a roster of capabilities and facilities, 2) organize the best way to share expertise, and 3) plan to pool and share resources with a view to optimize 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 European Commission Decision C (2017) 2468 of 24 April 2017, Horizon 2020 Work Programme 2016-2017, 14. Secure Societies - Protecting freedom and security of Europe and its citizens, webpublication at: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-security_en.pdf
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- 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) 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 maximize opportunities provided and created by the CBRN platform.

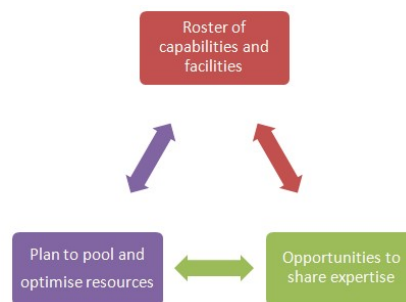


Figure 1 Three lines of actions in eNOTICE (eNOTICE DoA 2016)

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 reports' scope, objectives and methodology

1.2.1 Scope

This report relates to Task 5.2.3 - Evaluation of the methodology and templates for the preparation, organisation, evaluation and follow up of exercises combined with tests, validations and demonstrations of exercises combined with tests, validations or demonstrations.

As mentioned in the Description of Action, this task covers the following actions:

Task 5.2.3 aims at evaluating the methodology and templates, elaborated in Task 4.1, and used in Task 4.2 for the preparation, organisation, evaluation and follow up of exercises, combined with tests, validations, or demonstration.

It is the expectation that a standardised approach will improve the preparation and organisation of those activities and will encourage and facilitate lessons learnt to be shared and to initiate follow up actions, including for the identification of end user needs for R&D. Therefore, both the methodology and templates could create an added value, as effective practice, beyond the duration of the project.

Lessons should thus also be learnt from their use during the project, which will be performed after each joint activity.

From this point of view, “The evaluation and feedback on the eNOTICE methodology and templates” collected through the Joint activity planning Reports (D4.2, D4.3, ..), will be fundamental to identify any eventual shortcomings of the methodology and templates, or barriers that limit their adoption among the network members.

If one or more of these problems arise, through the involvement of project partners and network members, appropriate countermeasures will be identified.

The process will be iterated for the duration of the project. The result of the monitoring activity will be presented in the three deliverable D5.10, D5.14, D5.17.

UNITOV leads this task, based on its experience in testing the efficiency of training through the usage of exercises and techniques adopted for the qualitative and quantitative evaluation of such exercises, and its experience in linking end user's needs to R&D in the field of CBRNe. UCL, VESTA, SDIS77, FDDO, JCBRND COE will contribute as users.

1.2.2 Links to other tasks

Since the Templates are considered as a ‘live document’ and will be continuously updated in Task 5.2.3 – Evaluation of the methodology and templates. After each Joint Activity, the Methodology and Templates are revised and updated in line with the identified lessons learnt and points of improvement, agreed upon by the consortium partners.

The results of Task 5.2.3 will serve as input for other Tasks:

- First, the improvement Methodology and Templates will be used for the preparation and organisation, evaluation and follow up of the Joint Activities organised within Task 4.2. It will provide the exercise team with guidance and support to organise and document the main steps of the process.
- Furthermore, continuously updated Templates will provide a structured approach to identify opportunities to strengthen policies and recommendations for R&D, which is the scope of Task 4.3.
- A structured approach to collect information on the resources and costs related to the exercise will be a part of the design of the templates and should allow for identification, comparison and lessons learnt on optimal allocation of resources and optimisation of investments (cost-benefit analysis) for Task 4.4 – Plan to pool resources and optimise investments for increased CBRN Training Capacity.
- Once the Templates will have gained enough maturity, they will be offered as assets to network members through the web-based platform, free to be used by other Training Centres that lack a structured approach. This dissemination of effective practices falls within the scope of Task 3.1 – Dissemination activities to promote and enhance the web-based platform and project results.

1.2.3 Methodological approach of this Evaluation Report

The first section (Chapter 2) of this document is structured as a collection and analysis of the essential information on the use of the eNOTICE methodology and templates in past Joint Activities from the JA Planning Reports available at the moment (D4.2, D4.3, D4.4 and D4.5). The purpose of this collection of information is to identify the major criticalities on the use of the eNOTICE methodology and templates that arose in the planning, preparation, organisation, execution, evaluation and follow up of all the JA carried out from the Basic Training for eNOTICE D5.10 - eNOTICE evaluation report on the preparation/organisation, evaluation and follow up of exercises combined with tests, validations or demonstration. Report 1 – Aug. 2020

Firefighters (Gurcy, December 2017) to the Joint Activity in Ankara of February 2020. Considering that the outcomes and achievements of the previous training activities were already discussed in depth in deliverables D4.2, D4.3, D4.4 and D4.5, only information related to the use of eNOTICE methodology and templates were collected and analysed in this document. The definition of name, location and type of each JA in this document is based on the information found in the catalogue of Joint Activities on the eNOTICE website (<https://www.h2020-enotice.eu/static/ja-catalogue.html>).

A table summarising the focal point of this analysis is presented in Chapter 3. This table provides a quick, but complete, view on the feedback collected in the first part of this document and presents the solutions adopted in each JA to overcome the issues encountered in the past Joint Activities.

Finally, future and next steps to be taken in order to try to maximise the use of such methodology and templates among CBRN TC in the network, are presented in the last section of this document (Chapter 4).

In the Annexes, a few integrations to the methodology, updated templates and revised forms filled in by the participants to the JAs are included as an example of the direction in which the methodology and templates are moving to overcome the shortcomings identified.

2 Analysis of eNOTICE methodology and templates from the past JAs

2.1 Gurcy Joint Activity, December 2017

The Gurcy JA of December 2017 (Basic training for Firefighters) was a field training exercise (FTX) centred on CBRN issues. The activity was attended by two external partners: the EU Project TRADR and the PARROT corporation. The two external partners joined a standard exercise, following its standards procedures. In this training activity, all attending external partners (i.e. the eNOTICE partners, the invited partners to the exercise and the invited experts) were considered as observers. In order to ensure focus during observation, evaluation and debriefing, forms for the observers were prepared and distributed in advance. The role of the observers was not to evaluate the quality of the exercise as such but rather to provide feedback on the joint aspect of the activity, and to find possible added value for needs-driven research and for building the network.

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This Joint Activity (JA) was organised by the CBRN Training Centre of Fire & Rescue Department Seine-et-Marne, France, with the objective of performing the mandatory operational certification of HAZMAT teams for practitioners. The HAZMAT teams of the Seine-et-Marne Fire & Rescue department have to be certified annually, in order to retain their operational capability. This certification is granted (or refused) during a standalone exercise, in which basic skills, safety regulations and reactions to operational stimuli are tested. For this JA, the exercise presented dealt with operational certification only for CBRN missions. This was indeed only a part of the overall operational certification for which the HAZMAT teams have to qualify, that takes also into account other aspects such as pollution management, HAZMAT traffic accident, etc. The field training exercise (FTX), centred only on CBRN issues, was considered to be the most effective way of assessing the HAZMAT team capabilities. No adaptations to the exercise were made for the joint aspect of the exercise and the two external partners joined a standard exercise, following its standards procedures.

The initial draft of the eNOTICE Methodology and Templates was not yet finalised for the preparation phase of the Gurcy JA, therefore only general observations could be made as to their relevance. Specific questions that were asked on the use of checklists and documentation

were left unanswered. After the Gurcy JA was completed, a discussion was held between all observers (eNOTICE partners, invited representatives from EU projects and invited experts) to share all experiences, views and ideas about what was observed during the exercise. The Evaluation and Debriefing forms were used to guide the discussion, although the setting also allowed for spontaneous discussions on other aspects.

As the eNOTICE Methodology and Templates (Task 4.1) were not yet available during the preparation phase of the Gurcy JA, the format was only used afterwards for reporting. It was established that the following JAs would have been organised in line with the guidelines from the eNOTICE methodology, which entails that preparation, documentation and reporting are to be done in a uniform and structured way. All following Joint Activities should actively provide input for the current Task 5.2.3, the evaluation of the Methodology and Templates. During the debriefing, it was stated that the future evaluations and debriefing should always incorporate discussion on the usability, completeness, applicability and reality value of the methodology. Questions for evaluation and debriefing forms were prepared and distributed in advanced in order to ensure that all observers had a specific focus to observe during the exercise. The overall purpose of the observations was to extract as much information as possible from the JA, considered as eNOTICE show cases to achieve the project's objectives.

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The specific purpose of these questions was:

- To provide guidance for all observers, in order to ensure an active participation during the exercise.
- To gather information, relevant for the different ongoing tasks or tasks starting in a near future.
- To provide input and guidance for the discussions to be held during the debriefing sessions.

The questions were distributed and assigned to the three categories of participants (eNOTICE partners, Participating EU project/experts, invited experts) in order to ensure they were answered by different profiles (academics and Training Centres, eNOTICE partners and external experts). This variety in the audience ensured different focuses because of the different profiles and aimed at enriching the discussion on lessons learnt.

To keep the observation focused, each participant was provided with a template for observation and evaluation made with only a few questions.

- eNOTICE partners were assigned questions related to tasks in which they participate.

- the EU experts participating in the Joint Activity and the invited experts were assigned questions related to 1) visibility of the centres, 2) added value of this type of JA, 3) needs and expectations from TCs in general and this type of activity in particular.

2.2 Nîmes Joint Activity, January 2018

The Nîmes JA of January 2018 (The activation of the medical chain after a major CBRN incident) was organized jointly by ARMINES and METU. They collaborated jointly on the organisation, on the design of the exercise, on the choice of experts and the design of the serious game. Indeed, the main goal of the JA in Nîmes was to gather user requirements and to integrate them in a serious game implementation phase. The objective of the Nîmes JA was the organization of mandatory training for practitioners at the Nîmes Hospital. This training was part of the regular program of the Hospital therefore no crucial adaptations to the exercise were set up for the joint aspect of the exercise. The various external partners joined a standard exercise, following its standard procedure.

The Nîmes JA, being an exercise aimed at replicating real conditions, was considered as successful. Despite being a very narrow exercise dedicated for medical consequences of a CBRNE attack, the activity was still able to demonstrate its added value in providing a range of network activities between stakeholders on the medical consequence at hospital level. During the Nîmes JA, a specific focus on lessons learnt to be shared among the partners was demonstrated. Moreover, Nîmes JA permitted to initiate follow up actions, including the identification of end user needs for R&D.

During the Nîmes Joint Activity, all the participants attended the exercise as observers, selected because of their competence in the practice of this type of activity. Observers were responsible for issuing findings on the progress of the exercise. The observer tasks consisted of taking notes and the realization of photographs or video film. The position of the observers during the exercise was fixed or mobile as long as the observer did not intervene under any circumstances during the course of the simulation. Their feedback was almost always positive. Most observers evaluated positively the overall ambition to test the coordination of the interventions according to the plans and to test the validity of standards and procedures and their implementation. During the Nîmes JA, all the observers appreciated the comprehensive involvement of all the stakeholders, from nurses to doctors, and the realism of the Joint Activity was underlined. All participants were involved in their roles and functions and the scenario was rather close to actual issues. The timeline and the related concerns were appropriate. The role of each partner was

appropriately described during the briefing phase. All observers appreciated the relevant “time management”.

Although the participants appreciated the realism of the scenario, some possible improvements have been highlighted:

- The difficult transfer/integration of existing solutions: the TARGET solution (from target EU project) has been developed for the purpose of communications between participants. This kind of solution needs a comprehensive staff of assessors, trained with the tool, and this was not possible to handle in this occasion.
- The debriefing and lessons learnt phase are difficult to emphasize. The debriefing methodologies have been developed for industry and the field of emergency engineering. The main challenge of the eNOTICE project is to apply and adapt these methods to a CBRNE organization. The actions of a CBRNE organization do not rely on technical systems but, rather, on the decisions of human actors with regard to a set of contextual elements. Taking this complex human dimension into account is one of the difficulties for the implementation of an innovative methodology.

The eNOTICE templates were not yet available for the Nîmes JA in January 2018. However, one of the expectations of Task 4.2 was to set up a standardised approach that will improve the preparation and organisation of such activities. The Nîmes JA demonstrated the added value of collecting lessons learnt, in a way they can be shared in order to maximise input for follow up and improvements. The Nîmes JA allowed indeed to initiate follow up actions, including for the identification of end user needs for R&D.

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2.3 Brussels Joint Activity, June 2018

The Brussels JA of June 2018 (Joint international field exercise with EU mobile laboratory), dubbed Bio Garden, took place at Peutie-Vilvoorde and it was a CBRN exercise organised by UCL with an unusual biological focus. The objective of the exercise is to raise the level of preparedness in case of a CBRN incident and to outline the multidisciplinary (several disciplines practice one or more parts of the tasks assigned to them) national and international cooperation in the field of CBRN preparedness and response. This JA was an operation-based/full scale/field exercise: single agency or multi-agency/multi-jurisdictional activities involving actual deployment of resources in a coordinated response, as if the real incident had occurred (mobilization of units, personnel, and equipment in a realistic environment, etc.). The

Bio Garden exercise poses the emphasis on collaboration between the actors involved. Response of situations was played in which biological hazards may be present accidentally, or intentionally, such as natural outbreak of a disease or CBRN terrorism.

The Bio Garden exercise showed the necessity of multidisciplinary national and international exercises where first responders of various disciplines, who generally do not train together, can perform together in the same scenario and in the same setting to compare and align their procedures, to improve communication between them and with competent authorities. The involvement of R&D innovations to facilitate the first responders' work and communication is particularly important, so that the users know what is available to them on the market and can state their needs and requirements to be sure that the innovative solutions exactly meet their needs. The exercise showed that the current knowledge on technological innovation is not completely accurate and it is necessary to provide more details in this field. Due to this, the whole organisation of the exercise has to be arranged in such a way to address the real-time training or demonstration on the scenario, and to find time to provide details on the R&D achievements as well.

For the preparation of the Joint Activity in June 2018, UCL could benefit from the availability of the eNOTICE methodology and templates and all the information needed was well reflected in such templates. However, not all the templates could be employed directly before the exercise, for the same reasons found during the Nîmes JA of January 2018 and, therefore, most templates were mainly filled after the event, transferring the information from UCL own templates and Excel sheets to the eNOTICE templates. During the exercise preparation phase, the eNOTICE templates and the existing preparation forms were compared in order to make sure that the eNOTICE templates did not contain any extra information not present in those actually used. Once the correspondence was acknowledged, the standard UCL templates were used, and then the information was transferred to the eNOTICE templates unified for all project JA. However, some eNOTICE templates were used before the Joint activity to communicate important information to eNOTICE partners. Regarding the content of the templates, they appeared to be detailed and relevant to the preparation and organisation of the exercise.

2.4 Rome Joint Activity, October 2018

The Rome JA of October 2018 (CBRN Operational Sampling Course) was an operation-based/full scale/field exercise based on the participation of different specialists of national assets and multinational CBRN Operational Sampling Teams. Different proxposed scenarios eNOTICE D5.10 - eNOTICE evaluation report on the preparation/organisation, evaluation and follow up of exercises combined with tests, validations or demonstration. Report 1 – Aug. 2020

were adopted in relation to a possible response for several situations caused by incidental/accidental release, intentional release, and/or natural outbreak. The scenario for the exercise focused exclusively on Bio-threats. The organisation of the Joint Activity was based on two training activities of the Joint CBRN defence School of Rieti. The activities were based on the integration among the “NATO Selected Course CBRN Operational Sampling” and on the integration among CBRN and EOD Teams in case of unconventional use of Improvised Explosive Device (IED).

The CBRN Operational Sampling Course aims to train CBRN Specialists in CBR survey and sampling activities as well as procedures. In addition to the course, during the activity a demonstration based on national CBRN-EOD capabilities in case of a combination of events was held. The main objective of the course is to provide the students with real capability and the skills necessary to perform survey and sampling in an environment contaminated by unknown CBR agents and TIMs (Toxic Industrial Material). The Joint Activity consisted of the practical part of the CBRN Operational Sampling Course.

The combined feedback obtained from all participating observers was shared during the hot debriefing right after the exercise as well as the more in-depth reflexions based on the eNOTICE Evaluation and Debriefing forms. The feedback can be summarised as follows:

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- The exercise showed the differences between military and civil procedures, used in this type of intervention. Feedback stressed the relevance and importance of harmonisation and standardization at EU level between Military and Civilian agencies.
- It was noted that CBRN – EOD procedures are well standardized at national level while, in case of Multinational Integration, a series of gaps are still observed. These gaps can be overcome by a close Military-Civilian cooperation.
- The effectiveness of standardised protocols for operational activities indicates that a standardised approach would also be useful for training/exercise and for planning such activities. Standardisation would in fact permit to all personnel to adopt the same procedures for a common standard training in this specific sector and to the organisers to adopt the same methodology for different types of training at different TCs.

The eNOTICE templates were available for the Rieti JA on October 2019, and were partially used for the preparation, the organization, the evaluation and follow up of the CBRN exercises. However, their use was limited since Italy is part of NATO and therefore the Italian Joint NBC Defence School, being a military TC, refers to well-established NATO procedures, standards,

and templates for the organization of every exercise, demonstration or real-life mission. For this reason, since the organization already had its templates, some of the templates developed within the eNOTICE project were not used for this Joint Activity. In particular, the templates for exercise “Preparation and Organization” and for “Cost Calculation and personnel cost” were not used.

The eNOTICE templates used were those that best reflect the specificities of the Joint Activity concept developed in the project while, regarding the other templates, the Italian Joint NBC Defence School made reference to its already well-established and consolidated tools.

2.5 Vyškov Joint Activity, February 2019

The JCBRN Defence Centre of Excellence (COE) of Vyškov, Czech Republic, hosts the International Radiological Assistance Program Training for Emergency Response (I-RAPTER) Basic Course every year. The objective of the I-RAPTER course is to provide radiation protection specialists, first responders, law enforcement and emergency managers with practical information to effectively respond to radiological incidents and accidents. The course is structured in a first theoretical training that provides instruction through briefings, equipment demonstrations and a subsequent field training with the use of a wide variety of radiation sources, radiation detection instrumentation and personal protective equipment. The field practical training was held in the premises of the Radiological Laboratory and at the Vyškov Air Museum. Both venues provided for an inspiring background for detection and identification procedures and allowed to ensure the safe transport of the recovered radioactive sources. This was the first time a Joint Activity took place at the JCBRND CoE in Vyškov and, for this reason, it had to be planned and conducted in a slightly different way than usual. The challenge was to combine and to integrate a regular residential course into an eNOTICE JA. The Joint Activity in Vyškov was therefore transformed to a full-military training course at the NATO JCBRN Defence COE opened for participation of eNOTICE partners and their invited experts. This Joint Activity was particularly welcomed by all participants and observers because it resulted in an interesting demonstration of civil-military collaboration. The planning, preparation and execution phases ran smoothly without any significant problems.

Following is a summary of the lessons learnt at Vyškov:

- The eNOTICE observers’ roles were not sufficiently clear. Therefore, during the practical day open for participation of eNOTICE observers, they had received limited eNOTICE D5.10 - eNOTICE evaluation report on the preparation/organisation, evaluation and follow up of exercises combined with tests, validations or demonstration. Report 1 – Aug. 2020

directions about the observation aims and means. During the debriefing following the exercise, eNOTICE partners decided to start elaborating a ‘protocol for observers’ which must include all practical aspects to consider in the preparation phase, in order to ensure a smooth preparation of the participation of observers. VESTA proposed to elaborate a draft, to be tested and evaluated during the Joint Activity in Gurcy, and to be used for future eNOTICE Joint Activities.

- The large number of observers on site, whose role was not clear, created difficulties in the control of the joint part of the exercise.

As for the Italian Joint NBC Defence School, also the JCBRND COE of Vyškov is a military organisation and therefore they have their own NATO-standardised templates for the preparation, organisation, conducting and follow-up for the exercises. For this reason, the eNOTICE templates were not used as a format for the reporting. Nevertheless, some general eNOTICE templates have been used, e.g. the General Information Sheet eNOTICE for a Joint Activity. This template, in particular, has no similarity with the NATO forms and therefore it was used and found as especially useful for both the hosting organisation, including the course participants, as well as the eNOTICE partners familiar with the ends, ways and means of the JA. On the other hand, the template for the JA report in the aftermath seemed as too comprehensive, academic, and complex and repeating common eNOTICE issues which are well known, not focusing on the JA as such and therefore it might deviate from the real important topics of the JAs. The way to summarize several JAs into one document, such as this, was a good approach to solve the issues.

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2.6 Gurcy Joint Activity, May 2019

The eNOTICE Joint Activity in Gurcy of May 2019 consisted of two main parts: the CNCMFE regional CBRN multidisciplinary field exercise, hosted by SDIS77, joined by the H2020 project TERRIFFIC; and the virtual deployment of a field hospital, organised as Serious Game Validation phase of the French National Project HOPICAMP, hosted by ARMINES.

The core of the regional CBRN multidisciplinary field exercise was a multidisciplinary field training session organized and hosted by SDIS77 under the authority of the French national civil-military CBRN training centre (CNCMFE). This training session is part of the national annual mandatory training plan. As part of the overall eNOTICE objectives, the Joint aspect of this exercise was covered by the participation of the EU project TERRIFFIC.

The objectives of the exercise were:

- to assess the interoperability of multidisciplinary civil-military teams in a terrorist attack situation;
- to train security forces, first responders, HAZMAT teams and medical support units to work in close cooperation.

The aim of second part of the activity, the virtual deployment of a field hospital hosted by ARMINES, was to evaluate the interoperability between a large-scale exercise and a serious game exercise based on the same CBRN scenario. A virtual mobile field hospital was deployed to quickly take care of the victims. The goal was to set-up a serious game designed to prepare the emergency medical teams of a field hospital before their intervention. The overall objective of the activity was to test the interoperability between a large-scale exercise, such as this, and a serious game exercise.

In the follow up of the Vyškov JA, rules and guidelines to better prepare the observers for their role had been elaborated. This protocol was tested in Gurcy, by preparing a Participant and Observer's Handbook (see Annex 1) that was appreciated by both the observers as the hosting organisations. Other lessons learnt from the Gurcy JA were:

- The protocol for observers was used for the first time in this Joint Activity. It was highly appreciated by the observers. Both the draft provided by VESTA and the additions by SDIS77 were welcomed as useful to ensure a more focused and efficient participation of the observers.
 - Due to the design of the exercise, observers were able to attend a few of the different steps of the exercise in different workshops held before the actual field exercise. Due to this preparation phase and the workshops, the day of the full-scale exercise ran smoothly, with not many uncertainties. Because of the workshops, participants had a better understanding of the context and procedures observed during the full-scale exercise.
 - The lessons learnt from past JAs, and especially from the first JA in Gurcy (December 2017), were taken into account in the preparation, organisation, and evaluation of this JA.
 - Two types of evaluation of the Gurcy JA were prepared: a hot and in-depth debriefing, both project goals-oriented. The hot debriefing, that took place immediately after the
- eNOTICE D5.10 - eNOTICE evaluation report on the preparation/organisation, evaluation and follow up of exercises combined with tests, validations or demonstration. Report 1 – Aug. 2020

exercise, was not structured as it was aimed at collecting first and fresh impressions. The in-depth debriefing was prepared, based on a list of questions meant to structure the discussions during the project meetings and to ensure input for all ongoing tasks. This distinction between ‘hot impressions’ and in-depth feedback was developed as it was one of the interesting lesson identified during the JA in Nîmes in February 2018.

- This JA was a good example of civil-military cooperation, to the satisfaction of the mixed group of civil and military partners in eNOTICE. Giving the attention at national, as well as at the EU level for civil-military cooperation to deal with CBRN threats, these Joint Activities can be considered as interesting demonstrations where to observe and learn from current practices in other countries. As an example, the transfer of the command of the assets on the ground from civil to military authorities raised interest among the observers.

Considering the lack of information from past JAs and the possibilities of misunderstanding, SDIS77 and ARMINES provided new templates based on the T4.2 previously provided. They agreed on the necessity to provide four questionnaires, rather than the usual two: two for the invited experts and two for the partners. The first questionnaire was called “Review Form” (see Figure 2 and Figure 3) and it provided all the questions presented in T4.2, in the section regarding partners or invited experts (marked by the letters A, B, C).

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Partner Review Form

Which aspects of the observed exercise would you like to see highlighted on the eNOTICE web-based platform?

Which information about the Joint Activity would you like to have easy access to electronically (e.g. map of the facilities, mail information...)?

Which information about the different parties participating in the Joint Activity (e.g. emergency professionals, research projects, invited experts) would you like to see on the eNOTICE web-based platform?

According to your experience in organizing/participating to exercises, testing and demonstration activities, do you think that the eNOTICE Joint activities, in addition, to contribute in increasing preparedness in CBRN field could represent an effective way to good resources?

YES, please specify (by flagging) one or more of the following:
 - Reduce exercise organization costs but;
 - Increase number and variety of scenarios;
 - Maximise the effects of project dissemination or the impact of new technologies on practitioners;
 - Other: _____

The workload for the organization of a eNOTICE Joint activity with respect to that for the organization of a similar training activity organized by your TC is: (flag the correct option)
 - None
 - Compatible
 - Less

Please justify your answer:

As past, present or future organizer of a JA, how you evaluate the eNOTICE methodology and templates for (select one or more option for each point):

Phase	Easy to use (Yes/No)	Level of detail (High/Low/None)	Useful (Yes/No)	Needs improvement (Yes/No) If Yes, please specify below
Preparation				
Organization				
Evaluation and Debriefing				
Follow-up				

Please provide your suggestions for the improvement:

Figure 2 Examples of Partner Review Form developed for the Gurcy JA (May 2019)

Participating EU Projects/ Experts Review Form

Which information about the different parties participating in the Joint Activity (e.g. emergency professionals, research projects, invited experts) would you like to see on the eNOTICE web-based platform?

Which aspects of the observed exercise would you like to be highlighted on the eNOTICE web-based platform?

Which information about the Joint Activity would you like to have easy access to electronically (e.g. map of the facilities, meal information, ...)?

Did the General Information template provided you all the information you needed to take part to this JA?

If NO, what kind of information were missing according to your opinion?

During your past experience, have you organized or took part to the organization of CBIRI exercises?

If Yes, did you (Circle the correct option): Use / Used / Look for guidelines and templates for the organization of a CBIRI exercises?

Did you know that eNOTICE developed a methodology and templates for the preparation, organization, evaluation and follow-up of Joint Activities, that are available on the project website?

Which are the first three information concerning a CBIRI TC capabilities that you would like to see highlighted on a web portal?

Did you know that eNOTICE developed a "CBIRI Training Capacity quality label" system, for the quick identification and on-line search of CBIRI TC, on the eNOTICE Community Center?

In your opinion, is your organization eligible to be a CBIRI TCT?

If YES, are you already in the eNOTICE Catalogue or would you consider the possibility to be included at a later stage?

Figure 3 Examples of Participating EU Projects/Experts Review Form developed for the Gurcy JA (May 2019)

Furthermore, it was noted that the Evaluation & Debriefing form developed in T4.2 was missing the usual three questions asked to the observers during the previous Joint Activities, although the reason for this issue was not clear. As a solution and to be more efficient and statistically focused, the organisers decided to include three questions which could have been interesting for the statistics ran by eNOTICE. Three questions, relevant to experts or partners, were then selected among the list presented at the end of T4.2 and two new Evaluation & Debriefing forms were created: one for the experts and one for the eNOTICE partners (see Figure 4).

EVALUATION & DEBRIEFING FORM - JA GURCY eNOTICE PARTNER	EVALUATION & DEBRIEFING FORM - JA GURCY Invited expert
Name: Organisation:	Name: Organisation:
Question 1 - Were you able to achieve your objectives while participating in the exercise? (e.g. testing of technology)	Question 1 - In what way could the exercise be adapted so that it will become more interesting for you?
Question 2 -After observing the joint activity, do you feel like you have a better image of the needs of practitioners?	Question 2 - After participating in the joint activity, do you feel like there is a need for harmonisation/standardisation of exercise practices? Why (not)? What specific aspect?
Question 3 - Did participation in the exercise meet your expectations?	Question 3 - Do you consider this type of exercise as an interesting setting for a validation session as closure of the technical development process in an EU project? What is most interesting: interaction with practitioners, the infrastructure, other?
Question 4 - What do I take home?	Question 4 - What do I take home?
Question 5 - Does this exercise meet my expectations? If not, why?	Question 5 - Does this exercise meet my expectations? If not, why?
Other feedback or suggestions you would like to share with us?	Other feedback or suggestions you would like to share with us?

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Figure 4 Example of new Evaluation and Debriefing Form for eNOTICE Partners and Invited Experts developed for the Gurcy JA (May 2019)

The updated templates created for the Gurcy JA (May 2019) and examples of form filled in by the participants are found in Annex 2 and Annex 3.

2.7 Birmingham Joint Activity, July 2019

The Birmingham Joint Activity was a CBRN tabletop exercise (TTX) run by the UK National CBRN Centre (WMP partner). It consisted in a one-day indoor exercise simulating a fast acting Chemical CBRN mass casualty event requiring a coherent multi-agency detection, identification and monitoring capability, decontamination strategy and mass casualty planning. Ninety delegates received this immersive exercise, with visual and audio recordings, to consider what their role, capability, capacity and policy would look and feel like throughout an emerging CBRN terrorist attack in a crowded place. The EU project PROACTIVE (‘**PR**eparedness against CBRNE threats through **cO**mmun Approaches between security **prACTI**tioners and the

Vulnerable civil society.’) joined the exercise as delegates and completed the exercise alongside UK police, fire, ambulance, local authority, education, and military commanders.

Being a tabletop, front loaded exercise, which restricted the practical application of equipment and technology, the Birmingham JA was not ideal for testing, validation or demonstrations from external stakeholders. However, the Coventry University department specialised in immersive virtual reality exercising, invited as external partners, were able to successfully observe the exercise and take away the exposure to what would have previously been a closed event. They also connected with eNOTICE partners and create synergy in their understanding and ambitions for CBRN exercising.

During the hot debrief, the feedback often drifted into longer reviews of the exercise. This showed that, regarding the joint aspect of the exercise, the feedback should focus more of the ‘Joint Activity’ rather than the quality and design of the exercise. A mechanism to maintain brevity of comment is therefore required. However, the feedback which was focused on the joint aspect of the activity was mainly positive as the PROACTIVE delegates were able to ask questions throughout the exercise and the TTX proved to be a cost-effective way to combine a Joint Activity to the exercise, as it does not add any significant cost.

Though the feedback, it was noted the difficulty in understanding CBRN acronyms. The solution recommended to this problem was to either include a glossary or ban altogether acronyms for the Joint Activities.

A problem encountered was that the in-depth debriefing was not completed.

The practical guide for attending an eNOTICE Joint Activity as an observer, used in Birmingham, was found useful by the organiser. This guide was amended to suit UK specific details.

During the previous JA in Gurcy, VESTA elaborated, trialled and evaluated the ‘protocol for observers’. The safety briefing and check list pages from this protocol were found useful in this JA as well.

The Joint Activity in Birmingham showed that an EU H2020 project can successfully be integrated into a business as usual CBRN training centre exercise. The most positive factor to this success was to introduce the organisers and leaders of the exercise to the eNOTICE project, the joint activity team and external partners ahead of the exercise. Making the organisers and leaders aware of eNOTICE and showing the project at a joint exercise before hosting meant they were invested and passionate about the project and were willing to adapt their product to make the joint activity a success.

2.8 Dortmund Joint Activity, September 2019

The Dortmund JA was an end-user full-scale multidisciplinary exercise, where different end-users trained their response to a railway accident. The scenario was adopted in relation to a possible response for chemical threats caused by incidental/accidental release. The aim of the exercise was the training of large scale events with hazardous substances, including detection and identification procedures, as well as decontamination.

The Joint aspect of the Activity in Dortmund consisted of a joint effort of FDDO and CNBOP, both eNOTICE partners. Beside the participants of the eNOTICE project, also national CBRN experts, proposed or invited by the eNOTICE Consortium Members, observed the JA. The profiles of the invited experts were: first response practitioners (fire & rescue, police, military, emergency medical services), lecturers from CBRN Training Centres and academics or developers involved in research to improve CBRN preparedness.

The combined feedback and suggestions for improvement obtained from all participating observers, shared both during the hot debriefing as well as the in-depth briefing were based on the eNOTICE Evaluation and Debriefing forms and were collected according to a series of questions. The series of questions and the analysis of the answers are included in D4.5. Beside the questions and answers regarding the exercise itself and the possibility of improvements, for the scope of this deliverable, it is interesting to note that most of the project partners and observers of the JA highlighted the need for harmonisation/standardisation of exercise practices, especially with regard to harmonised guidelines for organisers, to be recognised in different countries. However, some project partner opposed this view due to the differences in the commanding structures of the different actors involved and the difficulties in standardising practices due to restrictions on incident command, equipment and local procedures.

The JA in Dortmund showed that is it advisable to involve different types of observers (academics, practitioners, policy makers and decision makers) in Joint Activities in order to discuss and exchange ideas between different professional profiles. Building on the recommendations and lessons identified from former Joint Activities, during the JA in Dortmund the visibility of the observers (including eNOTICE observers) was increased so that they could be recognised from far and liaison officers between the observers and exercise staff were enlisted. These liaison officers would elaborate on what was being carried out in the field and report it to the observers. However, some observers had difficulties in hearing the liaison officers, therefore a broadcast via loudspeakers or headphones sets would be advisable for future Joint Activities.

2.9 Ankara Joint Activity, February 2020

The Ankara Joint Activity was held in the Technopolis of METU (CoZone) in collaboration with Eskişehir Osmangazi University. The aim of the JA was the training of practitioners using serious games. The activity also included a Serious gaming workshop and two field visits to the mine at Beypazarı and the mine at Eskişehir Osmangazi University.

Most of the scenarios of the METU JA were adapted from the previous eNOTICE Joint Activities of Nîmes JA (January 2018) and Brussels Bio Garden scenario (June 2018), to virtual reality and mixed reality environments.

The JA was evaluated by acquiring feedback through the Technology Acceptance Model (TAM), System Usability Scale (SUS), Immersive Tendency Questionnaire (ITQ) and Open-ended questions and suggestions.

The JA in Ankara showed that augmented or virtual reality offers great training opportunities to the practitioners and, therefore, in the future might be used as a tool to support practitioners. It is a cost-efficient way to test new technologies and train first responders, although there is awareness that it cannot completely replace real training.

3 Findings of the analysis

3.1 Summary of the use of eNOTICE methodology and templates

Table 1 Summary of the use of eNOTICE methodology and templates during the JA analysed and solutions adopted.

	Organiser	Type	Scenario	Use of the eNOTICE Methodology and Templates	Main problems arisen in the use of eNOTICE Methodology and Templates	Consequences caused by the problems arisen	Solutions adopted
27	Gurcy (Dec 2017)	SDIS77	Field Exercise	Fire, Rescue & Relief, Chemical	Format only used afterwards for reporting.	eNOTICE Methodology and Templates not yet finalised at the time.	<p>Specific questions that were asked on the use of checklists and documentation were left unanswered.</p> <ul style="list-style-type: none"> - The Evaluation and Debriefing forms were used to guide the discussion between all observers after JA. - The following JAs are to be organised according to eNOTICE methodology. - Evaluation and debriefing should incorporate discussion on the usability, completeness, and applicability of the methodology. - Questions for evaluation and debriefing forms were prepared in advanced to ensure that all observers had specific focus during the exercise.

<p>Nîmes (Jan 2018)</p>	<p>ARMINES and METU</p>	<p>TTX</p>	<p>Medical, Explosive, Radiological</p>	<p>Format only used afterwards for reporting.</p>	<p>eNOTICE templates not yet available.</p>	<p>The JA was planned and carried out according to the standard methodology normally used by the organisers.</p>	<p>The JA demonstrated the added value of collecting sharable lessons learnt, in order to maximise input for follow up and improvements.</p>
<p>Brussels (Jun 2018)</p>	<p>UCL</p>	<p>Field Exercise</p>	<p>Biological</p>	<p>- eNOTICE methodology and templates available. - All the information used was reflected in the templates. - eNOTICE templates were used before the JA to communicate the information to eNOTICE partners.</p>	<p>- Not possible to use all the templates before the exercise. - Every exercise, demonstration or real-life mission is prepared according to rules and templates already established and used by the organisation for many years. - The staff is reluctant to change something that works already well. - Taking complex human dimension and interactions into account is difficult for the implementation of an innovative methodology.</p>	<p>- Difficulty in convincing staff to switch to unfamiliar templates. - The templates were mainly filled in after the event.</p>	<p>- The UCL staff are experienced in preparation of such events. - The UCL already have their own developed efficient templates. - During the preparation it was made sure that the eNOTICE templates did not contain any extra information not comprised in existing forms. - The contents of the templates appeared to be detailed and relevant to the preparation and organisation of the exercise.</p>

<p>Rome (Oct 2018)</p>	<p>UNITOV</p>	<p>Field Exercise</p>	<p>Radiological, Explosive</p>	<p>- The eNOTICE templates were available for the JA. - The eNOTICE templates were used partially for the preparation, the organization, evaluation and follow up of the CBRN JA.</p>	<p>The Italian Joint NBC Defence School refers to NATO procedures, standards and templates for the organization of every exercise, demonstration, or real-life mission.</p>	<p>The templates for exercise “Preparation and Organization” and for “Cost Calculation and Personnel Cost” were not used since the organization already had its templates.</p>	<p>- The eNOTICE templates used were those that most reflect the specificities of the JA concept developed in the project. - The combined feedback obtained from all participating observers, was based on the eNOTICE Evaluation and Debriefing forms.</p>
<p>Vyškov (Feb 2019)</p>	<p>JCBRN Defence COE</p>	<p>Field Exercise</p>	<p>Radiological</p>	<p>The eNOTICE templates were not completely used as a format for the reporting.</p>	<p>The JCBRND COE has their own NATO-standardized templates for the preparation, organisation, conducting and follow-up for an exercise.</p>	<p>- The eNOTICE observers’ roles were not sufficiently clear. They had received limited directions about the observation aims and means. - The template for the JA report in the aftermath seemed as too comprehensive, academic, and complex and repeating well known eNOTICE issues, not focusing on the JA as such.</p>	<p>- During the debriefing, eNOTICE partners decided to elaborate a ‘protocol for observers’, including all practical aspects to take into account during the preparation phase. - Some general eNOTICE templates have been used, e.g. the General Information Sheet eNOTICE for a JA. - Summarising several JAs into one document is to be a good approach.</p>

<p>Gurcy (May 2019)</p>	<p>SDIS77 and ARMINES</p>	<p>Field exercise, Multidisciplinary</p>	<p>Rescue & Relief, Fire</p>	<ul style="list-style-type: none"> - Rules and guidelines for the observers had been elaborated and were tested in Gurcy. - Participant and Observer’s Handbook created for the occasion. 	<ul style="list-style-type: none"> - Lack of information and possibilities of misunderstandings. - The Evaluation & Debriefing form provided in T4.2, did not provide three questions. 	<p>SDIS77 and ARMINES provided new templates based on the T4.2 previously developed.</p>	<ul style="list-style-type: none"> - The lessons learnt from past JAs, were taken into account in this JA. - Rules and guidelines for the observers were well received by both the observers and hosting organisations. - A “Review Form” with the questions from T4.2 was provided to experts and partners. - Three questions relevant for the eNOTICE statistics were chosen and two Evaluation & Debriefing forms, one for the experts and one for the partners, were prepared.
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<p>Birmingham (July 2019)</p>	<p>WMP</p>	<p>TTX, Multidisciplinary</p>	<p>Chemical</p>	<ul style="list-style-type: none"> - Practical guide for attending an eNOTICE JA was used and found useful. - ‘Protocol for observers’ used and found useful. 	<ul style="list-style-type: none"> - TTX not ideal for testing, validation or demonstrations from external stakeholders. - Difficulty in understanding CBRN acronyms. 	<ul style="list-style-type: none"> - More focus needed on the joint aspect of the exercise in the hot debrief. - There is a need for a mechanism to maintain brevity of comments. - In-depth debrief not completed. 	<ul style="list-style-type: none"> - Feedback on the joint aspect of the activity was mainly positive. - The Coventry University department successfully observed the exercise and connected with eNOTICE partners. - TTX proved to be a cost-effective way to combine a JA to the exercise. - Include a glossary or blanket ban acronyms. - Practical guide for attending eNOTICE JA as an observer, was amended to suit UK specific details. - The safety briefing and check list pages from ‘protocol for observers’ were found useful. - Raising awareness on eNOTICE and showing the project ahead of the exercise made organisers and leaders passionate about the project and willing to adapt their product.
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<p>Dortmund (September 2019)</p>	<p>FDDO and CNBOP- PIB</p>	<p>Field Exercise, Multidisciplinary</p>	<p>Chemical, Rescue & Relief</p>	<ul style="list-style-type: none"> - Use of a questionnaire to collect feedback and suggestions in hot and in-depth briefs, based on eNOTICE Evaluation and Debriefing forms. - Increased visibility of observers as identified in former JAs. - Introduction of liaison officers. 	<ul style="list-style-type: none"> - Most project partners and observers noted the need for standardisation, especially of guidelines for organisers. - Observers are not all practitioners. 	<ul style="list-style-type: none"> - Difficulties in harmonising and standardising practices. - Direct and clear communication is imperative. 	<ul style="list-style-type: none"> - It is advisable to involve different types of observers in order to discuss and exchange ideas between different professional profiles. - Use of loudspeakers or headphone sets by liaison officers suggested.
<p>Ankara (February 2020)</p>	<p>METU</p>	<p>Serious game</p>	<p>-</p>	<ul style="list-style-type: none"> - Scenarios of the METU JA adapted from previous eNOTICE JA. - JA evaluated through TAM, SUS, ITQ and Open-ended questions and suggestions. 	<p>No feedback provided.</p>	<p>-</p>	<p>VR is a good tool and offers training opportunities to practitioners.</p>

3.2 Summary of lessons learnt from JAs

The lesson identified from each JA are used in the preparation and organisation of the next JAs, thus creating a continuous loop of improvement during the whole project.

Some of the main lessons learnt during the Joint Activities are:

- It is important to have a close Military-Civilian cooperation. The standardized protocols for operational activities are found useful, it indicates that a standardized approach for training and exercise could be useful as well.
- It is important to give observers a specific role and to restrict the number of observers to a minimum. Furthermore, it is much appreciated if the lessons learnt from the last training are considered for future trainings.
- When inviting other EU projects to a regular exercise, the project and the project developments need a certain level of maturity in order to be useful and create benefit. And if there are VIPs invited to the exercise it is better to have a dedicated VIP day, so the real exercise and testing can run more smoothly.

33 A problem found both during the Nîmes JA and the Brussels JA was the difficulty in asking the organisation hosting the exercise to use the eNOTICE templates. Every exercise, demonstration or real-life mission is in fact normally prepared according to the rules and templates already established and used by the organisation for many years, thus the staff is reluctant to change something that works already well. Both the civilian and military staff of UCL are quite experienced in preparation of such events, they have developed their own forms that have proven efficiency throughout the years. Furthermore, the staff comes from different offices and have different functions (from operational in the field to administration), therefore convincing everybody to switch to unfamiliar project templates instead of the ones normally used successfully seemed to be challenging.

Most of the TCs have their own templates and are in no need for new templates but, nevertheless, for the success of the project, the eNOTICE consortium should provide the TCs the templates developed in task T4.2. They can be used by the TCs in total or partially, to update their templates when necessary. Especially eNOTICE templates regarding the integration of R&D projects into the exercise could be useful for TCs. It has been decided the templates are a useful tool and should be used by the consortium partners in the preparation of their JAs.

Moreover, the templates can be useful for other TCs in the network too, as they will be an added value in their existing procedures.

The main lesson identified from the last three Joint Activities (Birmingham, Dortmund and Ankara) is that not all TCs will and/or can use the templates provide by eNOTICE – for many different reasons. Therefore, an update of these templates needs to be made, or at least an alternative solution (such as the digitalisation of the approach) needs to be found and will be discussed.

4 Future plans and next steps

The analysis performed in this document clearly shows that, although the eNOTICE methodology and templates are evolving as the project progresses, the continuous improvement of these documents is an absolutely necessary step in order to produce methodology and templates that can be completely adopted by the different TCs involved in the project.

Some templates, such as the General Information Sheet eNOTICE for a JA, are already widely used by the partners to plan their JAs as it summarises the exercise and the main information needed. The adoption of this template by all partners should continue, while the adoption of other templates should also be encouraged.

The system of continuous feedback loop and evaluation meetings held every Joint Activity must continue throughout the duration of the project as, by doing so, the issues arisen in each JA can be promptly addressed by the eNOTICE partners and appropriate countermeasures can be proposed.

In the preparation, organisation, evaluation and follow up of future Joint Activities, the indications on the eNOTICE methodology and templates provided by all the previous JAs should always be taken into consideration. It would be necessary to design templates that can be used to plan the activities rather than being filled in afterwards.

The latest Joint Activities have shown that most TCs already have their own methodology for the preparation, organisation, evaluation and follow up exercises. This means that only a small part of the eNOTICE methodology is used. For this reason, an update of the templates is absolutely necessary and will be made. Discussions on the added value of the templates and the digitalisation of the standardised approach, aiming at obtaining aggregated results that can be consulted on a digital platform (with the aid of the web-based platform and a specifically designed intuitive app) have started and will continue as the project progresses.

Annex 1. Sample pages of Participant & Observer’s Handbook created for the Gurcy JA 2019



**INTERMINISTERIAL
ZONAL FIELD TRAINING EXERCISE
CBRN-E**

22 & 23 MAY 2019

PARTICIPANT & OBSERVER’S HANDBOOK

DISTRICT OF SEINE-ET-MARNE



THE CBRN-E LAYOUT



THE CBRN-E NATIONAL CIVIL-MILITARY TRAINING CENTRE (CNCMFE)

The goal of CNCMFE is to enhance the operational capabilities of first responders and state agencies against CBRN-e risks and threats.

Created in 2014, the CNCMFE is a national agency attached to the General Directorate of Civil Security & Crisis Management (DGSCGC, French Ministry of Interior). Its main missions are:

- Development of multi-disciplinary training policy;
- Development of learning techniques in order to set up multi-disciplinary operational procedures.

The CNCMFE is based on a central core in Aix-en-Provence, with a territorial network of zonal training centres (CEZ). It plays a major role in the organization of multi-disciplinary zonal field training exercises (EIZ), which are carried out under the responsibility of the defense & security zone's prefects. During the EIZ, the CNCMFE missions are to advise the exercise directors on the theme and objectives, as well as enforce the national CBRN-E policy.

The CNCMFE also organises « specialised » field training sessions aimed at the enhancement of multi-disciplinary cooperation on specific issues (for example medical management of contaminated wounded people).

Finally, the CNCMFE proposes various courses in Aix-en-Provence for public agents (health, interior, armed forces, etc.). All these courses are carried out in strict observance of guidelines and doctrines established by the General Secretariat for Defense and National Security (SGDSN).

THE INTERMINISTERIAL FIELD TRAINING EXERCISES (EIZ)

The EIZ allow the various actors to work together in realistic scenarios, in order to enhance the common operational procedures. The main targets of these EIZ are the non specialized first responders; the IEZ will allow them to get familiar with operational procedures of units specialized in CBRN-E crises management.

The specific objectives of each EIZ are set up by the defense and security zone interministerial staff; they are based on the CNCMFE annual training guidelines and prefectural directives.

These two day exercises allow the participants to acquire specific skills, by following a learning philosophy based on « do – make do – make do again ».

Each EIZ can train up to 200 participants from various ministries and agencies.

Each EIZ is organised in three phases:

- « Acculturation » phase ;
- « Mechanisation » phase : learning of specific skills in thematic workshops (« do – make do » ;
- « Directed game » phase: restitution of skills in the framework of a dedicated scenario (« make do again ».

ACCULTURATION PHASE

Theoric courses concerning CBRN-E issues.

MECHANISATION : learning process within dedicated workshops.

Theoric : to know the different agencies involved in the management of a CBRN-E event : organisation, missions, constraints, expectations and needs.

Practical / tactical : to acquire professional skills for joint operations, to get familiar with equipments and operational procedures used by other actors.

DIRECTED GAME : realistic scenario.

Restitution of the skills in a scenario which gathers all the workshops.

An animation team which ensures the coherence of the scenario.

THE WORKSHOPS

EXCLUSION AREA (ZEX)

POPULATION MANAGEMENT IN CONTAMINATED AREA

MULTI-DISCIPLINARY CONNECTING ZONE

COMMAND & CONTROL

TRANSIT POINT

HEALTH FACILITIES

GENERAL INFORMATION

- The gymnasium is the only rendezvous point at the beginning and the end of each training day.
 - A question box is available at the check-in table in the gymnasium ; all questions will be answered during the debriefing.
 - If you need to contact a training direction membre (H24) : 01.64.60.54.61.
 - A health support team is available 24/7 during the training exercise.
 - **Badge**
During check-in you will receive a badge corresponding to your workshop. This badge is to be returned on Thursday 23th before lunch.
 - **Accommodation**
 - Breakfast (for units sleeping on-site only) : from 6h45
 - Lunch on 22nd: 11h55 - 12h30 – all units must leave the restaurant before 13h45.
 - Lunch on 23rd : after the debriefing.
 - Dinner on 22nd: 18h45 – 20h00 – all units must leave the restaurant before 20h30.
- All units must take the dinner on-site; priority will be given to units sleeping off-site.
- Because of the numerous units playing in the field training exercise, you are kindly asked to leave the restaurant as soon as you have finished your meal. Coffee will be available in the gymnasium.**
- Parting time for units sleeping off-site: 20h00.

INTERNAL RULES OF PROCEDURES – SDIS77 TRAINING CENTRE

1° - All attendants to a course organised in the SDIS77 training centre are expected to follow the rules below:

Tolerance and respect.

Refusal of physical, moral and verbal violence.

Respect of public / private assets and facilities.

It is forbidden to wear any distinctive signs, be they religious, political or philosophical.

Protection of the environment.

2° - It is forbidden to smoke in the SDIS77 training centre.

3° - Bringing, selling, consuming alcohol and / or any legally prohibited substance is strictly forbidden.

4° - Traffic within the training centre must comply with national traffic laws : speed limited to 30 kph, use of designated parking areas only, use of green spaces as traffic lines forbidden.

Thank you for helping us keeping the training centre clean!



Annex 2. Updated templates created for the Gurcy JA (May 2019).

OVERVIEW QUESTIONS FOR OBSERVERS – JOINT ACTIVITY GURCY

This overview lists questions for observers during the Gurcy Joint Activity, 22nd and 23rd May 2019

Purpose of the questions:

The overall purpose of the observations is to extract as much information as possible from these Joint Activities, considered as eNOTICE show cases to achieve the project’s objectives.

The specific purpose of these questions is:

- To provide guidance for all observers, in order to ensure an active participation during the exercise
- To gather information, relevant for the different ongoing tasks or tasks starting in a near future
- To provide for input and guidance for the discussions during the debriefing sessions

The questions will be distributed and assigned to three categories of participants – see next column, to ensure they are answered by different profiles (academics and Training Centres, eNOTICE partners and external experts): different focuses because of different profiles will hopefully enrich the discussion on lessons learnt.

For each participant a template for observation and evaluation will be made with only a few questions (to keep the observation focussed).

- eNOTICE partners will be assigned questions related to tasks they participate in
- the EU experts participating in the Joint Activity and the invited experts will be assigned questions related to 1) visibility of the centres, 2) added value of this type of Joint Activity, 3) needs and expectations from TC’s in general, this type of activity in particular.

Three categories of observers:

- A) eNOTICE partners
- B) Participating EU projects/experts
- C) Invited experts



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Task	Lead		A	B	C	Observer	Organisation/project
WP3 Ongoing tasks	UCL/UPB	T3.2 (UPB): Which aspects of the observed exercise would you like to be see highlighted on the eNOTICE web-based platform?	X	X	X		
		T3.2 (UPB): Which information about the Joint Activity would you like to have easy access to electronically (e.g. map of the facilities, meal information, ...)?	X	X	X		
		T3.4 (UPB): Which information about the different parties participating in the Joint Activity (e.g. emergency professionals, research projects, invited experts) would you like to see on the eNOTICE web-based platform?	X	X	X		
4.2 Joint activities	VESTA						
4.3 Policy recommendations	UCL						



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4.4	Plan to pool resources	UMU				
5.2.3	Evaluation methodology and templates	UNITOV				
5.2.4	Evaluation quality label (+roster)	UNITOV				
5.3	Security, legal and ethical	VESTA				



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Overview of eNOTICE participants in Gurecy, per task

	WP3	T4.1	T4.2	T4.3	T4.4	T5.2.3	T5.2.4	T5.3
UCL								
VESTA								
ARMINES								
FDDO								
UPB								
JCBRND CoE								
METU								
UNITOV								
WMP								
WSU								
CNBOP- PIB								



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Overview of invited EU projects and experts in Gurcy

EU projects

Organisation or Project	Representative	Role during the JA

Invited Experts

Organisation or Project	Representative	Role during the JA



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EVALUATION & DEBRIEFING FORM – JA GURCY eNOTICE PARTNER

Name:

Organisation:

Question 1 -

Question 2 -

Question 3 -

Question 4 - What do I take home?

Question 5 – Does this exercise meet my expectations? If not, why?

Other feedback or suggestions you would like to share with us?



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EVALUATION & DEBRIEFING FORM – JA GURCY Invited expert

Name:

Organisation:

Question 1 -

Question 2 -

Question 3 -

Question 4 - What do I take home?

Question 5 – Does this exercise meet my expectations? If not, why?

Other feedback or suggestions you would like to share with us?



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Complete list of questions for external participants

- What infrastructure did you see that provokes interest for use within the project(s) you are involved in?
- What characteristics of the training centre do you believe to be most valuable to promote?
- What elements of the exercise do you believe to be most valuable to promote?
- What do you consider to be 'unique selling points' of training centres, that might influence your choice to work with them?
- Which are the characteristics that you would look for, when searching for a TC?
- Would you have specific requirements toward the Training Centre to provide good protection of classified data, i.e. identities, equipment, operational procedures?
- What are your main expectations when observing/participating in the exercise?
- What characteristics of the training centre are or would be critical in your decision of participating (again) in an exercise?
- What elements of the exercise are or would be critical in your decision of participating (again) in an exercise?
- Would you consider working with practitioners through the participation of a training centre? What would be your requirements to take such a training centre on board as full partner in your next EU or national research project?
- What would be determining assets for you to choose working with a TC: availability of practitioners? Infrastructure? Access to policy makers? Other?
- Joining the exercise/the network is your individual wish or your organisation policy?
- What could prevent you from joining the exercises? The network?
- What are the current gaps or challenges in stakeholders synergies you can think of? E.g. lack of information? Lack of wish to synergize? (Why?) Lack of legal basis? Other?
- Does participation in this exercise convince you that collaboration within a CBRN network would be beneficial? Why (not)?
- After observing the joint activity, do you feel like you have a better image of the needs of practitioners?
- Does the development of a CBRNe TC's network, implementing standardized procedures, with a common programme/catalogue of exercises (covering all the fields of CBRNe specializations), help to increase the practitioner access to an optimized training process? Why (not)?
- Does the development of a CBRNe TC's network, integrating all the participating TC capabilities and infrastructures for a complete offer, help to increase the practitioner access to an optimized training process? Why (not)?
- Do you think that such kind of TC's network (composed of training centres sharing a quality label, with a complete range offer of CBRNe facilities) can become a reference point for those looking for a TC to involve EU or national research project? Why (not)?



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- Could the use of a common methodology for the organisation of exercises be useful? Have added value?
- What did you learn from participating in/observing the exercise?
- Were you able to achieve your objectives while participating in the exercise? (e.g. testing of technology)
- Did you feel like the exercise provided you with enough opportunities to learn from?
- Did participation in the exercise meet your expectations?
- In what way could the exercise be adapted so that it will become more interesting for you?
- Is your expertise and/or way of working compatible with the practice within the exercise?
- Did the exercise offer sufficient opportunities for the identification of good practices?
- Do you consider this type of exercise relevant for the collection of end user needs at the start of an EU project?
- Do you consider this type of exercise as an interesting setting for testing, as part of the technical development process in an EU project? What is most interesting: interaction with practitioners, the infrastructure, other?
- Do you consider this type of exercise as an interesting setting for a validation session as closure of the technical development process in an EU project? What is most interesting: interaction with practitioners, the infrastructure, other?
- Do you consider this type of exercise as an interesting setting for a demonstration session to present the final results at the end of an EU project? What is most interesting: interaction with practitioners, the infrastructure, other?
- After participating in the joint activity, do you feel like there is a need for harmonisation/standardisation of exercise practices? Why (not)? What specific aspect?
- Shall there be synergies between civil and military training practices? Why (not)? In what aspect?
- During this joint exercise were you as practitioner/end-user /stakeholder, what kind of "critical technological gap(s)/need(s)" could you immediately identify which would justify the recommendation for a "prompt new end-user-guided innovation project? or several projects?
- Would you be interested in observing/participating in the exercise if you had to pay a fee for attendance?
- Does the distance you have to travel holds you back to participate in (future) joint activities?



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FOLLOW UP FORM

Overview of actions identified during the debriefing of the exercise

	Topic	Link/task	Required action	Who?	Timing	Expected result
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						



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Annex 3. Examples of forms filled in by the participants in the Gurcy JA

EVALUATION & DEBRIEFING FORM - JA GURCY
eNOTICE PARTNER

Name:
Organisation:

Question 1 - During your past experience, have you organized or took part to the organization of CBRNe exercises? (YES/NO).
If YES, did you [circle the correct option]: use need/look for guidelines and templates for the organization of a CBRNe exercises?

Question 2 - Did you know that eNOTICE developed a methodology and templates for the preparation, organization, evaluation and follow up of Joint Activities, that are available on the project website? (YES/NO).

Question 3 - Which are the first three information concerning a CBRN TC capabilities that you would like to see highlighted on a web portal?
1.... Workshops
2.... type of potential trainings
3.... Facilities

Question 4 - What do I take home? Extraordinary organization
The perfect joint activity by two partners

Question 5 - Does this exercise meet my expectations? If not, why? Yes

Other feedback or suggestions you would like to share with us?

2



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EVALUATION & DEBRIEFING FORM - JA GURCY

Invited expert

Name:

Organisation:

Question 1 - Which aspects of the observed exercise would you like to be see highlighted on the eNOTICE web-based platform?

MULTI-AGENCY COOPERATION
COMMON SOPs

Question 2 - Which information about the Joint Activity would you like to have easy access to electronically (e.g. map of the facilities, meal information, ...)?

HANDBOOK FOR EXERCISE

Question 3 - Which information about the different parties participating in the Joint Activity (e.g. emergency professionals, research projects, invited experts) would you like to see on the eNOTICE web-based platform?

COOPERATION BETWEEN EU FUNDED PROJECTS

Question 4 - What do I take home?

Possibility of COOPERATION BETWEEN EU PROJECTS

Question 5 - Does this exercise meet my expectations? If not, why?

YES

Other feedback or suggestions you would like to share with us?

NICE OPPORTUNITY TO EXPLAIN AN UNDERSTANDING
OF E-NOTICE PROJECT GOALS.