eNOTICE
European Network Of CBRN Training Centres

D4.2 eNOTICE Joint activities planning

Report 1

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Executive Summary

This document is the first progress report on the organisation of eNOTICE Joint Activities (JA). It describes the objectives, rationale and methodological approach for their organisation and includes a summary of the observations made and the lessons learnt from the first JA, organised in Gurcy on 13th December 2017. The full report on the Gurcy JA is included in annex.

The first JA was generally considered as a successful experiment to achieve the eNOTICE objectives, which are to build a bridge between different public safety and security stakeholders and to learn from these gatherings to build a sustainable network of CBRN Training Centres (TC).

These activities are meant to collect information in order to achieve a better understanding of the needs and expectations of different stakeholders and to explore the possible added value of different kind of exercises (field, table top, simulations and serious gaming) as a favourable setting to bring these stakeholders together. Therefore, a lot of attention is given to the 'joint' character of these activities and to the preparation of a structured debriefing and evaluation in order to collect as much valuable input as possible.

The 'joint' character is achieved through the participation of ongoing EU projects, attending the exercise for observation, testing, validation or demonstration. In Gurcy, the EU project TRADR and the industrial company PARROT Corporation joined the exercise. Experts from the EU projects TOXI-TRIAGE and FIRE-IN participated to observe and learn and share their feedback with the eNOTICE consortium partners.

All participants received a debriefing and evaluation form with a few (2/3) questions to ensure focussed observations during the exercise. A hotwash debriefing with the practitioners, immediately after the exercise and an in depth debriefing and project meetings with eNOTICE consortium partners and all external experts ensured a structured approach to collect feedback on questions of relevance (prepared in advance by the eNOTICE consortium partners) for building the CBRN TC network in general and for eNOTICE ongoing tasks in particular.

From the lessons learnt, new actions were decided, gathering in a follow up list, mentioning owners and deadlines. They will also be taken into account for the organisation of the next JA.

The main recommendations were to aim for more comprehensive field exercises with a full response scenario rather than a training activity, to pay attention to favourable and safe conditions for all participants (both the practitioners and the invited persons); to ensure clear briefings so that external partners understand the national context, the level of expertise of the practitioners and their objectives during the training or exercise, in order for the external experts to enable them to define their own expectations for participation and increase the learning opportunity, from the comparison with their own knowledge and experience. It was also requested to have more time to visit the available exercise infrastructure of the TC, as this is definitely a unique characteristic, which distinguishes them from other training academies.

Tables and figures

Definitions

CBRN Training Centre - eNOTICE uses the following instrumental definition of CBRN Training Centres:

CBRN Training Centres

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

eNOTICE focus

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

eNOTICE ambition

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

eNOTICE rationale

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

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1 Introduction

1.1 Overall objectives of eNOTICE and scope of WP4

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 policy-makers, 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 effective in meeting 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. The work programme (SEC-21-GM-2016-2017 – Pan European Networks of practitioners and other actors in the field of security[1]) 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 (Figure 1) and will be achieved through a mix of activities.

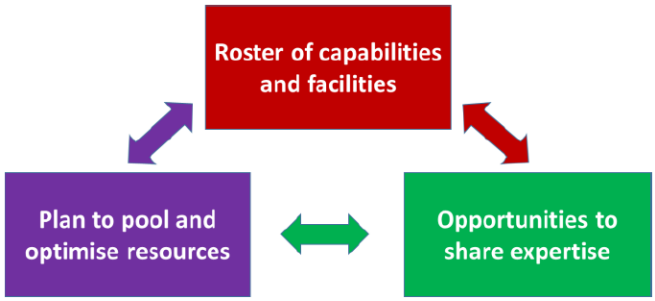

Figure 1 Three lines of actions

[1] European Commission Decision C (2017) 2468 of 24 April 2017, Horizon 2020 Work Pogramme 2016-2017, 14. Secure Societies - Protecting freedom and security of Europe and its citizens, web publication at: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-security_en.pdf.

One of the key activities within eNOTICE is the organisation of Joint Activities, which is the main scope of WP4.

The objectives of WP4 are defined in the DoA as followed:

> WP4 aims at transforming the WP3 information and communication network into a transactional network, based on sharing of expertise and effective practices and collaboration through the organisation of joint activities between the eNOTICE consortium partners and external partners. WP4 will also identify and encourage opportunities to optimise investments through pooling of resources, and liaise with other networks and policy makers to avoid duplications and to create synergies to align policies and optimise efforts.

Joint Activities can be defined as exercises for first responders or civil protection practitioners organised by CBRN TCs as part of their regular educational or training activities, opened up to external stakeholders, which allows for the activity to be combined with tests, validations or demonstrations.

The eNOTICE Joint Activities can be seen as show cases to demonstrate the role, contribution and added value of the TCs *beyond* their traditional activities, in terms of user driven R&D, enhanced preparedness, improved training capacity and a community buildup.

During the project, all eNOTICE consortium partners will organise such activities in which they open up their core activities such as multidisciplinary field exercises, table top exercises, trainings, serious gaming and simulations to external partners, such as, EU R&D projects, industry, policy makers and other practitioners. These realistic settings of real-life situations will provide unique opportunities for the identification and development of user-driven technological solutions, e.g. through the identification of genuine user's needs, technical testing, validations, demonstrations, focus groups, etc.

Lessons learnt from these Joint Activities will result in recommendations to improve their organisation and output, for optimised resource allocation and for enhanced collaboration both at operational and strategic (policy) levels.

1.2 Objectives and scope of Task 4.2

Task 4.2 – "*Organisation of joint activities (exercises combined with tests, validations or demonstrations)"* is responsible for the organisation of these eNOTICE key activities, which are the Joint Activities, organised during the whole duration of the project.

The current Deliverable D4.2 – eNOTICE Joint activities planning (Report 1) consists of:

1) A clarification on the context and objectives of the eNOTICE Joint Activities (Section 1)

2) The report on the Joint Activity, organised by SDIS77, in Gurcy (Annex), incl. the summary of the input gathered through observation and evaluation (Section 2);

3) An overview of the lessons learnt to take into account for the following Joint Activities, as well as the planning for the future Joint Activities (Section 3).

The objectives of Task 4.2 are defined in the DoA as followed:

> Task 4.2 organises joint activities between partners with a different profile and expectations, as show cases with a double objective: 1) cost-efficiency: to demonstrate the added value of joint efforts and pooling resources, 2) increased benefits: to demonstrate additional benefits in terms of better mutual understanding of the participants, of lessons learnt (individually and from each other), identification of opportunities for improvement and requirements for innovative solutions, etc.
>
> A balanced mix of different types of activities is covered during the project (see planning in methodology). These activities are part of the regular annual program of the project partners. External (national or EU projects) research partners will be identified, selected and invited to join the exercise, because of their scope, which is improved CBRN incident management.
>
> Mutual lessons for improvement of CBRN training and response capacity and identification of opportunities for research and innovation need to be a structural part of the evaluation of every activity and reported as possible paths for follow up, including R&D and policy recommendations. The Task 4.1 methodology and templates will be used as a structured and standardized procedure for all the projects activities, in order to allow comparisons and to facilitate generic (common) as well as specific lessons learnt. The results of these evaluations will serve as input for Task 4.3 and Task 4.4. Both the methodology and lessons learnt will be shared in publications, conference presentations and papers, workshops if relevant (see Dissemination). At the final conference (Y5) the results and added value of these joint activities will be presented, showing gradually gained insights and guidelines for improvement.

A CBRN Exercise is considered as a Joint Activity when it consists of *"an exercise organised by the Training Centre and joined by an external party, each having their own, specific objectives such as mandatory training for practitioners as part of the regular program of the Centre, opened up to an industrial or research partner who wants to test, validate or demonstrate new technologies. Both the exercise team and the organisation who joins have*

their own objectives. The external partner joins an existing exercise[2]."

Table 1 Joint Activity

Activity	Joint
Regular training activity of the TC: • Field Exercise • Table Top Exercise • Training • Simulation • Serious Game • Other	Opened up to R&D partners for: • Observation • Testing • Validation • Demonstration

These Joint Activities are considered as show cases, to demonstrate all possible benefits of a multi-profile participation in CBRN or multidisciplinary exercises: by inviting public safety and security stakeholders to these training exercises, normally exclusively attended by practitioners, a broad range of learning opportunities and possible synergies is expected, for the TC as well for external visitors.

Task 4.2 relates to eNOTICE Subobjective 3.2, defined in the DoA as follows: "*To organise joint activities between the eNOTICE beneficiaries or between an eNOTICE project beneficiary and external partners to demonstrate the benefits of sharing resources and optimising outcome. EU and national CBRN projects will be monitored to identify networking activities, promising innovations and to facilitate dissemination and exploitation through the eNOTICE network by organizing joint activities, such as using eNOTICE consortium facilities for the project's training, testing or demonstration events. eNOTICE will support testing, validation and training of new technologies in operational end-user facilities to ensure that all user's operational procedures are respected, being in realistic environment set up by users, by involving members of the eNOTICE practitioners community. To organise joint activities within the consortium, and for some of those, with external partners, in order to document the outcome benefits of sharing resources. EU and national CBRN projects taking potential advantage of the consortium training and testing facilities will be looked at, thereby expanding the scope and size of the network, fast-tracking innovations and expanding dissemination. Practitioners' involvement in tests, validation and training in new technologies*

[2] eNOTICE Deliverable 4.1 (2018) - eNOTICE methodology for the preparation/organisation, evaluation and follow up of CBRN exercises combined with tests, validations or demonstrations

inside well-adapted infrastructures and in real-life or simulated situations will prompt the respect of operational procedures, support CBRN innovation and make those better fit users' needs. This objective will provide support to CBRN research projects with easier access to the users and training facilities."

1.2.1 Clarification on the objectives and the JA as key instrument

The main ideas behind these Joint Activities as a key instrument to build the network are: 1) the unique role CBRN Training Centres can play as an intermediary between other public safety and security stakeholders; 2) the added value of creating opportunities for different profiles of security stakeholders to work together to increase mutual understanding and to identify opportunities for improvement as well as synergies for collaboration, rather than listening to each other in a traditional conference room environment.

Unique role of CBRN Training Centres

CBRN Training Centres are indeed strategically placed in the core of the network as they are the genuine operational link between all CBRN stakeholders, particularly CBRN practitioners and technology suppliers. They are the perfect intermediary, due to their usual core business of training practitioners in well-adapted infrastructures for training in real case settings.

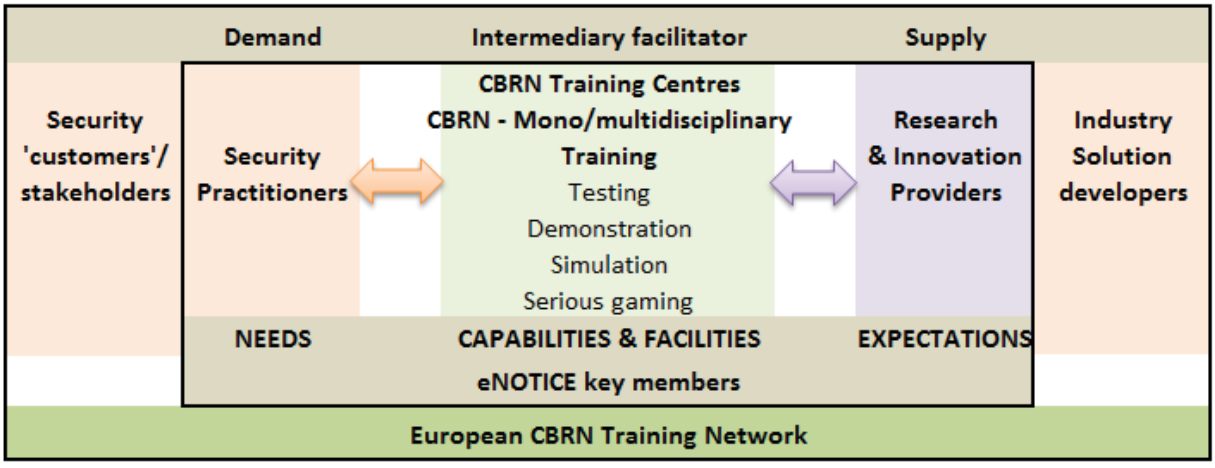

Figure 2 The key actors of the European Network Of CBRN TrainIng, Testing and Demonstration CEntres

It is widely admitted that innovative technologies are useful for countering real CBRN threats, but only if the need is recognized by users and if these technologies meet their needs and requirements (Collaborate design approach to innovation): users should not adapt to the tools; rather tools must meet their needs, respect the user context and organisational culture, in which processes and decisions are embedded. Development of new tools clearly needs to fill a gap

that users identified as such and that is not yet covered by other existing tools, then the development meets the need and requirement.

In a yet totally overlooked bottom-up approach, CBRN TC (see Figure 3) are best placed to collect ideas and advices and to organise successive discussions and evaluations with practitioners to identify which tool should be developed, and then evaluate the successive phases of a new development.

This will be highly beneficial in terms of technological maturation and validation.

A final step will be to test the new tool in real life settings and learn how to use it. Trained actors are best placed to appreciate the added value and relevance of a technology, to see its limitations, and to fully assess its potential. This new bottom-up approach is the best way to prepare new tools for the CBRN market.

Added value of Joint Activities

The expectation of these Joint Activities is that inviting stakeholders to observe and experience these realistic settings of real life situations will increase mutual understanding. Moreover, it provides numerous opportunities for various stakeholders to meet, get to know each other and share experiences and good practices. Such a practical approach will enable to bridge the gap between research and technology suppliers and practitioners and will lead to a more solid environment for the establishment of a viable and sustainable network, through:

- Increased opportunities to meet the needs of these stakeholders;
- Better insight for end users in technical possibilities;
- Better understanding by industry of the modus operandi the needs of end users;
- Better understanding of end users of the needs of and modus operandi and needs of industry and R&D organisations.

The usual core business of a CBRN TC is to organise regular training, testing and demonstration activities for local stakeholders. Enlarging this to other organisations and widening the scope of activities to joint innovation testing will naturally strengthen ties between new partners and bring them closer together.

Joint activities will include field exercises, table top exercises, trainings, and will also include demonstrations with deployable laboratories, simulations and serious gaming. The latter will provide a virtual environment creating a multi-background learning and sharing process that will open up avenues for further CBRN-orientated research in a cost-effective way.

Overall, Joint Activities will improve a tight interaction between end-users and technology developers facilitating the identification of user needs and requirements, implementation and correct use of new technologies, clearer understanding of CBRN incident management issues, and favouring structural and functional partnerships.

1.2.2 Link between Task 4.2 and other eNOTICE tasks

As the Joint Activities belong to the key activities of eNOTICE, Task 4.2 has several links with other Tasks, during the whole duration of the project:

- The Methodology and Templates that will be used for the preparation/organisation, evaluation and follow up of the Joint Activities (JA) are elaborated in Task 4.1. They will provide the (TC's or any other) exercise team with guidance and tools to organise and document the main steps of the process and are designed to facilitate the collection of relevant information from the observation of JA.

- The Methodology and Templates will be continuously updated in Task 5.2.3, based on the points of improvement that are observed while applying them for the preparation/organisation, evaluation and follow up of the JA.

- The JA are a means to identify opportunities to strengthen policies and recommendations for R&D, which is the scope of Task 4.3.

- The JA should allow the 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.

- The lessons learnt and effective practices that come forth out of the discussion of observations made during the JA are considered as valuable input to make publicly available on the web based platform. This is embedded in Task 3.1 – Dissemination activities to promote and enhance the web based platform and project results.

- The planning of the JA, announcements and pictures are published on the web based platform, thus creating visibility for this type of activities. Both the network as well as the hosting CBRN Training Centres are thus being promoted, which is part of Task 3.1 – Dissemination activities to promote and enhance the web based platform and project results.

1.3 Provisional calendar

A provisional calendar provides an overview of the planned Joint Activities for the whole duration of the eNOTICE project (see Table 2). 16 activities are planned between the start of the project in September 2017 and the conclusion of the project in August 2022. Each eNOTICE partner will twice be (one of) the hosting partner(s) for these activities. Half of the activities are an active collaboration between two of the eNOTICE partners, which emphasises the joint aspect of these activities.

The provisional calendar mentions the (approximate) date on which the activity takes place, the hosting partner(s), the location and the type of activity. The calendar will be made publicly available on the web based platform (Task 3.1), in order for stakeholders that are interested in (participating in) one of the activities to be able to consult them.

The concrete dates for each forthcoming Joint Activity are set 6 months to 1 year in advance.

The first Policy Meeting, planned in December 2017 in Gurcy, has been postponed to June 2018 and will take place together with the Joint Activity that takes place in Brussels. Subsequently, the first Annual Workshop, planned in June 2018 in Brussels, will be organised in October 2018, in Rome.

1.4 Methodological approach

1.4.1 Introduction on the general methodological approach

The main characteristic of all CBRN Training Centres – TC, which makes them unique and justifies their possible role of intermediary actor between practitioners – the need/demand side of new technological solutions and R&D organisations – possible solution providers is their capacity and infrastructure for the organisation of mono- and multidisciplinary exercises: table top exercises, field exercises, simulations, serious gaming, etc. The infrastructure for field exercises consists of chemical installations, training villages, airplanes, railway stations, high ways etc.

As a consequence, they have an extensive network of practitioners, which consists of experts covering all relevant aspects to deal with public safety and security in general, of CBRN challenges in particular.

It is the combination of the availability of specific exercise infrastructure and expertise within their network that enables CBRN TC to be strategic players in new developments.

It is the deployment of the expertise of these first intervention teams in the setting of real case scenarios for educational or training purposes that provides for unique opportunities for R&D organisations and projects to participate in these activities. In all stages of the development of new tools, procedures, technologies, techniques, methodologies, etc. R&D partners can have an interest in joining these activities instead of or as a complement to the organisation of a workshop, focus group or conference with theoretical explanations, without any witnessed practice in the field:

- for the identification of end user needs, e.g. by observing the interventions of practitioners and discussions with them during the debriefing session, immediately after the exercise;
- for the definition of user requirements, again through observations of, discussions with and validation by the practitioners;
- for testing at different development stages and validation by the practitioners, who are the future end users of the expected results;
- demonstration of the final results to a larger audience, using real settings to clearly show the added value in practice.

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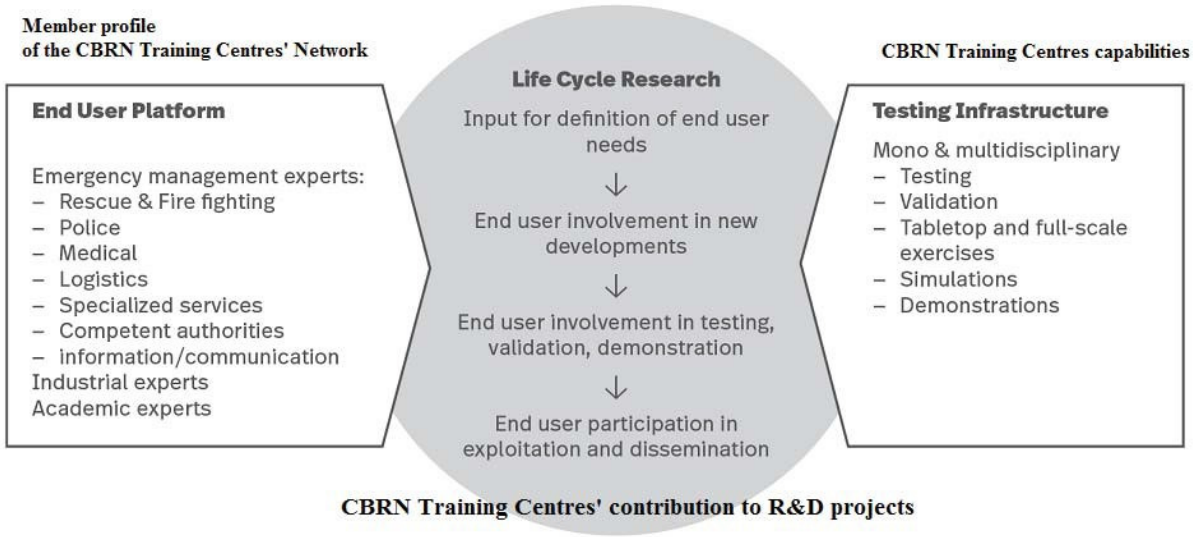

Figure 3. CBRN TC act as a natural host for a platform between security practitioners, innovative solutions providers and other stakeholders to improve CBRN incident management training, preparedness and response capacity

As all TC organise educational and training exercises as core activities of their annual programme, there is no need for researchers and developers to 'order' these practical cases or

to invest themselves in their organisation. They exist, they are available and all it takes to bring practitioners and researchers and developers together is to be aware of these opportunities and know the calendar of these activities. These announcements will be made at the eNOTICE platform, which is under development in WP3.

The organisation of the Joint Activities in Task 4.2. will serve the following purposes:

- they are considered as show cases to convince invited research projects and invited experts of the added value of these exercises for needs driven research;
- they will serve as experiments to understand and to promote the full range of additional benefits beyond the traditional goals of training and education;
- they will serve as experiments to identify the best possible conditions for maximum benefits for all the partners involved;
- they will be analysed in order to identify recommendations for optimized investments and allocation of resources.

The methodological approach to ensure these ambitions relies on the following aspects:

1) Templates for the preparation and organisation, debriefing and follow up of these exercises are elaborated in Task 4.1 and used for the preparation as well as the reporting on these activities. These templates ensure a structured and harmonised approach, in order to maximise the output generated by these activities in terms of lessons learnt, opportunities for improvement, new possible synergies and forms of collaboration, etc. The generic character of these templates ensure sufficient flexibility to take specific needs into account in a dymanic way.

2) The Joint aspect of these exercises is guaranteed through the collaboration between (two or more) eNOTICE partners, merging their activities and joining their efforts, or by inviting a research project or and industrial partner to join the exercise for the purpose of collection of end user requirements (observations), testing, validation or demonstration;

3) All types of stakeholders – practitioners, other Training Centres, competent authorities, industry, academics, etc. – interested in the eNOTICE concept can be invited as participants to observe, to learn from, and reflect on the methodology.

1.4.2 Methodological steps for the organisation of the Joint Activities:

Four main methodological steps can be distinguished: 1) the preparation of the 'Joint' aspect of the exercise; 2) invitation of experts for observation; 3) preparation of the roles and responsibilities of all the participants; 4) evaluation and follow up of the Joint Activity. They all aim at a thorough preparation in order to ensure an efficient and effective activity, matching the needs and expectations of all participants.

Preparation of the 'Joint' aspect of the exercise

The exercise as such is part of the annual program or a key activity of the hosting Training Centre and the preparation thereof is its sole responsibility.

In order to have a JA, the exercise is open for participation of a research project that is interested in joining because of the possible benefits for their own research: as an opportunity to observe for the collection of end user needs, to test their tools, methodologies, etc. to have them validated by the practitioners participating in the exercise or to demonstrate their final results.

The challenge, at this stage of the eNOTICE project, is to find a research project that is interested in the type and the thematic topic of exercise that is organised by the hosting TC.

The identification of an interested research project is done (for now) by the hosting TC, supported by all consortium partners. In the future, announcement will be made through the eNOTICE web based platform, which will provide for mechanisms (yet to be developed) for research projects to find a TC and exercise that matches their needs.

For now, a communication and information sheet has been elaborated with relevant information on the location, the type of the exercise, the objectives of the exercise, the scenario, profile of participants, the infrastructure and facilities used for the exercise, etc.. This sheet is to be used by the hosting TC to inform possible research partners, so that they consider their participation (See in the report in annex, the example for the Gurcy JA).

Once a research project has been identified, a collaborative process starts between the hosting TC and the research project to discuss the modalities of the participation: is there a need to adapt the scenario, need for additional material, additional profiles of participants, duration of the exercise, etc.

As soon as the collaboration between the TC and the research project is sufficiently concrete, the information sheet is completed with relevant information on the research project: the

objectives of their research, the objectives and expectations of their participation (testing, validation, etc.), the profile of the research partners participating in the exercise (second column of the information sheet, see in the report in annex, the example for the Gurcy JA).

Invitation of experts for observation

The completed information sheet is used to inform external experts of the JA. At this stage of the project, it is communicated to experts belonging to the network of the eNOTICE partners. In the future, this information can be made available on the eNOTICE web based platform. For now, the activity was only announced.

When external experts show their interest, they can be invited by one of the consortium members. A specific budget is dedicated to take care of the travel and accommodation costs of their participation. These experts do not actively participate in the exercise, in the sense that they have no active role in the scenario and no specific expectations and objectives. Their interest lies in observing the concept of a 'Joint' activity, assessing the possible added value of this type of activity for their own research (or other) project (e.g. in the case of competent authorities) and critically reflect on the conditions, required to make these JA successful, as such and as an instrument to build the network.

These experts might have diverging interests in the Joint activity:

1) The 'joint' aspect: the use of an activity for multiple purposes, to serve multiple objectives;
2) The type of exercise: table top, field, simulation, serious gaming;
3) The thematic topic of the exercise: C, B, R, N, mono- or multidisciplinary;
4) The scenario;
5) The facilities and infrastructure of the TC;
6) The profile of practitioners participating in the exercise.

Preparation of the roles and responsibilities of all participants

As an intrinsic characteristic of JA, there are different profiles of participants, according to their motivation of participation:

1) The practitioners involved in the exercise: they have their own learning or training objectives, and can also be interested in networking and exchange of knowledge;

2) The eNOTICE consortium partners, who participate in order to learn from the experience of organising a JA and to collect information for the tasks they are involved in, ultimately to identify opportunities to build a sustainable network;

3) The participating EU project(s), the Joint partner(s) in the exercise, who joined for testing, validation or demonstration;

4) The invited experts, whose interest can be very diverse and related to all aspects of organising an exercise, ensuring practitioners' participation in R&D development, policy interests, etc.

To ensure focused observations and participation and to guarantee that as much valuable feedback as possible is collected, a list of questions is elaborated as part of the preparation of the exercise, taking into account the participants' expectations. This list is composed by questions proposed by all the eNOTICE partners, they relate to the different eNOTICE Tasks, questions related to T4.1 and T4.2 take into account the expectations of external stakeholders.

The added value of this list is:

- To provide guidance for all observers, in order to ensure an active and focussed 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 were distributed and assigned to three categories of participants (except for the practitioners involved in the training or the exercise): 1) the eNOTICE consortium partners, 2) the participating EU projects/experts and 3) the invited experts.

For each participant an individual template for observation and evaluation was made, where only three or four questions were listed. This was done to keep their observation focussed.

- eNOTICE partners were assigned questions related to the Tasks they participate in;
- 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 TC's in general (this type of activity in particular).

The distribution and assignment of the questions were done to ensure that they were answered by observers with different profiles. It was expected that different perspectives from profiles

of observers - academics and Training Centres; eNOTICE consortium partners and external experts - would enrich the discussions during the debriefing and to ensure more balanced lessons learnt.

Evaluation and Follow up of the Joint Activity

The list of questions serves as a structured and comprehensive basis to evaluate the JA, to identify lessons learnt and opportunities for improvement. A Follow up Form collects all decisions on follow up actions.

The list of questions is to be used to structure the discussions during the debriefing and to make sure all relevant aspects are covered in an appropriate way. All participants are asked to share their feedback on the evaluation questions that were assigned to them. The individual evaluation forms are collected (on the internal Share Point) and to be used by all eNOTICE Task leaders as input for their task.

A follow up form list actions, decided during the debriefing and the project meetings that followed the debriefing sessions. The form list the type of actions, the owners and the corresponding deadline.

(See below for the example of the Evaluation & Debriefing and Follow up Form for the Gurcy JA)

2 Report on the Gurcy Joint Activity

The full report of the Gurcy Joint Activity, based on the T4.1 Guidance and Templates, is included in Annex to this report.

This section gives a summary overview of the evaluation and feedback collected and discussed at the Gurcy JA.

2.1 Debriefing and evaluation of the Gurcy Joint Activity

Two types of evaluation of the Gurcy JA were prepared: a hot and in depth debriefing, both project-oriented (the debriefing of the exercise as such, from the point of view of the TC and practitioners and the evaluation if the practitioners' objectives were met, were not covered by the project debriefing as this is an internal matter of the TC).

The hot debriefing took place immediately after the exercise, in the presence of the practitioners. This debriefing was not structured as it was aimed at collecting first and fresh impressions, right after the exercise.

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.

The collected feedback for both is explained separately in the following paragraphs.

2.2 Feedback from the practitioners during the hot debriefing

Immediately after the exercise, the practitioners who had an active role in the exercise were invited to share their experiences. They were specifically asked to share their views on the eNOTICE's objective to enhance collaboration between technology suppliers and researchers through these kinds of JA, in order to ensure that new developments match their needs, thanks to their contribution to the development of technologies and tools.

In general, practitioners expressed a very positive attitude towards this type of collaboration with industry or researchers.

Examples were brought up in which a similar (but often more confined) kind of cooperation already exists in France and is perceived as valuable and interesting for both parties:

- Practitioners with a military background gave examples of collaboration with industry to ensure that practitioners' needs are translated into technical requirements for the

development. An example was given about the involvement within nuclear projects for air force requirements.

- Collaboration between practitioners who are working as chemical analysts for HAZMAT incidents work together with laboratories to develop an algorithm used for the identification of different components of a substance when dealing with a mixture.

From the discussion with the practitioners, the following statements can be seen as valuable input for future activities:

- The practitioners were convinced that working together with different types of practitioners is desirable, as different practices can be shared and observed.

- Organising such joint exercises allows them to observe and compare each other's practices and procedures. Military practitioners who train together with civil responders notice few differences between their practices and procedures. The procedures of fire fighters can be seen as simplified versions of their procedures, what makes collaboration possible.

- It is seen as interesting by the practitioners to become familiarized with each other's practice. An example is given about how the role of military practitioners is somewhat different when deployed in Paris, as they are seen as technical assistants to firemen, while in other regions they would have broader responsibilities at the first intervention of an incident. Better understanding of each other's practice is seen as a contribution to their training.

2.3 Feedback from the JA participants, based on the Evaluation & Debriefing Forms

Observations in eNOTICE Joint Activities are considered as a means to gather input for various other eNOTICE Tasks.

In this report, only the feedback, relevant as input for Task 4.1 on the Methodology and Templates and for Task 4.2 on the JA themselves are reported. The feedback for all other Tasks is gathered (as showed in **Fout! Verwijzingsbron niet gevonden.**) by the Task leaders, and will be integrated in the respective Deliverables of these Tasks.

The list of all questions used by the observers during the Gurcy JA, is included in the report in annex.

2.3.1 Feedback on the Methodology and Template (Task 4.1)

As the initial draft of the eNOTICE Methodology and Templates was not yet finalised for the preparation phase of the Gurcy JA, only general observations could be made as to their relevance. It is expected that the following JA will provide more input for this Task, as the hosting partners are asked to critically revise, update, complement, improve and refine the initial guidelines while using them for the preparation of their exercise.

Specific questions that were asked on the use of checklists and documentation were left unanswered.

2.3.2 Feedback on the Joint Activities (Task 4.2)

After the Gurcy JA was completed, a discussion was held between all observers (both 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.

In the following paragraphs, both the feedback shared during the discussions as written feedback of the collected Debriefing and Evaluation Forms is reported.

2.3.2.1 The added value of Joint Activities

The Gurcy JA was the first showcase to demonstrate the added value a TC can provide *beyond* their traditional activities, in terms of user driven R&D, enhanced preparedness, improved training capacity and building a community. As this was the first exercise, it was opted to start with a somewhat smaller scale exercise and to gradually go into more complex types of exercises throughout the project. In reality, this was rather a training activity than a real case scenario exercise.

Despite the smaller scale, enthusiasm was expressed about the concept and eNOTICE objectives, i.e. the idea of Joint Activities as a key instrument to build the network and to bridge the gap between researchers and practitioners.

This kind of activity indeed proved to be a stimulating setting for the sharing of practices and expertise and lessons learnt. During the whole exercise, a lot of interactions took place between participants with different profiles and backgrounds. This happened in a rather natural way: as the practitioners were performing actions in relation to their CBRN training, questions were asked, comments were made and experiences were shared with each other.

That's indeed one of the goals the Joint Activities aim at: providing for an opportunity for different perspectives, esp. academic and practitioners to meet and to create a better understanding of the needs and expectations of practitioners versus of the logics and process of new developments.

However, larger scale exercises were by some believed to be more adequate to promote both the project and the possible role of the TC, as they can show how the entire process of CBRN preparedness and response works. This could include: the command and control system, decontamination, crowd control, cooperation with the police, medical services, etc. Experienced experts seemed to have more interest in participating in these kinds of extensive real-life training settings. They want to be able to observe all aspects of the exercise, as they are interested in various topics such as the communication between the practitioners, the decision making process, feedback to the team leader – things that were not demonstrated in the Gurcy JA but are of interest for the invited experts.

On the other hand, demonstrations are supposed to be rather easy to integrate within an existing exercise, but questions were raised about the feasibility of doing tests and evaluations, as they require a more thorough preparation and might escape the scope of such an exercise, as this kind of activity might possibly *"hijack the event"*.

2.3.2.2 Points of improvement

The main points of improvements expressed can be summarised as follows:

1) A clear briefing with sufficient explanation on the exercise, the context, objectives and plan are considered imperative;
2) A clear and coherent scenario that allows for various objectives for practitioners to be integrated;
3) A real-life exercise rather than a training setting is to be preferred as a learning opportunity, especially if non-practitioners, such as academics are invited and if the goal is to give them an understanding of first response practices;
4) A stronger focus on exercise and training infrastructure and facilities, that are unique selling points of the hosting CBRN TC and/or country/region could facilitate the promotion of the TC and demonstrate more clearly the added value as a partner in R&D projects;

5) Sound and safe conditions for the observers need to be ensured during the whole exercise, e.g. to have a clearly marked area in which they could and should stay for observation.

1) A clear briefing with sufficient explanation on the exercise, the context, objectives and plan

Because of the lack of a briefing, some observers noted they felt lost at some points, as they were not sufficiently informed about the course of the day. For instance, the choice to show a training, rather than a real life case scenario, was not clearly announced, which induced false expectations by the observers. More information was asked about the exercise objectives, scenario, triggers within the scenario and the expected response, the profile of the participating practitioners, their level of expertise, etc. As part of the briefing of external participants, suggestions were raised to provide a short introduction on the national context and requirements of emergency planning, the response phase, etc. from the hosting country, in order to have a better understanding of how the system works and where this type of training or exercise fits in. In general, a more thorough preparation for the observers was seen as a necessity.

2) A clear and coherent scenario with various objectives for practitioners

Most observers believed that a JA would be more suitable to reach eNOTICE's objectives when the exercise would allow for the participants to feel embedded in a real-life tactical situation. This would require a full and coherent scenario, demonstrating the response to a CBRN incident from A to Z, including a bigger variety of operational aspects of the practitioners' actions, and including tactical and strategical aspects. For developing future JA, interest was expressed to prefer more elaborate and complex scenarios that would allow various aspects of the response phase to be executed and observed.

3) A real-life exercise rather than a training setting

As a complementary aspect to the expectation of a more coherent scenario, there was a general demand for a higher degree of realism, which also includes the fact that observers should stay in their role as observers and not be allowed to interfere in any way with the exercise. It was considered important that practitioners can stay in their role and are not triggered nor allowing to think or step outside the scenario. When practitioners would act

outside their role as responder and their assigned role in the scenario, this could lead to a distorted image and impressions for the observers.

A critical note was raised if it is realistic to achieve a real collaboration between practitioners and researchers for the purpose of testing and validation. The researcher might interfere too much with the practitioners' scenario. For demonstration purposes, this should be feasible.

4) Stronger focus on training infrastructure and facilities to promote the unique selling points of the hosting CBRN TC or country/region

The invited experts with a practitioners profile, who participated as observers in the Gurcy JA, were mostly and particularly interested in the demonstration of facilities or opportunities that are not available in their own TC or country or region, including e.g. the possibility and (legal) permission to create smoke clouds, to perform loud explosion noises, etc. Especially in densely populated areas, these practices are not possible. If this would be possible at a TC, that would be an asset. It was proposed that the future JA would put more emphasis on demonstrating those aspects that are unique selling points of the hosting Training Centre.

5) Sound and safe conditions for the observers

A certain concern was expressed about the presence of a considerable number of observers. It was sometimes felt as if this might be an interference or devaluation of the practitioners' training, seeing the observers were allowed to move very closely to the actions of the practitioners. There were little to no demarcation ribbons that marked the zone in which the observers could settle, something that might be recommended when larger-scale exercises are organised.

2.4 Follow up actions

The follow up actions for future Joint Activities is listed in the Gurcy Report (see annex).

3 Conclusions and lessons learnt

The Gurcy JA is considered successful, being the first trial event in the eNOTICE project. Despite being a smaller scale exercise, the activity was already able to demonstrate its added value in providing a setting in which various kinds of CBRN stakeholders with different backgrounds were able to meet and share practices and expertise and learn from each other. The main objectives of the Task 4.2 JA are indeed to demonstrate the role, contribution and added value of the TC *beyond* their traditional training and educational activities, in terms of user driven R&D, enhanced preparedness, improved training capacity and a community buildup.

3.1 General findings and conclusions

The Gurcy JA was able to demonstrate its beneficial setting for the sharing of practices, expertise and lessons learnt, as manifold interactions between stakeholders from various backgrounds were observed. Even if many stakeholders attended the activity with more ambitious expectations, even this kind of smaller scale exercise already led to interesting discussions. Larger scale exercises are now expected to provide more and additional opportunities for understanding the end user needs and sharing of best practices, as they will cover a broader variety of aspects in a real-life scenario: more procedures, tools, methodologies, on response management, communication, interoperability, etc. operational, tactic and strategic levels to be observed.

Participating and collaboration was seen as feasible for demonstrations, but questions were raised about the feasibility for tests and evaluations.

The points of improvements that were identified during the Gurcy JA relate to:

- Clear briefing and clarification for the external participants;
- A clear and comprehensive scenario;
- Preference for a real case exercise rather than training;
- Bigger focus on the unique characteristics of the hosting TC;
- Appropriate conditions for the observers, in terms of roles and safety.

3.2 Follow up

Each JA is to be concluded by initiating the follow up phase. In first instance, identified points during the evaluation and debriefing provide actions for improvement. For each action, one or multiple owners are assigned; a time plan is made and the required resources are identified (if relevant). This way, it is ensured that each following JA of the eNOTICE project will build upon the lessons learnt from the previous exercises, as the aim is to continuously improve.

3.3 Way forward

As the eNOTICE Methodology and Templates (Task 4.1) were not yet available at the preparation phase of the Gurcy JA, the format in section 2 was only used afterwards for reporting. From the third activity on, the JA will be organised in line with the guidelines from the eNOTICE methodology, which entails that preparation, documentation and reporting will be done in a uniform and structured way. From then on, all following Joint Activities will also serve to actively provide input for Task 5.2.3, the evaluation of the Methodology and Templates. Evaluation and debriefing should incorporate discussion on the usability, completeness and applicability of the methodology.

4 Future activities – calendar

Table 2 Provisional calendar of eNOTICE activities

Provisional calendar of *e*NOTICE activities

	Date	Hosting partner	Location	Type of activity	
1	15.09.17	UCL	Brussels, BE	Project Kick Off Meeting	
2	12-14.12.17	SDIS77	Gurcy, FR	Multidisciplinary Training Exercise	
3	30.01-01.02 2017	ARMINES + METU	Alés, FR	Multidisciplinary Exercise preparing Serious Gaming	
4	18-20 Jun 2018	UCL	Brussels, BE	Bio Mobile Lab Field Exercise	Policy Meeting 1, 20/6, Brussels
5	9-10 Oct 2018	UNITOV	Rome/Rieti, IT	Multidisciplinary Field Exercise	Annual Workshop 1
6	Jan 2019	JCBRND	Vyškov, CZ	Live Agent Testing - Radiological Basic Training Course	
7	May 2019	CV	Ranst, BE	Multidisciplinary Field Exercise	Annual Workshop 2
8	Jul 2019	WMP	To be determined, UK	Table Top Exercise	
9	Oct 2019	FDDO + CNBOP	Dortmund, DE + Jozefow, PL	Multidisciplinary Field Exercise + Table Top Exercise	Policy Meeting 2
10	Jan 2020	METU	Ankara, TR	Serious Gaming	
11	May 2020	CV + UCL	Ranst, BE	Multidisciplinary Field Exercise + Bio Mobile Lab Field Exercise	Policy Meeting 3
12	Jul 2020	UNITOV	Rieti, IT	Multidisciplinary Field Exercise	Annual Workshop 3
13	Nov 2020	SDIS77 + ARMINES	Gurcy, FR	Multidisciplinary Field Exercise + Serious Gaming	
14	Jan 2021	NDU	Warsaw, PL	Table Top Exercise	Policy Meeting 4
15	Apr 2021	FDDO	Dortmund, DE	Multidisciplinary Field Exercise	Annual Workshop 4
16	Oct 2021	JCBRND COE	Vyškov, CZ	Live Agent Testing - Radiological Advanced Training Course	
17	Feb 2022	NBU + CBNOP	PL	Combined Civil-Military Exercise	Policy Meeting 5
18	May - Jun 2022	UCL	Brussels, BE	Final conference	

ANNEX: Full report on the Gurcy JA, 12-14.12.2017

Report on the preparation, organisation, evaluation and follow up of the first eNOTICE Joint Activity for disaster management and CBRN preparedness, hosted and organised by the CBRN TRAINING CENTRE of the FIRE & RESCUE DEPARTMENT SEINE-ET-MARNE (FRANCE)

This report describes the different steps for the preparation, organisation, evaluation and follow up of the first eNOTICE Joint Activity. This Joint Activity (JA) was organised by the CBRN Training Centre of Fire & Rescue Department Seine-et-Marne, en France (further referred to as Gurcy JA in this report). The JA took place on 12 December 2017. On 11 and 13 December, eNOTICE project meetings were organised.

This report is part of Deliverable 4.1. The Methodology and Templates, elaborated in Task 4.1 (See Deliverable 4.1, January 2018), were used as a format for reporting. This methodology is referred to below as Exercise Guidance.

X PREPARATION

The context

The Gurcy JA is a Joint Activity in the sense as defined in the Exercise Guidance: *A Joint activity is an exercise organised by the Training Centre - TC and joined by an external party, each having their own, specific objectives.*

The objective of the TC was the organisation of mandatory training for practitioners, this is part of the regular program of the Centre.

Two external parties were invited to join the exercise:

1) EU project TRADR, their objective for participation in the exercise was to test both UAV[3]s and UGV[4]s (see also below);
2) The PARROT corporation, whose objective for participation was to demonstrate the capabilities of drones in hostile environments (see also below)

Clarification on the context

- **TC exercise: Operational certification of HAZMAT teams:**

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.

[3] Unmanned Aerial Vehicle
[4] Unmanned Ground Vehicle

The requirements for the HAZMAT teams are detailed in a national regulation document[5], issued by the ministry of Interior.

The exercise presented below deals with operational certification only for CBRN missions. This is only a part of the overall operational certification the HAZMAT team have to qualify for, which also takes into account other missions (pollution management, HAZMAT traffic accident, ...).

- **Short clarification the TRADR project**

The TRADR project[6] is a research project funded by the EU FP 7 Programme (2013-2017). It aims at developing robotic technologies to assist in urban search & rescue disaster response efforts; key issues are capabilities to search and explore the disaster environment, as well as gather various samples from the hazardous area.

- **Short clarification on the industrial partner**

The PARROT Corporation is a French industrial company who offers a wide range of unmanned aerial vehicles, both for leisure and professional use. PARROT and the Fire & Rescue Department have been collaborating for some years; PARROT drones have been used first for the mediatic cover of major interventions. Currently members of both organisations are developing specific mission-orientated assets, in order to use them in hostile environments.

The key issue of this partnership is to use commercially available drones which are equipped or adapted for specific missions.

Objectives, expected results and evaluation criteria

Objectives, expected results & evaluation criteria for operational certification of HAZMAT teams

The general objective of the operational certification of the HAZMAT teams is to check whether trainees are able to carry out a typical CBRN mission and its different phases:

- Reconnaissance ;

[5] Guide national de référence relatif aux risques chimiques et biologiques, Ministère de l'Intérieur, Direction Générale de la Sécurité Civile et de la Gestion des Crises (DGSCGC)

[6] Long-Term Human-Robot Teaming for Robot Assisted Disaster Response, http://www.tradr-project.eu/

- Detection of CBRN agents & Hazard assessment ;
- Reaction and adaptation to unexpected situations ;
- Sampling ;
- Personnel decontamination[7].

The trainees have the following profile:

- Fire fighters on active duty in operational units;
- Passed basic or advanced course (depending on their rank) in CBRN hazards;
- Have a minimum of one year of operational experience.

Thanks to various partnerships, operatives from other units (military or civilian) can also benefit from the operational certification. In this case, the Fire & Rescue Department is not responsible for the operational certification of these units; it only provides training & accommodation facilities, scenario, and evaluation of the units.

Each of these phases is linked with specific objectives, which are listed below.

Mission phase	Specific objectives
Reconnaissance	Carry out a mission in a CBRN environment Peform a mapping of the hazardous area
Detection & analysis	Detect & take samples of chemical warfare agents Detect & take samples of biological warfare agents
Reaction & adaptation skills	React to an IED[8] threat in accordance with safety regulations React to a wounded fire fighter situation in accordance with safety regulation
Communication	Use communication systems within the HAZMAT team Report relevant data to team leader & relief team
Safety issues	Compliance with safety regulations Correct use of individual protective equipment

Special attention is given to safety (OSH) issues.

Expected results HAZMAT

The HAZMAT teams are expected to fulfil all of the specific objectives for each phase of the CBRN mission.

Evaluation criteria HAZMAT

[7] The decontamination of infrastructures (buildings, vehicles,..) is not a part of the skills tested during these standalone exercises

[8] Engin Explosif Improvisé – Improvised Explosive Device - IED

Each specific objective (which correspond to a basic skill) is evaluated on a "pass / fail" basis by the lead instructor of the certification exercise. In order to maintain its operational capability, a HAZMAT team must fulfil ALL specific objectives.

Objectives, expected results & evaluation criteria for the invited partners:

TRADR Objectives

The objective for TRADR project was to test their drones, both aerial and ground vehicles, in the different hazardous environment which can be provided by the CBRN TC for training / demonstration, testing purposes.

The CBRN TC was expected to provide a real radiological environment, as well as a real fire environment.

Due to operational & planning issues, the TRADR representative was not able to bring either UAVs or UGVs for the JA; and attended the exercise only for observation.

PARROT Corporation Objectives

The general objective for PARROT Corporation was to test general purpose drones equipped with specific detectors, in hazardous environments:

- A radiation detector in a real radiological environment;
- A heat detector in a real fire environment.

The expected results were:

- To check the capability of the drone operator to carry out a radiation measurement in the vicinity of a real radioactive source (with radiation levels dangerous for life & health);
- To check the capability of the drone to perform a radiological mapping of the hazardous area;
- To check the capability of the drone to operate in a hazardous area with strong thermal currents & smoke;
- To check the capability of the drone to perform a thermal mapping of the area.

The evaluation criteria were as follows:

- Flight control of the drone in a radiological and a fire environment;
- Accuracy of the radiation and heat measurements;
- Use of the mapping results by a field operative, for operational purposes.

The different test sequences listed above were to be performed by an operative form the Fire & Rescue Department (and not by a technical from PARROT Corporation).

Summary overview of all objectives, expected results and evaluation criteria

Training Centre			External partner 1: TRADR			External partner 2: PARROT		
Objectives	**Expected results**	**Evaluation criteria**	**Objectives**	**Expected results**	**Evaluation Criteria**	**Objectives**	**Expected results**	**Evaluation Criteria**
Operational certification of the HAZMAT teams	Certification passed successfully	Pass/fail of all specific objectives for the team	Test the capability of UAVs/UGVs in real hazardous environments	Reconnaissance and mapping missions carried out successfully	Defined by TRADR representative: observation of the operational environment for the use of drones and robots	Test the capability of general purpose drones to carry out reconnaissance and mapping missions	Reconnaissance and mapping missions carried out successfully	Flight control in a fire environment; Accuracy of the heat/radiation measurements; Use of the mapping results by a field operative for operational purposes
No common objectives								
			No common objectives					
Umbrella objective: input for the eNOTICE project								

No common objectives between two participating external parties were defined for this JA.

An important umbrella objective for all JA's is to collect input for the eNOTICE project. As these JA are experiments and show cases of the added value of the TCs' activities, eNOTICE partners attend these JA as observes to learn and collect input for the eNOTICE objectives of enhancing needs-driven research, building a network of training centres and strengthening CBRN preparedness.

Type of exercise/activity and corresponding needs

Type of exercise for operational certification of HAZMAT teams

Operational certification of HAZMAT teams requires real life operational situation & conditions, so that the skills and reactions of the trainees match those they would display in a real operation.

For this reason, the field training exercise (FTX) is assessed to be the most effective way of testing the HAZMAT team.

The FTX used for operational certification is centred only on CBRN issues.

Corresponding needs for the JA

No adaptations to the exercise were made for the Joint aspect of the exercise. The two external partners joined a standard exercise, following its standards procedures.

Roles

Three main categories of roles can be distinguished, corresponding to responsibilities related to the organisation of the exercise, the scenario and to incident management functions.

A clear division of roles makes sure that everyone knows what to expect from each other and who is accountable for what task.

The roles & responsibilities for preparation of the operational certification FTX are listed below.

Role	Actor	Responsibilities
Exercise director	HAZMAT team leader (officer), selected on a voluntary basis	• Cordons the project team;
Project team	HAZMAT team leaders (officers), selected on a voluntary basis	• Builds the scenario; • Identifies the necessary assets (training grounds, IPE, simulation substances, equipment, vehicles); • Determine the evaluation criteria;
CBRN authority	CBRN technical advisor of the Fire & Rescue Department's commanding officer	Check : • The reality of the scenario; • Its compliance with national regulations & requirements;
TC Coordinator	Training centre's correspondent for CBRN issues	• Plans the FTX; • Books the identified assets; • Checks possible interferences with other activities; • Evaluates the cost of the FTX;

The role & responsibilities for organisation of the operational certification FTX are listed below.

Role	Actor	Responsibilities
Lead instructor	HAZMAT team leader (officer), selected on a voluntary basis	• Conducts the FTX; • Evaluates the skills displayed by the HAZMAT team; • Acts as safety officer;
Junior instructor	NCO member of HAZMAT team	• Assists the lead instructor in the evaluation of the HAZMAT team; • Manages the logistic assets for the FTX;
Logistic support	Member of training centre's logistic support team	• Brings all necessary assets to the selected training ground; • Assists the lead instructor in case of technical problems with training facilities;
Evaluator	See lead instructor	See lead instructor
Safety officer	See lead instructor	See lead instructor

Scenario roles

Role	Actor
Participants	HAZMAT team to be certified (both operatives & team leader)
Key actors	Lead & junior instructors
Supporting actors	All characters are "played by" the lead & junior instructors (e.g. police officers, witnesses, local administration representatives…)

Although without any active part in the scenario or exercise, the role of the observers is an important element in any JA.

For the Gurcy JA, all attending external partners were considered as observers: the eNOTICE partners, the invited partners to the exercise (TRADR and PARROT Corporation) and invited experts. In order to ensure focus during observation, evaluation and debriefing forms have been prepared for them in advance (see below). Their role was not to evaluate the exercise as such but the Joint aspect of it, and the possible added value for needs-driven research and for building the network (eNOTICE objectives).

The list of eNOTICE participants:

Name	Organization and function	Motivation for participation	Profile
Kathleen Van Heuverswyn	Campus Vesta, research coordinator	eNOTICE Technical coordinator	Academic/practitioner
Ine Huybrechts	Campus Vesta, junior researcher	eNOTICE Technical coordination team	Practitioner
Olga Vybornova	Université Cathlique de Louvain, senior researcher	eNOTICE project coordinator	Academic
Jean-Luc Gala	Université Cathlique de Louvain, senior	eNOTICE partner	Academic/practitioner

	researcher		
Gilles Dusserre	ARMINES, researcher	eNOTICE partner	Academic/practitioner
Volker Quante	JCBRND COE, Deputy Director	eNOTICE partner	Practitioner
Petr Mohnacs	JCBRND COE, staff	eNOTICE partner	Practitioner
Elif Surer	Middle East technological university, researcher	eNOTICE partner	Academic
Adam Bagniewski	War studies university / CBRN defense training centre, CBRN expert	eNOTICE partner	Academic
Anna Maria Japs	University of Paderborn, researcher	eNOTICE partner	Academic
Maximilian Kiehl	University of Paderborn, researcher	eNOTICE partner	Academic
Elizabeth Benson	National CBRN centre, staff	eNOTICE partner	Practitioner
Lore Cloessen	KUL, junior researcher	eNOTICE partner	Academic
Sylvia Pratzler-Wanczura	Dortmund Fire Department, senior researcher	eNOTICE partner	Academic/practitioner
Daniele Di Giovanni	UNITOV, researcher	eNOTICE partner	Academic

The list of external experts from other projects, who participated as observers:

Vasileios Papadopouls	Greek Armed Forces, CBRN expert	Invited expert	Practitioner
Chrysostomos Anastasilakis	Greek Armed Forces, CBRN expert	Invited expert	Practitioner
Ivana Kruijff-Korbayova	TRADR project	Invited expert	Academic
Jyri Silmari	TOXITRIAGE project	Invited expert	Practitioner
Marius Feltynowski	FIRE IN project	Invited expert	Practitioner
Matleena Marttinen	TOXITRIAGE project	Invited expert	Researcher

Planning of the preparation and timeline

Preparation, organisation & timeline for operational certification of HAZMAT teams FTXs

Preparation

Timeline Todo's PREPARATION				
Timing	Action nr. + short description	Owner(s)	Description of the action	Participants
X-1Y	1	CBRN authority	Definition of thematic to be played in the following year	
X-1Y	2	Exercise director	Definition of objectives / evaluation criteria / scenario	project team
X-1Y	3	CBRN authority	Validation of objectives / evaluation criteria / scenario	Exercise director / project team
X-1Y	4	Exercise director	Rehearsal of the scenario	Project team
X-1Y	5	TC coordinator	Feasibility study & planning of the exercise	CBRN authority / exercise director
X-9M	6	TC coordinator	Booking of all necessary assets • Meals & water; • IPE; • Training facility; • Simulation materials; • CBRN equipment[9]; • Vehicles.	TC's logistic support team
X-9M	7	TC coordinator	Choice of the participants – players & instructors	
X-3M	8	TC coordinator	Notifications to attend to all participants	
X-1W	9	TC coordinator	Last check: players - instructors	

Organisation

Todo's EXERCISE				
Timing	Action nr. + short description	Owner(s)	Description of the action	Participants
07:30	1	TC logistic support team	Setting up of all assets (training facility / equipment / vehicles / simulation materials / water / IPE)	Junior instructor
08:00 08:30	2	TC coordinator	Reception of actors (participants & key actors) at the TC's meeting point	Participants / key actors
09:00 09:10	3	Lead instructor	Briefing: • Presentation of the scenario; • safety instructions;	Participants

[9] Either from the TC or from other operational units

09:10 09:15	4	Lead instructor	Background of the FTX	Participants
09:15 11:30	5	Lead & junior instructors	Exercise - evaluation	Participants
11:30 11:50	6	Lead instructor	Hot debriefing	Participants
11:50 12:15	7	Participants	Equipment reconditioning	
11:30 12:15	8	TC logistic support team	Training facility reconditioning	

Scenario

The scenario description uses the step by step approach of Wilston and Ralston (2006). As this is a small scale exercise, only the relevant steps are clarified.

Scenario for operational certification of HAZMAT teams FTX

Step 1 : Develop the case for the scenario
The choice of the specific thematic (C/B/R/N) and the general environment (urban / transport / rural) is made by the technical adviser is based upon:

- Requirement specified by national regulations;
- intelligence reports from the national authority;
- Lessons learned from real situations faced by the HAZMAT teams the year before the operational certification.

The objective to be fulfilled is defined regarding the overall performance of the HAZMAT team the year before the operational certification[10].

Step 2 : Gain executive understanding, support and participation
The CBRN technical adviser regularly reports to the commanding officer concerning thematic and general environment, as well as potential weaknesses of HAZMAT teams.

Step 3 : Define the decision focus
Not applicable

Step 4 : Design the process
The process to be followed to organise the exercise is as follows:

- Define the scenario, by identifying vulnerabilities & axes of improvement for HAZMAT teams;
- Identify a project team which will setup the scenario;
- Define Objectives, expected results & evaluation criteria for the exercise;
- Plan the exercise during the year, by taking into account the workload of the CBRN TC;
- Setup, validation & rehearsal of the scenario;
- Identification of necessary assets for performing the exercise;

[10] the lessons learned process cycle can be much shorter if an operational situation recently encoutered highlights insufficient preparedness of a HAZMAT team.

- Select instructors for the exercise.

Step 5 : Select the facilitator
The facilitator is the CBRN coordinator for the training centre.

Step 6 : Form the scenario team
The scenario team is selected by the CBRN technical adviser among team leaders (officers) on an voluntary basis. Specific attention is given to the background (both operational and theoretic) of the team leaders.

Step 7 : Gather available data, views and projections
Data useful for building a scenario come from:
- Lessons learned reports, either from Seine-et-Marne Fire & Rescue Department or other first responders units;
- National intelligence estimates[11];

Step 8 : Identify critical forces & drivers
Not applicable

Step 9 : Conduct focused research on key issues, forces & drivers
Not applicable

Step 10 : Assess the importance and uncertainty of forces and drivers
Not applicable

Step 11 : Identify key "axes of uncertainty"
Not applicable

Step 12 : Select scenario logics to cover the "envelopes of uncertainty"
Not applicable

Step 13 : Write the story lines for the scenario
The background story for the scenario is as follows:
"A suspect package has been released in a train wagon in the MELUN railways station. Victims have showed clear signs of intoxication by chemical substances, although the substances are not clearly identified. The area has been cordoned off by police units; the first victims have been evacuated. The state representative (prefect) wants to know ASAP what is the kind of chemical used in this event, whether the train is safe for civilians."

The prefect gave the mission to the fire fighters, due to their state of preparedness in CBRN crisis response.

The team is expected to follow the following story line:
- Upon arriving on the scene, the team leader undergoes a data gathering procedure; meanwhile, the rest of the team equips themselves in IPE, set up a sas, and test their equipments;
- The team leader gives clear orders to carry out a reconnaissance in the wagon, and makes a safety check of all the team (IPE, comm system);

[11] The classified intelligence estimates are not available directly to the scenario team

- Upon discovery of an IED, the whole team must back off and exit the scene;
- The team must perform sampling of both suspected CHEM and BIO materials;
- The team leader is expected to make a clear mapping of the area, and a report of all the actions carried out by his team;

Reaction of the team to an unexpected situation :
The lead instructor can decide at any moment to order to one of the participant to simulate a faintness.

Step 14 : Rehearse the future with scenarios:
The scenario is rehearsed once the technical adviser has given his approval on the whole scenario.

Step 15 : Get to the decision recommendation
Not applicable

Step 16 : Identify signposts to monitor
Not applicable

Step 17: communication of the results to the organisation
It is up to the technical adviser to communicate (if deemed relevant) to the commanding officer of the Fire & Rescue Department.

Cost calculation

The overview of all costs - direct and indirect related to the organisation of the exercise, plus the specific costs for the Joint Activity – were not yet available at the time of writing this report.

Logistic requirements

The following equipment was used for the exercise:

- Equipment:
    - 6 individual protective equipment;
    - Mock explosive;
    - Simulants for chemical & biological detection;
    - Sampling equipment;
- Training facilities:
    - Wagon & railway station;

The following template is used in order to identify the logistic requirements for the exercise.

LOGISTIQUE
Organisation : - 1 VRCH ; - Produits de simulation - EPI : 7 C3P complètes + ARFC - Matériel de prélèvement de formation - Matériel de détection de formation (KDTB/KDTC) - Dispositif explosif

LOCALISATION
Au centre de formation départemental : Rame RER

SCENARIO DE LA MISE EN SITUATION et ELEMENTS DE BRIEFING
Les binômes réalisations successivement les étapes du déroulé mentionnées ci-dessous **Déroulé de la séquence :** 1. Briefing 2. Montage du SAS / Habillage 3. Reconnaissance et cartographie (Prise en compte d'un engin explosif improvisé) 4. Détection et prélèvement Chimique 5. Détection et prélèvement biologique 6. Secours à un SP en difficulté 7. Débriefing 8. Remise en condition **NOTA :** Les étapes 3, 4, 5 et 6 sont réalisées par 1 seul binôme à la fois en présence du chef terrain. Quand un binôme manœuvre dans la rame, les 2 autres observent depuis l'extérieur. Le sas devra être monté par les stagiaires mais il n'est pas veillé par un chef sas. Le formateur a toute latitude pour déterminer le plan de prélèvement.

PLAN / SCHEMA de la MISE EN SITUATION initiale (à T0)

Actions à réaliser par l'organisation pour la réalité du thème : Mettre en place la machine à fumées.

ELEMENTS UTILES AU DEBRIEFING

Institutionnalisation :

Le formateur veille à :

- Rappeler des éléments de connaissance détailler le matin et caractéristiques des produits en présence ;
- Insister sur l'usage des FOD RCH n°8 et de 9A à 9D.

Communication strategy

Internal communication

During the preparation phase, internal communication was ensured by Cpt. Nicolas Raulin, in charge of the practical arrangements of organising the JA.

External communication

Communication strategy for operational certification of HAZMAT teams FTXs:

Due to the fact that these exercises are mandatory (they do not have an exceptional feature), standalone and within the training centre, they are not subject to a communication strategy from the Fire & Rescue Department.

Communication to stakeholders

As the exercise was open for participation and observation to external experts and organisations, external communication had to be ensured.

Information on the objectives, the type of exercise, the scenario etc. are relevant for them to consider attending the exercise.

For the Gurcy JA, there has been no communication to the local press.

The JA has been announced – for information – to the public through the eNOTICE website.

Pictures of the JA are also published on the eNOTICE website.

A template was used to communicate to the consortium partners, EU projects that were interested in joining, as well as experts that were interested in attending the exercise to observe.

The information & communication sheet for the JA in Gurcy is presented below.

Documentation on every step

The following documents were elaborated and used for the joint activity in Gurcy:

1. The information & communication sheet was designed to communicate about the joint activity see below:
    - General information about the exercise to be carried out (objectives, expected results & evaluation criteria);
    - Short description of the scenario;
    - The expected agenda;
    - Some practical information to join the CBRN TC.
2. Registration Forms and an Information sheet with practical information for those who registered
3. Debriefing and evaluation forms
4. The informal consent form

INFORMATION SHEET eNOTICE Joint Activity organised by SDIS77, France, CBRN training centre GURCY-LE-CHATEL, Dec. 12th – 14th 2017

Part A: Summary description of the objectives and topic of the CBRN Exercise

Main activity	Invited activity
This part 1-4 on the main activity is important information for: 1) Research projects interested in joining, so that they can assess whether the X offers an opportunity for their project to complete, test or validate their knowledge and developments. Both the type (field, table top, simulation, …) and the scenario of the exercise (C or B or R or N) as well as the profile of the participants (type of intervening services) are relevant for them; 2) eNOTICE partners who all received a budget for inviting people from their network to the joint activities. This budget can be spent for their own activities as well as for activities organised by the partners. This information will be used to identify interested nationals.	*This part 1-4 on the invited activity is important information for: 1) The organising partner, as a basis to assess whether a joint activity is feasible, if yes: as a basis to start from to make arrangements to make the observation/demonstration/… possible; 2) eNOTICE partners to identify interested nationals.*

1 Type of activity and contact details of the hosting exercise	Type of activity and contact details of the invited activity
Organising partner: Field exercise / chemical and biological hazards.	**Research project:** Project TRADR (project ID 609763)

2 Objectives and evaluation criteria of the hosting exercise	Objectives and evaluation criteria of the invited activity
Objectives: Assessment of the operational capability of the SDIS 77 HAZMAT teams. **Evaluation criteria:** Compliance with SDIS 77 standard operational procedures.	**Objectives:** To be confirmed with the project coordinator. **Evaluation criteria:** To be confirmed with the project coordinator.

3 Main scenario: short description	Description of the invited activity
The joint activity is made up of 2 sequences: 3.1. CWA situation in a train wagon The HAZMAT team is expected to carry out: ■ Reconnaissance & detection; ■ Sampling; ■ Decontamination &risk mitigation; ■ Hazard assessment. 3.2. CHEM hazard in an industrial facility The HAZMAT team is expected to carry out: ■ Reconnaissance; ■ Hazard assessment; ■ Risk mitigation. ***Fout! Verwijzingsbron niet gevonden.***	TRADR is an integrated european research project funded by the EU FP7 Programme, ICT: Cognitive systems, interaction, robotics in the area of robot-assisted disaster response (disaster robotics; robot search and rescue). Using a proven-in-practice user-centric design methodology, TRADR develops novel science and technology for human-robot teams to assist in urban search and rescue disaster response efforts, which stretch over multiple sorties in missions that may take several days or weeks

4 Facilities used for the activity	If relevant, extra facilities needed for the activity
Chemical: train wagon / Chemical industrial facility **Biological:** N/A **Radiological: N/A** **Nuclear: N/A***Fout! Verwijzingsbron niet gevonden.*	N/A.

5 Profile of participants of the hosting exercise	Profile of the participants of the invited activity
The firefighters of the SDIS 77 HAZMAT teams will be the only participants.	N/A.

Part B – Practical organisation

Agenda

Day 1: Project meetings		Day 2: Exercise		Day 3: Project meeting	
time	activity	time	activity	time	activity
Fm 09:00 to 12:00	Check-in / accommodation	08:30	Field exercise – sequence 1	08:30	Project meeting – assessment of the joint activity
12:00	Welcome lunch	12:00	Lunch	10:00	Coffee break
14:00	Project & tasks meeting	14:00	Field exercise –sequence 2	12:00	Check-out
17:30	Visit of the training centre	17:30	Debriefing & exchanges		
		19:00	Social event		

Practical information		
Dates:	Dec. 12th – 14th, 2017	
Location:		
Meetings and exercise:	SDIS 77 training centre 2 rue Ampère 77520 GURCY-LE-CHATEL FRANCE	
Hotel/accommodation: *Fout! Verwijzingsbron niet gevonden.*	Up to each partner's choice (PROVINS /FONTAINEBLEAU / MONTEREAU-FAULT-YONNE)	
Contact person: (course manager/ exercise director)	**Name:**	Francis COMAS
	Mobile:	+33 6 75 09 28 89
	E-mail:	comas@sdis77.fr
Deadline for registration for the activity:	Nov. 15th 2017	

Transfer information	
Train:	MELUN train station (40 km from the TC) / transportation to the TC by road organized by SDIS 77
	CHESSY train station (70 km from the TC) / transportation to the TC by road organized by SDIS 77
Highway:	A5 highway / exit no. 17 "Forges"
Airport:	ROISSY CHARLES DE GAULLE airport (100 km from the TC) / transportation to the TC by road organized by SDIS 77
	ORLY airport (90 km from the TC) / transportation to the TC by road organized by SDIS 77

Exercise details	
Participants:	
Participants to the exercise:	SDIS77 HAZMAT teams
eNOTICE partners + invitees:	All eNOTICE partners
Role : observers	
Invitees from the project:	APICOM /PARROT / APVL (industrial partners) (TO BE CONFIRMED)
Role : observers	
Invitees from the invited research project:	TRADR project (TO BE CONFIRMED)
Role : observation & field testing (TO BE CONFIRMED)	

Other	
Dietary restrictions/requirements:	Meals without pork / vegetarian on request

other message

Informed Consent Form

I, the undersigned, agree to take part in Joint Activity in GURCY-LE-CHATEL, confirm that the purpose and scope of the Joint Activity has been explained to my satisfaction. I am well aware of the above notes and the content of the Information Sheet and understand what the Joint Activity involves. I have had the opportunity to consider the Information Sheet, the verbal explanations given and to ask questions and I have had all my questions answered to my full satisfaction.

My participation in the Joint Activity is voluntary and I understand that I am free to withdraw at any time during the period of data collection and engagement with the researcher without giving a reason and without my right to medical care or my legal rights being affected in any way.

I understand that any information collected during the Joint Activity will be held in confidence and will only be shared within the eNOTICE project consortium. I understand that conclusions reached from the Joint Activity may be published in emergency planning and academic journals, as well as in project reports. I understand, however, that individuals participating in the Joint Activity will not be identified in any of such publications.

I consent to the processing of my personal information (name, affiliation, email address, phone number) for this project. I understand that such information will be treated in strict confidence and handled in accordance with the provisions of the Data Protection Act 1998. I understand that the project research team may use my data for future research and understand that identifiable data will be reviewed by the project ethics monitoring experts before such use to ensure it would not be included in any report.

I consent to my participation in the Joint Activity and in focus groups being video-recorded and transcribed.

CBRN training centre, Seine & Marne Fire & Rescue Dept. Date

Personal data:

Name and surname:	
Contact details (phone number, email):	
Affiliation: (name and address, contact details)	

Additional information (to be stored in eNOTICE project internal databases):

Background/ Education:	
Expertise:	
Professional experience: (including important national or EU projects/ initiatives/ committees):	
Additional qualifications:	

The registration form

eNOTICE Joint Activity Registration Form

To confirm your attendance to the eNOTICE Joint Activity organised in GURCY-LE-CHATEL, by Seine-et-Marne district's Fire & Rescue Department, Dec. 12-14, 2017, please send the complete form to raulin@sdis77.frbefore Nov. 15th, 2017.

Joint Activity	To be completed by the organiser of the exercise.			
Type of exercise:	Field exercise / chemical & biological hazards.			
Location:	**Address:**	2 rue Ampère		
	City:	GURCY-LE-CHATEL	**Zip code:**	77520
	Country:	FRANCE		
Timing:	**Begin:**	Dec. 12th ,2017 12:00		
	End:	Dec. 14th , 2017 12:00		

Attendant(s)	To be completed by the attendant(s).
Organisation:	
Representative (1):	**Name:**
	E-mail:
	Phone number:
Function within the organisation:	
Role during the exercise:	A définir
Arrival:	12 décembre au soir
Departure:	13 décembre au soir
Dietary restrictions/requirements:	
Representative (2):	**Name:**
	E-mail:
	Phone number:
Function within the organisation:	
Role duringthe exercise:	
Arrival:	
Departure:	
Dietary restrictions/requirements:	
Representative (3):	**Name:**
	E-mail:
	Phone number:
Function	

within the organisation:	
Role during the exercise:	
Arrival:	
Departure:	
Dietary restrictions/requirements:	
Comments:	

X ORGANISATION

Set up of the location

Material of the exercise

All necessary equipment, as well as relief assets (such as water bottles) are forwarded to the training facility by the logistic support team in the morning, one hour before the beginning of the exercise.

The logistic support team is also responsible for the activation / setting up / testing of the training facility.

As an example, the leakage simulation system of the industrial facility must be filled with water and fitted according to the chosen scenario; this is one of the tasks of the logistic support team. Moreover, in winter times, they also have the duty to unfreeze the leakage simulation system.

Specific assets for the JA were identified and transported as well by the logistic support team; the tents were set up the day before the JA, so that the logistic support team was fully available for the exercise.

Setting up the decor

Outside:

The CBRN TC is surrounded by fences, and is under constant surveillance from a private security firm. Moreover, the different training areas / facilities are clearly demarcated; there was no need to set up a specific layout for the exercise.

Inside:

The simulation systems (leakage simulation, or mock explosives / CBRN agents) are put in place by the junior instructor just before the beginning of the exercises (during the briefing by the senior instructor).

If pyrotechnic devices are to be used (blank ammo, mock explosives), a specific communication plan is activated toward the mayor of the nearby village.

If confidentiality is required for the exercise, the training facility will be chosen accordingly (inside a building for example).

Set up of a reception

Welcome point

Once all the participants have been gathered at the meeting point, they are taken in charge by the lead instructor and the catering representative, in order to check the meals & accommodation bookings.

Visual recognition

No visual distinction was necessary for the small-scale certification exercise; each participant knew his role beforehand.

For large-scale or multi-disciplinary exercises, the CBRN TC provides to each participant a jacket of specific color or wearing a specific sign, depending on the participant's role in the exercise.

Start-up Safety and Exercise briefings

Different kinds of briefing were carried out during the JA:

- Briefing for the trainees: general regulations, objectives of the exercise (both global& specific) as well as security recommendations were given by the lead instructors; the evaluation criteria were also mentioned;
- Briefing for external particpants about the JA:
    - A briefing about eNOTICE general objectives, carried out by the eNOTICE project coordinator;
    - A briefing on the specific JA objectives, conducted by the WP4 coordinator;
    - A briefing on the scenario of the exercise and on security issues, made by a representative of the CBRN TC commander.

Roll out of the scenario

See description of the timeline before.

X DEBRIEFING AND EVALUATION

Post exercise debriefing

Two types of debriefing were organised: a hotwash debriefing immediately after the exercise. The HAZMAT practitioners participated in this debriefing.

Questions for evaluation and debriefing forms were prepared in advanced in order to ensure that all observers had a specific focus to observe during the exercise. The collection of their feedback was done first of all during the project meetings, the day following the exercise; and in depth evaluation is done in stages as all debriefing forms are collected and published on the internal share point space. The feedback is treated per Task, by the respective Task leaders.
The feedback related to Task 4.2 is integrated in the first part of D4.2 (see Section 2 above).

Evaluation forms

Evaluation of the exercise

The evaluation of the exercise is done internally by the staff of SDIS77.

Evaluation of the Joint Activity

The following table gives the overview of all questions listed for observation to collect feedback.
All eNOTICE partners contributed to prepare this list.

OVERVIEW QUESTIONS FOR OBSERVERS – JOINT ACTIVITY GURCY

This overview lists questions for observers during the Gurcy Joint Activity, 13.12.2017

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

Task	Lead		A	B	C	Observer	Organisation/project
2.1.1 Roster	VESTA	Do you notice any infrastructure, capabilities and/or services that should be extra highlighted when making the roster public?	X			Chr. FRITSCH	FDDO
		What kind of pictures would be of value to gain visibility for the TC's capabilities and facilities?	X			A.M. JAPS & M. KIEHL	UPB
		What infrastructure did you see that provokes interest for use within the project(s)		X		M.	FIRE-IN

			you are involved in?				FELTYNOWSKI	
2.1.2	Quality label	SDIS77	What characteristics of the training centre do you believe to be most valuable to promote?	X	X	X	M. POKORA	CNBOP-PIB
			What elements of the exercise do you believe to be most valuable to promote?	X	X	X	S.PRATZLER-WAN-CZURA	FDDO
			What do you consider to be 'unique selling points' of training centres, that might influence your choice to work with them?	X	X	X	G. DUSSERE	ARMINES
			Did the training centre offer any capabilities or facilities that exceeded or deceive your expectations?	X			G. DUSSERRE	ARMINES
			Do you think the training centre can provide a good protection of classified data, i.e. identities, equipment operational procedures?	X			E. SURER	METU
			Would you have specific requirements toward the Training Centre to provide good protection of classified data, i.e. identities, equipment, operational procedures?			X	M. FELTYNOWSKI	FIRE-IN
			What are the characteristics that you would look for, when searching for a TC?	X	X	X	D. DI GIOVANNI	UNITOV
2.2	Mapping	UCL	What are your main expectations when observing/participating in the exercise?		X	X	V. PAPADO-POULOS	Greek Armed Forces
			What characteristics of the training centre are or would be critical in your decision of participating (again) in an exercise?		X	X	V. PAPADO-POULOS	Greek Armed Forces
			What elements of the exercise are or would be critical in your decision of participating (again) in an exercise?		X	X	I. KRUIJFF – KORBA-YOVA	TRADR
			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?		X	X	J. SILMARI	TOXI-TRIAGE
			What would be determining assets for you to choose working with a TC: availability of practitioners? Infrastructure? Access to policy makers? Other?		X	X	M. MAR-TTINEN	ENVIRONICS OY
			Joining the exercise/the network is your individual wish or your organisation policy?		X	X	Chr. ANST ASILAKIS	Greek Armed Forces
			What could prevent you from joining the exercises? The network?		X	X	M. MAR-TTINEN	ENVIRONICS OY

			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?	X	X	X	A. BAG-NIEWSKI	WSU
2.3	KPI	VESTA	Does participation in this exercise convince you that collaboration within a CBRN network would be beneficial? Why (not)?		X	X	Chr. ANAS TASILAKIS	Greek Armed Forces
			Did you feel like there was mutual understanding between the different profiles of participants within the exercise?	X			M. POKORA	CNBOP-PIB
			Did you notice any valuable interaction between practitioners and researchers/developers?	X			D. DI GIOVANNI	UNITOV
			After observing the joint activity, do you feel like you have a better image of the needs of practitioners?		X	X	J. SILMARI	TOXI-TRIAGE
			After observing the joint activity, did you notice any barriers for collaboration within a CBRN network?	X			E. SURER	METU
2.4	Frame work	UNITOV	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)?		X	X	B. SER-RAULT	ENCIRCLE
			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)?		X	X	I. KRUIJFF – KORBA-YOVA	TRADR
			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)?		X	X	M. MAR-TTINEN	ENVIRONICS OY
			In the light of the exercise you observed and the TC you have visited, can you figure out whether your TC has activities and facilities that can be complementary and that can be used to perform joint activities or propose joint training curricula?	X			P. MOHNACS	JCBRND CoE
			For your organisation, could the definition of standardized procedures, with a common programme/catalogue of exercises increase the practical and economical sustainability of these activities?	X			E. BENSON	WMP
4.1	Methodology and templates	VESTA	Could the use of a common methodology for the organisation of exercises be useful? Have added value?	X	X	X	E. BENSON	WMP
			Are checklists being used for various tasks? (e.g. logistics: moving equipment to the site,…)	X			A. BAG-NIEWSKI	WSU

			Do you feel like the documentation that is made is sufficient to ensure follow-up of the lessons learnt?	X			Chr. FRITSCH	FDDO
4.2	Joint activities	VESTA	What did you learn from participating in/observing the exercise?		X	X	M. MAR-TTINEN	ENVIRONICS OY
			Were you able to achieve your objectives while participating in the exercise? (e.g. testing of technology)		X	X	I. KRUIJFF – KORBA-YOVA	TRADR
			Did you feel like the exercise provided you with enough opportunities to learn from?		X	X	Chr. ANAS TASILAKIS	Greek Armed Forces
			Did participation in the exercise meet your expectations?		X	X	M. FELTY-NOWSKI	FIRE-IN
			In what way could the exercise be adapted so that it will become more interesting for you?		X	X	M. FELTY-NOWSKI	FIRE-IN
			Is your expertise and/or way of working compatible with the practice within the exercise?		X	X	Chr. ANAS TASILAKIS	Greek Armed Forces
			Did the exercise offer sufficient opportunities for the identification of good practices?	X	X	X	A. BAG-NIEWSKI	WSU
			Were there any obstacles in observing and learning from the exercise?			X	J. SILMARI	TOXI-TRIAGE
			Were the objectives from each participant compatible? Did the scenario allow all parties to participate sufficiently? Did they not get in the way of each other?	X			M. POKORA	CNBOP-PIB
			Was the briefing of the practitioners clear, using a guideline?	X			P. MOHNACS	JCBRND CoE
			Was the debriefing activity clear? Did it provide an analysis of gaps or lacks in the practitioner activities?	X			E. BENSON	WMP
			Is there a clear vision of the lessons learnt and what will be the next steps to move forward?	X			V. R. QUANTE	JCBRND CoE
			Do you consider this type of exercise relevant for the collection of end user needs at the start of an EU project?		X	X	B. SER-REAULT	ENCIRCLE
			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?		X	X	I. KRUIJFF – KORBA-YOVA	TRADR
			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		X	X	B. SER-REAULT	ENCIRCLE

			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?		X	X	J. SILMARI	TOXI-TRIAGE
4.3	Policy recommendations	UCL	Through the involvement of external participants within the exercise, do you notice any aspects of training that transcend the national level?	X			P. MOHNACS	JCBRND CoE
			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?	X	X	X	V. R. QUANTE	JCBRND CoE
			Shall there be synergies between civil and military training practices? Why (not)? In what aspect?	X	X	X	V. R. QUANTE	JCBRND CoE
			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?	X	X	X	D. DI GIOVANNI	UNITOV
4.4	Plan to pool resources	UMU	Was the infrastructure used to its full capacity? Or were there any more opportunities?	X			S. PRAT-ZLER-WAN-CZURA	FDDO
			Did you witness each participant having a clear objective and task during the exercise?	X			E. SURER	METU
			Would you be interested in observing/participating in the exercise if you had to pay a fee for attendance?		X	X	V. PAPADO-POULOS	Greek Armed Forces
			Does the distance you have to travel holds you back to participate in (future) joint activities?		X	X	B. SER-REAULT	ENCIRCLE
			Do you see any opportunity to increase cost-efficiency?	X			Chr. FRITSCH	FDDO

Overview of eNOTICE participants in Gurcy, per task

		T2.1.1	T2.1.2	T2.2	T2.3	T2.4	T4.1	T4.2	T4.3	T4.4
UCL	Olga VYBORNOVA	X	X	Lead	X	X	X	X	Lead	X
	Jean-Luc GALA	X	X		X	X	X	X		X
VESTA	Kathleen VAN HEUVERSWYN	Lead	X	X	Lead	X	Lead	X	X	X
	Ine HUYBRECHTS		X	X		X		X	X	X
ARMINES	Gilles DUSSERRE			X	X			X	X	
FDDO	Sylvia PRATZLER-WANCZURA	X	X	X			X	X		X
	Christian FRITSCH	X	X	X			X	X		X
UPB	Anna Maria JAPS	X	X	X	X	X		X	X	X
	Maximilian KIEHL	X	X	X	X	X		X	X	X
JCBRND CoE	Volker R. QUANTE	X		X		X	X	X	X	X
	Petr MOHNACS	X		X		X	X	X	X	X
METU	Elif SURER	X	X	X	X	X	X	X		X
UNITOV	Daniele DI GIOVANNI	X	X	X	X	Lead	X	X	X	X
WMP	Elizabeth BENSON	X		X	X	X	X	X		X
WSU	Adam BAGNIEWSKI	X		X			X	X		
CNBOP-PIB	Magdalena POKORA	X	X		X	X		X		

EXAMPLE TEMPLATE Evaluation and Debriefing Form

EVALUATION & DEBRIEFING FORM

Name: XXX
Organisation/representing project: XXX

Question 1 – e.g. What do you consider to be 'unique selling points' of training centres, that might influence your choice to work with them?

Question 2 – e.g. 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)?

Question 3 – e.g. 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?

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

X FOLLOW UP

In advance a format for follow up actions was prepared to collect the actions discussed and decided at the debriefing session and the project meetings the day after the exercise. The identified actions were sent to all partners by email for feedback and approval, as part of the minutes of the JA, and published on the internal share point space as todolist for all action owners.

The following actions were identified for the next 6 months:

No	Action	Who	When
A1	All partners shall be sure to send out the project infos and the link for questionnaire to their assigned TCs asap	All	ASAP, by mid January at latest
A2	Fix and communicate to all the dates of the JA in June in Brussels, organised by UCL	UCL	December 22, 2017
A3	Prepare questions according to categories of stakeholders for mapping the needs and gaps in Task 2.2	UCL	January 15, 2018
A4	Elaborate the agenda of the JA in Nîmes so that invited EC projects are not only presented with slides, but participate in the scenario	ARMINES + METU	December 31, 2017
A5	Update the eNOTICE website with info and pictures of the past JA in Gurcy, put the pictures and videos on SharePoint	UPB	December 22, 2017
A6	D2.1 Catalogue of CBRN TC, testing and demonstration sites.	VESTA	Submit before February 28, 2018
A7	D2.1: TC's in Ireland, Norway, Sweden, Spain and Portugal	See distribution list	ASAP
A8	D2.3. Mapping and needs and gaps analysis of the CBRN stakeholders	UCL	Submit before April 30, 2018
A9	TC Roster on Sharepoint: 2 columns to be added to the roster	VESTA	ASAP
A10	TC Roster on Sharepoint: - add partner name to 'their' contacts - add the date of (the first) contact	ALL	
A11	T4.1 further elaboration of the 4.1. draft manual based on BE + INT + FR doc	VESTA	December 22, 2017
A12	T4.1/4.2 SDISS Checks the draft	SDISS77	Jan. 12, 2018

	manual + uses the format to describe the Gurcy JA as input for the Deliverable (due 31.1)		
A13	T4.1 feedback on the draft manual	ALL	Jan. 19, 2018
A14	ARMINES/METU use the draft manual for the preparation and reporting of the Nimes JA	ARMINES/METU	Jan./Feb. 2018
A14	T4.2/5.2.3 - all partners use the draft manual for the preparation of their JA and complete/refine the document at that occasion as part of Task 5.2.3.	ALL	When organising their JA
A15	All debriefing and evaluations forms on SharePoint	ALL	ASAP
A16	All Task leaders use the feedback in the forms as input for their Task	Task Leaders	Cf. Task timing