



ENCIRCLE

European Cbrn Innovation for the maRket CLustEr

D4.1 ENCIRCLE Cluster Discussions Y1

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Executive Summary

The Deliverable D4-1 presented herein provides a summary of the discussions, that can be publically disseminated, from the first six month period of the ENCIRCLE project.

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1 Introduction

The main goal of the ENCIRCLE project is to strengthen the European industry to help create the tools and strategies needed to consolidate the EU CBRN communities of suppliers and practitioners in order to strengthen the field of CBRN safety, security and defence in the European Union.

In order to achieve this goal, an innovative approach was proposed. Based on five objectives, it aims at prompting the innovation and business development, and filling market gaps within the project timeframe. The project objectives include:

- Create an open and neutral EU CBRN cluster,
- Provide a sustainable and flexible vision and roadmap for the development of the European CBRN market and innovations,
- Provide integration with platforms (systems, tools, services, products) by proposing standardized interfaces and future EU standards to integrate CBRN technologies and innovations developed from the Part b projects,
- Support CBRN safety, security and defence commercial and market services,
- Improve and facilitate European CBRN dissemination and exploitation.

The purpose of this document is to summarise the discussion on the ENCIRCLE Project to date, covering the period from March 2017 to September 2017

2 ENCIRCLE Discussions

The ENCIRCLE project has been running since the 10th March 2017 and the following sections summarise the discussion to date.

2.1 INNOVATION PLAN AND DISSEMINATION

2.1.1 2017 Part B Call Topics

The current version of the ENCIRCLE catalogue contains the list of the technologies, which were identified as gaps in certain functions (based on the STACCATO functions) of the main phases in the CBRN Security Cycle (Prevention, Preparedness, Response, Recovery). Due to the time constraints to meet the 2017 Part B Call there was a very short period between the beginning of the project and the deadline for providing first deliverable needed for SEC-05-DRS-2016-2017 call opening. Therefore the first version of the ENCIRCLE technology catalogue that was issued was mainly based on the EDEN Demonstration Project results. The ENCIRCLE consortium partners reviewed and discussed the topics a few weeks before Kick-Off meeting and during Kick-Off meeting workshop and updated the catalogue to its final version which was submitted to DG HOME in April for the upload on the REA site, and then issued as D3-9 in May 2017.

2.1.2 ENCIRCLE Project Site

The ENCIRCLE project site was developed and has been operational since May 2017, the project site is available at the following link: <http://encircle-cbrn.eu/>



2.1.3 Part B Collaboration Agreement

A collaboration agreement, which is required to be in place for the Part B proposals, was drafted and agreed and then loaded on the ENCIRCLE project site. During the proposal submission, 13 collaborations agreements were signed between UCL and the proposal coordinators.

2.1.4 Dynamic Catalogue

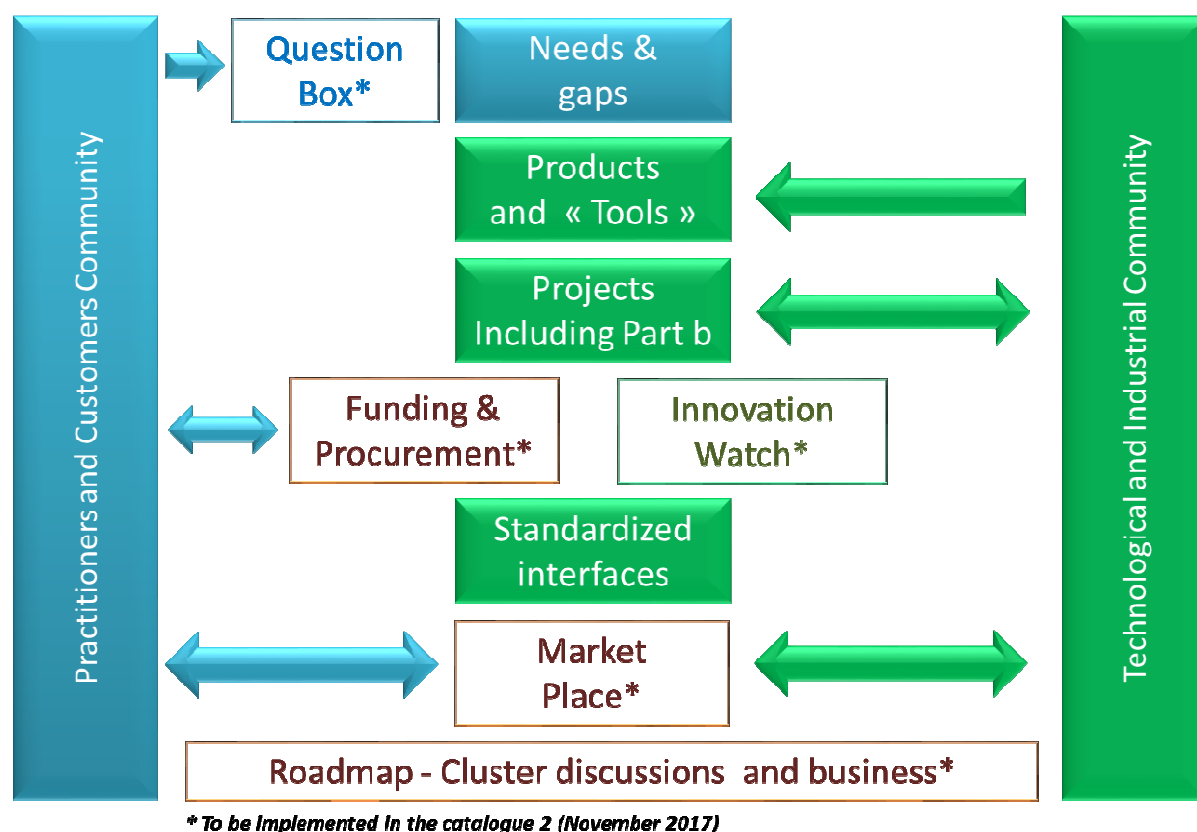
Using data from EDEN (that could be passed upon an agreement), the metadata was reviewed and updated to form the basis of the new ENCIRCLE Dynamic catalogue.

The dynamic catalogue is a framework and a process that provides a sustainable and secure web-portal and databases supporting:

- the ENCIRCLE Dynamic Catalogue creation and update,
- the community networks and “market place” functions.

The catalogue has benefited from lessons learnt during the EDEN project to make the user experience easier and more user-friendly. The search engine is based upon an improved STACCATO/EDEN functional & technical taxonomy (including Human and Social Sciences).

The structure of the catalogue is shown below:



The main functions of the catalogue that are currently implemented include:**Products and projects database**

This is populated by unclassified information by the communities and comprises:

- The Product/tool “catalogue” which is to be populated by the Consortium and Community members and will include CBRN relevant technologies and tools and generic, dual and non-specific CBRN products and technologies;
- The Project database which will be filled in and updated by the Consortium and the Community members and will include CBRN project main information and CBRN related projects information.

Needs and gaps

This is a gathering and summary of unclassified and not confidential information from the ‘communities’ of their needs and gaps. These will form the basis of the calls for the new topics for the SEC05 Part B projects.

The functions of the catalogue to be implemented in the future are as follows:**Question box**

This function is for the registration of urgent new requests (new threats, needs, solutions) that could result in potential procurement or future R&I depending on the timescale.

“Market place” function

This will provide the ability to request for information for new capabilities such (systems/technologies) from the users, potential integration platforms and other tools suppliers and will also provide links to calls and CBRN oriented conferences and exhibitions.

Technical Support functions

These will include:

- Integration and standards – This will provide standards and interfaces description in all the tools and toolboxes and a standardized interface summary and description as a specific “tool level”;
- Innovation Watch – This will provide general results of the innovation watch conducted by the project;
- Roadmap summary – This will include non-technological lessons learnt from EU projects and a general overview of future requirements and activities.

Funding, procurement and business

This function of the catalogue will provide sources of funding and procurement agencies and updated information on EU and national instruments such as DG ECHO, CBRN Centres of Excellence, structural funds, and other procurement agencies. It will also provide general

reporting (whilst respecting IPR and confidentiality) on the cluster business discussions and business deals.

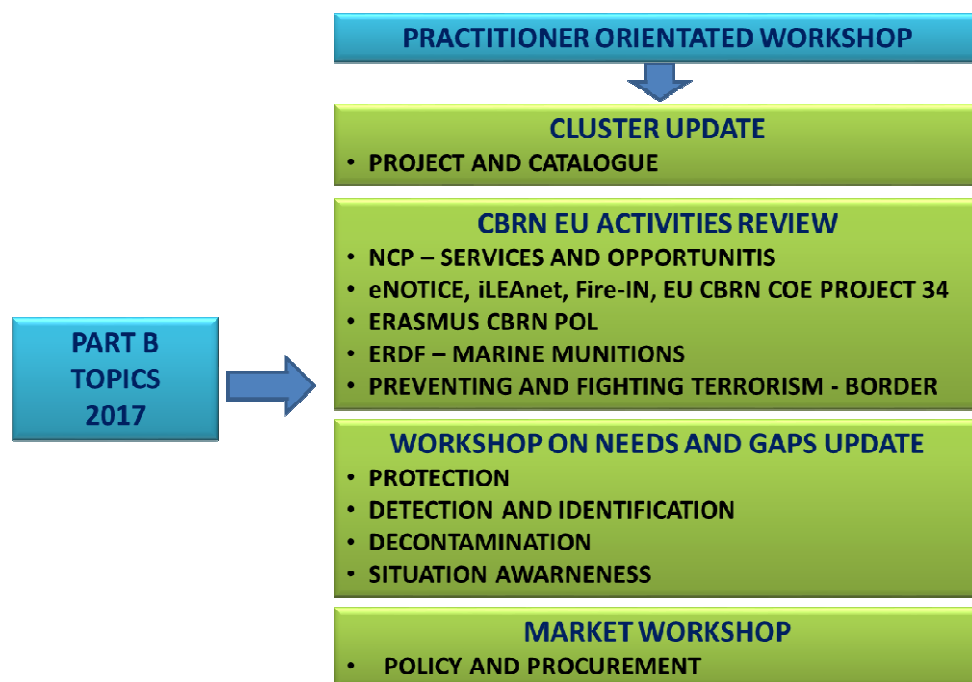
2.1.5 Registration Process

The registration process is as follows:

- Registration process: <https://www.encircle.eu/>
- Register in one of the communities:
Click either on “Register in the Practitioner and Customer community” or on “Register in the Technological and Industrial community”,
- Fill in your organization (if not yet registered), points of contact, functions fields,
- For the Technological and Industrial community, fill at least one tool or project,
- Download the Letter of Intent to sign and return scanned when filling your profile,
- Submit your request (at the bottom of the questionnaire),
- Once the consortium accepts your request, you will receive an e-mail with a link (valid only 24 h) to activate your account and choose your password.

2.2 ENCIRCLE FIRST WORKSHOP – SEPTEMBER 2017

The first ENCIRCLE workshop was conducted at the Conference and Training Centre of the Military University of Technology (MUT) (in Polish Centrum Szkoleniowo-Konferencyjne WAT) and was focused on the practitioner community (primarily from Eastern Europe). The following diagram shows the general areas discussed at the workshop.



The main outputs of the workshop are summarised below:

2.2.1 Cluster Update and CBRN EU Activities

The workshop was introduced by an overview on the ENCIRCLE project, with a description of the functions and registration process for the dynamic catalogue as well as the market assessment to be started in the near future. The following sessions consisted of presentations by the practitioners focussing on some of the CBRN EU activities.

The main topics presented during the workshop are listed below.

- **ENCIRCLE Project overview**

The project was briefly presented. The project objectives, as described in the Introduction of this document, were explained to the workshop participants. As this workshop was dedicated specifically to Practitioners and Customers, the emphasis has been placed on how the project can benefit them and the contribution they can make to the project:

- Being involved in the ENCIRCLE state of the art assessment, by participating in workshops and answering e-questionnaires,
- Being involved in workshops and answering e-questionnaires to improve policy, procurement and market development and service support for new innovations,
- Providing feedback on the catalogue contents so that it can be iteratively improved,
- Being aware of all products available on the market.

- **ENCIRCLE Dynamic Catalogue**

A general description of the catalogue was presented as developed in point “2.1.4 Dynamic catalogue” of this document. Main functionalities were outlined and the process for registration to the ENCIRCLE Dynamic Catalogue was explained.

- **ENCIRCLE Market Analysis**

Acknowledging that the CBRN Market is fragmented and, in order to provide a sustainable and flexible roadmap for the development of the European CBRN market and innovations (one of the five objectives of ENCIRCLE), a market analysis will be conducted. This analysis will draw upon the knowledge and experience of the ENCIRCLE partners and community members. Both ENCIRCLE communities will be consulted through Survey Questionnaires and participants have been encouraged to complete the e-questionnaires [to be available soon on the ENCIRCLE website (as stated in point 2.3.1 of this document)].

- **Polish NCP – Polish NCP services and funding opportunities in H2020**

The **Polish NCP system** was presented. In Poland, overall coordination of NCP is assigned to Ministry of Science and Higher Education (MSHE) and the network of NCP-PL is co-financed by MSHE. The Network is composed of 38 individually nominated NCPs (in most areas 2 or 3 NCPs assigned) and 43 experts in Regional Contact Points and the NCPs host organisation is the Institute of Fundamental Technological Research Polish Academy of Sciences (IPPT PAN; <http://www.ippt.pan.pl/en/home.html>).

IPPT PAN is NCP for HORIZON 2020 & Euratom-Fission, coordinates NCP & EURAXESS Network, cooperates with EEN & Thematic Contact Points and is actively involved in NCP network projects (Partner in more than 100 Framework Programmes projects/ Coordinator of 17 projects).

NCP mission in Poland is to reinforce the position of Polish science and innovation on the international arena by supporting participation in European research and innovation programs (Horizon 2020, EURATOM and IMI2). The NCP core functions are (i) Informing, awareness raising; (ii) Assisting, advising and training; and (iii) Signposting and cooperation. NCP cooperates with Poland research organisations [CRASP - Conference of Rectors of Academic Schools in Poland, PAN - Polish Academy of Sciences and the Main Council of research institutes] to create a database of H2020 institutional contacts, to promote H2020, to identify the best scientists/research teams and to Develop grant offices.

The **H2020 Secure Societies NCP Network support project - SEREN3** (<http://www.seren-project.eu/>) –was also presented. The objectives of this project is to support clients of H2020 in SEC SOC, identify and share good practices and raise the standard of the NCP support to Horizon 2020 Secure Societies (SC7) programme applicants and facilitate trans-national co-operation among NCPs for Secure Societies. Amongst the activities to support stakeholder, the SEREN3 project is organising Info Days and Brokerage Events and has developed the **Security Research Map - SeReMa** (<http://www.security-research-map.eu/>) - partner search tool. SeReMa is a database with the objective of increasing the visibility of security related research in Europe and optimizing the networking between security stakeholders.

- **H2020 SEC 21 – eNOTICE – European Network of CBRN Training Centres**

This project aims to build a dynamic, functional and sustainable pan European network of CBRN training centres, testing and demonstration sites (CBRN TC) strengthening capacity building in training and users-driven innovation and research, based on well-identified needs.

Main pillars for the network and confidence building will be to pool and share resources, effective practices and lessons learned, to map and label EU CBRN TC based on their capabilities and specificities, and to use a dedicated web based information and communication platform for exchanges and dissemination. Rather than usual workshops that are of no interest for task-focused, busy practitioners, the CBRN TC network will organize joint activities, training and debriefing in well-adapted infrastructures, using real-life or simulated situations (e.g., field exercises, table top, serious gaming and simulations), with external partners, in order to foster the identification of genuine users' needs with users-driven technological solutions.

Whilst using efficiently investments made across Europe in demonstration, testing, and training facilities for practitioners, this novel concept will issue meaningful users-guided recommendations to the EU R&D programme, enhance CBRN product performance and competitiveness, and decrease EU market fragmentation.

- **H2020 SEC 21 – iLEAnet – Innovation through Law Enforcement Agencies networking**

The ILEAnet project will set up and develop a sustainable network of Law Enforcement Agency (LEA) practitioner organisations from all over Europe. The mission of this network will be to stimulate LEA capabilities to influence, develop and take up Research, Development and Innovation (RDI) that is useful and usable for LEAs, and thereby help them to tackle the major challenges they face.

The network will be organised around ILEAnet National Contacts (INCs) who will be in charge of federating the respective networks of practitioners, policy makers, academics, industrial players and other RDI stakeholders in their respective countries.

ILEAnet will also operate as a community of people with a common interest in exchanging and collaborating with respect to LEA challenges and needs and LEA-centred RDI. Whilst the organisational ILEAnet Network will be focused – “top-down” - on specific challenges, the ILEAnet Community of people will contribute “bottom-up” ideas to produce innovative approaches to face newly arising challenges. An online community platform will enable professional social networking and mutual online assistance related to new solutions and best practice to address LEA challenges.

ILEAnet will hence catalyse innovation between LEAs and between LEAs, academics and industry. This will enable LEAs not only to take up mature results but also to prepare and influence future RDI efforts which could be taken up by individual or groupings of organisations and countries as well as by European research funding programmes.

- **H2020 SEC 21 – Fire-IN – Fire and Rescue Innovation Network**

FIRE-IN has been designed to raise the security level of EU citizens by improving the national and European Fire & Rescue (F&R) capability development process. FIRE-IN addresses the concern that capability-driven research and innovation in this area needs much stronger guidance from practitioners and better exploitation of the technology potentially available for the discipline.

FIRE-IN builds on a project cycle with four steps: (i) Definition of fire and rescue practitioners requirements and needs; (ii) Identification of research, development and innovation challenges; (iii) Dialogue with Research and Industry (State of the Art, identification of research & innovation addressing challenges); (iv) Strategic Research Agenda recommendations to DG Home.

This cycle is based on the contribution provided by a significant and heterogeneous practitioner network with a strong practitioner involvement through a web platform divided in five thematic groups (Search and Rescue (SAR) and Emergency Medical Response, Structures fires, Vegetation fires, Natural Disasters and CBRNE).

- **EU CBRN CoE – Project 34 – Strengthening Capacities in CBRN event response and related Medical Emergency response under strengthened CBRN event**

The CBRN CoE Project 34 (<http://www.cbrn-project34.eu/>) aims to elaborate a series of enhancements in CBRN risk mitigation in the partner's countries in the Middle East (Iraq, Jordan and Lebanon) by the means of the execution of targeted work packages to address certain national needs. The project is structured in five Work Packages (WP) : (1) Knowledge development and transfer of best practice on inter-agency CBRN response; (2) Awareness, risk assessment, import/export monitoring and management of hazardous chemical agents, their precursors and chemical weapons; (3) Capacity building of national HAZMAT teams in emergency preparedness and response to CBRN incidents; (4) Strengthening capacities of the emergency medical service (EMS) in preparedness and response to CBRN incidents; and (5) Enhancing on-site chemical agent (hazardous chemical agents, their precursors and chemical weapons) detection, sampling, sample handling and analysis capabilities.

In the frame of the first WP, the **E-formare Platform** was set-up (<http://www.cbrn-project34.eu/learn/>) to provide a technological support to the knowledge sharing and transfer activities, also to ensure the accessibility to Project contents over time.

Training courses, seminars and simulation exercises organised in the frame of the project were also briefly presented.

- **ERASMUS+ – CBRN-POL – Development of CBRN training programme for police officers**

Two projects were presented:

- The 'CBRN-POL' project (<http://cbrn-pol.uni.lodz.pl/>), implemented in the frame of Erasmus + KA2 Strategic Partnership in the area of vocational education and training: This project supports the Development of CBRN training programme for police officers. The general aim of CBRN-POL project is to create of modern, multidisciplinary CBRN training curriculum and training educational materials, dedicated for Police officers, universally applicable for all EU Member States. The scope of the educational programme shall meet the demand for safe, responsible and effective behavior of police officers on scene of intentionally induced incident involving CBRN materials.
- The 'Support for European Union action in the field of CBRN security managers education' project (<http://secbrnure.uni.lodz.pl/>): This project led to the creation of **CBRN-E defence postgraduate studies – “CBRN Security Manager”** course. It is a multi-disciplinary course consisting of various educational modules, covering all aspects of CBRN-E. This course is based on a series of modular theoretical lessons and practical training sessions conducted by experts in their field. It is offered to 30 participants: 15 from Poland and 15 from the European Union Member States (recruitment closed on 15 September 2017. The list of participants will be published by 30.09.2017).

- **ERDF Interreg Baltic Sea Region Programme DAIMON – Decision Aid for Marine Munitions**

The DAIMON project (<http://www.daimonproject.com/>) is the follow-up the CHEMSEA (Chemical munitions search and assessment) and MODUM (Towards the monitoring of dumped munitions threat) projects. DIAMON project objective is to define how to proceed (remediation or no action) with the identified and mapped warfare objects by developing tools to support the Baltic Sea Region governments and companies in case-to-case decision-making. The tools comprise methods (Munition Status Examination, Modelling of possible release, Pollution of sediments and water), risk assessment tools (Impact on biota assessment, Risk categorization procedure) and decision support (Remediation options: costs, environmental impact, legal considerations).

- **Internal Security Fund of the European Union – Preventing and fighting CBRN-E terrorism – building capacity of actors involved in the detection and mitigation of CBRN-E risks at air and road border crossings on European level**

The main objective of the project is to strengthen the capacity of law enforcement agencies in the EU Member States to manage the CBRN-E incident risk, as well as to strengthen coordination and cooperation between law enforcement and other actors during CBRN-E incidents on the EU external border, leading to increased security of critical infrastructure. The project is addressed to the officers of the Provincial Police Headquarters in Lublin, Nadbużanski Border Guard Branch, Lublin Airport, Estonian Police and Border Guard, Slovak Border Guard and other police units in Poland.

During the project, two study visits (to Estonia and to Slovakia respectively in June and September 2017) have been organised and the two training and practical exercises are planned: crisis at the Lublin airport (October 2017) and emergency situation in Dohhobycz [border crossing with Ukraine] (November 2017).

The results of the project will be a CBRN-E training program, the reports of conducted training and practical exercises, movies of the conducted training and practical exercises as a supplement to the training material, and a report comparing CBRN-E best practices for CBRN-E safety training (all material will be disseminated in Polish and translated into Slovak, Estonian and English).

- **Presentation of the CBRN risk mitigation Centres of Excellence (CoE) Initiative**

The CBRN CoE initiative (<http://www.cbrn-coe.eu/>) has been established since 2010 by the EU and is currently composed of eight Regional Centres of Excellence (African Atlantic Façade, Central Asia, Gulf Cooperation Council Countries, Middle East, North Africa and Sahel, South East Asia and South East & Eastern Europe), with more than 50 partner countries and more than 60 projects in the regions.

Objective of the CBRN CoE initiative is to set up a framework for cooperation and coordination, involving all levels of governmental and international, and to facilitate regional cooperation in order to enhance CBRN capabilities.

The benefits for the Partner Countries are the reinforcement of National CBRN policies, the maximisation of existing capacities in the region, the set-up of experts' network and the strengthening of the regional culture of safety and security.

The CBRN CoE initiative has a bottom up approach based on Partner Countries' needs, taking into consideration regional aspects. After a "National Needs Assessment", a National CBRN Action Plan is formulated in order to close gaps regarding CBRN capacities. This action plan may include strengthening the legal framework, development of CBRN strategies, improvement or development of operational CBRN capacities. Based on this, projects are formulated, also trying to facilitate regional cooperation

In various Regional CoE, On Site Assistance (OSA) experts are installed. They provide local and regional training and expertise on demand, support project development, supporting the National Need Assessment Process and the National CBRN Action Plan and facilitate all CBRN CoE activities (e.g. National Team Meetings).

2.2.2 NEEDS and Gaps Review

The workshop participants were divided into four groups (Protection, Detection and Identification, Decontamination and Situation Awareness). The groups then used the same scenario to frame the exercise and allow the participants to work through the scenario and identify the needs and gaps from their perspective. The results from the workshop will be compared with the current areas that have been identified and the resultant "gaps and needs" list will be updated. Prioritisation of list to form the basis of the new topics will be conducted in 2018 in time for the expected 2019 next topic call.

2.2.3 Policy and procurement

The final session of the workshop involved some initial discussions on the potential policy and procurement challenges in the CBRN area. Presentations were given in the following areas:

- **CBRNe Security System in Poland (Internal Security Agency)**

The **CBRN Shield 2017** project was presented. This project is a partnership between Norway and Poland, supported by the Norwegian Financial Mechanism 2009-2014 under the Programme "PL-15 – Schengen Cooperation and Combating Cross-border and Organised Crime, including Trafficking and Itinerant Criminal Groups". The objective of the project is to analyse the requirements and capabilities of the Polish response system. The project program includes four study visits (two in Poland and two in Norway), a field demonstration in Poland (CBRNE equipment & procedures) and a field exercise in Poland.

The gap analysis resulted in the identification of 134 and 80 gaps, respectively in Norway and Poland, with common gaps that are opportunities for future collaborations.

The CBRN Shield 2017 project will be followed by the CBRN Armour 2018 project (Norwegian Financial Mechanism 2014-2021) to developing Polish national CBRNE response strategy

based on the gaps identified in CBRN Shield 2017. Other next steps planned in Poland are to establish inter-ministerial team for developing the concept of national CBRNE response system and identify other funding opportunities.

- **Chemical and Ecological Rescue in Poland (State Fire Service, Katowice, Poland)**

The presentation described the organisation of the Polish state fire service (PSP). PSP is a National organization, with a structure based on the administrative subdivision of the country. PSP is supervised by the Minister of Interior and Administration and is financed from the state budget and supported by self-government budgets. It is a professional and uniformed organization (Procedures, standards and equipment are the same in all country) and PSP is organizer and core of The National Firefighting and Rescue System.

Tasks of State Fire Service includes: prevention and recognition of hazards, education, research and development, and the response to daily emergencies and disasters (Extinguishes fires, first medical aid, technical and road rescue, water/ice rescue, chemical/environmental rescue and Does altitude rescue and search rescue (USAR)). Each unit has knowledge and equipment for fighting fires and first medical aid. For all other tasks, all units have basic knowledge and equipment to be able to handle the risk until the intervention of and advanced team. In one unit there could be only one specialization, with specific vehicles and equipment required to handle the specific risk.

In terms of chemical/environmental rescue, the basic level (all fire station) profile is the following: defining the tasks, duties, knowledge level and minimal standards that has to be fulfilled be every fire station to perform immediate response to CBRN threats. The time of deployment of the team should not exceed 90 seconds once the emergency call has been received. The advanced level profile is the following: Defines the tasks, duties, knowledge level, minimal standards and maximum time of arrival on scene that have to be fulfilled by indicated fire station to perform immediate response to CBRN threats. There are 3 levels of specialization: level A – RECONNAISSANCE CBRN teams, level B – MEDIUM CBRN teams and level C – HEAVY CBRN teams. The minimum range of tasks performed at advanced level (A-B-C) includes: hazard identification, assessment and prediction of their development, including an attempt to identify or sampling preparation for analysis of chemical substances, evacuation of victims, vulnerable people and animals out of contaminated area, warning and alarming about the threat, informing on the rules of conduct. And also, at advanced level B&C: putting dams on water areas threatened by petroleum substances, neutralizing and binding the chemical sorbents, putting water curtains, conducting decontamination of people, conducting decontamination of equipment, pumping and the replacement chemical tanks, emissions reduction and retention of chemicals, collecting chemicals.

As it is a centralised system, all units have similar compatible equipment, which is positive for the collaboration of different teams for risk management. However, the renewal of equipment acquisition of new equipment is decided centrally controlled, which is cumbersome and not always answer local specific needs.

- **EU CBRNe Policies and actions (European Commission, JRC)**

Several EU actions, funding frameworks and policies were presented:

- The **EU CBRN action plan** (2010-2015) covered 124 actions, covering all the CBRN threats (67H; 15C; 17B & 25RN), studying the different steps of the CBRN management (Prevention, Detection, Preparedness (RA) & Response (training-exercises)), implemented by various stakeholders. Those actions lead to uneven achievement but with some major progress: 3 EU lists of high-risk substances (C, B & RN); E Bomb Data System (EBDS); E Explosive Ordinance Disposal network (EEODN) (Europol-Cepol; exchange - training); CBRN-E Glossary (app); EUSECTRA training; New CBRN scenarios developed; Better emergency response plans; 2 CBRN modules for civil protection (out of 17).
- The **European Reference Network for Critical Infrastructure Protection (ERNICIP)** aims at providing a framework within which experimental facilities and laboratories will share knowledge and expertise in order to harmonise test protocols throughout Europe, leading to better protection of critical infrastructures against all types of threats and hazards and to the creation of a single market for security solutions. ERNICIP is divided in thematic groups and five of those groups are related to CBRN-E: Chemical and Biological Risks to Drinking Water; Detection of Indoor Airborne Chemical-Biological Agents; Detection of Explosives & Weapons at Secure Locations; Explosives Detection Equipment (non-Aviation) and Radiological; Nuclear Threats to Critical Infrastructure.
- CBRN research is funded in the FP7 and H2020 Secure Societies framework.
- The **European Agenda on Security** (2015-2020) has three priorities (Tackling terrorism and preventing radicalization, Disrupting organised crime and Fighting cybercrime) and is built on three pillars (Better information exchange, Increased operational cooperation and Training, research & innovation).
- **European Defence Action Plan** (2016): The European Commission proposes a European Defence Fund and other actions to support Member States' more efficient spending in joint defence capabilities, strengthen European citizens' security and foster a competitive and innovative industrial base. The Fund would include two "windows" which are complementary but different in their legal structure and budget sourcing: a "research window" to fund collaborative research in innovative defence technologies and a "capability window" to support the joint development of defence capabilities commonly agreed by Member States (MS). The Fund will also foster investments in defence supply chains by facilitating access to finance for SMEs and investments in the defence sector, developing regional clusters of excellence and grant access to a European Structural and Investment Funds (ESIF) that may be used by MS. The objectives of the European Defence action plan are also to strengthen the Single Market for defence and maximize civil/military synergies across EU policies.
- **CBRN CoE initiative** (2010-2020). The European Union Chemical Biological Radiological and Nuclear Risk Mitigation Centres of Excellence Initiative (or EU CBRN CoE) was launched in

response to the need to strengthen the institutional capacity of countries outside the European Union to mitigate CBRN risks. It was funded through the Instrument contributing to Stability and Peace (IcSP). Participation is on a voluntary basis (57 partner countries). 61 projects implemented: Strengthening CBRN legislation framework, Increasing first responders capacities, Biosafety and biosecurity programme, Better capacities for nuclear detection, Improved CB waste management, Forensics capacities, Strengthening border control, Export-control of dual-use goods.

- **Procurement and policy – lessons learnt from FP7 Project EDEN (End-user driven DEMO for cbrNe) – (BAE Systems)**

An overview was given concerning some of the issues and lessons learnt from the EDEN project:

Security supply and demand: Generally speaking, the security demand is very fragmented, de-structured and heterogeneous with governmental actors playing a key role in terms of products acquisition. Analysis highlights a certain degree of overlap in terms of the allocation of security responsibilities and the role of different customers of security products or services and overlap exists both between different public actors (i.e. central and local governments) and between public and private operators. The fragmentation at the national level is reflected in a lack of bilateral or multilateral cooperation in the European context. National Adaptations of systems and evaluation methods also exacerbates the level of fragmentation. The supply of security solutions is also fragmented with a high number of small and medium sized companies focused on the development of specific security products, components and technologies.

Policy: The key EU policy is represented by the CBRN action Plan and the Explosive action plan and regulation but other EU policies that have CBRN as a focal point include the EU Civil Protection Mechanism and Consumer Health Protection as well as Energy Infrastructure and Transport Networks, Environment and industrial risks and International Cooperation and the military domain. The implementation of these policies is a complex process as they involve a large number of stakeholders and each Member state will also follow their own specific approaches and national action plans. In addition the implementation needs to be compatible with the EU Industrial Policy which aims to boost industrial competitiveness and innovation

Procurement: A national case study showed wide variations in the cost paid by the practitioners and also instances where industry has stopped manufacturing items due to lack of demand. A lack of appropriate standardisation in procurement and test/evaluation methods for acceptance also drives costs for both the user and industry. Procurements are fragmented across European, national and regional level and this often results in duplication for similar items. There are also national and regional adaptations, which also drive cost to the user and cost to suppliers. For the case study a lack of influence at the operational level

was seen as a factor and whilst commercial benefits can be seen through standardisation. It should be noted that a single approach for leasing/purchasing has to be balanced with technical and operational requirements. There needs to be a good balance and management between operational need and good procurement practices. An option that is often considered is collaborative procurement and whilst this can be a number of factors must be considered for this option. First of all, one size does not fit all, collaborative procurement needs to work differently for different goods and services – e.g. sometimes by geographic location, sometimes on volume. In addition co-ordinating procurement between a large number of bodies needs resource and budget, which is probably not currently in place. It is also about approaching the market with a clear commitment and enabling suppliers to reduce costs, through reducing different approaches to testing and evaluations, less duplication and lower bidding costs. Otherwise, the misconception that volume alone can decrease costs will perpetuate.

The session was closed by a general discussion and it was concluded that ENCIRCLE will initially concentrate on the particular policy and procurement challenges of early stage innovations. In addition questionnaires concerning policy and procurement will be made available on the ENCIRCLE project website to allow practitioners and the industrial and technological community to provide their views and opinions. An excel spreadsheet version of the questionnaires can be provided if that is preferred. All responses will be treated in confidence, and no responses will be attributed to a particular individual or organisation.

2.2.4 Community of users meeting 12th September

An overview of the project and the workshop was given at the COU meeting on the September 12th, the presentation will be made available on the COU website.

2.3 MARKET AND BUSINESS SUPPORT

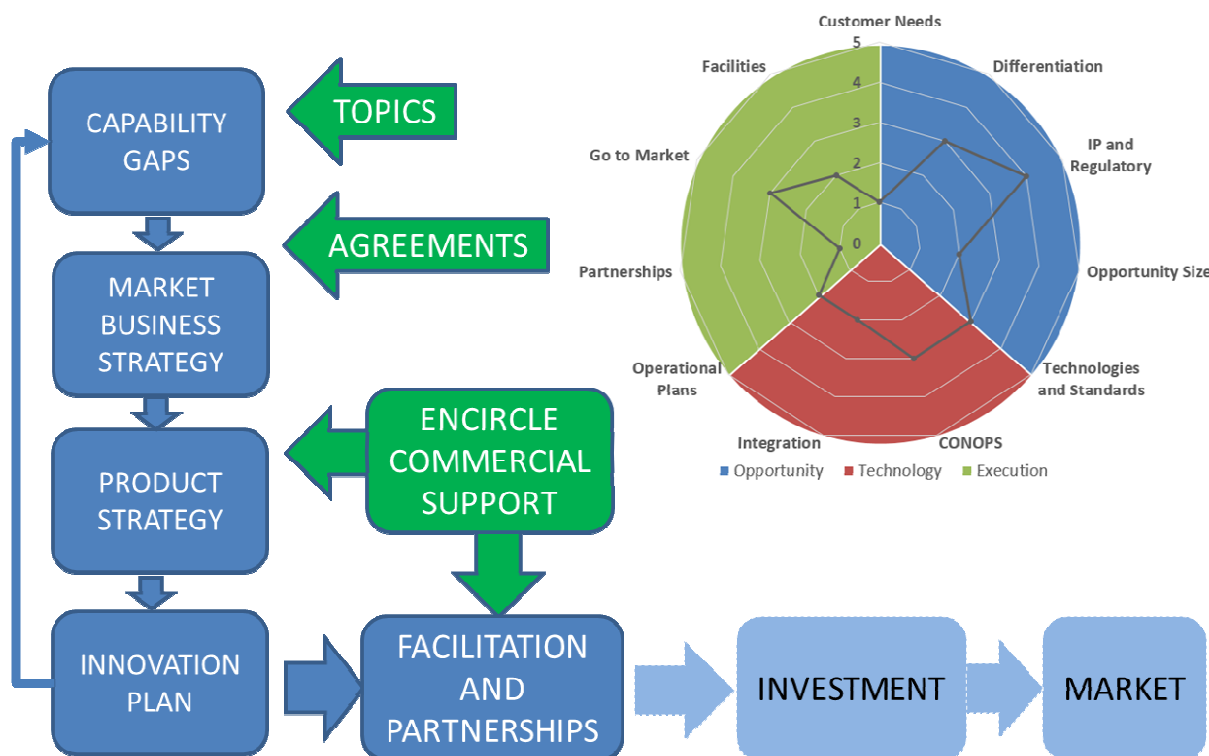
2.3.1 Market analysis

A draft Market Analysis questionnaire has been completed and is being converted to Survey Monkey format for inputs from the communities. This will be made available via the ENCIRCLE website.

2.3.2 Business Models and Plans

This work area will progress in earnest when the Part B projects that have been awarded are known. As part of the preparation for the future activities, discussions have been ongoing within the consortium concerning business and technology investment models that can potentially be used. At this stage of the development of the cluster draft business models templates have been generated and these will be made available from February 2018.

A set of questions and a monitoring process have been developed to assist and monitor the Part B projects.



2.3.3 Technological and Industrial Community

A new Letter of Intent has been generated and distributed to new partners and dissemination of the ENCIRCLE information has occurred in 3 different events in Europe (Spain, Italy and France).

2.4 INTEGRATION AND TECHNICAL SUPPORT

Most of the activities in this area will occur once the 2017 Part B awards have been made so most discussions revolved around preparation.

2.4.1 Standards and Interfaces

The initial catalogue has been reviewed to start collecting standards, interfaces and links that are being made with the SEC-21 networks with a view to gather suitable standards and networks to add to the ENCIRCLE catalogue.

2.4.2 Integration Platforms and Human Factors

The discussions to date have primarily been concerned with defining the structure of how the integration platforms will be grouped and the development of questionnaires.

2.4.3 Impact Policy and Exploitation

Discussions have been ongoing concerning Policy and Procurement issues and the intention is to prepare a white paper for further discussions with the EC in December.

Questionnaires for a survey being conducted by the cluster on both Policy and Procurement issues are available via the ENCIRCLE project site.