



# European Cbrn Innovation for the market CLustEr



Topic: H2020 – SEC 05 – 2016 CBRN Cluster, Part a

LUDOVIC OUVRY  
EDEN -OUVRY SAS

# ENCIRCLE

# About ENCIRCLE

## Coordination and Support Action

Grant Agreement N°: 740450

Start date: 10/03/2017 – End date: 09/03/2021

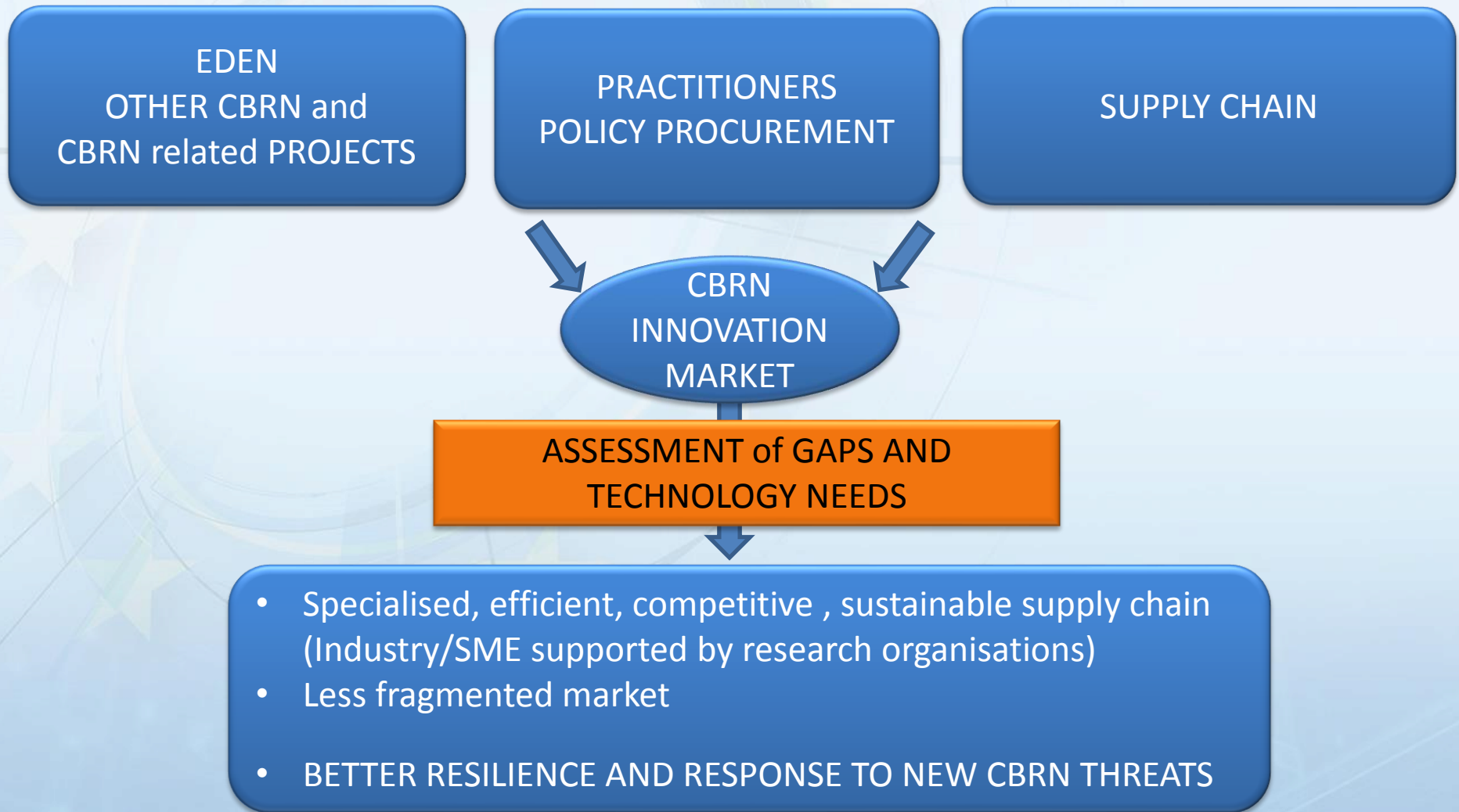
Project website: [encircle-cbrn.eu](http://encircle-cbrn.eu)



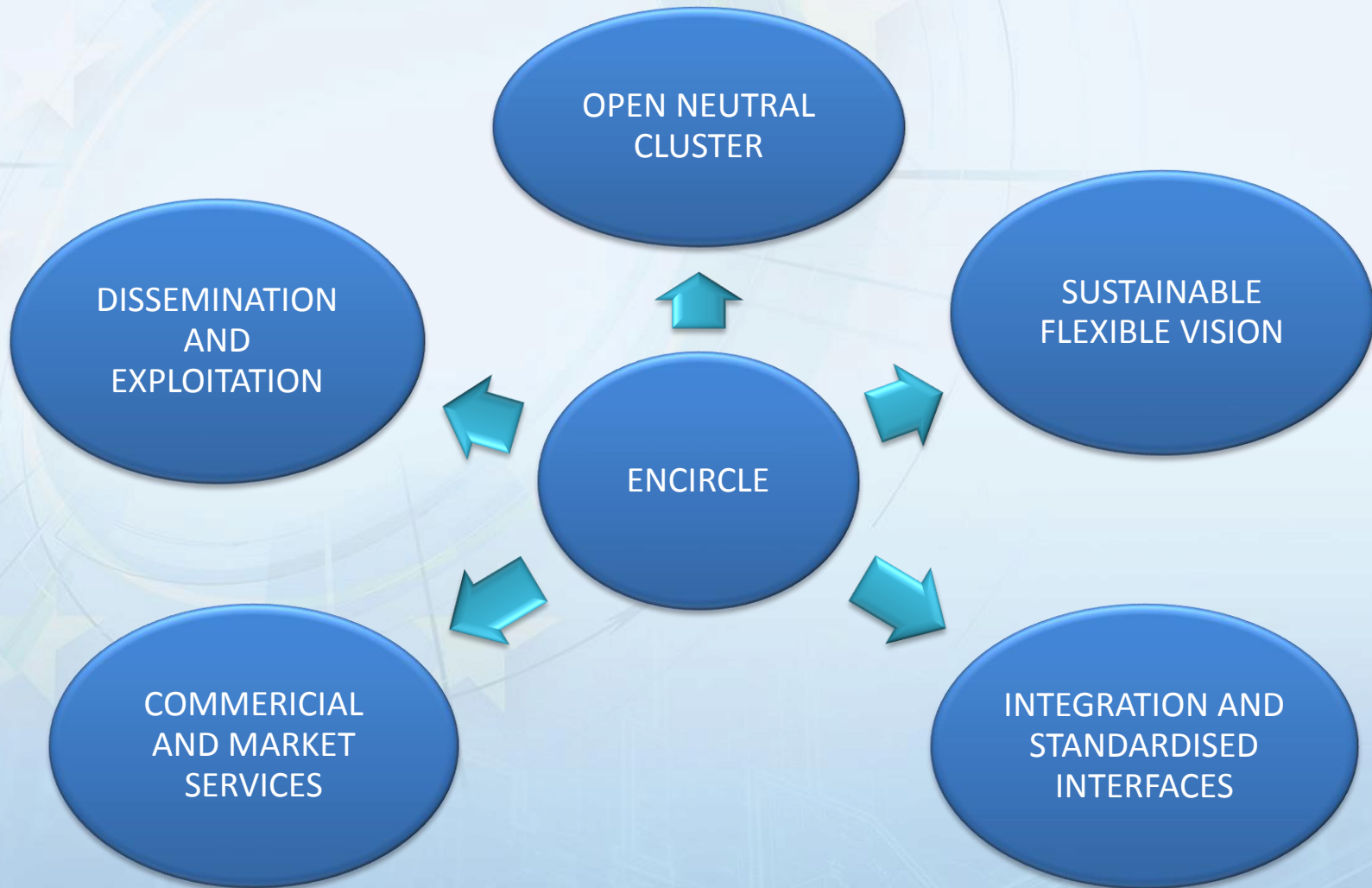
## ENCIRCLE consortium partners :

- UCL, Centre for Applied Molecular Technologies & BE-Defence, BE (**Coordinator**)
- BAES, BAE SYSTEMS, UK (**Technical Coordinator**)
- OUVRY, Ouvry SAS, FR
- PIAP, Przemysłowy Instytut Automatyki i Pomiarów, PL
- TCA, Tecnoalimenti, IT
- WAT, Wojskowa Akademia Techniczna, PL
- EU-VRI European Virtual Institute for Integrated Risk Management, DE
- IAI, Istituto Affari Internazionali, IT
- UNS, Université de Nice-Sophia Antipolis, FR
- UCSC, Università Cattolica del Sacro Cuore, IT
- FALCON Communications Ltd, UK
- SMITHS Detection Watford Limited, UK
- MIKSEI, MIKKELI Development MIKSEI, FI
- EOY, ENVIRONICS OY, FI
- ADS GROUP LIMITED LBG/CBRN-UK

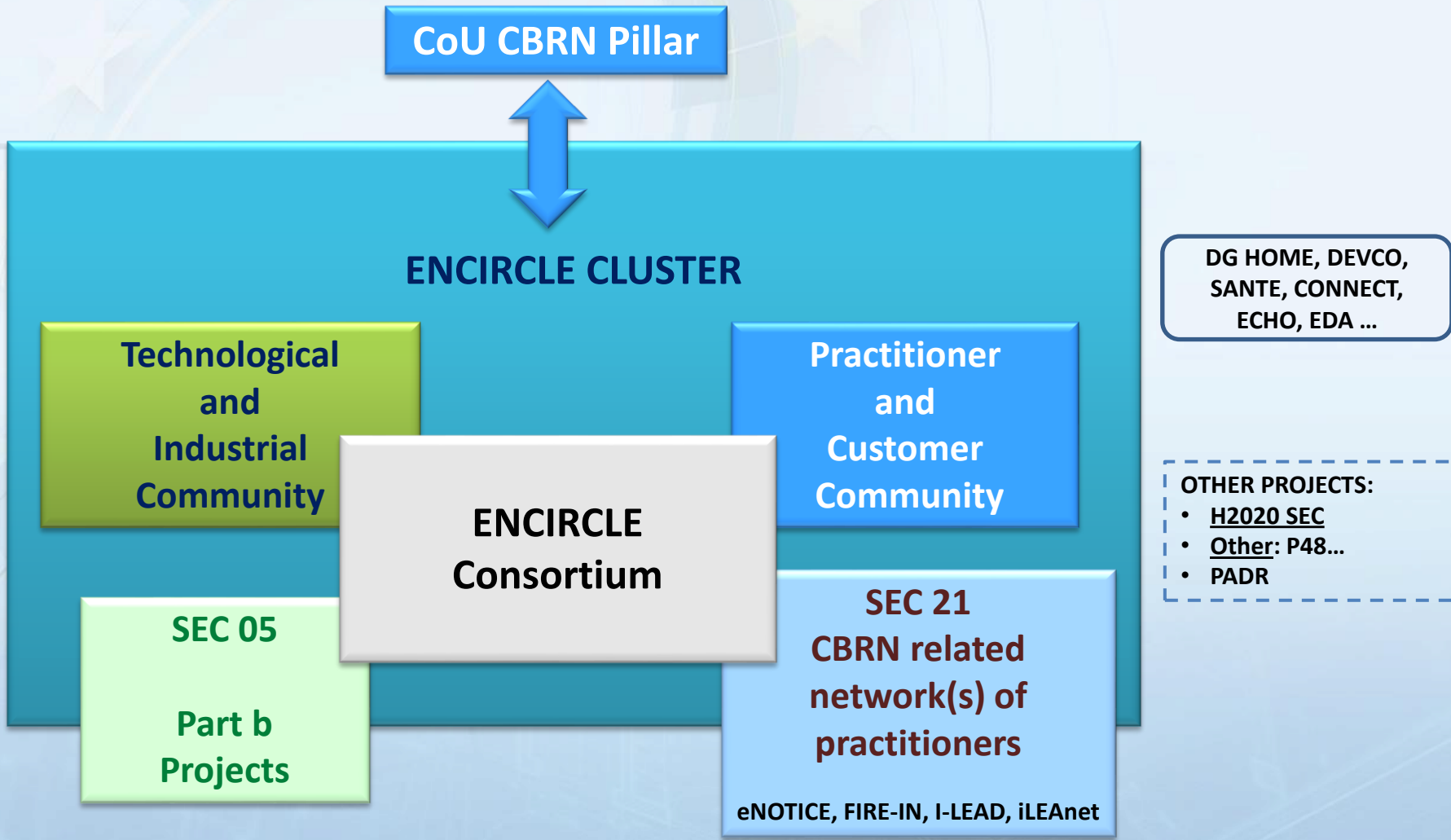
# ENCIRCLE - Scope



# ENCIRCLE Top Objectives



# The ENCIRCLE Cluster



# ENCIRCLE Communities

**Practitioners and  
Customers**

**Industrial and  
Technological**

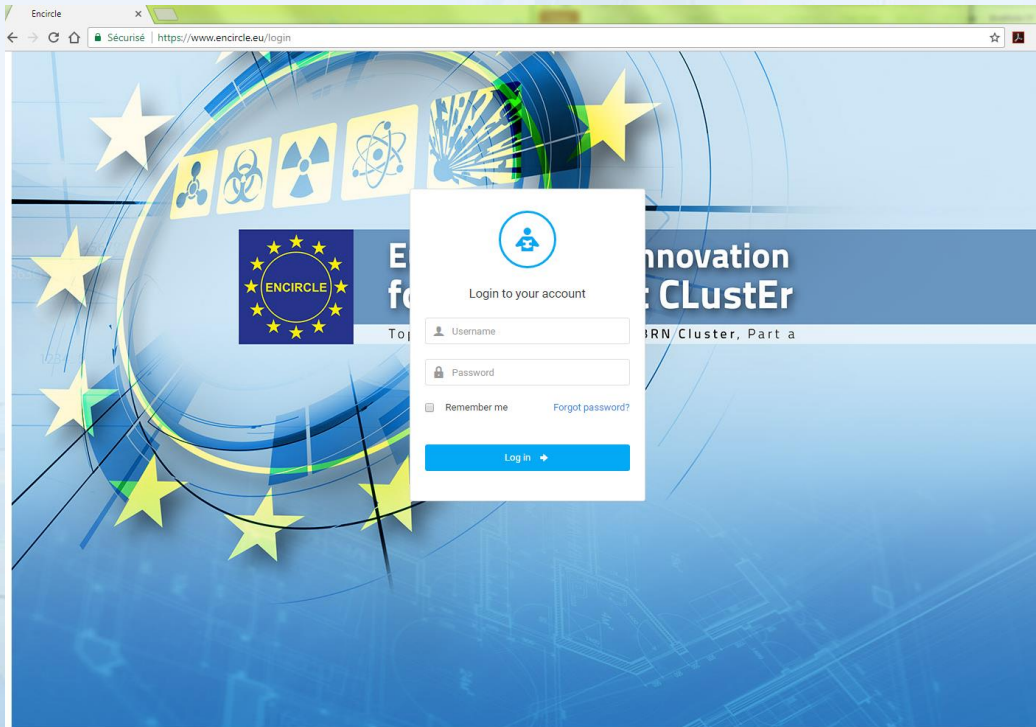
**State of the art assessment  
Policy and Procurement  
Market Development and Services  
Feedback on the catalogue  
Awareness on products' availability**

**Promote products and services  
Networking and integration  
Access to potential customers  
Link with practitioners and ENCIRCLE  
partners**

# ENCIRCLE - Dynamic catalog

- The ENCIRCLE Dynamic Catalogue is a web portal accessible at :

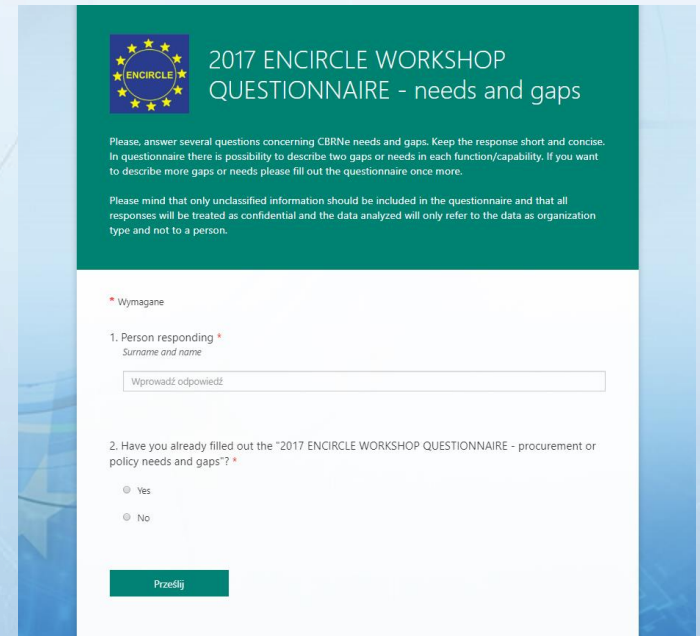
<https://www.encircle.eu/>




(databases, networks, market place)

# ENCIRCLE - Market and Business

- Rolling survey via ENCIRCLE website <http://encircle-cbrn.eu/>
  - CBRN End User organisations
  - Industrial and academic organisations involved in the development and/or production of CBRN capabilities, goods and services,
  - Procurement organisations involved in the acquisition of CBRN capabilities, goods and/or services.
- Currently, 3 questionnaires are available
  - CBRNe needs and gaps
  - Policy needs and gaps
  - Procurement



 2017 ENCIRCLE WORKSHOP  
QUESTIONNAIRE - needs and gaps

Please, answer several questions concerning CBRNe needs and gaps. Keep the response short and concise. In questionnaire there is possibility to describe two gaps or needs in each function/capability. If you want to describe more gaps or needs please fill out the questionnaire once more.

Please mind that only unclassified information should be included in the questionnaire and that all responses will be treated as confidential and the data analyzed will only refer to the data as organization type and not to a person.

\* Wymagane

1. Person responding \*  
Surname and name

2. Have you already filled out the "2017 ENCIRCLE WORKSHOP QUESTIONNAIRE - procurement or policy needs and gaps"? \*

Yes

No



# ENCIRCLE and SEC 05 part b) RIAs

- ENCIRCLE provide a list of technologies that needs to be developed, updated yearly → open for the future SEC 05 part b calls on the Research Executive Agency (REA) website

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Function	Description	Phase in security cycle				Field				Priority	ENCIRCLE TECHNOLOGY NEEDS	Tool Requirements	
		Prev	Prep	Resp	Rec	C	B	RN	Med				Desc
Risk Reduction	Too little research/ identification of improvised CBRNE devices and production facilities.	X				X	X	X	X		L		
Protection	Lack of ordinary working suit for daily-use, including embedded detectors.			X	X	X	X	X	X		H		
	Lack of standardised or universal and multifunctional (with integrated sensor systems) PPE, that is not heavy and bulky. Lack of respiratory protection, with an extended range of protection from toxic agents.			X	X	X	X	X	X		H	Find the optimum balance between comfort, systems integration and protection of PPE (standardised, light – for longer use –; usable also at high outside temperatures, and including communication, localisation devices and sensors); a) Respiratory protection system with an improved sound quality for communication; b) Gloves that allow to use touch screen devices and buttons; c) Protective suits against general toxic threats (with no changing of air filters).	Respiratory protections to first responders that can protect towards a range of toxic agents. Standard and multifunctional, light, non-bulky and easily manoeuvrable PPE. Additional features should include: end of filter life, rail mounting, dislosure coatings, novel closings.
Detection	Lack of the ability for fast scanning of large numbers of containers for threatening CBRNe material.	X		X	X	X	X	X	X		H	Lack of the ability for fast scanning of large numbers of containers for threatening CBRNe material.	
	Insufficient equipment for estimation of contamination. Lack of instant scanning, single or multipurpose detectors, which are fast, sensitive, robust, reliable, affordable, handheld and which do not disturb business continuity when applied in the prevention or preparedness phase. Needs to detect a large spectrum of detectable agents, and detect degree of hazard and residual, post decon, contamination. Must produce less false positive results.	X		X	X	X	X	X	X		H	Insufficient equipment for estimation of contamination. Lack of instant scanning, single or multipurpose detectors, which are fast, sensitive, robust, reliable, affordable, handheld and which do not disturb business continuity when applied in the prevention or preparedness phase. Needs to detect a large spectrum of detectable agents, and detect degree of hazard and residual, post decon, contamination. Must produce less false positive results.	
	A general lack of accurate and instantaneous detection equipment and technologies for search and detection (also a gap between commercially available instruments and those			X	X	X	X	X	X		L	Quick detection of the presence of contaminating agent (without need of immediate identification).	Further development and improvement of RN detection systems. Important issues are: reduction of weight, natural background rejection, improvement of sensitivity, capability of interconnectivity between sensors, integrated navigation, data-log.

- ENCIRCLE signed a “draft *Collaboration Agreement*” with all the 13 SEC 05 Part B Research and Innovation Actions (RIA) proposals submitted in response to the 2017 call (indicative total budget: 13.75 M€).

- ENCIRCLE will organize yearly workshops
- Current workshop is the first ENCIRCLE workshop:
  - Dedicated to the Practitioner and Customer Community
  - **Needs and Gaps** (4 thematic groups)
    - Protection
    - Detection and Identification
    - Decontamination
    - Situation Awareness
  - **CBRNe Policy and Procurement**
- Next : 2018 - Technological and Industrial Community dedicated workshop

## **ENCIRCLE Project Coordinator**

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## **ENCIRCLE**

### **Practitioners and Customers Community**

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## **ENCIRCLE**

### **Technological and Industrial Community**

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## **ENCIRCLE**

### **Dynamic Catalogue**

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