# International CBRNE Institute (ICI)

International Non Profit Organization (INPO)



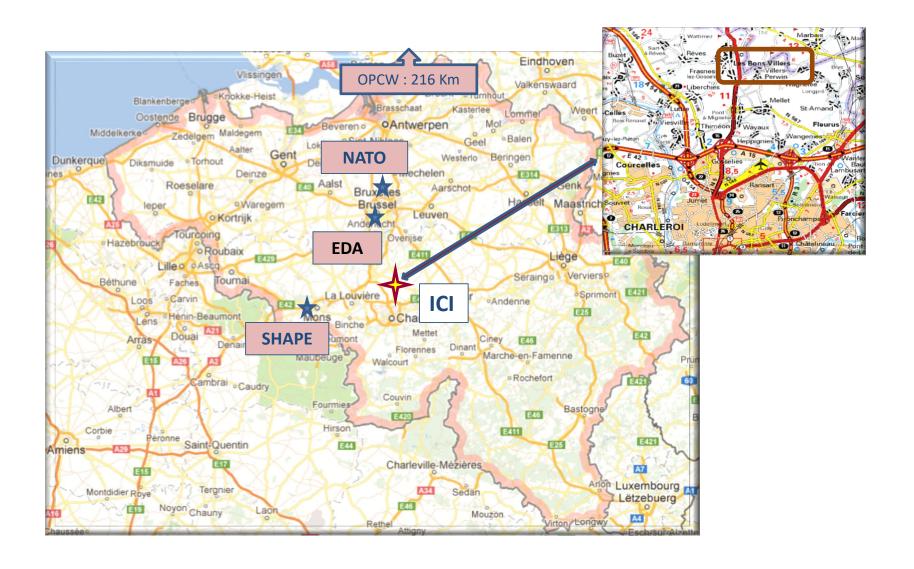


## Historical Background

The International CBRNE Institute (ICI) was established in partnership with the municipality of Les Bons Villers, Belgium. The Royal Decree incorporating the ICI, as an independent International Non-Profit Organization, was granted on 30 August 2013

The ICI was officially inaugurated on 5 October 2013 by Ms. Agnes Marcaillou (Director of the United Nations Mine Action Service (UNMAS)), Mr. Wart (Mayor Les Bons Villers), Mr. Mattmann (CEO HZS) and Mr. Dubucq (Managing Director ICI)

## LOCATION: Les Bons Villers BELGIUM



## ICI KC's Expertise









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### **ER-KC KNOWLEDGE CENTER**

- The Manager of E-KC
- **ER-KC Structure**
- **ER-KC Vision**
- **CBRN Collaborations & Partnerships**
- **CBRNE-related workshop**
- **CBRN Publications**
- **CBRN** Educational materials

**BOARD OF DIRECTORS** & MANAGING **DIRECTOR** 

### SECRETARIAT

- **Managing Director**
- Manager ERKC
- **Manager CBRNKC**
- **Administrator**

**CBRN-KC** 

**CBRN Knowledge** 

Manager

Center

**Oteering Committee** 

**Explosives knowledge Center** 

**ER-KC** 

Manager **Steering Committee** 





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The Knowledge Centre refers to a **network** of experts and CBRN-E organizations (e.g. universities, companies, NPOs) collaborating together to pursue excellence in a number of areas of CBRN-E matters, Counter Explosive Hazards (C-EH)

The E-KC vision will be materialized via respective Task Forces (TF) as follows:

TF 1: Technology Watch and Shared R&D

TF 2: Validation and European Standards

TF 3: Training and Risk Education

TF 4: Meeting the C-EH Practitioners' Requirements

**TF 5: Countering specific Threats** 







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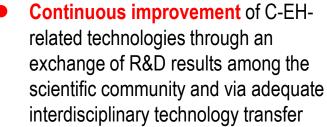
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### TASK FORCE 1

### Technology Watch and Share R&D



- Share **expertise** and particularly research through dedicated workshops, in close cooperation with the GICHD, NATO COE, EDA and other stakeholders (ECSA, IMEKO, CLAWAR, SED)
- Monitor the developed tools and prepare their validation and their wider implementation













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#### **EXAMPLE for ITA MoD - MINERVA is a**

vehicle-mounted ground penetrating radar (GPR) sensor for counter-IED and mine route clearance. It is a product of IDS's past experience in developing and manufacturing market leading GPR systems and its expertise CBRN Collaborations & Partnerships in radar systems and antenna design. It uses from one to four modular antenna arrays to produce radar images of the subsoil, from 2D images to complex real-time high resolution 3D tomography.

> **IDS Company**: The IDS group employs >400 full time professiona in Italy and over 100 specialized professionals overseas. Contact: https://www.idscorporation.com/safe ty-protection-systems/







Contact: Ms Luigia NUZZO (I.nuzzo@idscorporation.com)



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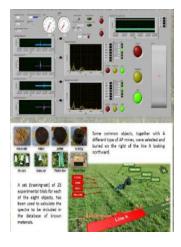
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### **TASK FORCE 2**

### Validation and European **Standards**

- Promote EU-wide standards of relevant counter Explosives hazards technologies, tests and evaluations of related equipment
  - Maintain a dedicated permanent labspace for baseline testing of performance and suggest appropriate test areas for field testing
- Suggest and validate new/improved testing procedures, in cooperation with ICI, NATO, HCR-CTRO, the European Defense Agency, the **European Committee for** Standardization (CEN), ECSA and others
- Pursue (or propose/extend) new CEN workshop agreements initiated by the FP7 Projects or initiated under the current Horizon 2020 projects









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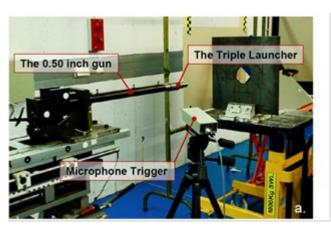
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EXAMPLE. PPE (Hotzonesolutions/RMA)

The assessment of the resistance of a material under near simultaneous multiple impacts, as in a case of the fragmentation generated by IED explosion, can be roughly described by single ballistic impact tests. Therefore the Department of Weapon Systems and Ballistics of the RMA, has developed a technique that takes into account the interactions of multiple near simultaneous impacts, within certain space. STANAG 2920







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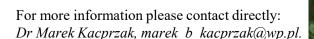
### **TASK FORCE 3**

### Training and Risk **Education**

- Develop **survey** (prediction, prevention, detection)
- Offer advanced multinational counter Explosives Hazards courses and related training
- Provide risk-education tools for countering Explosives hazards practitioners
- **EXAMPLES:**

Computer game for school children education on mine /IED risk (IMM)

https://youtu.be/GRcpXNJB63Y





Billy Goat radio is a Risk Education (RE) tool allowing operators living in mine and other explosive affected areas to produce short educational serial dramas which will be broadcast by radio and performed live by a team of local actors travelling through the interested region. Contact: E. Cepolina patfordemining@gmail.com







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#### TASK FORCE 4

**Meeting the C-EH Practitioners' Requirements** 

- Support comprehensive and integrated use of Information Management Systems (IMS) as requested by end users
- **Realisation of synergies** between all Centres focusing on **Counter Explosive Hazards in** view of the Systems and Security challenges of the **European Union**
- Close cooperation with practitioners in the field of **Counter Terrorist activities and** the European Corporate **Security Associations (ECSA)**
- **Participatory Analysis of C-EH** Requirements







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#### **TASK FORCE 4**

### **Meeting the C-EH Practitioners' Requirements**

#### T-AIDSS(HCR-CTRO)/T-IMS (SITE)

The migration of persons towards Europe produces new problems and challenges in many domains in several EU countries, while only in Croatia this phenomenon is linked with mine action. Croatia has border long 2374 km, whereas to Bosnia and Herzegovina 1011, 4 km, to Serbia 317,6 km and to Monte Negro 22,6 km.

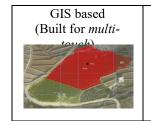




milan.bajic1@gmail.com Scientific Council and MS Nikola Pavković, nikola.pavkovic@ctro.hr



INFORMATION: Torsten Vikström info@sitescandinavia.se



Ordnance database (Up to ~5000 objects)



UAS/UAV imagery







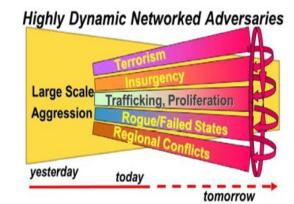
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## **TASK FORCE 5 Countering Threats**

- **Support training of** practitioners in the domain of CBRNE **Dertection**
- (together with CBRN-KC)
- **Improve Sensory** and Management



**Current EC Proposal RAPID** 

**RAPID ACCURATE PATHOGEN INTEGRATED DETECTION** 



### **Knowledge CENTERS-PARTNERS**

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### **Our Competences**

- $\overline{\mathbf{V}}$ The ICI KC aims to be a well of CBRNE professionals where national and international bodies or organizations can find solutions to occurring CBRNE problems they are facing.
- $\square$ KC would address topics from crisis/consequence management to scientific issues, emergency planning, or technological challenges and development.
- $\overline{\mathbf{V}}$ KC members are high-level professionals from all backgrounds (international organizations, armed forces, first responder community, scientists, equipment providers, etc.) ready to assist, inform and advise on best practices about CBRNE matters.
- ER-KC Possibility to be designated as an expert on request for incidents involving C-EH matters (national, international), including **Humanitarian/Military Demining operations**
- Access to the C-EH database of professionals in all C-EH matters and networking with other professionals within the C-EH community;
- Possibility to publish your own publications on the ICI website of the KC community and IMEKO TC17 ACTA
  - Access to publications on **testing** of C-EH (CTRO-HR) materials; Updates on **future** CBRN-E conferences, seminars and workshops
  - **Privileged Participation conditions to International ICI** WORKSHOPS (ISMCR'2018, RISE 2019, ISMCR 2019 Houston)

## Planned activities in 2019

- Dutch Coy: Basic 2 days; 4-5 Jan
- Oman academy January, 1 week
- AFIU La Marlagne Congrès annuel Infirmier, 05 Feb
- ❖ IDEX Abu Dhabi: International Exhibition and Conference 2019 17th Feb 21st Feb 2019
- DTRA USA February, 2 weeks
- ❖ ICI International conference on Robotics MPPM 01 03 April
- OPCW: April, 1 week
- Department of State USA April/May, 2 weeks
- Dubrovnik Croatia: 16th International Symposium Mine Action 2019; 08-11 April (NATO SfP Biosensing project)
- Kuwait, Chemical Defense: May to June 2019, 8 weeks
- HUY Belgium ; Symposium de médecine critique 10 May
- NANTE France; International CBRN Conference 20- 23 May
- NCT event June 2019
- Benin-Cameroun CBRNE Information (European CoE Africa)
- UAE presidential guard, July/August, 4 weeks
- ❖ ISMCR 2019 20-21 Sep 2019 Houston USA
- Saudis Royal Guard: September, 4 weeks
- MALMÖ Sweden:13th International CBRNe Protection Symposium 24-26 Sep
- UAE CDC, basic training TBD, 2 weeks
- RIVM (Dutch) 1 week, TBD
- Courses for urgentist: 3 x Level 2/trimester (1 day)
- ❖ 1 x Level 3/trimester (3 days)

