

Edition 9, October 2021

Welcome to the latest newsletter of EXERTER, an EU Funded H2020 project. EXERTER commenced in May 2018 and is a five year project which seeks to connect practitioners into a pan-European network of explosives specialists.

Message from the Project Coordinator

EXERTER is looking back at a year filled with different virtual events; conference, webinars and workshops. In this newsletter you can read more about the latest webinar on standardisation within the security field, and also about our upcoming virtual workshop on exploitation.

For the coming year we will again be able to combine virtual and physical events, and for this period the EXERTER network will highlight an interesting and very relevant theme: Criminal use of explosives. During the coming winter and spring there will be webinars and a physical conference devoted to discussing issues related to that, giving us all a chance to raise issues we think are important and share information between us within the network.

The connection between different actors, such as academia, law enforcement, research and manufacturers, will also be emphasised through activities during the coming period. We hope that you will all join us to make these activities lively and fruitful!

EXERTER Workshop "From the lab to the client"

EXERTER is organizing a second On-line Workshop scheduled on December 1, 2021, "From the lab to the client", that will deal with the process of bringing innovations into the market. The overall purpose of this Workshop is getting the Security of Explosives' sector companies together to share their experiences related to turning their innovations into successful products. We will also have a debate on innovation business models and which actions should our regulators undertake to make Europe more attractive for cutting edge companies.

It shares a common ground with EXERTER's On-line Workshop on standardization that took place on October 5, but it covers the whole innovation loop from the inception of something new until it turns into a successful product on the market. It deals too with our current business environment, where EU's research and innovation programmes are meant to be a game changer by supporting industry and innovations to remain competitive in the current world stage.

The workshop will start with presentations to set the scene form a 360° perspective, ranging from companies' strategies to endure market challenges and leverage opportunities, to clients' demand and public funding. Then, business cases in the SoE sector will be presented to illustrate the key of some of our innovative companies' success. At the end of these presentations, there will be an opportunity for all attendees and speakers to have a discussion and, to share what they learnt from their particular experiences and to discuss their insights on what our governments and regulators should do to better support innovations. Please keep an eye out for the email with further details



For more information visit: www.exerter-h2020.eu This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no.786805



EXERTER Year Four Scenario National Workshops

In each year of the EXERTER project, a set of scenarios are defined to to focus the discussions on selected topics in the field of security of explosives. The work then evolves around: review of research initiatives, looking at standardisation and certification, market screening and evolution of threats. The scenarios encourage the inclusion of variations and emerging or future threats in a way that opens up discussions on requirements, gaps, other factors which can impact on society and LEAs required to prevent, detect, mitigate or react to the illegal use of IEDs. As indicated in the previous newsletter the EXERTER Year Four is exploring the illegal use of IEDs for the purposes of criminality, for example, attacks on ATM to aid the theft of cash.

As with last year, due to current COVID-19 challenges the EXERTER workshops will be hosted nationally by project partners., which will allow experts within the national context to contribute to progress by discussing requirements, needs, issues, based on sharing knowledge and experiences of such threats. It offers an opportunity to think and ask the relevant questions and contribute to the development of the work undertaken by EXERTER during Year 4.and the wider European perspective.

You should receive more information and an invite from the EXERTER partner responsible in your country.

EXERTER Interactive Workshop on Standardisation

On the 5th October 2021, the EXERTER team organised an interactive webinar titled "Is standardization an enabler for exploitation of innovations in security against explosives?"

A number of very informative presentations paved the way for interactive breakout sessions, with lively discussions and the opportunity to engage in networking between the 67 participants.

TNO kicked-off with an overview of the FP7 program HECTOS, setting the scene of standardisation in security and outlining the developed roadmaps. A UK speaker introduced the UK perspective on the complex landscape of standardisation in security and the need for a nuanced approach. It was followed by presentation from the Defence Forces Ireland stressing the importance of standardisation in the fields of Common Operational Systems and Standard Operating Procedures.

The second block of presentations focussed on specific topics. An expert from the Dutch Coordinator for Counterterrorism and Security outlined the current practice of standardisation and testing of explosive detection equipment for aviation security in the EU, including the framework of the ECAC Common Evaluation Program. It touched on the importance of a Common Testing Methodology and Routine Testing. The European Organisation for Security (EOS) then had a very interesting presentation on the role of standardisation in innovation, connecting the need for standardisation to the Technical Readiness Level (TRL) of the development, where at low TRLs, standards may inhibit standardisation, whereas at high TRLs, they are a necessity.

ICTS gave a presentation on standardisation in the field of Explosive Detection Dogs, arguing that standards link together stakeholders, but semantics also matter in this field, to properly understand each other. The UK Defence Science and Technology Laboratory (DSTL) went into detail on the use of simulants in testing, addressing the pros and cons of their use. The final presentation was from Aalbers Wico guiding us through the field of explosion resistant structures and the applicable standards. Interesting were the examples of apparent contractional requirements for safety and security and how to cope with that with innovative solutions.

During the breakout sessions, there was an opportunity to consider and discuss the presentations, and debate several questions concerning standardisation. The findings were presented during the wrap up session and will be analysed further by EXERTER.

As EXERTER organising team we look back on an informative and successful event!

INHERIT

INHibitors, Explosives and pRecursors InvesTigation

The threat of homemade explosives is high, as demonstrated by multiple terrorist attacks throughout the EU. While restricting access and detecting precursor materials is top priority, there is no universal approach to keep a terrorist from using them. In this context, the EU-funded INHERIT project will develop a multidisciplinary approach to intervene across numerous stages of the terrorism timeline with a focus on explosive precursor chemicals including identification of new precursors. Specifically, it will develop technologies to render chemicals inert, more readily detectable and capable of yielding greater forensic value. The aim will be to make it impossible for terrorists to exploit these materials for the production of explosives.

| INH | ERIT | has | assemb | oled | а | mult | i-faceted | team | with | | experie | nce | of | all | aspects |
|-----|------|-----|--------|------|----|------|-----------|--------|------|---|---------|------|-------|-----|-----------|
| of | four | imp | ortant | step |)S | for | counter- | measur | es i | n | the | terr | orisi | m | timeline. |

| Intention Planning Precursor acquisition HME preparation IED transportation | Target infiltration | Execution | Post-attack | Exploitation |
|--|------------------------|-----------|-------------|--------------|
|--|------------------------|-----------|-------------|--------------|

With a focus on explosive precursor chemicals, the team will work to develop technologies directed towards thwarting the ability of terrorists to exploit these materials for production of explosives. Methodologies to render chemicals inert, more readily detectable and capable of yielding greater pre-forensic value will all be pursued. Collaboration between the diverse teams developing these interventions will ensure a coordinated holistic approach across all threat materials identified. A systematic evaluation of the countermeasures will also be addressed. This holistic approach will also be applicable in the struggle against emerging and future HME threats.

The EU precursor legislation is an example of the first step in disruption of the timeline. This action serves to restrict the availability of a precursor, either by a ban, a concentration limit, or through requested reporting of suspicious transaction to authorities. Mandating dilution of a precursor, or reporting requirements of its purchase, allows for normal use, while disrupting illicit application. Despite existing precursor restrictions, HMEs can be made from consumer products. Therefore, INHERIT will work with inhibition research for the purpose to prevent and predict manufacturing of HMEs, develop better methods for precursor detection and forensics. This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 101021330.

INHERIT started June 1 2021 and will end by May 2024.

The consortium:



Networking & Events

EXERTER Events

EXERTER Interactive Workshop 1st December 2021 - Time and registration details to be confirmed. *"From the lab to the client"*

EXERTER Annual stakeholder workshop Autumn 2021 - Dates and Venues of national workshops to be confirmed and subject to ongoing COVID-19 restrictions.

Other Related Events

FEINDEF '21 - International Defence and Security Exhibition - 3rd-5th November 2021 Madrid, Spain https://www.feindef.com/eng/

FULMINATION 2022 - 4-6th April 2022 Reading, UK https://iexpe.org/event/fulmination-2022/

EFEE World Conference on Explosives and Blasting - 15-17th May 2022 Maastricht, Netherlands https://efee2022.com/

Forensics Europe Expo - 8-9th June 2022 London, UK https://forensicseuropeexpo.com/

International Security Expo - 27th-28th September 2022 London, UK https://www.internationalsecurityexpo.com/welcome

EXERTER End User and Expert Community

EXERTER End user and Expert Community (EEC) is important to the network, in order to give valuable input to scenarios, requirements, evaluations and upcoming threats.

It consists of practitioners, academia, research institutes, industry and policy makers. If you are interested in becoming a member of the EEC, or are aware of some- one who would benefit in participating in EXERTER, please contact the Project Coordinator. Alternatively if you only wish to receive regular information and updates on the project you can get this through visiting the website and the project news- letter. Please contact the Project Coordinator to be added to the project mailing list. **Facts & Figures**

Project duration: 01/06/2019 - 31/05/2023

Budget: € 3 498 868.75

Contact

If you wish to find out more, are interested in our End user and Expert community or wish to receive the EXERTER Newsletter with updates of the project, please contact us:

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Partners

