



# **Technical discussion**

## **« explosive detection »**

Participants: manufacturers (6) , end-users (2), experts (8)

# TECHNICAL DISCUSSION

## « Explosive detection »



### Technical discussion on some generic questions

- Specific issues of testing related to the threat?
  - Link scenarios with tests protocols
  - Manufacturers need adapted facilities to assess their equipment, with real explosives (not only simulants)
  - Focus on liquid explosives and their components (duty free products, shampoo, parfumes,... : tests are needed to indentify) characterize them.
  - Difficulty to characterize new explosives (lot of tests, few facilities able to do that)

# TECHNICAL DISCUSSION

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- Availability of standard protocols for testing (incl. operational tests)?

### Tasks of the group :

- Establish the list of available standards and protocols, send it around to be upgraded by participants
- Identify who can do what (list of the labs and their capabilities) and which standard to follow or to create.

Necessity to have graduated tests (e.g. A : threshold level, B : statistical tests, C : tests field) related to the detection capability of equipments

ECAC protocols and threat list (restricted information)

Manufacturers have difficulties to obtain these protocols, threat list, tests results.

# TECHNICAL DISCUSSION

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- Where you get the agents necessary for testing detectors?

Simulants are good for early stages of tests but after we need real explosive  
Simulants used for a technology are not appropriate for another one (e.g X-ray, IMS, neutron activation...)

It's more complicated for home made explosive

List of simulants would be helpful for each family of detectors (or technology)

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- Do we need harmonization / standardization of testing, how could it work? (e.g. inter comparison exercises?)

**Yes we need !**

**Example of standard for mm wave imaging system :  
Industry Wireless Packaging Consortium (IWPC)**

**Manufacturing of samples**

**1st level : need of standard for lab test**

**2nd level : no need of standard, just a check-list to be sure that the requirements are reached (environment parameters, performances, handling, human factors)**

**Inter comparison exercises :**

**Yes we need !**

**Need of reference basic samples**

**Starting tests with simulants and then if good results, continue on real explosives**

**Difficulties : cost transportation, security**