TERMS OF REFERENCE

for the technical working group supporting a voluntary scheme for EU performance requirements of threat-detection equipment used to protect public spaces (‘Technical working group on detection performance requirements’)

1. Introduction

Threat detection equipment is used in a wide range of sectors, including — but not limited to — law enforcement, border security, customs, post services, transport, prisons, government buildings and large sports / entertainment events. Despite the enormous market, however, there are no harmonised European performance requirements or test methods for detection equipment outside areas where aviation standards apply. Consequently, the equipment used in public areas can be of unknown and varying efficacy.

This technical working group (TWG) aims to address this shortcoming. It supports a voluntary scheme for performance requirements of detection equipment used in public spaces outside areas where aviation standards apply. It is tasked with implementing the practical steps towards defining harmonised performance requirements of the detection equipment and related verification mechanisms.

The scheme aims at setting up a system whereby the conformity of detection equipment to performance requirements will be assessed by an independent EU-based testing entity using a standardised EU testing protocol, thus maximising reassurance in the performance of detection equipment. Since the setting up of such systems takes time, self-declarations of preliminary conformity by manufacturers will be possible as an intermediate step to yield results in a timely manner.

The scheme is open to all interested manufacturers of detection equipment who are willing to test the equipment they make available in the EU against an agreed level of performance. Ultimately, the Commission wishes that a large majority of the detection manufacturers will participate in this scheme, thus raising the bar across the sector.

It is anticipated that this voluntary scheme will contribute to the protection of public spaces and to the wider efforts to improve the detection and prevention of chemical, biological, radiological, nuclear and explosives incidents. It will in particular help the operators of public spaces that are considering the use of detection equipment to identify the appropriate equipment. At the same time, it will bring more clarity for industry about the threats that their equipment should be able to detect.

2. Scope

In the field of aviation security, standards and procedures for the testing of detection equipment already exist. The work of the technical working group is without prejudice to these standards and procedures which remain unaffected by it. The group aims at elaborating requirements and procedures for the testing of detection equipment where those for aviation are not applied.

1 Requirements for the equipment used in aviation context are defined in EU Regulation 300/2008 and related implementing legislation. There are no agreed requirements for the equipment used in public spaces outside aviation.
As a starting point, five most common types of detection equipment used in public spaces will be discussed by the group, as outlined in section 5.1 (hand-held detectors for explosives and chemicals, conventional x-ray, walk through metal detector, hand held metal detector, explosive trace detection equipment).

The equipment for which requirements will be discussed must be commercially available in the European Union and legal for use by law enforcement, public authorities such as border security and customs, and other public and private operators including – but not limited to – post services, transport, prisons, government buildings and large sports/entertainment events. As the discussions of the technical working group should not preclude innovation and the availability of new types of detection equipment, the scope of the discussions may be reviewed at a later stage to include other types of equipment (taking into account the availability of resources necessary to carry out the related technical work).

3. Definitions

For the purpose of the work of the TWG:

- ‘Detection equipment’ refers to the security equipment used in public spaces outside aviation as part of broader security measures, and aiming to detect different types of threats (such as x-ray or metal detectors).

- ‘Performance requirements’ relate to the required detection capabilities of the equipment to identify, detect, or localise different types of threats (such as size and shape of objects for walk-through metal detectors and x-ray equipment, image quality for x-ray equipment, detection rates and false alarm rates of a range of threats for explosive trace detection and handheld devices, etc.). Performance requirements will be defined as part of the voluntary scheme.

- ‘Standardised EU testing protocols’ refer to the methodology to demonstrate that detection equipment conforms to performance requirements. The protocols will be developed as part of the voluntary scheme.

- ‘Self-declaration of preliminary conformity’ is a declaration of conformity to performance requirements issued by the manufacturer based on the manufacturer’s own methodology and not (yet) confirmed by testing using a standardised EU testing protocol.

- ‘Declaration of conformity’ is a declaration of conformity to performance requirements issued by the manufacturer and which is supported by testing according to the standardised EU testing protocol. The testing is carried out by an independent EU-based testing entity or, in some well-defined cases, by a manufacturer.

4. General principles

The TWG adheres to the following principles:

4.1. Openness of participation

The TWG is open for participation to all EU Member States, manufacturers of threat-detection equipment, technical laboratories that are competent in testing this equipment, and professional associations representing these industries, which meet the conditions laid out in the group’s Rules of procedure.
4.2. Transparency
The TWG will be organised transparently and implement actions in a concerted and cooperative way, involving open exchanges between all members. A website will be administered by DG HOME in order to communicate to the general public:

- general information about the TWG
- the rules of procedure and terms of reference of the TWG
- an up-to-date list of the members of the TWG.

4.3. Information sharing
The work of the TWG may require the handling of EU classified information. When this is the case, members must comply with the following requirements:

- originate from within the EU or a third state that has an agreement with the EU under which EU classified information may be exchanged; and
- be in possession of valid EU issued security clearance (or third country issued security clearance recognised by an EU Member State) and comply with EU legislation related to the handling of EU classified information\(^2\).

4.4. Involvement of operators of public spaces
To ensure that the perspective of equipment end-users is taken into account, the work of the TWG will be regularly brought to the attention of the operators of public spaces.

To this end, the EU Operators’ forum established by DG HOME (forum regrouping public authorities and private operators, created in the framework of the EU action plan to support the protection of public spaces) will be kept regularly informed. Where relevant, the forum will be consulted on the proposals related to the voluntary scheme.

5. Commitment to support a voluntary scheme for EU performance requirements of threat-detection equipment used to protect public spaces
The members of the TWG commit to working together with each other, the European Commission services, the observers from the EU Public spaces Operators’ forum, and possible others:

- to contribute, as relevant, to the development of a set of performance requirements for the most frequently used detection equipment and to contribute, as relevant, to the development of the standardised EU testing protocols.

Manufacturers of detection equipment also commit, subject to the satisfactory completion of the work described in previous paragraph:

- to test whether their equipment conforms to the performance requirements (based on their own methodology, and once available, based on the standardised EU testing protocols); and

- to inform the Commission thereof via declarations and report the results of their performance verifications.

5.1 Tasks

5.1.1. Definition of performance requirements

- The performance requirements will be developed for the detection equipment categories listed in the Annex to these terms or reference. [Repeated here for ease of reading: hand-held detectors for explosives and chemicals, conventional x-ray (single and multi-view), walk through metal detector, hand held metal detector, and explosive trace detection equipment.]

- In parallel to the development of performance requirements, the technical working group will define a template and minimum contents for the self-declarations of preliminary conformity that will be issued by manufacturers.

5.1.2. Self-declarations of preliminary conformity

- Once the performance requirements for a category of equipment are defined, the manufacturers will be invited to submit to the Commission services a self-declaration of preliminary conformity, based on the template already developed by the technical working group, informing that their equipment conforms to the performance requirements (based on their own methodology) and accompanying a test report.

- The Commission services will carry out basic assessment of the submitted self-declarations (such as information related to the company, or reasonability of product claims). The experts of interested EU Member States and independent EU-based testing entities may be consulted during this step.

5.1.3. Definition of standardised EU testing protocols

- The standardised EU testing protocols will be developed for the detection equipment categories listed in the Annex to these terms of reference. [Repeated here for ease of

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3 Declarations will be available to the TWG. Individual testing reports, on the other hand, will not be disclosed to other manufacturers; these will only be made available to the Commission and experts of interested EU Member States.
reading: hand-held detectors for explosives and chemicals, and conventional x-ray (single and multi-view).}.

5.1.4. Declarations of conformity

- Once the standardised EU testing protocol for a category of equipment is defined, the manufacturers will be invited to demonstrate that their equipment conforms to the performance requirements (using the standardised EU testing protocol).

- As a general rule, tests will be carried out by independent EU-based testing entities that are independent third parties and that are equipped and competent to test according to the standardised EU tests in a reasonable period of time.

- Depending on the requirements and testing protocol, the testing may exceptionally be performed by manufacturers themselves for certain equipment or for certain aspects thereof. In these cases, the testing must be impartial, objectively verifiable, independent from commercial activities, technically competent and in line with the standardised EU testing protocol.

- The Commission services will support the coordination the testing activities.

- When equipment demonstrates conformity with performance requirements using the standardised EU testing protocol, the manufacturers will then submit to the Commission services a **declaration of conformity** of their equipment, accompanied by a test report.

- The Commission services will carry out basic assessment of the received documentation (such as information related to the company, or reasonability of product claims). The experts of interested EU Member States and representatives of independent EU-based testing entities may be asked to express their opinion during this step.

5.2. New Technologies

The Commission welcomes the development of new technologies that can improve threat detection and facilitation in the protection of public spaces. Therefore, innovative technologies or processes involving one or more technologies may be considered for addition to the EU “preliminary list of equipment” after a review process.

The review process will take place after the new technology has been subjected to operational trials in public spaces and the performance data from such trials demonstrate potential of improved or equivalent detection performance to other types of technologies already listed on EU “preliminary list of equipment”.

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4 As a starting point, the standardised EU testing protocols will be developed only for two types of equipment. Depending on the feedback / practical experience with implementation of the voluntary scheme with these two types of equipment, and on the availability of resources necessary to carry out the technical work, the standardised EU testing protocols could be developed for other equipment categories.
The review process will be undertaken by the Commission and be assisted by the technical working group, which will then propose a new recommended technology type and detection parameters for such new technology.
Annex – list of detection equipment covered by the discussions of the technical working group

- The **performance requirements** (cf. section 5.1.1.) will be developed for the following detection equipment categories: **hand-held detectors for explosives and chemicals, conventional x-ray (single and multi-view), walk through metal detector, hand held metal detector, and explosive trace detection equipment.**

- The **standardised EU testing protocols** (cf. section 5.1.3.) will be developed for the following detection equipment categories: **hand-held detectors for explosives and chemicals, and conventional x-ray (single or multi-view).**

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5 As a starting point, the standardised EU testing protocols will be developed only for two types of equipment. Depending on the feedback / practical experience with testing on these two types of equipment, and on the availability of resources necessary to carry out the technical work, the standardised EU testing protocols could be developed for other equipment categories.