Commission communication on the use of security scanners at European airports — questions and answers

The Commission has today adopted a communication on the use of security scanners at European airports. This is a fact-finding report. It is a technical and factual report which assesses the current situation with regard to the use of security scanning technology in terms of detection capacity, and compliance with fundamental rights and health protection. The report is a direct response to a request from the European Parliament for information on this issue so as to provide the basis for an informed discussion.

This represents the **start of a discussion**. It does not prejudge whether there will or will not be any future legislative proposals.

The changed context

Since the failed terrorist attempt on the Amsterdam–Detroit flight on 25 December 2009, Member States are increasingly trialling or using security scanners, for example in the UK, Finland, the Netherlands, France and Italy. Currently this is done under a patchwork of different national operational procedures and standards. The central question, therefore, is if there is a need for EU-wide regulation on the use of scanners or if the status quo — where security scanners fall outside the scope of the EU aviation security framework and are regulated nationally — should remain in place.

The Commission's view

On the basis of this report, the Commission's view is that where Member States decide to authorise security scanners, a common EU-wide framework would be the best way to legally guarantee the uniform application of security rules at all airports and provide strict and mandatory safeguards to ensure compliance with European fundamental rights and health provisions.

The next steps

There will be a first discussion with the European Parliament, when the report is presented to the Transport Committee on 21 June 2010. And a discussion with Ministers at the June 24th Transport Council in Brussels. On the basis of these and other discussions in the coming months, the Commission will decide, with the Council and European Parliament, on the next steps.

Frequently Asked Questions

Does this report give the "green light" for security scanners to be used across the EU?

No. Security scanners are already being trialled or used in five or six Member States in national airports, but under a patchwork of different national rules. The use of security scanners currently falls outside the scope of EU rules on aviation security. The question now is whether they should be included in EU law.

If there is a political will from the European Parliament and Council, then the Commission could go ahead with an impact assessment and a legislative proposal. If there is not that will, then the issue will continue to be regulated at national level.

Bear in mind that, even within an EU framework*, it would always be for each national government to authorise the use of any scanners* or certain types of scanners in their airports.

Do these scanners really provide a value added for security?

Security scanners screen for non-metallic items — including plastic and liquid explosives. They therefore clearly provide an additional security capacity when compared with traditional metal detectors, which by definition screen passengers for metal objects.

Security scanners alone, like any other single security measure, cannot guarantee 100% aviation security. But an increasing number of Member States do want to use them to reinforce security and detection capacity.

On privacy and fundamental rights

There are important privacy and fundamental rights issues which need to be taken into account in the use of security scanners. The reality is that technology has moved on greatly in recent years and this is significant, particularly when it comes to fundamental rights issues and privacy. Today, for example, software exists which does not produce a real body image but only a stick figure. Software exists to allow for remote viewing; to ensure that images are not stored, copied, retrieved and unauthorised access is prevented; and to ensure that any image analysed by a human reviewer is not linked to the identity of a screened person and kept 100% anonymous.

Again, the modalities for the operations of scanners would need to be set out in binding rules.

On health

There are important health considerations which need to be respected with regard to security scanners.

There are different types of scanners which require different limits and procedures — from scanners using thermal radiation (effectively natural body heat) and scanners using millimetre wave technology (used in microwaves and mobile phones) where EU thresholds are already widely applied to low X-ray technology where strict application of Euratom principles and limits are needed with operational procedures to meet health protection standards. Above certain limits X-ray scanners are not suitable for this kind of systematic screening and are simply not permitted for use in aviation security under EU law.

Finally, it is for each Member State to choose to decide if they authorise security scanners in national airports and which type of security scanners.

As part of any EU proposal, the different operational requirements and procedures needed for different types of scanner would be fixed.

Will people have opt outs if they don't want to be scanned? Will I have a choice if I am screened or not?

We are not there yet. A decision has not yet been taken to go ahead with EU-wide rules and operating procedures to cover the use of scanners. As a general rule, passengers are not allowed to opt in or out of security measures at EU airports.

However, if a decision is taken to go ahead with an EU-wide framework for security scanners, then the need for special protection, for example for pregnant women, or any more general considerations with regard to optional use, would be considered at that stage and examined in detail as part of an impact assessment, before any proposal was made.

What happens next?

This report aims to shed light on the key issues and form the basis for an informed discussion on the way forwards. If the political will for a European solution is not there, then the issues will continue to be regulated at national level with different national provisions — i.e. the status quo will continue.

BACKGROUND INFORMATION

1) General

1.1) What are security scanners and how do they work?

"Security scanner" is the generic term commonly used to describe a security screening technology that is capable of detecting objects carried under clothes.

The term "security scanner" covers various scanning technologies, including those based on natural thermal radiation (heat from the body), but the most commonly deployed security scanners use active millimetre wave technology (similar to those used in a microwave), and back scatter (low X-ray) technology (used within strict Euratom limit values and principles).

X-ray transmission technology can be used in scanners to produce images like a medical X-ray. This technology goes easily beyond EU maximum limit values and is therefore not used in aviation security in Europe.

1.2) How do security scanners fit in the aviation security picture?

The most recent attempts to attack aviation (notably the incident that took place on flight NW 253 from Amsterdam to Detroit on 25 December 2009) have reminded us that aviation security faces new types of threats against which the traditional security technologies currently deployed at airports are not fully effective. In this context, security scanners could be an effective means to increase aviation security as they are capable of detecting metallic as well as non-metallic prohibited items, including plastic and liquid explosives, carried in clothes or on the body.

1.3) What are the current rules covering security scanners?

The use of security scanners is not currently regulated at EU level. However, Member States may decide[1] to deploy them:

- as a more stringent measure justified by the security risk prevailing in that Member State (if they are used in addition to EU aviation security measures) — in this regard each Member State may decide if and under what conditions to use security scanners; or
- for a limited period of time (maximum 30 months) under the Member States' right to conduct **trials** of new technical methods or process — in this regard the Commission must first be satisfied that the trialling of the equipment concerned will not negatively affect the overall level of security.

1.4) Why is a European approach needed?

At present the situation in Europe is fragmented as security scanners are deployed only at some airports in some Member States. In addition, their use is not harmonised in terms of operational conditions.

Only a common EU framework would legally guarantee the uniform application of security rules and standards at all EU airports. This is essential to ensure both the highest level of aviation security as well as the best possible protection of EU citizens' fundamental rights and health.

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[1] Regulation (EC) No 300/2008 of the European Parliament and of the Council of 11 March 2008 and its implementing acts lay down measures for the implementation of the common basic standards on aviation security.

1.5) Where are security scanners currently deployed in the EU?

Trials of security scanners for screening passengers were undertaken at Helsinki Vantaa airport in Finland, at London Heathrow airport in the UK and are still ongoing at Manchester airport in the UK, and at Amsterdam Schiphol airport in the Netherlands. Recently France and Italy have also tested this type of equipment. Security scanners are currently deployed as a more stringent measure in the UK. Recently France and Italy have also tested this equipment.

1.6) What is the situation in respect of security scanners in third countries?

The Commission has information that:

- the US currently deploys about 200 security scanners at 41 different airports;
- Canada deploys 15 machines;
- Russia has been using security scanners at airports since 2008 and will continue to deploy them more widely in the future;
- the Australian government declared in February 2010 its intention to introduce security scanners at airports as of next year;
- Switzerland will start a trial in the summer;
- other states are also considering the deployment of security scanners.

2) European Parliament Resolution and Follow-up

2.1) What steps did the Commission take after the European Parliament resolution of 23 October 2008?

Following the European Parliament resolution of 23 October 2008, in which the Commission was requested to verify the impact of aviation security measures and security scanners on human rights, privacy, personal dignity and data protection [2], the Commission has undertaken the following:

- a meeting with stakeholders took place on 12 December 2008;
- a public consultation took place at the turn of 2008/2009, to which approximately 60 stakeholders provided the Commission with information and their opinions on security scanners as technology to be applied in aviation security;
- in 2009 the European Data Protection Supervisor (EDPS), the Article 29 Data Protection Working Party and the Fundamental Rights Agency were consulted;
- several studies and reports on health have been analysed in order to assess the implications related to the use of radiation on health;
- close contact with Member Sates that carried out or are carrying out tests or trials at national airports has been kept in order to receive comprehensive information on their concrete experiences.
- several meetings with manufacturers took place all through 2009 and 2010 in order to better understand the technology used and its developments, the possible remedies to the main concerns and the functioning of the security scanner market;

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[2] The EP Resolution (2008)0521 asked the Commission to: undertake an impact assessment relating to fundamental rights; consult the European Data Protection Supervisor (EDPS), the Article 29 Working Party and the Fundamental Rights Agency (FRA); carry out a scientific and medical assessment of the possible health impact of such technologies; carry out an economic, commercial and cost–benefit impact assessment.

- at international level (in particular with the US, Canada, Australia) technical and operational standards for the deployment of this equipment were intensively discussed.

The Commission has analysed all the available information in its Communication on security scanners, assessing the impact of security scanners in terms of detection, fundamental rights, health, commercial and economic aspects and cost/benefits.

3) Key Issues

Detection performance

3.1) What is the effectiveness of security scanners in terms of detection capability?

Walk-through metal detectors used presently at EU airports do not have any capability to detect liquid or plastic explosives. As proved by several trails carried out in various Member States, security scanners are an additional security means in terms of security performance and detection of both metallic and non-metallic items.

3.2) Could the use of security scanners have avoided the terrorist attempt of 25 December 2009?

Walk-through metal detectors used presently at EU airports do not have any capability to detect liquid or plastic explosives while security scanners can detect both metallic and non-metallic items. Therefore, security scanners increase the detection capability.

Security scanners represent a possible avenue which can be pursued towards the goal of reinforcing Europe's aviation security framework while facilitating travel. International cooperation, technology and enhanced profiling are equally useful tools that can be used to guarantee the security of citizens.

Data protection and privacy

3.3) How is the Commission addressing the issue of data protection and privacy?

As requested by the European Parliament Resolution of 2008, the Commission has consulted with the relevant bodies, such as the European Data Protection Supervisor (EDPS), the Article 29 Data Protection Working Party and the Fundamental Rights Agency.

It is clear that any intrusion in passengers' privacy must be proportionate and well justified, which implies a careful assessment. Adopted measures must be limited to the minimum necessary to meet an identified threat risk.

This screening method offers the possibility to reinforce passenger security, but their deployment must ensure the full respect of privacy, data and health protection. The Commission is in favour of an EU approach to the use of scanners to avoid the currently fragmented situation and better protect citizens' rights throughout the EU.

At present technologies exists that permits to significantly reduce concerns related to fundamental rights. It is nowadays possible to use security scanners that generate stick figures only instead of real body images. It is also possible to prevent storage of images or to require remote viewing, without any contact with the screener.

The option to use security scanners at airports may come with an obligation to use privacy-enhancing technology in order to minimise the privacy intrusion. Furthermore, any operation of security scanners would have to be accompanied by comprehensive information to passengers.

Health

3.5) How is the Commission addressing health concerns relating to security scanners?

The Commission has analysed a wide range of information including scientific studies and assessments by governments discussing possible health concerns.

With the exception of X-ray transmission imaging, as identified in the report (which would easily reach the maximum dose limits and is therefore not suitable to apply for systematic screening in aviation security), security scanner technologies could meet existing EU standards depending on technical and operational standards and on the fulfilment of limits and principles set in EU legislation.

As regards scanners using technologies such as millimetre wave or low doses of X-ray radiation, these must be used in full compliance with existing EU legislation[3] as regards the respect of maximum radiation doses and, more specifically, for X-ray radiation. Technical and operational standards can be established to ensure that the use of security scanners poses no health risk for any category of passengers or for the aviation sector workers who are frequently in the screening area.

Financing

3.6) How much do security scanners cost?

Security scanners currently cost between €100,000 and €200,000. In addition to this initial investment, staff costs should be considered while the cost that arises from hand searches should be deducted. Maintenance costs and other after-sale services must also be considered but will depend on individual contract arrangements. The picture of the cost–benefit analysis for airports may therefore vary considerably, depending on the setup and the choices airports will make in relation to the security systems they deploy.

3.7) If security scanners are used to screen passengers, who will bear the related costs?

The cost of aviation security is a general issue which is not related particularly to security scanners. Depending on the Member State, aviation security costs are either borne by the state (and thus by all citizens) or by the airports (and then transferred to passengers). As for other security measures then, also costs related to security scanners would be borne by the general public (via the state budget) or by passengers.

4) Next steps

4.1) What is the timing of a proposal to include security scanners as a method for screening passengers?

The Commission is convinced that, as regards the use of security scanners, a European approach is justified to ensure the best protection of our citizens' rights in a uniform manner throughout the EU.

In light of the outcome of the discussion with the European Parliament and the Council, the Commission will decide on what steps to take next, including whether or not to propose an EU legal framework on the use of security scanners at EU airports. If a legislative proposal were to be brought forward, the decision could be taken on

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[3] Council Recommendation of 12.07.1999 and Directive 2004/40/EC and 96/29/EURATOM.

the basis of comitology procedures, with a Commission proposal, a scrutiny period by the European Parliament and a vote by Member States.

See the report on security scanners :

http://ec.europa.eu/transport/air/security/doc/com2010_311_4_security_scanners.pdf
For more information see:

MEMO/10/34 EU aviation security and passenger screening technologies – frequently asked questions (10 Feb 2010)