

On approval of certification requirements for the organization of inspection by the airport aviation security service and requirements for the hardware and software used during the inspection

## Invalidated Unofficial translation

Decree of the Government of the Republic of Kazakhstan No. 829 dated July 18, 2011. Expired by the Decree of the Government of the Republic of Kazakhstan dated 08.18.2022 No. 571 (effective from the date of its signing and subject to official publication).

Unofficial translation

Footnote. Expired by the Decree of the Government of the Republic of Kazakhstan dated 08.18.2022 No. 571 (effective from the date of its signing and subject to official publication).

In accordance with Law of the Republic of Kazakhstan No. 239-V\_dated September 29, 2014 concerning the division of powers between the levels of government, see order of the Acting Minister of Investment and Development of the Republic of Kazakhstan No. 332 dated March 26, 2015.

In accordance with subparagraph 51) of article 13 and with paragraph 6 of article 107 of the Law of the Republic of Kazakhstan dated July 15, 2010 "On the Use of the Airspace of the Republic of Kazakhstan and Aviation Activities", the Government of the Republic of Kazakhstan **HEREBY DECREES AS FOLLOWS**:

- 1. That the following attached shall be approved:
- 1) repealed by Decree of the Government of the Republic of Kazakhstan No. 774 dated September 11, 2015 (shall be enforced from the date of its first official publication);
  - 2) the requirements for the hardware and software used during the inspection.

Footnote. Paragraph 1 as amended by Decree of the Government of the Republic of Kazakhstan No. 774 dated September 11, 2015 (shall be enforced from the date of its first official publication).

2. This Decree shall come into effect upon expiry of ten calendar days from the date of the first official publication.

Prime Minister of the Republic of Kazakhstan

K. Massimov

Approved by Decree of the Government of the Republic of Kazakhstan No. 829 dated July 18, 2011

## Certification requirements for the organization of the inspection by the airport aviation security service

Footnote. Certification requirements have been repealed by Decree of the Government of the Republic of Kazakhstan No. 774 dated September 11, 2015 (shall be enforced from the date of its first official publication).

Approved by Decree of the Government of the Republic of Kazakhstan No. 829 dated July 18, 2011

## Requirements for the software and hardware used during the inspection 1. General provisions

1. These requirements for the software and hardware used during the inspection have been developed in accordance with Article 107 of the Law of the Republic of Kazakhstan dated July 15, 2010 "On the Use of the Airspace of the Republic of Kazakhstan and Aviation Activities" (hereinafter - the Law) and establish requirements for the hardware and software used during the inspection (hereinafter - the requirements).

These requirements shall apply to the technical means used during the inspection of the airport aviation security service.

- 2. Terms and definitions used in these requirements:
- 1) technical equipment used during the inspection special devices intended for use independently or as part of any system when inspecting passengers, hand luggage, cargo, baggage, mail, airborne stocks, crew members of aircraft, aviation personnel;
- 2) X-ray television installation a technical device designed for visual identification of metal objects;
- 3) stationary metal detector a technical device designed to detect metal objects on the human body;
- 4) portable (manual, portable) metal detector a technical device designed to determine the specific location of a metal object on the human body;
- 5) explosive detection equipment (explosive vapor detectors) a technical device designed to detect explosive vapors or microparticles.

## 2. Requirements for the software and hardware used during the inspection

- 3. Stationary metal detectors shall be able to:
- 1) allow detecting metal objects on the human body and in his clothes that are forbidden to be transported by air, while the probability of a false positive on metal objects of personal use with a total weight of not more than 100 grams;

- 2) have an automatic light and sound signaling for the availability of a prohibited metal object, exclude unauthorized changes in the set detection parameters, its electronic circuitry shall be able to automatically return to its original position 3 seconds after the alarm is turned off (the end of the alarm should indicate that the device is ready for operation), the time for reaching the operating mode should not exceed 30 seconds after switching on the network;
- 3) to ensure normal operation in conjunction with an X-ray television installation in the electromagnetic environment of modern airports, as part of a group of similar devices in an amount of 2 to 4 pieces installed in one line at a distance of 3 to 8 meters from each other, work in plan with a distance between the sensor blocks of 1 meter;
- 4) comply with all requirements when working around the clock, time to failure at least 6,000 hours during routine maintenance less than 5% of the operating time, guarantee the first period of operation at least 1 year from the date of commissioning, the average service life not less than 6 years, warranty period of storage not less than 1 year from the date of manufacture of the product;
- 5) allow to carry out diagnostics and repairs at the place of operation, complete with documentation sufficient to maintain its normal and safe operation, good condition, and repair, consisting of the Operation Manual and a full technical description of the product with diagnostic methods;
- 6) have an arch opening of at least 2 meters in height and 0.76 meters in width, a visual and adjustable sound alarm, as well as the ability to change the sensitivity level depending on changing circumstances.
  - 4. Portable (hand-held) and portable metal detectors shall be able:
- 1) to ensure the detection of metal objects (steel plate 100x100x1 mm in size) at a distance of 0.12-0.15 meters with a device moving speed of 0.2-0.5 meters per second, have an audible alarm for the presence of a metal object, ensure normal operation in conditions electromagnetic environment of modern airports;
- 2) have a warranty period of at least 1 year from the date of commissioning, an average service life of at least 3 years, a warranty period of storage of at least 1 year from the date of manufacture of the product;
  - 3) to allow diagnostics and repairs at the place of operation;
- 4) when working from an autonomous power source, the product must maintain detecting characteristics at a 60% discharge (voltage) of power sources, ensure the duration of continuous operation of the product from an autonomous power source is at least 10 hours.
  - 5. X-ray television installation shall:
- 1) be able to recognize metal and non-metal firearms, their parts, ammunition of all calibers, grenades and other types of fragmentation / explosive weapons, knives, batons

, swords, military and commercial explosives, detonators and clock mechanisms, electrical and electronic products, sources of electricity;

2) have the following characteristics of the x-ray generator and image quality in operational mode:

penetration power- 27 mm in steel; range of resolution - 0.1 millimeters; anode voltage: nominal - 160 kilowatts, operating - 140 kilowatts; tube current - 0.7 milliamps; tube cooling in a hermetic oil bath with forced ventilation;

3) have the following characteristics of the X-ray generator and image quality in the maximum mode when using the "High Penetrating Ability" option:

penetration: 35 mm; resolution: 0.1 millimetres; anode voltage: rated - 160 kilowatts, operating - 140 kilowatts; tube current - 0.7 milliamps;

the typical level of radiation leakage does not exceed 0.1 microroentgen per hour;

- 4) the conveyor speed of the X-ray television installation shall be at least 0.15 meters per second;
- 5) have a warranty period of at least 1 year from the date of commissioning, an average service life of at least 6 years, a warranty period of storage of at least 1 year from the date of manufacture of the product;
  - 6) allow diagnostics and repairs at the place of operation;
- 7) have a light signalling to turn on the x-ray radiation, have locks that turn off the x-ray radiation in case of violation of the integrity of the protective screens and stop the supply of electric current in case of exceeding operational loads and malfunctions;
- 8) have a level of X-ray radiation in an X-ray television installation that does not allow to violate the integrity of cinema and photo materials, electronic media when they are ten times passed through the working area of an X-ray television installation;
- 9) have an X-ray dose rate level at a distance of 5 centimeters from the outer panels of the X-ray equipment not more than 0.03 X-rays per second, the noise level of the working X-ray equipment not more than 60 decibels;
- 10) the design of x-ray equipment shall provide protection against exposure to x-ray radiation.
  - 6. Equipment for the detection of explosives (explosive vapor detectors) shall:
- 1) have a sensitivity for the detection of explosives, for which the product is intended to be used, which should be no worse than  $1x10^{-14}$  grams per cubic centimeter, but at the same time, the cycle time for analyzing explosive vapors is no more than 60 seconds, the response time of the product to the presence of explosive

vapors - not more than 5 seconds, the readiness for the next sampling cycle - not more than 30 seconds, the time to reach the operating mode should not exceed 35 minutes after switching on;

- 2) work both from the mains power supply and from an autonomous source (battery, accumulator) with a voltage of 9-12 volts;
- 3) have a sound and light alarm system that works independently of the operator, while the level of the sound alarm should be clearly distinguishable from the noise of modern airports, a discharge indicator of an autonomous power source that works at 70% discharge (voltage) of power sources;
- 4) have a warranty period of at least 1 year from the date of commissioning, an average service life of at least 6 years, a warranty period of storage of at least 1 year from the date of manufacture of the product;
  - 5) to allow diagnostics and repairs at the place of operation;
- 6) have a safety system that stops supplying electric current in case of exceeding operational loads and malfunctions, means of monitoring operability during its operation;
- 7) meet all the requirements when working around the clock, the failure time is at least 6,000 hours, the routine maintenance time is less than 5% of the operating time, the warranty period is at least 1 year from the date of commissioning, the average service life is at least 6 years, the warranty shelf life is at least 1 year from the date of manufacture of the product.
- 7. All technical means used during the inspection shall meet the following safety requirements:
  - 1) include a protective grounding circuit, excluding electric shock;
  - 2) provide electrical safety hazard;
  - 3) the materials used in the products must be safe for human health.

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