Civil Aviation Bureau

# Summary of Evaluation Test Results of Advanced Body Scanner Operation

~ Body scanners will be gradually installed at major domestic airports from FY2016~

This is to inform about the summary of evaluation test results of advanced body scanner operation conducted by MLIT at three airports, Kansai, Narita and Haneda, from October to December last year.

- 1. Inspection time was an average of about 80 seconds which realized time crunch of an average of about 10 seconds compared to whole body contact inspection. Further efforts to attain efficient operation will be made to achieve shorter inspection time.
- 2. About 70% of customers made favourable answers concerning the overall inspection and future installtion in responce to customer questionaires (about 2,500 customers).

Based on such results, we plan to gradually install body scanners at major domestic airports from FY2016.

In May last year, Headquarters for prevention of transnational organized crime and international terrorism (Headquarters Chairman: Deputy Vice-Minister) decided a policy regarding "Enhancement of counter-terrorism measures in responce to the murder of Japanese nationals by terrorists". The policy describes that "Upgrading of security check by introducing advanced security check equipment at airports shall be considered".

Civil Aviation Bureau, aiming at stricter security check and smoother stream of passengers at the same time, has conducted operation evaluation tests of advanced body scanner which has been increasingly introduced in foreign countries and the test results are to be studied for future installation.

The evaluation test results are as follows:

- 1. Effects on operation of security check area
  - (1) Number of cuctomers checked by body scanner: 17,765 people, a total at three airports

In case of advanced body scanner: Average inspection time was about 80 seconds. \*1

(Reference) In case of whole body contact inspection: Average inspection time was about 90 seconds. \*2

- \*1: From entry into body scanner to completion of contact inspection
- \*2: From entry into portal metal detector to completion of contact inspection
- (2) Points for further improvement

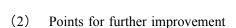
For most customers, body scanner inspection was the first experience and consequently, it took time to give a full explanation about the following:

- ① Preparation for security check (remove a jacket and also remove all personal belongings from pockets)
- ② Appropriate posture at the time of security check (stand still or rotate by the type of equipment)

We will think out a better way to familiarize customers with the new inspection method in order to conduct inspection more efficiently and thereby reduce inspection time.

- 2. Results of customer questionaires (For more details, please refer to Exhibit )
  - (1) Number of customers who returned questionaires: 2,509 people, a total at three airports

1	Overall inspection	Satisfied / Slightly satisfied	70 %
	by body scanner	Neither satisfied nor dissatisfied / No answer	22 %
		Slightly dissatisfied / Extremely dissatisfied	8 %
2	Future installation	Actively install / Moderately install	73 %
		No strong opinion / No answer	22 %
		Better to conduct "whole body contact inspection"	5 %



Responce from customers was generally favourable one, however, we understand that some customers are dissatisfied with body scanner inspection or prefer to whole body contact inspection.

Taking these into full account, we continue to respond carefully and politely to each customer at the time of providing information, undertaking public relations activity and conducting inspections.

#### [Contact information]

Aviation Security Office, Airport Safety and Aviation Security Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism

MLIT switchboard number: 03-5253-8111, Extension number: 48318 or 48328

(As the above extension numbers are excusive for inquiries about the operation test results of advanced body scanner, the service period is limited untill April 28 excluding Saturdays, Sundays and Public Holidays)

Contact personnel: Nakamura, Kawachi and Arita Fax: 03-5253-1663

# **Summary of Evaluation Test Results of Advanced Body Scanner Operation**

## < Implementation period>

(Equipment employed)

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①Kansai Internation al Airport	Terminal 2	October 15 (Thu) ~October 26 (Mon), 2015	(a)
②Narita International	Terminal 1	October 27 (Tue) ~ November 3 (Tue), 2015 November 18 (Wed) ~ November 25 (Wed), 2015	(b) (C)
Airport		November 26 (Thu) ~ December 3 (Thu), 2015	( <b>d</b> )
<b>3</b> Haneda	International Terminal	November 5 (Thu) ~ November 16 (Mon), 2015	( <b>d</b> )
International Airport		December 5 (Sat) $\sim$ Dedember 16 (Wed), 2015	<b>(b)</b>

# <Equipment employed>

< Equipment employed>							
Maker (Country of	Model		Size (m): height x width x depth, Weight	Radio wave	Inspection method		
manufacture)				specification	Detection method and display	Detection time	
L3 (U.S.)	(a)	ProVision ATD	2.67×1.95×2.65 682kg	Milimeter wave, Active type	Enter inside of equipment, put up hands and stand still (about 3 seconds)	7 to 10 seconds from entry to confirmation by display	
L3 (U.S.)	<b>(b)</b>	ProVision 2	2.36×1.50×2.31 695kg		in the second se		
Smiths (Germany)	(c)	eqo	2.11×1.08×2.42 470kg	Milimeter wave, Active type	Put up hands and rotate 360-degree (an average of 10 to 15 seconds)	12 to 20 seconds from entry to confirmation by display	
Rohde & Schwarz (Germany)	( <b>d</b> )	QPS200	2.35×1.3×2.6 630kg	Milimeter wave, Active type	Stand still with hands down (about 0.064 second)	About 10 seconds from entry to confirmation by display	

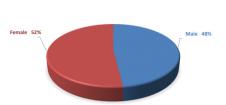
# < Number of passengers checked by body scanner >

17,765 customers kindly accepted security check by advanced body scanner. (2,700 people at Kansai International Airport, 7,176 people at Narita International Airport, 7,889 people at Haneda International Airport)

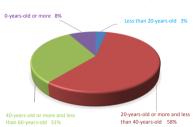
	Provision ATD(a)	Provision 2 (b)	eqo (c)	QPS200 (d)	Total
Kansai International Airport	2,700				2,700
Narita International Airport		2,567	2,478	2,131	7,176
Haneda International Airport		4,054		3,835	7,889
Total	2,700	6,621	2,478	5,966	17,765

### < Questionnaire results >

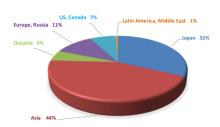
- 2,509 customers responded to the questionnaire.
- (Kansai International Airport: 733 people, Narita International Airport: 1,132 people, Haneda International Airport: 644 people)
- 1. About yourself
- (1) What is your sexuality?



(2) What is your age group?



(3) What is your nationality?



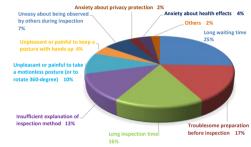
- 2. What is your feedback after the operation evaluation test?
- (1) Overall inspection by advanced body scanner



(1-1) Reasons for 'Satisfied' or 'Slightly dissatisfied'



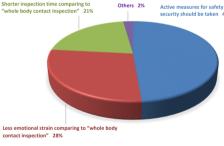
(1-2) Reasons for 'Slightly dissatisfied' or 'Extremely dissatisfied'



- (2) Future installation
- A morough whole body contact inspection instead of installation 4%.

  Actively install 44%.
- (2-1) Reasons for 'Actively install' or 'Moderately install'
- of Installati
  safety and
  aken 49%
  Anxiety about health

(2-2) Reasons for ""Whole body contact inspection" in stead of installation' or 'Prefer to" whole body contact inspection"



- 3. Other major comments
- (1-1) 'Satisfied' or 'Slightly satisfied'
  - O Not particularly unpleasant
  - O Smooth and very good inspection
- (1-2) 'Slightly dissatisfied' or 'Extremely dissatisfied'
  - O Removing boots is bothersome
  - O The equipment reacted without any prohibited article
- ⇒ (Note fromAviation Bureau) In some cases, slack of clothes could be reacted by the equipment, since prohibited articles could possibly be hidden in the slack.
  - (2-1) 'Actively install' or 'Moderately install'
    - O Prerequisite to curb terrorism
    - Other airports should install the equipment as well.
  - (2-2) 'Preferably conduct a thorough "whole body contact inspection" without installation of the equipment'
    - 'New equipment should not be installed and a thorough "whole body contact inspection" should be carried out
    - O Waiting time is too long
    - O Passengers worry about X-ray
- ⇒ (Note from Aviation Burear) Body scanner uses radio wave called milimeter wave and the strength of radio wave is approximately from a few hundredth to ten-thousandth compared to a cell-phone. Radioactive ray such as X-ray is not used.