

立法會
Legislative Council

LC Paper No. CB(4)1096/15-16
(These minutes have been seen
by the Administration)

Ref : CB4/PL/EDEV

Panel on Economic Development

Minutes of meeting
held on Thursday, 24 March 2016, at 10:45 am
in Conference Room 1 of the Legislative Council Complex

- Members present** :
- Hon James TIEN Pei-chun, GBS, JP (Chairman)
 - Hon Jeffrey LAM Kin-fung, GBS, JP (Deputy Chairman)
 - Hon CHAN Kam-lam, SBS, JP
 - Hon Andrew LEUNG Kwan-yuen, GBS, JP
 - Hon WONG Ting-kwong, SBS, JP
 - Dr Hon LAM Tai-fai, SBS, JP
 - Hon Paul TSE Wai-chun, JP
 - Hon Frankie YICK Chi-ming, JP
 - Hon WU Chi-wai, MH
 - Hon YIU Si-wing, BBS
 - Hon Gary FAN Kwok-wai
 - Hon Charles Peter MOK, JP
 - Hon CHAN Yuen-han, SBS, JP
 - Hon Kenneth LEUNG
 - Hon Dennis KWOK
 - Dr Hon Elizabeth QUAT, JP
 - Hon TANG Ka-piu, JP
 - Ir Dr Hon LO Wai-kwok, SBS, MH, JP
 - Hon CHUNG Kwok-pan
 - Hon Tony TSE Wai-chuen, BBS
- Members absent** :
- Dr Hon LEUNG Ka-lau
 - Hon Albert CHAN Wai-yip
 - Hon Steven HO Chun-yin, BBS
 - Hon Christopher CHEUNG Wah-fung, SBS, JP
 - Dr Hon Fernando CHEUNG Chiu-hung
 - Hon SIN Chung-kai, SBS, JP

**Public Officers
attending** : Agenda item IV

Transport and Housing Bureau

Miss Joey LAM, JP
Deputy Secretary for Transport and
Housing(Transport)5

Marine Department

Ms Maisie CHENG, JP
Director of Marine

Mr CHEUK Fan-lun
Acting Assistant Director of Marine /Planning &
Services

Environmental Protection Department

Mr WONG Hon-meng
Assistant Director (Waste Reduction & Recycling)

Mr Steven WONG
Senior Environmental Protection Officer (Waste
Reduction & Recycling)2

Agenda item V

Transport and Housing Bureau

Mr Wallace LAU
Deputy Secretary for Transport and Housing
(Transport)4

Civil Aviation Department

Mr Victor LIU, JP
Acting Deputy Director-General of Civil Aviation

Mr Raymond NG
Acting Assistant Director-General of Civil Aviation
(Airport Standards)

Agenda item VI

Transport and Housing Bureau

Mr YAU Shing-mu, JP
Under Secretary for Transport and Housing

Mr Wallace LAU
Deputy Secretary for Transport and Housing
(Transport)⁴

Civil Aviation Department

Mr Simon LI, JP
Acting Director-General of Civil Aviation

Mr Kevin CHOI
Deputy Director (Special Duties)

Mr Raymond LI
Assistant Director-General of Civil Aviation (Air
Traffic Management)

Mr Richard WU
Assistant Director-General of Civil Aviation (Air
Traffic Engineering Services)

Clerk in attendance : Ms Shirley CHAN
Chief Council Secretary (4)⁵

Staff in attendance : Ms Anki NG
Senior Council Secretary (4)⁵

Ms Lauren LI
Council Secretary (4)⁵

Ms Zoe TONG
Legislative Assistant (4)⁵

Action

I. Confirmation of minutes of meeting

(LC Paper No. CB(4)737/15-16 — Minutes of meeting on 23 November 2015)

The minutes of the meeting held on 23 November 2015 were confirmed.

II. Information papers issued since the last regular meeting

(LC Paper No. CB(4)668/15-16(01) — Administration's paper on tables and graphs showing the import and retail prices of major oil products from February 2014 to January 2016

LC Paper No. CB(4)741/15-16(01) — Press release on Competition Policy Advisory Group publishes 2014-2015 annual report)

2. Members noted the above papers issued since the last regular meeting.

III. Items for discussion at the next meeting

(LC Paper No. CB(4)735/15-16(01) — List of outstanding items for discussion

LC Paper No. CB(4)735/15-16(02) — List of follow-up actions

LC Paper No. CB(4)743/15-16(01) — Administration's written response to the letter dated 1 February 2016 from Hon James TO Kun-sun requesting to discuss issues relating to the Report of the Transport and Housing Bureau's Investigation into Staff Conduct in the Marine Department in relation to the Vessel Collision Incident near Lamma Island on 1 October 2012 as set out in LC Paper No. CB(4)574/15-16(01))

3. Members agreed to discuss the following items at the next regular meeting scheduled for Tuesday, 19 April 2016 at 10:45 am –

- (a) Refunding of Air Passenger Departure Tax;
- (b) Incorporating in local legislation the latest standards of the International Maritime Organization; and
- (c) Proposed amendments to the Pilotage Order (Cap. 84C) and Pilotage (Dues) Order (Cap. 84D).

4. The Chairman drew members' attention to the Administration's reply to Mr James TO's letter dated 1 February 2016 proposing the Panel to discuss issues relating to the Report of the Transport and Housing Bureau's Investigation into Staff Conduct in the Marine Department in relation to the Vessel Collision Incident near Lamma Island on 1 October 2012 ("the Report"). In its reply, the Administration advised that if it was the consensus view of the Panel that there were a reasonable number of Legislative Council ("LegCo") Members who wished to, upon signing of the Undertaking (i.e. the version issued to Members on 15 July 2015), peruse the Report, and that arrangements should be made by the Government to again make available the Report (with certain redactions) for Members' perusal, the Government would duly consider the Panel's view and explore the related arrangements.

5. The Chairman sought members' views on the matter and members raised no particular comment on it. The Chairman said that the Panel would not deal with the matter for the time being. He advised members to approach the Clerk if they saw a need for the Panel to revisit the arrangements for LegCo Members to peruse the redacted Report.

IV. Outcome of the review on Public Cargo Working Areas

(LC Paper No. CB(4)735/15-16(03) — Administration's paper on review on Public Cargo Working Areas findings and recommendations

LC Paper No. CB(4)735/15-16(04) — Paper on the management of Public Cargo Working Areas prepared by the Legislative Council Secretariat (background brief)

LC Paper No. CB(4)614/15-16(01) — Letter dated 15 February 2016 from the Administration to the Public Complaints Office of the Legislative Council Secretariat (Chinese version only) enclosing an Information Note on review on Public Cargo Working Areas)

Presentation by the Administration

6. At the invitation of the Chairman, Deputy Secretary for Transport and Housing (Transport)5 ("DSTH5") introduced the background for the review on Public Cargo Working Areas ("PCWAs"). With the aid of power-point presentation material, Acting Assistant Director of Marine/Planning and Services ("AD of Marine (Ag)") presented the outcome of the review on PCWAs. The Administration also sought members' support for the proposal to introduce a discount fee for Vehicle Entry Ticket ("VET") by providing a first half-hour parking rate for vehicles using PCWAs. Details of the presentations were set out in the Administration's paper (LC Paper No. CB(4)735/15-16(03)).

(Post-meeting note: The power-point presentation material provided by the Administration was issued to members vide LC Paper No. CB(4)780/15-16(01) on 24 March 2016.)

Discussion

Tenure of Berth Licence Agreements

7. Mr Frankie YICK welcomed the findings of the review on PCWAs which affirmed the important role played by PCWA operation to the cargo handling industry in Hong Kong and recognized its contribution to Hong Kong's economy. Pointing out that the Administration had not provided sufficient support to PCWA operation in the past, Mr YICK urged the Administration to devise measures to assist PCWA operators in face of the fierce competition and uncertain economic situation ahead. Mr YICK and Miss CHAN Yuen-han also enquired whether the Administration would consider extending the tenure of the next Berth Licence Agreements ("BLAs") from five to seven years to facilitate PCWA operators' planning for longer term development.

8. DSTH5 advised that the Administration appreciated that a longer BLA tenure would give PCWA operators greater certainty in running their business and encourage them to invest on equipment and facilities. Nevertheless, a shorter tenure would allow the Government more flexibility in planning for the use of sea frontage to meet changing community needs. A balance needed to be struck between the interest of the trade and the need for flexibility in land use planning. The Administration would continue to listen to the views of the trade in considering the tenure of BLAs in future reviews on PCWAs.

9. Mr YIU Si-wing considered that in view of the rapid development of the logistic industry, it was necessary for the Administration to review the operation of PCWAs at a regular interval. It was hence suitable for the Administration to continue to run the new BLAs for a term of five years.

Vehicle Entry Ticket fees

10. On the VET discount proposal, Mr Frankie YICK expressed support for the Administration to introduce a discount fee for the first half-hour stay in PCWAs as the proposal could encourage PCWA users to leave PCWAs within half an hour and hence optimize traffic flow and in turn help reduce the operation cost of PCWAs. He urged the Administration to consider the trade's request for setting the half-hourly rate at \$16.50 (i.e. half of the current hourly rate of \$33) instead of the proposed \$25. DSTH5 advised that the Administration would continue to discuss with the trade on the appropriate fee level.

Stonecutters Island Public Cargo Working Areas

11. Noting the 100% occupancy rate of Stonecutters Island PCWA ("SIPCWA") in 2014, Miss CHAN Yuen-han queried the justifications for the Administration's proposal to release a portion of the sea frontage of SIPCWA to support the operation of the Kwai Tsing Container Terminals ("KTCT"). She suggested that the Administration should explore other alternative locations in the area for container handling. DSTH5 advised that according to "The Study on Strategic Development Plan for Hong Kong Port 2030" commissioned by the Transport and Housing Bureau which was completed in 2014, SIPCWA should be upgraded to become a modern container handling facility for ocean-going and river trade vessels to support the operation of KTCT. Having assessed the actual situation, the Administration recommended that a sea frontage of 120 metres at the northwestern end of SIPCWA (about 17.6% of the total sea frontage of SIPCWA) should be released to support KTCT's operation after July 2016 so as to increase its container handling capacity to cope with growth in container throughput and provide barge berths for

transshipment operations. The Government would take a flexible approach in considering the future land use of SIPCWA, taking into account the performance of the upgraded sea frontage and forecasts of cargo throughput.

12. Noting the high occupancy rate of SIPCWA, Mr CHAN Kam-lam urged the Administration to consider designating more berths in popular areas such as Tuen Mun and SIPCWA to ensure the sustainability of PCWA operation. DSTH5 advised that the Administration had been looking for suitable sites for logistics uses, including potential sites in the Tuen Mun area.

Tendering exercise

13. Mr CHAN Kam-lam enquired whether the new round of tendering exercise for PCWA berths to be conducted in April 2016 would be conducted in one go for the total of 129 berths in six PCWAs or separately by areas. He also enquired about the eligibility criteria for bidding the PCWA berths. AD of Marine (Ag) advised that tendering exercises would be conducted simultaneously for the berths on Hong Kong Island, in Kowloon and the New Territories, involving about 100 bidders which were cargo operators. On eligibility criteria, open tenders would be conducted for PCWAs on Hong Kong Island. Only competent recyclers genuinely involved in local paper recycling operation could bid for the designated waste paper berths, and recyclers bidding for the designated waste paper berths were not allowed to bid any other PCWA berths based on the principle of fairness.

14. Mr YIU Si-wing expressed concern on the management of PCWAs, in particular the storage and handling of potential high risk cargoes in PCWAs. He enquired about the safety requirements for PCWA operators to observe in handling different types of cargoes and insurance requirements for operators working in the six PCWAs under the new round of tendering exercises. To optimize the use of parking facilities in PCWAs, Mr YIU also suggested that the Administration should consider making arrangements for large vehicles to park at night time in PCWAs.

15. AD of Marine (Ag) advised that the Marine Department would ensure that adequate safety precautions and measures were taken by operators in handling different types of cargoes in PCWAs. Regarding insurance requirements, AD of Marine (Ag) responded that operators working in PCWAs were required to arrange for their own insurance coverage. Mr YIU Si-wing urged the Administration to provide guidelines on insurance coverage to operators, in particular third party insurance.

Environmental concerns

16. Noting that residents might be affected by noise and pollutants created by PCWA operation, Ir Dr LO Wai-kyok enquired about measures taken by the Administration to address environmental concerns in PCWAs. Assistant Director (Waste Reduction and Recycling) of the Environmental Protection Department advised that staff of Environmental Protection Department ("EPD") could take enforcement actions under the Noise Control Ordinance (Cap. 400) and the Air Pollution Control Ordinance (Cap. 311) against noise and air pollutants arising from PCWA operations if there were any violations. EPD had also provided advice and guidelines to PCWA operators and reminded them to take proactive measures to reduce noise and other pollutants generated during cargo handling activities.

Conclusion

17. Summing up, the Chairman concluded that members supported in principle the Administration's proposal to introduce first half-hour parking rate for vehicles using PCWAs. He urged the Administration to continue its discussion with the trade to work out the appropriate rate. He also requested the Administration to take note of members' concerns raised at the meeting.

V. Proposed amendments to the civil aviation legislation relating to the air carriage of dangerous goods

(LC Paper No. CB(4)735/15-16(05) — Administration's paper on proposed amendments to legislation relating to the carriage of dangerous goods by air)

Presentation by the Administration

18. At the invitation of the Chairman, Deputy Secretary for Transport and Housing (Transport)4 ("DSTH4") introduced the background for pursuing necessary amendments to the two pieces of subsidiary legislation for the carriage of dangerous goods by air. With the aid of power-point presentation material, Acting Assistant Director-General of Civil Aviation (Airport Standards) ("ADGCA(Ag)") presented the 2015-2016 edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air ("the TIs") issued by the International Civil Aviation Organization ("ICAO") outlining major changes that required legislative amendments. Details of the presentations were set out in the Administration's paper (LC Paper No. CB(4)735/15-16(05)).

(Post-meeting note: The power-point presentation material provided by the Administration was issued to members vide LC Paper No. CB(4)780/15-16(02) on 24 March 2016.)

Discussion

19. Mr Andrew LEUNG supported the enhancement of aviation safety. Pointing out that there was confusion in the past over the carriage of electronic devices containing lithium batteries on board passenger aircraft and the transport of goods containing lithium batteries on board all-cargo aircraft, he sought explanation on the new arrangements for carriage of lithium batteries by air under the latest TIs. He also expressed concern on whether the relevant trade and industrial organizations were well consulted and informed of such changes.

20. ADGCA(Ag) advised that lithium batteries were forbidden to be carried on board passenger aircraft as cargo, but the prohibition did not apply to portable electronic devices containing lithium batteries. After the new edition of the TIs was promulgated by ICAO, the major changes in the TIs had been uploaded onto the website of the Civil Aviation Department ("CAD") since January 2015. The air cargo industry stakeholders including the airlines', freight forwarders' and shippers' associations were informed of the changes in writing and briefed accordingly. Regarding the air carriage of self-balancing wheels containing lithium batteries, ADGCA(Ag) advised that they could be transported as cargo or carried by passengers with airlines' approval as baggage under the TIs. In practice, some individual airlines might not accept devices with lithium batteries of high energy level (e.g. self-balancing wheels) due to their own safety consideration.

21. In response to Mr Andrew LEUNG's enquiry about the transport of goods containing lithium batteries as cargo, ADGCA(Ag) advised that ICAO had prescribed certain packing instructions in the TIs for transport of goods containing lithium batteries of different energy levels as cargo. At the request of Mr Andrew LEUNG, the Administration undertook to provide information in tabulated form on the major changes in the 2015-2016 edition of the TIs published by ICAO.

(Post-meeting note: The Administration's written response was issued to members vide LC Paper No. CB(4)838/15-16(01) on 11 April 2016.)

22. Miss CHAN Yuen-han supported the proposed legislative amendments to ensure aviation safety. She enquired about the reasons for the delay in incorporating the changes in the TIs into the local legislation. DSTH4 advised that before the enactment of legislation, the new TI requirements had already

come into effect on 1 January 2015 through administrative means to ensure aviation safety. The amendments to local legislation were to formalize and localize the TI requirements.

23. ADGCA(Ag) added that after the new TIs were issued in December 2014, CAD reviewed the new requirements and published in January 2015 ICAO's amendments on its website. It also wrote to stakeholders to provide details of the amendments, and briefed the air cargo industry accordingly. After consulting the Aviation Development and Three-runway System Advisory Committee in November 2015, CAD proceeded to consult the Panel on Economic Development. In fact, the international air transport industry had already operated in accordance with the latest requirements of the TIs in handling the transport of dangerous goods by air and in disseminating the relevant information to the passengers on the types of dangerous goods which were forbidden to be taken on board an aircraft. The International Air Transport Association ("IATA") updated its Dangerous Goods Regulations ("DGR") on 1 January 2015 to promulgate the latest amendments to the TIs. The IATA DGR was the globally recognized reference for transporting dangerous goods by air. It was the established industry practice that in handling dangerous goods, airlines, freight forwarders and shippers would adhere to DGR.

24. Mr YIU Si-wing enquired about the number of cases recently detected for passengers carrying prohibited dangerous goods on board aircraft. He also enquired whether additional security measures would be taken by the Administration and the Airport Authority in tightening security control at the Hong Kong International Airport given the recent Brussels airport attack incident.

25. ADGCA(Ag) advised that after completing the check-in process at the airline counters, all passengers and their baggage would be subject to security screening before boarding. During the first two months in 2016, 166 cases involving passengers carrying self-balancing wheels and self-balancing vehicles containing lithium ion batteries were detected during security screening. Passengers generally were willing to surrender these self-balancing wheels upon detection. No case for passengers' carriage of prohibited dangerous goods such as explosives was detected. Regarding airport security, Acting Deputy Director-General of Civil Aviation advised that Hong Kong adopted very stringent international aviation security requirements based on Annex 17 to the Convention on International Civil Aviation. Since the Brussels airport incident involved terrorism attack, CAD had been in close contact with the Police and the Security Bureau of Hong Kong to ensure that adequate security measures would be available to guard against possible terrorism attacks.

Conclusion

26. Summing up, the Chairman concluded that members supported in principle the Administration's proposal to amend two pieces of subsidiary legislation to give effect to the latest standards promulgated by ICAO for the carriage of dangerous goods by air.

VI. Deployment of the new Air Traffic Management System for Hong Kong International Airport and the related safety issues

(LC Paper No. CB(4)735/15-16(06) — Administration's paper on new Air Traffic Control System in Civil Aviation Department

LC Paper No. CB(4)735/15-16(07) — Paper on the new Air Traffic Management System prepared by the Legislative Council Secretariat (background brief))

Presentation by the Administration

27. At the invitation of the Chairman, Under Secretary for Transport and Housing ("USTH") briefed members on the new Air Traffic Control ("ATC") System, including the new Air Traffic Management System ("ATMS"). With the aid of power-point presentation material, Assistant Director-General of Civil Aviation (Air Traffic Management) presented the main features of the new ATC System, readiness assessment of the new ATMS and advice from external consultants, phased transition arrangements to the new ATC System, including work done on staff training and communication when introducing the new ATMS. Details of the presentations were set out in the Administration's paper (LC Paper No. CB(4)735/15-16(06)).

(Post-meeting note: The power-point presentation material provided by the Administration was issued to members vide LC Paper No. CB(4)780/15-16(03) on 24 March 2016.)

Discussion

System readiness and staff confidence

28. Given the negative criticisms made by some members of the public and the media on the reliability of the new ATMS, Ir Dr LO Wai-kwok was concerned about whether sufficient acceptance tests had been conducted on the

new ATMS before its implementation. He noted with concern that the media had recently reported on system deficiencies in the new system such as overlapping of aircraft data label on-screen.

29. Mr CHAN Kam-lam expressed concern about the operational readiness of the new ATMS and staff readiness for using the new system. In view of the many problems relating to the implementation of the new ATMS as pointed out by the Public Accounts Committee ("PAC") in 2015, he asked how confident the Administration was in launching the new ATMS in June 2016.

30. USTH advised that the Administration was committed to safeguarding aviation safety and had positively responded to the PAC's recommendations. Apart from monitoring the progress of the replacement of ATC System, the Transport and Housing Bureau ("THB") had engaged an external and independent expert, National Air Traffic Services ("NATS") of the United Kingdom, in November 2015 to assess the new ATMS and staff readiness, as well as to render independent advice to the Secretary for Transport and Housing as an additional safeguard in ensuring safety, reliability and stability of the new ATMS operations.

31. Acting Director-General of Civil Aviation ("DGCA(Ag)") supplemented that while preparing for the implementation of the new system, CAD had also conducted a series of stringent acceptance tests on the new ATMS on par with international aviation safety management standards and in accordance with established Government procedures. The final acceptance test event for the new ATMS was completed in September 2015 and CAD was generally satisfied with the test results.

32. USTH further advised that according to NATS' assessment, the new ATMS was safe, stable and reliable, and on par with good practice in ATC centres in other advanced jurisdictions. On human factor, NATS had observed that there were some aspects that had to be refined to cater for user preference and operational effectiveness (such as font size, audio alert sounds for different situations, overlapping of aircraft data label on-screen), prior to the actual commissioning of the new ATC System so as to ensure smooth delivery of service. NATS had suggested a phased functional implementation of the new ATMS to allow more time for ATC staff to familiarize themselves with the system's functions and operations in phases, so as to minimize the risk of providing full functional services during the typhoon season. CAD's current plan was to launch the new ATMS progressively from June 2016 onwards. The use of the new ATMS would be expanded over a period of about five months. Subject to actual implementation progress, the new ATMS would be fully commissioned and operated by October/November 2016.

33. Noting that CAD had engaged another international consultancy firm, EC Harris, in 2012 to provide expert advice on the implementation of the new ATC System, Mr Andrew LEUNG enquired whether there were any disparities in opinion between the independent experts appointed respectively by CAD and THB on the new ATMS. Mr LEUNG and Miss CHAN Yuen-han also enquired about measures taken by CAD to rebuild staff and public confidence in the safety of the new ATMS.

34. USTH advised that in assessing the new ATMS, NATS completed a "snapshot" review based on the situation in December 2015 on the system technical aspects, operations and training documents of the new ATMS, as well as making reference to the work of EC Harris on the design, implementation and transition of the new ATC System. THB and CAD would further review critically system safety, staff readiness and resources requirement in the coming months before finalizing the transitional arrangement to commence use of the new ATMS in June 2016. The ultimate aim was to ensure that the new ATMS would be launched only when CAD has attained the highest level of system and staff readiness.

35. On staff readiness, DGCA(Ag) advised that CAD had formulated a comprehensive training plan to enhance staff performance and confidence in the new ATMS. Given the substantial changes in the mode of operation of the new ATMS as compared with the existing one, ATC staff would need more time to familiarize with the new system. He assured members that CAD would continue to maintain close communication with staff, address their concerns and provide training to boost staff confidence and competence level.

36. Given the substantial delay in implementing the new ATMS, Mr Paul TSE was concerned whether the phased functional implementation of the new ATMS would be a tactic used by the Administration to buy time for further delay in the implementation of the new system. Mr TSE requested the Administration to provide a copy of the "snapshot" review report on the system technical aspects, operations and training documents completed by NATS based on the situation in December 2015.

(Post-meeting note: The Administration subsequently provided NATS' assessment report on the system and staff readiness of the new ATMS based on the "snapshot" review done in December 2015 as well as NATS' latest report on the overall readiness of the operational transition of Stage 1 of the phased functional implementation of the ATMS. The Administration's written responses were issued to members vide LC Papers Nos. CB(4)929/15-16(01) and CB(4)1060/15-16(01) on 3 May and 31 May 2016 respectively.)

System monitoring and maintenance

37. Mr Kenneth LEUNG stressed the need to continuously monitor the performance of the new ATMS after its implementation. To regain public confidence, the Administration should continue to engage independent experts to assess the system. He enquired about measures taken by THB to ensure continuous and effective monitoring of CAD's work and the new ATMS, as well as the duration and coverage of the current contract between THB and NATS. He also enquired about the expected usable lifespan of the new ATMS and whether there would be any difficulties in providing maintenance for the system if only a few countries, such as India and Dubai, were using the system.

38. USTH advised that the monitoring of the new ATMS was an on-going process to ensure aviation safety. In addition to the "snapshot" review completed by NATS based on the system situation in December 2015, further reviews would be conducted by NATS in the coming months to ensure system and staff readiness before the new ATMS would be fully commissioned. He reassured members that the Administration would again engage an independent expert to monitor the performance of the new ATMS after its phased transition began in June 2016.

39. On the expected lifespan of the new ATMS, DGCA(Ag) advised that the new system could last for 18 to 20 years. As the current ATC System, which had been in use for about 18 years without maintenance difficulty, was provided by the same supplier, the Administration did not see any problem with the maintenance of the new system. Similar products provided by the same supplier were used in many major airports around the world, including airports in India, Dubai and the United States of America.

40. In view of the projected increase in air traffic in the coming years, Mr YIU Si-wing expressed concern over the maximum capacity and possible operational failure of the new ATMS. Noting that the new ATC System was implemented through a total of eight system contracts, of which seven had been completed and commissioned in phases since 2013, Mr YIU enquired whether operational problems were identified in the other seven systems. Mr Jeffrey LAM also expressed concern about the capacity of the new ATMS.

41. DGCA(Ag) advised that the capability of the new ATMS was designed to meet the latest international standards on technical, safety and ATC operational requirements. It could also handle the projected air traffic increase as a result of the development of the Three-Runway System of the Hong Kong International Airport. Supplementary hardware upgrade with more working positions, as well as additional manpower should be provided to cope with the air traffic increase in future. On possible system failure, DGCA(Ag) advised

that the main system had internal fault-tolerant design as backup. A fallback system, which was identical to the main system, had been provided to serve as back-up for each other. An additional ultimate fallback system would be available for use in the unlikely event if both the main and the fallback systems failed. He confirmed that no significant operational problems were identified in the other seven systems under the new ATC System.

42. In view of the projected air traffic growth, Mr Jeffrey LAM enquired about measures to ensure system upgrades of the new system to be conducted in a smooth and safe manner. He also enquired whether system failure had been detected in the existing ATC System.

43. DGCA(Ag) advised that for the existing ATC System, system upgrades were first tested on the back-up system before being incorporated into the main system. No system failure had been detected during system operations. For the new ATC System, CAD had requested the supplier to incorporate in the design the capability for system upgrading and expansion to cope with future traffic growth.

44. Underlining the importance of aviation safety, Miss CHAN Yuen-han expressed concern over the readiness for launching of the new ATMS, in particular the reliability of the new system and its back-up systems, as well as whether staff concerns had been fully addressed by the Administration.

45. USTH advised that multiple back-up systems were designed to provide additional failure defence to ensure operation safety. Such design was in compliance with the relevant international aviation safety standards, and it did not imply that the main system was unreliable. DGCA(Ag) supplemented that all outstanding priority items identified during the test events, including the overlapping of aircraft data label on-screen, had been fully addressed by the contractor to ensure safe and smooth commissioning of the new ATMS.

VII. Any other business

46. There being no other business, the meeting ended at 12:44 pm.