1. The meeting was resumed at 9:10 a.m. on 12.1.2016.

2. The following Members and the Secretary were present at the resumed meeting:

Permanent Secretary for Development (Planning and Lands) Mr Michael W.L. Wong	Chairman
Mr Stanley Y.F. Wong	Vice-chairman
Mr Roger K.H. Luk	
Professor S.C. Wong	
Professor Eddie C.M. Hui	
Ms Anita W.T. Ma	
Dr W.K. Yau	
Professor K.C. Chau	
Mr H.W. Cheung	
Dr Wilton W.T. Fok	
Mr Ivan C.S. Fu	
Mr Lincoln L.H. Huang	
Ms Christina M. Lee	
Mr H.F. Leung	
Mr F.C. Chan	
Mr David Y.T. Lui	
Mr Peter K.T. Yuen	

Mr. Philip S.L. Kan

Dr Lawrence W.C. Poon

Chief Traffic Engineer (New Territories East)
Transport Department
Mr. K.C. Siu

Assistant Director (Environmental Assessment)
Environmental Protection Department
Mr K.F. Tang

Chief Engineer (Works), Home Affairs Department
Mr Martin W.C. Kwan

Deputy Director of Lands (General)
Mr Jeff Y.T. Lam

Director of Planning
Mr K.K. Ling

3. The Chairman said that the meeting was adjourned until the commenters and their representatives arrived.

[The meeting was adjourned for 20 minutes.]

4. The Secretary said that Members' declaration of interests for the representations and comments had been made in the morning sessions of the hearing on 14.12.2015 and 16.12.2015. No further declaration of interests had been received from Members since then. Members' declared interests were recorded in paragraphs 5 to 7 of the minutes on 14.12.2015 and paragraph 5 of the minutes on 16.12.2015.

Presentation and Question Sessions

5. The following government's representatives, commenters and representatives of commenters were invited to the meeting at this point:

Government Representatives

Planning Department (PlanD)

Ms Donna Y.P. Tam - District Planning Officer/Sai Kung & Islands

		(DPO/SKIs)
Mr Richard Y.L. Siu	-	Senior Town Planner/Islands 1 (STP/Is(1))
Mr Gary T.S. Lui	-	Town Planner/Islands (6) (TP/I(6))

Transport and Housing Bureau (THB)

Mr Wallace K.K. Lau	-	Deputy Secretary (Transport) 4 (DS(T)4)
Miss Grace W.S. Kwok	-	Principal Assistant Secretary (Airport Expansion Project Coordination Office) (PAS(AEPCO))
Mr Henry C.K. Chu	-	Chief Assistant Secretary, AEPCO (CAS(AEPCO))

Transport Department (TD)

Mr Isaac K.S. Lo	-	Senior Engineer /Is (SE/Is)
Mr Gabriel K.Y. Lau	-	Engineer/Is 2

Environmental Protection Department (EPD)

Mr Louis P.L. Chan	-	Principle Environmental Protection Officer (Regional Assessment)1 (PEPO (RA)1)

Marine Department (MD)

Mr Tony T.F. LI	-	Senior Marine Officer/Planning and Development 3 (SMO/P&D(3))
Mr P. Zou	-	Marine Officer/ Planning and Development 3 (MO/P&D(3))

Civil Aviation Department (CAD)

Mr Gabriel P.K. Cheng	-	Chief (Technical and Development) (C(TD))
Mr Samuel Ng	-	Senior Evaluation Officer (1) (SEVO(1))
Miss Angela C.N. Wong	-	Operations Officer (Environmental Management)1 (OO(EM)1)

Agriculture, Fisheries and Conservation Department (AFCD)

Mr. Dick K.C. Choi	-	Senior Marine Conservation Officer (West) (SMCO(W), AFCD)

Commenters and Representatives of Commenters

C75 –葉錦洪

Mr Wilson Fung	]	Commenter's representatives
Mr Tommy Leung	]	
Mr Peter Lee	]	
Ms Billie Leung	]	
(Airport Authority Hong Kong) (AAHK)		

C144 – Luk Chi To

C256 –李敬華

C261 –鍾健平

Dr Samuel K.Y. Hung (Hong Kong Dolphin Conservation Society) (HKDCS)	-	Commenters' representative

C155 – 周月翔

Dr Samuel K.Y. Hung (HKDCS)	-	Commenter's representative

C167 – YK Lee

C168 – 吳小姐

Mr Lam Chiu Ying	-	Commenters' representative

C178–余智健

Mr Yu Chi Kin	-	Commenter

C228 – Fung Kam Lam

Mr Fung Kam Lam - Commenter

C316 –鄭家泰

Mr Chang Ka Tai - Commenter

6. The Chairman extended a welcome and explained the general procedure of the hearing as follows:

(a) for each hearing session, government's representatives would first brief Members on the background. Afterwards, the representers/commenters or their representatives would be invited to make oral submissions in turn according to their numbers;

(b) as a large number of representers/commenters or their representatives had registered to make the oral submissions, the Board agreed on 16.10.2015 that each of them should be allotted 10 minutes for their oral submission;

(c) there was a timer device to alert the representers/commenters or their representatives 2 minutes before the allotted time was to expire and when the allotted time limit was up;

(d) question and answer (Q&A) sessions would be held after all attending representers/commenters or their representatives at each hearing session had completed their oral submissions. Members could direct their questions to government representatives or representers/commenters or their representatives; and after the Q&A sessions, the hearing on that day would be adjourned, and the representers/commenters or their representatives and the government representatives would be invited to leave the meeting. After hearing all the oral submissions from the representers/commenters or their representatives who attended the meeting, the Town Planning Board (the Board) would deliberate on the

representations/comments in closed meeting, and inform the representers/commenters of the Board's decision in due course.

7. The Chairman then invited the representative of PlanD to brief Members on the representations and comments with respective to the draft Chek Lap Kok (CLK) Outline Zoning Plan (OZP) No. S/I-CLK/13. With the aid of a Powerpoint presentation, Mr Richard Y.L. Siu, STP/Is(1), PlanD repeated the presentation that was made in the morning hearing session of the meeting on 14.12.2015 and recorded in paragraph 36 of the minutes of 14.12.2015.

8. The Chairman then invited the commenters and their representatives to elaborate on their written submissions.

C75 – 葉錦洪

9. With the aid of a PowerPoint presentation, Mr Wilson Fung made the following main points:

(a) as concerns were raised about the financial viability, layout planning and public consultation of the three-runway system (3RS) project, he intended to clarify further on those three aspects;

Financial Viability

(b) the total estimated construction costs for 3RS was HK$141.5 billion. The financial arrangements for 3RS would be based on the "joint contribution and user-pay" principle. Funding would be provided through three channels, namely (i) operational surplus (33%), (ii) introducing an airport construction fee (ACF) (18%) and (iii) borrowings (49%);

(c) AAHK was set up under the Airport Authority Ordinance (AAO) (Chapter 483) and in line with section 6 of AAO, AAHK had been operating the Hong Kong International Airport (HKIA) according to prudent commercial principles. Since the opening of HKIA in 1998,

over HK$300 billion had been invested by AAHK for various large-scale projects at HKIA, including the North Satellite Concourse, SkyPier, Terminal 2 building and midfield development. All the HK$300 billion was financed by AAHK alone with no government funding and those projects had been completed satisfactorily;

(d) AAHK had had stable growth in terms of operational surpluses in the past. On the basis that about 80% of annual net profit would be distributed as dividends each year, AAHK had provided the Government with dividends since the fiscal year of 2013/14, totalling HK$35.68 billion. AAHK was confident that the operational surpluses in the next eight years for the construction of 3RS could contribute to 33% of its total construction costs;

(e) as for ACF, AAHK was empowered under sections 5 and 7 of AAO to charge such a fee on operational grounds for the development of HKIA. In terms of pricing, ACF would be ranging from HK$180 for a long-haul departing passenger in first/business class to HK$70 for a short-haul transit/transfer passenger in economy class. It had been estimated that about 70% of departing passengers would pay an ACF of HK$90 or less when the charging regime became operational. AAHK considered the charging of ACF in line with the user-pay principle and would not affect the overall competitiveness of HKIA. According to an independent survey conducted, once the ACF was introduced, HKIA would still rank low amongst the major airports in the world in terms of the total levies or charges on passengers;

(f) AAHK had good credit rating, reflected by its low debt-to-earnings before interest, taxes, depreciation and amortization (EBITDA) ratio, standing at 0.3. As advised by an independent financial advisor, while the debt-to-EBITDA ratio would increase to about 4.5, AAHK would still be able to secure HK$69 billion (i.e. 49% of the total construction costs for 3RS) through borrowing and would be able to pay back that debt;

(g) according to the findings of a number of sensitivity analyses undertaken for the 3RS project under the scenarios where there were declining operational surpluses, cost overruns or increase in the costs of borrowing in the next 8 or 9 years, AAHK would still be able to secure funding for the 3RS project. AAHK had previously made clear to the Legislative Council (LegCo) that it had no intention to seek funding from the Government should there be any cost overruns for 3RS;

Layout Planning

(h) some representers opined that the capacity of HKIA in handling air traffic demand had been compromised as AAHK had failed to implement the previous X-shaped Midfield passenger concourse proposed under the 1992 New Airport Master Plan (NAMP). It was for the following reasons that the 1992 NAMP should not be adhered to:

(i) the bottle-neck situation of HKIA was due to the limited capacity of the existing two-runway system (2RS);

(ii) NAMP, formulated over 20 years ago, had not taken into account the considerable development and changes in the aviation industry. AAHK produced a New Master Plan every 5 years, each providing recommendations for the future development of HKIA over a 20-year horizon. There were three more Master Plans after the 1992 NAMP, including the HKIA Master Plan 2030 (MP2030) produced in 2011. Each Master Plan would make timely adjustments to the overall planning and layout of HKIA taking into account the latest trends and demands;

(iii) a total of 140 aircraft parking stands would be provided under the current plans, which would have 20 more aircraft parking stands than that proposed in 1992 NAMP; and

(iv) the cargo area of HKIA was currently located to its south. In order to maximise efficiency, the area of the proposed X-shaped Midfield passenger concourse and its adjoining area should be developed as a freighter apron for the parking of freighters, not as a passenger concourse, so as to cater for the increasing global demand for cargo freighters. The 1992 NAMP had not catered for the current trend in the aviation industry;

[Dr W.K. Yau arrived to join this session of the meeting at this point.]

Public Consultation

(i) AAHK had attached great importance to communicating with stakeholders and engaging the public regarding the 3RS project. A large-scale 3-month public engagement (PE) on MP2030 was conducted in 2011 to seek public views, with a total of 194 public briefings held;

(j) the Social Science Research Centre (SSRC) of the University of Hong Kong (HKU) was appointed by AAHK to independently compile and analyse the views collected during the 3-month PE and AAHK was not involved in the methodology adopted by SSRC. Responses to questionnaires were received during the PE, through various channels including roving exhibitions, the internet and mail, and contrary to the presentations by the representers/commenters, most responses to questionnaires were not received via the collection box at HKIA. Based on the completed 24,242 questionnaires, 73% of the respondents supported 3RS. Those views from various sources including LegCo, district councils, the media and those objecting views collected via green/concern groups were included in SSRC's qualitative analysis. The main overall public views as summarised by SSRC were that 3RS would be beneficial to HKIA, contributing to economic development and generating more job opportunities for Hong Kong, and construction of 3RS should commence at the earliest;

(k) when the Environmental Impact Assessment (EIA) for the 3RS project was being carried out in 2012-14, several Community Liaison Groups were set up covering districts most affected by HKIA operation, including Islands, Tsuen Wan and Kwai Tsing, to gauge views from local residents. Technical Briefing Groups were also set up to seek views from experts and academia on specific issues such as air quality, marine ecology and Chinese White Dolphins (CWD). Over 700 PE activities on the EIA were held during the 2-year period; and

(l) another 350 PE activities were subsequently held after the approval of the EIA by the Director of Environmental Protection (DEP) under the EIA Ordinance and the granting of the Environmental Permit (EP) in 2014.

C155 – 周月翔

10. With the aid of a PowerPoint presentation, Dr Samuel K.Y. Hung made the following main points:

(a) his oral submission was made on behalf of People's Aviation Watch (PAW) from a town planner's perspective;

(b) he would first respond to the points made by AAHK regarding financial viability and public consultation as follows:

(i) AAHK, being wholly owned by the Government, had kept part of its profits for the construction of 3RS which should originally be contributed to the public revenue. Hence, AAHK would be using public money to finance the 3RS project;

(ii) some Hong Kong people were displeased as they would be forced to pay ACF even though they opposed 3RS on environmental grounds; and

(iii) many environmental groups did not join AAHK's Technical Briefing Groups. Hence, Members should not believe that

AAHK had consulted all the relevant parties and all parties supported 3RS;

Expansion Plan

(c) a robust expansion plan of HKIA should have a vision, be implementable by phases, and be subject to regular reviews to take into account prevailing constraints and opportunities. AAHK's proposal for 3RS was devoid of those criteria;

(d) as pointed out by AAHK, the capacity of 3RS could only cater for the growth in air traffic up to 2030. AAHK had no answer for the airport expansion beyond 2030;

(e) AAHK had confined itself to the operation of HKIA and hence would only make use of the nearby waters of HKIA to address the capacity problem of 2RS, without looking into other options (e.g. another airport, collaborating with neighbouring airports, etc);

(f) since THB only requested one party i.e. AAHK to come up with the expansion plan to address the capacity problem, AAHK's proposal was formulated based on its own interest;

(g) in view of the topographical constraint of Lantau, HKIA was not a suitable site for the future expansion of the airport operation;

Lack of Information

(h) AAHK had not provided the Board with sufficient information on expansion plan and related assessments such as Traffic Impact Assessment (TIA), Air TIA and Marine TIA (MTIA), reflecting the lack of detailed planning for 3RS. As the Board had the responsibility to safeguard the long-term development of Hong Kong, Members should be mindful of the 3RS project which could only cater for the growth in air traffic up to 2030. In the absence of the technical assessments, the decision of the Board on 3RS would be subject to legal challenge;

(i) Lantau was planned to be further developed. Given the demand for road traffic would be increased, a comprehensive TIA should be conducted for the 3RS project together with all the planned developments at Lantau to provide a comprehensive assessment;

(j) to address the public concerns on the 3RS financing, the findings of the independent sensitivity analyses that had been carried out for 3RS should be released to the public;

(k) the decision on the EIA of the 3RS project was currently subject to judicial review (JR) and the EIA should not be regarded as accepted at this stage. The decision on reclamation for the 3RS project should not be based on the piecemeal information provided by AAHK so far;

(l) 3RS was not a reasonable nor beneficial alternative for the expansion of HKIA. Given the substantial financial resources required for the construction of the 3RS project and the irreversible environmental impacts it would bring, he doubted that the project would generate economic gains for Hong Kong;

Other Alternative

(m) the failure of 2RS to achieve its maximum capacity could be due to various issues such as management, staffing and technical support. Introduction of improvement/enhancement measures to 2RS, including better management, advance technology/equipment and staff training, could be a solution to the capacity problem in the medium-term; and

(n) PAW objected to the proposed amendments to the draft CLK OZP.

C167 – YK Lee
C168 – 吳小姐

11. With the aid of a PowerPoint presentation, Mr Lam Chiu Ying made the following main points:

Competiveness of HKIA

(a) HKIA had lost its competitiveness since 2008. It failed to timely construct the planned passenger concourse at the so-called midfield area of HKIA between 2005 and 2010 for connection to Terminal 2 to meet the demand. The decision made by AAHK at that time was to cut down expenditure and to show that profit was made during those years;

(b) Singapore Changi Airport, with similar design capacity of passengers as HKIA, had more aircraft parking stands i.e. 92 aircraft parking stands served with airbridge and 42 remote aircraft parking stands, comparing to 59 and 27 respectively at HKIA. Singapore Changi Airport became more efficient than HKIA after its construction of Terminal 3 with aircraft parking stands in 2007;

(c) to improve the competiveness of HKIA, the experience of passengers should be enhanced and more passengers facilities should be provided. There was no need to increase facilities for air freight since the current demand for it was less than half of the estimated demand in the design capacity of HKIA. The 3RS project was unnecessary and it addressed the wrong question;

Lack of Information

(d) no TIA had been submitted by AAHK to the Board to support 3RS. If accepted by the Board, an undesirable precedent would be set for other similar schemes. Too many untested assumptions had been adopted in supporting the 3RS project, including the resolution of the airspace issue. The Board, as a responsible statutory body, should not accept such a project;

(e) the Board should be mindful about marine traffic safety, which was of paramount importance in protecting human lives, yet no detailed MTIA of the 3RS project was available to the public. The safety of ferries travelling along Urmston Road to the further north of HKIA was a concern in particular when ferries had to re-route their courses due to the 3RS

project. That situation would be further aggravated as the frequency of ferries travelling to the Pearl River Delta (PRD) would be increased as claimed by AAHK;

(f) he was unsure if the technical assessments for the 3RS project had assessed the impacts of the growth of container vessels to the Shekou Container Terminal and those of tall vessels on the safety of aircrafts landing and take-off at HKIA;

(g) the proposed 3RS project would involve about 650 ha reclaimed land. That sizable area could meet the various needs of many Hong Kong people. Members should not treat the current amendments to the CLK OZP as merely an expansion project of HKIA but to consider them in the context of the overall needs of Hong Kong;

Purpose of Town Planning

(h) the current operation of HKIA should be improved without the need for 3RS. This would be in line with the purpose of town planning under the Town Planning Ordinance, which promoted health, safety, convenience and general welfare of the community by making provision for the systematic preparation and approval of plans for the lay-out areas of Hong Kong as well as for the types of building suitable for erection therein. The Board should reject the amendments to the CLK OZP and request for more information including the needs for 3RS, marine traffic safety and suitability of the proposed expansion area for 3RS; and

(i) the Board's decision on the OZP should be based on the preamble of the Ordinance and not be affected by the fact that the Chief Executive in Council (CE in C) had already given in-principle approval to 3RS.

<u>C228 – Fung Kam Lam</u>

12. With the aid of a PowerPoint presentation, Mr Fung Kam Lam made the following main points:

Previous Attendance

(a) he had attended the hearing session as R402 and would like to reiterate three main points made previously:

(i) hearing sessions should not be confined to office hours only. To achieve a fair hearing, consideration should be given to enabling those representers and commenters who could not attend the session due to work to attend and give their views;

(ii) more female Members of the Board should be appointed to achieve a balanced mix of genders;

(iii) part of the town planning procedures had commenced behind closed door prior to the endorsement of the EIA for the 3RS project by the Advisory Council on the Environment (ACE). The TPB Paper No. 9703, for reference back of CLK OZP to the Board for amendment relating to the 3RS project, was considered by the Board on 5.9.2014. As both TPB Paper and the meeting agenda of that item were confidential, the public could not have access to the details. He wondered whether the said paper and its related minutes of meeting could be released to the public;

Marine Sand

(b) the cost of reclamation for the 3RS project was estimated to be about HK$36.8 billion. Part of the cost would be for obtaining marine sand for reclamation purposes. According to the tendering information from the Administration of Ocean and Fisheries (AOF) of Guangdong Province in 2014, the marine sand in the water areas of Wailingding Island and Baili Island in Zhuhai were available for excavation, and they were used for the artificial island of the proposed Hong Kong-Zhuhai-Macao Bridge (HZMB) and the associated reclamation in Macau. Referring to the recent newspaper article in the Mainland dated 31.12.2015, there was a shortage of marine sand in the Mainland, which had resulted in the delay of the reclamation project in Macau;

(c) the availability of marine sand for the 3RS's reclamation was uncertain, as reflected by the data from the Guangdong Public Resource Trading Centre and the State Oceanic Administration People's Republic of China. The former showed no excavation tendering of marine sand in 2015 while the latter had no submission of EIA for marine sand excavation in the same year. A new regulation had also been promulgated by AOF of Guangdong Province in end 2015 to encourage deep sea excavation and use of new advanced technological materials to replace marine sand for reclamation;

(d) the 3RS project involving marine sand excavation at other areas would induce adverse environmental impacts on those areas, including detrimental effects on marine animals, including CWD; and

(e) AAHK should update its EIA to include the impact on water quality arising from the proposed reclamation at Lung Kwu Tan currently being examined by the Civil Engineering and Development Department.

C144 – Luk Chi To

C256 – 李敬華

C261 – 鍾健平

13. With the aid of a PowerPoint presentation, Dr Samuel K.Y. Hung made the following main points:

Previous Attendance

(a) he had previously provided the Board with details of the public opinion poll carried out by the Baptist University in collaboration with HKDCS, Friends of the Earth (Hong Kong) and Professional Commons under a Study on Social Return on Investment (SROI). The SROI was based on a random sampling size of 1,000 respondents. The majority of the views collected were that the public had many concerns and queries on the 3RS project and supported the protection of CWD. The survival of CWD would hinge on the Board's decision on the CLK OZP;

High-speed Ferries

(b) as a result of the 3RS project, the current routes of high-speed ferries, travelling between the SkyPier at HKIA and other areas of the Mainland and Macau across the waters of Lantau, would need to be rerouted to travel along Urmston Road to the north of Lung Kwu Chau. That re-routing would bring ferries to a hotspot of CWD with detrimental consequences on the survival of CWD;

(c) previous research studies had proven that high-speed ferries had significant impacts on dolphins. During the EIA process of the 3RS project, EPD and AFCD had requested AAHK to study the impacts of high-speed ferries on CWD under the Study Brief of the EIA. The findings of the study reaffirmed the impacts of high-speed ferries on CWD. CWD had already suffered a great deal and their population had been declining since the opening of SkyPier;

(d) as the routes of high-speed ferries already passed through hotspots of CWD, the dolphin densities in those areas had been significantly reduced. The volume of high-speed traffic from Hong Kong to all ports had increased by 48% from 1999 to 2010. In particular, the volume of traffic along the route between Hong Kong and Macau had increased by 77% in the same period. The significant reduction in dolphin densities in 2004 and 2007 coincided with the increase in the volume of high-speed ferries due to the expansion of gambling industry in Macau at that time. While Soko Islands would be developed as a Marine Park (MP), due to the presence of high-speed ferries in its vicinity, CWD had been reluctant to swim across the ferry channel to Soko Islands, as reflected by drastic reduction in dolphin densities at Soko Islands in the past;

(e) furthermore, noise from fast moving vessels was very high and might induce stress or cause behavioural changes in CWD;

Solutions

(f) he did not object to the 3RS project originally and had suggested a number of options for the protection of CWD before the commencement of the 3RS EIA process. One of them was to divert the existing high-speed ferry routes along South Lantau Coast to the further south, i.e. south of Soko Islands/Lung Kwu Chau/Cheung Chau, away from sensitive dolphin habitats. However, MD did not examine the feasibility of that option. While AAHK should have considered that option as required under the Study Brief, the approved EIA had only briefly mentioned that the option was examined. Members should clarify with AAHK at the Q&A session on that aspect accordingly. Since that option could potentially help save CWD, MD should be requested to study that option if not already done so by AAHK;

(g) the navigation channel to the east of the existing Sha Chau & Lung Kwu Chau MP (SCLKCMP) and north of the proposed third runway of HKIA was already congested given the presence of many ferry routes there. That situation would be worsen upon re-routing of the high-speed ferries to Urmston Road due to the 3RS project. To alleviate that problem and for marine safety, a cap should be placed on the total number of ferries/vessels travelling on the channel and nearby waters, which were also hotspots for CWD. A comprehensive MTIA should be conducted and its findings be released to the public;

(h) the ferry route to the north of Soko Islands should be re-routed so that the two proposed Fan Lau MP and Soko Islands MP, which would be established by the Government in 2017, could be connected together, so as to safeguard the hotspots of CWD and encourage their return to Soko Islands. That would be an effective measure to mitigate the adverse impacts from the 3RS project and should be implemented at the earliest;

Re-routing of High-speed Ferries

(i) during a roundtable meeting arranged by AAHK and attended by four green organisations including HKDCS on 5.1.2016, HKDCS was

informed that the re-routing of high-speed ferries to Urmston Road to the north of Lung Kwu Chau, as a mitigation measure proposed by AAHK under the EIA, had been implemented since December 2015. Since the waters to the north of Lung Kwu Chau remained the only place in the North Lantau that was still being inhabited by CWD, it was illogical to re-route the high-speed ferries to that previously undisturbed habitat;

(j) it was questionable how the reduction in the speed of ferries to below 15 knots when travelling near that hotspot as stated under the EIA could help alleviate the impacts on CWD. The slowing down of ferries would only serve to prolong the exposure of CWD to the noise nuisance, and 99 ferries per day would navigate across the hotspot, causing significant adverse impact on CWD;

[Mr H.W. Cheung arrived to join this session of the meeting at this point.]

(k) AAHK indicated that it would report back on the effects of the re-routing on CWD in about 6 months, and that reflected the lack of contingency planning or action plan on their part if the re-routing was found to be detrimental to CWD. That was highly unsatisfactory. Members should ask for clarification from AAHK;

(l) the re-routing was implemented in a hasty manner and it was unclear whether the issue on marine safety had been thoroughly examined beforehand as human lives could be at risk if there was collision between ferry and dolphin;

(m) no full justifications had been provided in the approved EIA for the proposed MP with an area of 2,400 ha under the 3RS project other than it was to connect the existing SCLKCMP and the committed Brothers Islands MP. The effectiveness of the connection was very much in doubt;

(n) AAHK had been non-responsive to the issues raised after the subject EIA had been approved and would likely to remain so should the CLK OZP be agreed; and

(o) the Board should consider the 3RS project carefully taking into account the above comments and make sufficient inquiries. The Board should also request MD and AAHK to implement the outstanding tasks/work for the protection of CWD, including the exploration of realigning the high-speed ferry routes as proposed and the provision of full scientific justifications for the proposed MP.

[Ms Anita W.T. Ma arrived to join this session of the meeting at this point.]

C316 –鄭家泰

14. Mr Chang Ka Tai made the following main points:

(a) he was a member of HKDCS and a resident of Hong Kong born in the 1980s;

(b) he enquired as to why the supporters as quoted by AAHK in respect of the questionnaires received during the PE of 3RS did not submit their supporting views to the amendments on the CLK OZP as only four supporting representations were received;

[Mr. Philip S.L. Kan arrived to join this session of the meeting at this point.]

(c) all of us should protect our natural environment. Many young children in Hong Kong valued CWD;

(d) CWD had lived in Hong Kong for centuries and their significance was reflected by being the symbol of Hong Kong in the return of the sovereignty of Hong Kong to the Mainland in 1997;

(e) it had been promulgated since 2000 that AFCD was tasked to protect CWD to ensure the long-term survival of the species within Hong Kong waters. Whether AFCD would be accountable in the event that the 3RS project had led to the eventual disappearance of CWDs from Hong Kong waters;

(f) money could not be used to rectify irreversible environmental damage. The current mode of development with emphasis on continuous economic growth, which was the objective of the 3RS project, was not in line with the concept of sustainability. Hong Kong should follow the footsteps of other countries such as Australia and New Zealand which had moved away from that mode of development by adopting a more sustainable mode of development e.g. green tourism. Hong Kong, although it was a concrete jungle, in fact had an extensive countryside which would attract overseas visitors;

(g) the 3RS project was required because of the need for HKIA to compete with other airports such as Guangzhou Baiyun Airport and Shenzhen Bao'an Airport in the Mainland. As an international airport, HKIA did not and should not compete with those airports; and

(h) there were many alternatives other than 3RS and a complete picture should be presented to the Board to ensure that a balance would be struck between development and conservation.

[The meeting was adjourned for a short break of 5 minutes.]

15. As the presentations from commenters and their representatives had been completed, the Chairman invited questions from Members. He explained that Members would direct their questions to the commenters or their representatives for clarifications on the points presented. He added that to facilitate the smooth and efficient conduct of the hearing, the Q&A sessions should not be taken as an opportunity for debating among the concerned parties.

Impacts on CWD

16. Noting that the expert advice provided in the EIA of the 3RS project concerning CWD appeared to be different from those of Dr. Samuel K.Y. Hung of HKDCS (representative of C144, C155, C256 and C261), a Member asked the basis for accepting the advice of AAHK's experts as an accurate presentation of the CWD issue and if Dr Hung could substantiate his main grounds in disputing the approved EIA.

17. With the aid of a PowerPoint presentation, Mr Peter Lee (representative of C75) made the following main points:

(a) two leading CWD experts were appointed for undertaking the EIA, who began their studies on CWD in Hong Kong since 1995/96. According to their advice, although the 3RS project would unlikely lead to the extinction of CWD in Hong Kong, it could lead to reduction in their population. Nonetheless, provided that the remaining habitats of CWD would be protected, such impact would not be permanent;

(b) according to AFCD's report on the sightings of two dolphins which were tracked during 2011-12, 2013 and 2014, it was concluded that the locations of their sightings had changed during the construction of the Hong Kong Boundary Crossing Facilities of the proposed HZMB located to the east of HKIA. The activity area of the dolphins had shifted away from the east of HKIA towards the west of Tuen Mun and Lantau, but they did not disappear. Such finding was supported by statistical data;

(c) as provided in the approved EIA, some key mitigation measures to minimise impacts on CWD included the designation of a MP of 2,400 ha (equivalent to the total area of all existing MPs in Hog Kong), re-routing of SkyPier ferries, minimisation of land formation area of the third runway from over 800 ha to 650 ha with an optimised 3RS layout design, using horizontal directional drilling for the diversion of the existing submarine aviation fuel pipeline to avoid disturbance to seabed as well as non-dredged methods during land formation of the third runway;

(d) based on a 12-14 month CWD field survey, their experts concluded that the reclamation area of the proposed third runway currently served as a travelling corridor for CWD amongst the existing SCLKCMP, CWD hotspots to the west of Lantau and the committed Brothers Islands MP. The proposed MP would connect the surrounding waters of HKIA with

existing SCLKCMP to the north, the committed Brothers Islands MP to the east and CWD hotspots to the west of Lantau, forming a continuous stretch of marine protected area for CWD;

(e) as regards the re-routing proposal of high-speed ferries as a mitigation measure, there were two routes of SkyPier high-speed ferries operating to the north of HKIA; one along Urmston Road to the east of SCLKCMP connecting SkyPier and various ports in the Mainland such as Shekou and Fuyong, and the other ran across the proposed reclamation area of the third runway to the south of SCLKCMP to Zhuhai/Macau. The latter route also passed through the Pearl River Estuary (PRE) CWD National Nature Reserve (NNR) of the Mainland to the west of SCLKCMP. The navigation channel for the latter route between SCLKCMP and HKIA would be reduced significantly with the implementation of the 3RS project, which might pose risks to the safety of both passengers and CWD. Given the watersto the south of SCLKCMP was a travelling corridor for CWD and the safety concerns on the narrowed navigation channel, re-routing of the latter route was necessary. The re-routing to the north of SCLKCMP also aimed to avoid the high-speed ferries running through the proposed MP covering such navigation channel and the adjoining waters. Besides, SkyPier high-speed ferries to/from Zhuhai/Macau would no longer need to pass through the PRE CWD NNR;

(f) noting that Lung Kwu Chau was a CWD hotspot and high-speed ferries could adversely affect CWD in terms of direct injuries and noise nuisance, a 15-knot speed limit was imposed for SkyPier high-speed ferries when approaching Lung Kwu Chau, comparing with the normal speed of 30-40 knots. The re-routing proposal as recommended in the EIA was considered by ACE and was later approved by DEP. AAHK had also committed that the SkyPier high-speed ferries movements would be capped at an annual daily average of 99 prior to the designation of the proposed MP, which was less than the estimated annual daily averages of 115 and 130 in 2021 and 2030 respectively;

(g) the re-routing had not been as easy task as the journey time for each ferry trip was increased by 10-15 minutes and there was also extra fuel cost. AAHK had made great effort in negotiating with the concerned ferry operators in the diversion of the route; and

(h) ferries/vessels travelling in the proposed MP would be subject to a 10-knot speed limit and no construction works would be allowed within the proposed MP. Hence, the MP could not be established before the 3RS project was constructed as proposed by representers/commenters.

18. In response to Dr Samuel K.Y. Hung's query on why Mr Peter Lee could attend the hearing to respond to Member's question, the Secretary said that AAHK was authorised by C75 to attend the hearing for the current session. In response to Dr Hung's further queries as to whether Mr Peter Lee himself was authorised by C75 and if AAHK was a government department, the Chairman said that AAHK was authorised by the commenter as his representative for the hearing. As regards AAHK, it was not a government department but a statutory body governed by AAO. Dr Hung said that Members should listen to the official responses from the government departments and not AAHK.

19. While expressing concerns on AAHK's responses, Dr Samuel K.Y. Hung of HKDCS (representative of C144, C155, C256 and C261) made the following main points:

(a) his expertise on CWD had been widely recognised and the expert data/information quoted by Mr Lee of AAHK in his presentation was extracted from his previous reports;

(b) AAHK had misinterpreted the findings of his reports, which did not suggest that CWD would simply relocate to another area when their habitats were disturbed. Some had indeed disappeared from Hong Kong waters;

(c) he disagreed with the opinion of AAHK's experts that the reduction in the CWD population due to the 3RS project would be temporary in nature, since it was without scientific basis or grounds;

(d) one of AAHK's experts had quoted San Francisco Bay as an example where dolphins had returned to the area after completion of a construction project. That example was not applicable to the current case as the dolphins in the San Francisco Bay were a common species found in many areas including offshore areas, but CWD could only live in the PRE; and

(e) no study had been conducted by AAHK in the EIA on the locations of CWD in the waters of the Mainland, especially along the PRE. That might be a deliberate act to avoid any adverse findings as the EIA process for the 3RS project was being undertaken during the construction of the proposed HZMB. Many CWD had already disappeared from the waters of the Mainland. He doubted the accuracy or validity of the opinions of AAHK's experts.

20. In response to a Member's question on the survival rate of CWD once they left the Hong Kong waters owing to the construction works of the 3RS project, Dr Samuel K.Y. Hung of HKDCS (representative of C144, C155, C256 and C261) said that CWD were like human being as they were also large-brained mammal with complex behaviours and social structures. Whether CWD could survive after they moved from the Hong Kong waters to the Mainland waters would depend on whether they could adapt to the new environment, whether there would be adequate source of food for them and whether there were threats to their lives. While those CWD being forced to leave Hong Kong might still be able to survive in an adverse environment for a short period of time, they needed to compete with other CWD and marine animals and re-establish their social order in the new environment. As a number of projects were being carried out in the waters of the PRE, they would threaten the lives of CWD too. It was expected that the waters of the Mainland would not be a better home for CWD than the waters of Hong Kong. The Government had the responsibility to take care of the CWD living in the Hong Kong waters. AFCD had stated clearly that the overall long-term goal of its Conservation Plan for CWD in Hong Kong was to enable the CWD to continue to use the Hong Kong waters as a portion of their population range and to enhance the continued survival of the dolphin population inhabiting in the PRE. While the EIA for the 3RS project claimed that the Mainland waters would have capacity for the habitation of the Hong Kong CWD displaced by the project, there should be

mitigation measures to address the reduction of the CWD population in Hong Kong. Although the experts of AAHK said that they would expect the affected CWD to return to Hong Kong upon completion of the 3RS project, none of them could tell where the CWD would be going to during the construction of the project.

21. In response to a Member's question on whether Dr Samuel Hung's proposal of re-routing all the high-speed ferry routes along south Lantau coast further southwards would be beneficial to CWD disregarding the marine traffic issue, Mr Dick K.C. Choi, SMCO(W), AFCD, said that Dr Hung's proposal would help the conservation of CWD and the proposal was thus included in the EIA study brief for the 3RS project to explore its feasibility.

22. In response to the question from Mr K.K. Ling, Director of Planning, on whether SCLKCMP was a water body contiguous with PRE CWD NNR, Mr Peter Lee (representative of C75) said that there was a gap between the NNR and the MP. However, AAHK had already proposed to include the gap into the proposed MP for 3RS so that a large continuous conservation area for CWD could be formed comprising PRE CWD NNR, SCLKCMP, the proposed MP for 3RS and the committed Brothers Islands MP.

Airspace and Flight Directions

23. A Member asked the following questions:

(a) the percentage split of the current 68 air traffic movements (ATMs) per hour under 2RS towards the south, northeast, north and southwest directions;

(b) how the maximum design capacity of 102 ATMs per hour under 3RS was derived and what the future estimated percentage split of the ATMs would be towards the south, northeast, north and southwest directions under 3RS;

(c) it was mentioned by a representer that the maximum capacity of 102 ATMs per hour under 3RS could only be achieved when there were no constraints, whether those constraints were referring to the hilly terrain of North Lantau, the airspace issue or the air traffic management measures of the Mainland; and

(d) whether the maximum capacity of HKIA with 3RS would be limited if the utilisation of the airspace of the Mainland remained unchanged.

24. In response, Mr Wilson Fung (representative of C75) said that while he had no information at hand about the breakdown of the current ATMs towards the four specific directions, about 24% of the current ATMs needed to utilise the airspace of the Mainland. To achieve the maximum design capacity of 102 ATMs per hour, the 'Arrivals only, Departures only, Mixed' (ADM) mode of operation would be adopted in 3RS. Under the ADM mode, the future north runway would only be used for arrival (of 33 flights per hour), the middle runway only for departure (of 35 flights per hour) and the south runway for mixed operation (i.e. for both arrival and departure) (of 34 flights per hour). Hence, the total of 102 ATMs per hour was derived. The specific flight paths to achieve the maximum capacity of 102 ATMs per hour would be further studied by CAD.

25. Mr Samuel Ng, SEVO(1), CAD, supplemented that the maximum design capacity of 102 ATMs per hour under 3RS had already taken into account all constraints, including the terrain of Lantau and the wake turbulence generated by operating aircrafts. In 2007, the Pearl River Delta Regional Air Traffic Management, Planning and Implementation Plan (Version 2.0) (the 2007 Plan) was drawn up and agreed by the Civil Aviation Administration of China (CAAC), CAD of Hong Kong and the Civil Aviation Authority of Macao (CAAM). The maximum capacity of 102 ATMs per hour at HKIA under 3RS was premised on the implementation of enhancement measures in the 2007 Plan, which had also taken into account all relevant factors including the development needs of other airports in the PRD region and the overall utilisation of the airspace in the region.

26. The same Member asked Mr Lam Chiu Ying (representative of C167 and C168) whether the Mainland's control of the airspace was a potential uncertainty on the efficiency of 3RS. Before answering the Member's question, Mr Lam expressed his concern over the

capacity of the representatives of AAHK at the meeting. He considered that the representatives of AAHK should be speaking on behalf of the representer/commenter that they represented, but not in the capacity of the project proponent or experts. Mr Lam requested that his concern be recorded in the minutes of the meeting.

27. In response to the Member's question, Mr Lam said that the current operation of HKIA was influenced by the regulatory measures implemented by the Mainland authorities on the airspace. The air traffic of the Mainland was not solely controlled by CAAC as people might expect. The control of the airspace in the Mainland was under the jurisdiction of the People's Liberation Army Air Force and there was an ad-hoc committee in the Mainland to take charge of the airspace control issue. While CAD claimed that the 2007 Plan drawn up by the Mainland, Hong Kong and Macau had already made arrangements on the overall utilisation of the airspace in the region, the 2007 Plan was only a planning framework and it had never been disclosed to the public. In a conference held in Hong Kong in around May 2015, an expert of CAAC had made it very clear to the attendees that the airspace of the PRD region was already saturated due to the busy air traffic of the existing airports. The growth in ATMs of any airport in the region would mean the decrease of ATMs in another airport. Notwithstanding any agreement or plan reached between the Mainland and Hong Kong civil aviation authorities, if the Air Force imposed restrictions on the movement of aircrafts into any airspace of the Mainland, all flights including those of Hong Kong would be affected. The utilisation of the airspace in the region was not only decided by CAAC and CAD but also the said committee on airspace control which was chaired by a General of the Air Force with CAAC being only one of the parties in the committee. As regards the breakdown of the ATMs of HKIA towards the different directions, Mr Lam said that the current ATMs towards the north and northeast were zero since the movements to the two directions were restricted by the air traffic control of the Mainland.

28. In response to the Member's further enquiry, Mr Wilson Fung (representative of C75) said that due to the constraint of the surrounding terrain, the current 2RS of HKIA could not operate in the 'Independent Mixed Mode', i.e. the operation on one runway could take place completely separately and without interference from the parallel runway, to achieve its theoretical maximum capacity of 86 ATMs per hour. By operating in the 'Segregated Mode', i.e. one runway was used exclusively for landing while the other

exclusively for taking-off, 2RS could achieve its current maximum capacity of 68 ATMs per hour without the need to utilise the northward flight path, i.e. the aircrafts turning north immediately after taking-off. In that regard, it would be correct for Mr Lam Chiu Ying to point out that no aircrafts were flying to the north currently as there was no need to use the northward flight path. For the case of 3RS, it was necessary to utilise the northward flight path to achieve its maximum design capacity of 102 ATMs per hour. Such information was included in the EIA and other documents presented to the public. The use of the northward flight path under the 3RS operation had been taken into account in the 2007 Plan.

Capacity of 2RS

29. Two Members asked the following questions:

(a) as AAHK had said that with the implementation of the 3RS project, the air traffic handling capacity of HKIA could be increased from 68 ATMs per hour under 2RS to 102 ATMs per hour under 3RS. Whether the capacity under 2RS alone could be increased to 80 ATMs per hour if the northward flight path was used, which was allowed under the 2007 Plan, and why the northward flight path was only utilised under 3RS but not under 2RS;

(b) whether the capacity of HKIA under 2RS could be enhanced through more efficient air traffic management measures, such as those implemented in London Heathrow Airport; and

(c) given the northward flight path was not used under the current 'Segregated Mode' of 2RS, whether the 2007 Plan had been put into practice.

30. In response, Mr Wilson Fung (representative of C75) made the following main points :

(a) it was a misunderstanding of some representers and commenters that the maximum capacity of HKIA under 2RS could be increased from 68

ATMs per hour to 86 ATMs per hour if the northward flight path and the airspace of the Mainland could be utilised. The fact was that 2RS would not be able to achieve the capacity of 86 ATMs per hour even if the northward flight path was used;

(b) the capacity of HKIA was determined by the terrain of Lantau and the mode of operation that it could adopt having regard to the need to fully comply with the safety standards and requirements of the International Civil Aviation Organisation (ICAO). The hilly terrain of Lantau dictated that the 'Segregated Mode' under 2RS where one runway was used exclusively for landing while the other exclusively for taking-off should be adopted by HKIA to achieve its maximum capacity;

(c) although the 'Dependent Mixed Mode' might also be adopted but the capacity of HKIA would be the same as the 'Segregated Mode', i.e. 68 ATMs per hour. As such, CAD opted to adopt the 'Segregated Mode', which was simpler, as the optimal mode of operation for HKIA;

(d) as Heathrow Airport had no terrain constraint, it could adopt the 'Independent Mixed Mode' of operation where two aircrafts might take-off from and land on the two runways simultaneously without interference to the operation on each other runway;

(e) HKIA could not adopt the 'Independent Mixed Mode' as Heathrow Airport did and therefore could not take the advantage of the compressed handling time; and

(f) no report published by AAHK or CAD had stated that the capacity of 86 ATMs per hour could be achieved in HKIA under 2RS.

31. To supplement, Mr Samuel Ng, SEVO(1), CAD, made the following main points :

(a) due to the need to comply with the safety requirements of ICAO and the terrain constraint of Lantau, HKIA could not adopt the 'Independent Mixed Mode' for 2RS to further increase its capacity as there was insufficient buffer distance between the two runways for the concurrent movement of two aircrafts safely in case one of them strayed from its intended flight path; and

(b) the Airspace and Runway Capacity Study commissioned by AAHK and carried out by National Air Traffic Services (NATS) in 2008 had concluded that the maximum practical capacity that could be achieved with the existing 2RS would be 68 ATMs per hour, taking into account all the above considerations. There was no need to use the northward flight path to achieve the maximum capacity of 68 ATMs per hour under 2RS. To achieve the maximum capacity of 102 ATMs per hour under 3RS, the northward flight path would be used, which was in accordance with the 2007 Plan.

Capacity of 3RS

32. A Member noted that while the maximum capacity of HKIA under 3RS was worked out on the basis of the 2007 Plan, the commissioning of the third runway would be on a much later date after 2007. The Member asked if the future changes in the air traffic volume and utilisation of the airspace of the region would affect the materialisation of the 2007 Plan. In response, Mr Wallace K.K. Lau, DS(T)4, THB, said that the formulation of the 2007 Plan had already taken into account the future development proposals of the airports in the region, including three runways for Shenzhen Bao'an Airport, five runways for Guangzhou Baiyun Airport and three runways for HKIA. It was believed that the 2007 Plan could cater for the growth of air traffic demand in the PRD region for the next two to three decades.

33. In response to a Member's question on why the capacity of HKIA could be increased by changing from 2RS to 3RS operation, Mr Samuel Ng, SEVO(1), CAD, said that according to the consultancy study conducted by NATS, with the third runway in place, HKIA could adopt the ADM mode of operation where two aircrafts could land on the north

and south runways concurrently as the buffer distance between the north and south runways was sufficient for the concurrent movement of two aircrafts safely even if one of them strayed from its intended flight path. With the adoption of the ADM mode of operation and the mix of flight paths as recommended by NATS, including the use of the northward flight path, the maximum capacity of HKIA under the 3RS operation could be increased to 102 ATMs per hour.

34. In response to a Member's question on whether the north runway was a must for HKIA to raise its maximum capacity from the current 68 ATMs per hour to 102 ATMs per hour, Mr Wilson Fung (representative of C75) said that HKIA was operating with the 'Segregated Mode' under 2RS and the number of ATMs allowed per hour under the 'Segregated Mode' was dependent on the safe separation distance between the aircrafts. Even if the northward flight path was used, HKIA still needed to operate under the 'Segregated Mode' with a maximum capacity of 68 ATMs per hour. Whether the northward flight path was being used or not was irrelevant as the capacity was determined by the mode of operation. HKIA could not operate with the 'Independent Mixed Mode' under 2RS which could allow a higher capacity because of the terrain constraint and safety requirements. Other operation mode under 2RS had also been considered, such as the 'Dependent Mixed Mode', but it could not further increase the capacity of HKIA to over 68 ATMs per hour.

35. A Member said that a lot of time had been spent on the discussion of the necessity of the 3RS project by the government representatives, the representers and the commenters and asked whether the necessity of the project should be the focus of the Board in the current plan-making process. In response, Mr Lam Chiu Ying (representative of C167 and C168) said that the Preamble of the Town Planning Ordinance (the Ordinance) required the Board to systematically prepare plans for the types of building suitable for erection therein to promote the health, safety, convenience and general welfare of the community. As such, the determination of the necessity of a project and the suitability of having a use in a particular location was within the ambit of the Board under the Ordinance.

36. In response to a Member's question on whether Mr Lam Chiu Ying (representative of C167 and C168) would have any suggestion to further increase the estimated maximum capacity of 102 ATMs per hour under 3RS, Mr Lam said that if the

separating distances among the three runways were wide enough and air traffic congestion problem did not exist, the total capacity of the three runways would be similar to that of three independent airports, which would be more or less around 102 ATMs per hour. Comparatively, the estimated maximum capacity of 3RS (i.e. 102 ATMs per hour) made by HKIA might be over-optimistic. In the 3RS scenario, if for some reason an aircraft arriving from the west could not land on the north runway on its first trial, it needed to climb up towards the northeast direction to wait for a second landing. Similarly, an aircraft from the east would need to climb up towards the northwest direction if it could not land on the north runway on its first trial. Under such situations, the flight paths of those two aircrafts could be in conflict with the flight paths of the aircrafts using Shenzhen Bao'an Airport as those vertical separation between the moving aircrafts would be less than the safety distance required by ICAO. Nevertheless, such a conflict in flight paths between Shenzhen and Hong Kong was not mentioned in AAHK's reports, nor any experts from CAD had pointed out that such an allegation was incorrect. Therefore, if the northward flight path issue was not resolved, the third runway would not be able to operate independently as a runway solely for landing and achieve the capacity as proposed by AAHK.

37. In response to the question of Mr K.K. Ling on how to address the concern on air traffic safety in relation to the increase in ATMs under 3RS, Mr Samuel Ng, SEVO(1), CAD, said that safety was always the paramount concern in the planning of any flight paths and CAD had all along complied and would continue to comply with the safety requirements of ICAO.

38. A Member suggested CAD or AAHK to provide written information with illustrations to Members on how the maximum capacities of HKIA under 2RS and 3RS were derived, including the scenarios being considered and the safety requirements of ICAO. In response, the Secretary said that the responses to the representers' and commenters' grounds and proposals had already been set out in the Paper for Members' consideration. It might be more appropriate for Members to make use of the Q&A session to seek clarifications from the attendees on any issues that they wished to know.

39. In response to the Chairman's question on whether any specific target on the capacity of HKIA under 3RS had been set in deciding the project would be worth

implementing, Mr Wilson Fung (representative of C75) said that AAHK had not set a target. While there were estimations on the economic benefits of the 3RS project to Hong Kong and the internal rate of return, those quantitative figures were not the most important factor to determine whether the project was worth to implement or not. As Hong Kong needed to maintain its competitive advantage as an aviation hub for sustaining its economic growth and its role as an international city in the long term, the 3RS project was imperative to Hong Kong. Although 102 ATMs per hour was the currently estimated maximum capacity of HKIA under 3RS, it was not impossible for such a capacity to be further increased in future owing to advancement in technology.

40. As a representative of commenters had stated that the competitiveness of HKIA might not be enhanced even with the implementation of the 3RS project, a Member asked Mr Wilson Fung for his views on the statement. In response, Mr Wilson Fung (representative of C75) said that while the representative might consider that the competitiveness of HKIA had been declining since 2008 as it was no longer ranked No. 1 and was receiving fewer awards than before, he did not consider that the competitiveness of HKIA should be indicated by the number of awards it received. HKIA had been receiving many awards from different organisations over the years and each was assessed by different criteria. Nevertheless, the best indicator of HKIA's competitiveness would be its connectivity, which was important not only to the airport but to the development of Hong Kong as a whole. The connectivity of HKIA could be reflected by the number of destinations that could be reached, its passenger traffic capacity, its cargo traffic capacity and the total number of ATMs per year. Those figures could reflect HKIA's competitiveness more objectively and substantiate HKIA as a leading international and regional aviation hub which in turn made Hong Kong an important world city. Compared with other important airports in the region, such as Singapore Changi and Seoul Incheon Airports, HKIA was still out-performing them in terms of cargo handling capacity and the number of international passengers that it served. To face the ever keener competitions from the nearby airports, HKIA needed to increase its capacity by implementing the 3RS project.

Alternative Development Options

41. Two Members asked the following questions :

(a) whether alternative locations for the third runway had been considered; and

(b) if it was possible to increase the capacity of HKIA by shifting the existing north runway under 2RS further northwards to allow a greater distance for the independent operations of the two runways, instead of constructing the third runway, so that the scale of reclamation could be reduced, the navigation channel to the south of Sha Chau could be utilised and the widened midfield could be used for other developments such as apron, terminal building and shopping facilities.

42. In response, Mr Wilson Fung (representative of C75) made the following main points :

(a) the current location of HKIA at CLK was considered the optimal by the Government after a thorough study of the different locations for relocating HKIA from Kai Tak years ago;

(b) when preparing MP2030, various options for developing the third runway had been explored, including the different alignments for a new runway at CLK and alternative locations such as South Lantau and the North West New Territories. After detailed analysis, it was considered that the location of the third runway to the north of the existing HKIA was the most desirable and cost-effective for maintaining HKIA's competiveness;

(c) the Member's proposal to modify the existing 2RS of HKIA would require the carrying out of a new study and other technical assessments to ascertain its feasibility. The design of the flight path mix and utilisation of the airspace in relation to the proposed modified 2RS also required complex calculations and assessments by the experts; and

(d) based on the operation of other airports in the world which were under 2RS, they could only achieve slightly over a maximum of 80 ATMs per hour under the conditions of specific fleet mix and non-existence of terrain constraint. As such, it might not be cost-effective for HKIA to carry out such a substantial modification to gain only a small increase in capacity. The study by AAHK revealed that the construction of the third runway was the most cost-effective expansion option for HKIA.

Marine Traffic

43. Noting that the waters to the north of Sha Chau and Lung Kwu Chau was a dolphin hotspot, a Member asked Dr Samuel Hung of HKDCS (representative of C144, C155, C256 and C261) whether he would agree that the boundary of SCLKCMP could be adjusted by including more of northern waters to the MP and reducing the extent of the MP in its southern waters so that the navigation channel between the south of Sha Chau and the north of the third runway could be widened to allow the re-routing of the high-speed vessels from the north of Lung Kwu Chau to that channel. In response, Dr Hung said that he was open to the Member's proposal if it could help conserve CWD, although the boundary of the MP had never been changed since its designation in 1996. For CWD, the waters to the north of Lung Kwu Chau was definitely a more important habitat than the waters to the south of Sha Chau according to his surveys. However, he expected that such a proposal might not be acceptable to MD for marine traffic reasons. Indeed, the high-speed ferries from SkyPier were allowed to navigate across SCLKCMP if they could reduce their speed to not more than 10 knots inside the MP under the statutory requirement of the Marine Parks Ordinance. However, for the interests of the ferry operators who used SkyPier, AAHK was unwilling to compromise and insisted that the high-speed ferries from SkyPier could only navigate at 15 knots the slowest when they travelled along Urmston Road to the north of Lung Kwu Chau. Mr Peter Lee (representative of C75) said that the vessels navigating along the channel between Sha Chau and the airport island had to pass through the Core Zone of PRE CWD NNR, while the vessels navigating along Urmston Road could avoid the Core Zone.

44. The Vice-chairman said that while high-speed ferries could provide comfort and convenience to passengers, they might also avoid the use of the ecologically-sensitive navigation channels as they could operate in high speed to keep down the loss in time. Although the travelling time of using an alternative navigation channel could be prolonged, there should not be any difference in competitiveness among the ferry operators as all operators had to use the same channel and subject to the same operating environment. He asked why it was impossible for all high-speed vessels to use only the navigation channel to the south of Lantau; or if the high-speed vessels wished to use the channel to the north of Lantau, whether it was possible to restrict their speed to not more than 10 knots in that area.

45. In response, Mr Wallace K.K. Lau, DS(T)4, THB, said that the proposed re-routing of all the high-speed ferries currently navigating in the channels north of Lantau to the channels south of Lantau involved substantive policy consideration and should be carefully considered taking into account a host of factors, including competitiveness and passengers' acceptance. The competition involved was not only limited to that between the ferry operators themselves, but also that between ferries and land-based transport. Most importantly, the impact on marine traffic safety should be considered. If a large number of high-speed ferries were navigating along the channels south of Lantau, it was a fundamental change to the current marine traffic management. The routes of the high-speed ferries might also overlap or conflict with those of the ocean-going vessels travelling in the same navigation channels.

46. Mr Tony T.F. Li, SMO/P&D(3), MD, supplemented that the high-speed ferries plying between Hong Kong and Macau or the ports in the PRD region had to follow the recommended routes under the Permit to Operate High Speed Craft. The routes were mainly divided into northern routes and southern routes. The master of each high-speed ferry would usually decide which route to take based on the destination, weather and marine traffic conditions. There were about 360 and 160 trips of high-speed ferries navigating in the channels to the south and north of Lantau respectively every day, serving about 100,000 passengers. If a drastic change was made requiring all the high-speed ferries currently navigating in the northern routes to be re-routed to the south, the number of high-speed ferry trips in the southern routes would increase significantly from about 360 to over 500 daily, and it might result in significant marine traffic impacts and operational problems of high speed ferries. If the ferries were required to re-route to further south of Soko Islands where

was less sheltered, the ferries and their passengers would encounter greater wave heights and swell than currently experienced.

47. In response to the Vice-chairman's question on why SkyPier could not be relocated to the western side of the airport island to avoid using the navigation channel to the north of the airport which was the core CWD habitat, Mr Peter Lee (representative of C75) said that the current location of SkyPier on the eastern side of the airport island had the advantage of being close to Terminal 1 and Terminal 2 for passengers' convenience as the pier and terminal buildings were connected by automatic people mover. If SkyPier was relocated to the western side of the island, although apron buses could be used for transporting passengers between the pier and the terminals, the distance involved would be as long as about 3 to 4 km, incurring a longer travelling time. It was also impractical to extend the automatic people mover to connect the terminals and the pier on the western side as it required extensive excavation of the apron. Besides, there were shoals of fish gathering around the waters to the west of the airport island, which was also an activity area of CWD. As the water depth to the west of the island was shallower, it was necessary to undertake dredging to create a deep enough channel for the pier. As such, it was not desirable to relocate SkyPier to the western side of the airport island.

48. In response to the question from Mr K.K. Ling on whether the commissioning of HZMB could reduce the number of ferry trips of SkyPier so that the number of high-speed ferries passing through PRE CWD NNR would reduce, Mr Peter Lee (representative of C75) said that while the number of high-speed ferry trips of SkyPier might drop after commissioning of HZMB, it was expected that there would still be increase in the ferry trips in the medium and long terms. In the EIA, it was estimated that the number of high-speed ferry trips of SkyPier would increase from the current level to 115 trips in 2021 and 130 trips in 2030 having taking into account the effect of HZMB.

49. Noting that Urmston Road was already a busy navigation channel for the ocean-going vessels, Mr K.K. Ling asked if the marine traffic safety concern had been taken into consideration when more high-speed ferries were proposed to be diverted to Urmston Road to facilitate the implementation of the 3RS project. In response, Mr Tony T.F. Li, SMO/P&D(3), MD, said that AAHK had undertaken the MTIA studies between 2011 and 2015 for the 3RS project. The marine consultant used quantitative and qualitative analysis

to assess different key marine traffic issues, including the anticipated marine traffic activities up to year 2030, construction activities of the 3RS project, the proposed HKIA Approach Areas to be developed for the 3RS project and the route diversion and speed restriction of SkyPier high-speed ferries, etc. Stakeholders, including the relevant government bureaux and departments and the consultative committees of the marine industry, had been consulted on the findings of the MTIA.

Land Traffic

50. In response to the question of Mr K.K. Ling on whether the existing and planned road infrastructure and land transport facilities could cope with the increased traffic demand of 3RS, Mr Isaac K.S. Lo, SE/Is, TD, said that TD had examined the TIA conducted by AAHK for the 3RS project and considered that the overall traffic impact arising from the project on the roads within HKIA and the adjoining road network would be acceptable before 2026. Besides, the Government was seeking necessary resources to proceed with a feasibility study of Route 11, which would link up North Lantau and Yuen Long, in the light of the future traffic demands of the developments in Lantau and the Northwest New Territories. The project, if implemented, would become the third road corridor to Lantau in addition to the existing Tsing Ma Bridge and the Tuen Mun-CLK Link under construction, thereby enhancing the robustness of the road network connecting to the airport.

Public Consultation

51. The Vice-chairman said that some representers and commenters, including AAHK, were using the results of the opinion surveys to support their viewpoints. From the questionnaire survey of over 20,000 feedbacks conducted by HKU for AAHK, 73% of the respondents preferred 3RS as the future development option for HKIA. On the other hand, the survey conducted by the Hong Kong Baptist University (HKBU) based on a smaller sample size indicated that about 70% of the respondents were against the 3RS proposal; and many respondents considered that the 3RS project should be withheld until some fundamental issues, such as airspace utilisation and financial arrangements, were sorted out. He considered that the survey results could be affected by the design of the questionnaire and the background information presented to the interviewees, whose

opinions might be affected by the economic, social and environmental costs of the project that they perceived. As HKU's survey was conducted in 2011 long before the affirmation of the 3RS project by the ExCo, the interviewees at that time were not aware of the current "joint-contribution" financial arrangements proposed by AAHK, which were portrayed by the opponents as a means to bypass the LegCo on funding approval. The Vice-chairman asked if the interviewees of AAHK's survey were provided with adequate information on the estimated development cost of over HK$140 billion of the 3RS project.

52. In response, Mr Wilson Fung (representative of C75) said that AAHK had no intention to use the results of a particular opinion survey to represent the major views of Hong Kong people as people's views at different times could vary. He had no dispute on the results of the surveys conducted by other universities, which were done with different methodology and sample size. However, it should be stressed that HKIA's survey was conducted by HKU in a professional manner, and AAHK had no interference on how the survey was conducted. The questions being asked in their survey were wide-ranging covering five major aspects, and it was a rather long and comprehensive questionnaire. The interviewees were provided with the cost information of the 3RS project, which was about HK$136.2 billion in 2010 instead of the latest estimate of HK$141.5 billion based on the current scheme design, but the difference in cost estimation was not substantial. He believed that the results from the analysis of more than 20,000 questionnaires received in their survey were reflecting the general opinion of Hong Kong people. While some people might misunderstand that AAHK was to bypass the approval and monitoring of the LegCo by proposing "joint contribution" financial arrangements, AAHK had no such intention at all. AAHK was a statutory body established under AAO for the operation and development of HKIA, and was required by AAO to conduct its business according to prudent commercial principles. AAHK welcomed the monitor by the LegCo which had already set up a subcommittee in May 2015 to follow up on 3RS-related issues. Several meetings of the subcommittee had been convened already. AAHK was willing and would continue to report the progress of the 3RS project to LegCo periodically.

53. Also, in response to the Vice-chairman's question, Mr Chang Ka Tai (C316) said that the results of questionnaire surveys were highly affected by how the samples were taken. As every question in AAHK's survey was provided with some relevant background information, it would be biased towards the stance of AAHK. As such, the survey results

would be in favour of 3RS as advocated by AAHK. In the survey conducted by HKBU in March 2015, albeit with a smaller sample size of about 1,000 persons, the sample was taken randomly. The results of such a survey would be more representative than that of the survey commissioned by AAHK.

Cost-Effectiveness of the 3RS Project

54. Two Members asked the following questions :

(a) according to paragraph 5.2(i) of the Paper, AAHK estimated that the overall economic benefits of 3RS would be around HK$1,046 billion over the 50-year period from 2012 to 2061. In another study on the third runway proposal of HKIA published by the Chinese University of Hong Kong (CUHK) in 2007, it was estimated that the value added by the construction of the third runway would make the aviation industry contributing to about 8% to the local GDP taking into account both the direct and indirect benefits. The study also projected that if the efficiency of HKIA could be enhanced by 40%, such that the maximum capacity of 80 ATMs per hour under 2RS could be increased to 112 ATMs per hour, the overall economic benefits for the period between 2009 and 2025 would be HK$287 billion. It would be useful to know how the differences in the economic benefits estimated by AAHK and CUHK could be reconciled; and

(b) the general public was very concerned about whether the 3RS project was cost-effective as there were cost overruns and delays recently in many large-scale infrastructure projects in Hong Kong. It would be useful to know how cost overruns could be avoided for the project.

55. In response, Mr Wilson Fung (representative of C75) made the following main points :

(a) he had no knowledge of the study published by CUHK but he could explain how AAHK had assessed the economic benefits of 3RS.

AAHK commissioned Enright, Scott and Associates to conduct an economic impact analysis for the 3RS project. The economic benefits comprised the direct, indirect and induced contributions of 3RS to the local GDP. Direct contribution referred to all the revenues generated by AAHK and the companies operating on the airport island; indirect contribution referred to all the revenues generated by the suppliers to the companies operating on the airport island; and induced contribution referred to the spending in the community induced by the employees of the companies in both direct and indirect sectors. The catalytic impact of 3RS on the community, i.e. the value added to other related industries, such as the tourism industry, was not included in AAHK's estimation of the economic benefits;

(b) it was estimated that 3RS would generate a combined direct, indirect and induced contributions of HK$184 billion to the local GDP in 2030, equivalent to about 4.9% of the 2030 GDP forecast. The economic net present value (ENPV) of 3RS for the period between 2012 and 2061, as discounted to 2012, was estimated to be HK$1,046 billion. Meanwhile, the ENPV of 2RS for the same period was estimated to be HK$591 billion. The difference in ENPV between 3RS and 2RS was therefore HK$455 billion;

(c) the control on cost and programme of the 3RS project was the major challenge for AAHK in light of the project complexity which involved land reclamation and the concurrent implementation of various components including the construction of a new passenger concourse building, the modification of the existing T2 and the provision of the sophisticated automated people mover and baggage handling systems. The scale of works involved in the 3RS project was comparable to the development of a new airport; and

(d) the increase in the local labour and material costs could give rise to uncertainties for cost control. As such, it was hoped that the 3RS project could be commenced as soon as possible to minimise the

uncertainties. AAHK had a very good track record in cost and programme control as over 90% of its projects were carried out on-time and within budget. As the 3RS project would be the largest project managed by AAHK after the construction of HKIA, AAHK would deploy more of its internal resources to monitor the implementation of the project.

Aircraft Noise

56. A Member asked if the aircrafts flying to the Mainland could not use the northward flight path, whether they all had to first fly towards the direction of Hong Kong Island before turning to the north leading to an increase in aircraft noise impact on Hong Kong Island. In response, Mr Wallace K.K. Lau, DS(T)4, THB, said that the aircraft noise impact of the 3RS project had been assessed in the EIA. As the proposed aircraft noise mitigating measures of AAHK were considered acceptable, the EP for the 3RS project was granted by DEP. While flight movements in different directions would induce aircraft noise impact on the concerned areas, AAHK had regularly updated the concerned District Councils on the relevant aircraft noise mitigating measures.

Marine Sand

57. In response to the question of Mr K.K. Ling on how to address the concerns on the source of marine sand for reclamation and the associated environmental impacts arising from the extraction of the marine sand could be addressed, Mr Wallace K.K. Lau, DS(T)4, THB, said that according to AAHK, the reclamation for the 3RS project would require the use of about 100 million m^3 of marine sand and 2.8 million m^3 of public fills. The marine sand would be imported from the Mainland. THB had been in contact with the relevant Mainland authorities in the past on obtaining marine sand. In Guangdong Province, AAHK's records showed that there were more than two sources of marine sand, as contrary to the information provided by some commenters. The Mainland authorities had all along expressed support for the supply of marine sand for the 3RS project.

58. As Members had no more question to raise, the Chairman said that the hearing on the day was completed. He thanked the government's representatives as well as the

commenters and their representatives for attending the meeting and said that the Board would deliberate the representations in their absence on another day and would inform the representers and commenters of the Board's decision in due course. They left the meeting at this point.

59. The meeting was adjourned at 3:05 p.m.