(I) Reply to PAC Letter Dated 30 March 2015

(a) with reference to Item (f) of the Attachment to your reply dated 25 March 2015 (GEN 20), a further breakdown **by year** from 2013 the extra costs incurred to ensure the continued safe and efficient operation of the **existing Air Traffic Management System** ("ATMS") (including upgrading and maintenance works, such as stocking specialized spare parts and software maintenance for the existing system) and extra manpower expenditure required for operating the **existing ATMS**, arising from the late delivery of the new ATMS contract project;

The average annual expenditure on system maintenance of the existing ATMS in 2013 and 2014 was $5.9M. This has included a one-off enhancement measure for the existing ATMS conducted in 2014 to enhance the system's capability to handle the increasing volume of air traffic to ensure its safe and reliable operations.

The average annual manpower cost to maintain the operation of the existing ATMS was around $9.5M in 2013 and 2014. Such manpower cost would be incurred in any case for operating the existing ATMS, or for the new ATMS upon its commissioning.

A detailed breakdown of the cost incurred is at *Appendix I* (see attached).

(b) with reference to the dedicated project team set up by the Civil Aviation Department ("CAD") to oversee the preparation and implementation of the new CAD headquarters project and the new Air Traffic Contract ("ATC") system (paragraph of 1.6 of the Audit Report refers), please provide:

(i) composition of the dedicated project team;

(ii) manpower situation and expenditure involved from 2007 up to now. Please set out the details by year;

Reply to (i) – (ii):

For the implementation of the new CAD headquarters project and the ATC system replacement project, an Assistant Director-General of Civil Aviation (ADGCA) post was established on 1 October 2007 to head a dedicated Project Team, following the approval from the Finance Committee of the Legislative Council in May 2007. The post has lapsed in March 2013. The supervision and implementation work of the ATC system replacement project has since been undertaken by an ADGCA in addition to his duties.

The Project Team is supported by 7 civil service posts created on a time-limited basis and other serving CAD officers through internal redeployment, as well as officers appointed on time-limited non-civil service contract (NCSC) terms. In addition, a Senior Architect and a Senior Electrical and Mechanical Engineer were temporarily seconded from the Architectural Services Department and the Electrical and Mechanical Services Department respectively to support the Project Team with their professional advice. The total number of staff in the Project Team varied at different stages of the project. As the project progresses, the Project Team has gradually reduced its staff complement. As at April 2015, the Project Team has 24 members.

Details of the manpower situation and expenditure of the Project Team for involving in the CAD headquarters project and ATC system replacement project from 2007/08 financial year are set out in the table below.

| Manpower situation and expenditure for the Project Team involving in the CAD HQs project and ATC system replacement project | | |
|---|---|---|
| **Year** | **Manpower** | **Expenditure ($M)** |
| 2007/08 | 25 | 11.9 |
| 2008/09 | 38 | 33.8 |
| 2009/10 | 39 | 40.7 |
| 2010/11 | 45 | 41.7 |
| 2011/12 | 49 | 46.1 |
| 2012/13 | 40 | 38.5 |
| 2013/14 | 34 | 28.5 |
| 2014/15 | 31 | 29.1 |
| As at April 2015 | 24 | N/A |

(iii) whether extra manpower expenditure was incurred as a result of the delay in the implementation of the ATMS contract;

(iv) if yes, the amount involved, and whether this amount is included in calculating the extra cost incurred in Item (a) above; and

Reply to (iii) – (iv):

The completion date for the new ATMS as stated in the contract signed with the ATMS Contractor was December 2013. The manpower cost for the Project Team from January 2014 to end March 2015 was $23.3 million. The figure includes the manpower cost for time-limited posts and NCSC staff. No additional expenses were incurred for redeploying existing staff of CAD to work on the ATC system replacement project.

As the Project Team did not participate in the maintenance and operation of the existing ATMS, the manpower cost set out here is not included in the amount of costs set out in item (a) above.

(v) whether the project team had submitted report(s) regarding the delay in the implementation of the ATMS contract. If yes, please provide the details and CAD's response and follow-up actions, if any;

The Project Team provides periodic reports on the progress of the ATC system replacement project to the CAD's senior management, who have been closely monitoring the project progress and providing guidance and directives to the Project Team through regular and ad-hoc meetings, high-level management meetings and new ATC system transition meetings, etc.

To monitor the progress of the ATMS contract work, and to expedite the completion of the project, CAD has required the Contractor to deploy more resources for the implementation of the project. A number of enhancement measures as follows have been adopted –

(1) A steering committee, chaired by the Deputy Director-General of Civil Aviation, was established in April 2013 to enhance monitoring of the progress of the ATMS project and to give timely instructions on key issues as well as channeling necessary resources to the project;

(2) Ad-hoc meetings were held between the Director / Deputy Director-General of Civil Aviation / Assistant Director-General of Civil Aviation and the contractor's senior management in Hong Kong in November 2013; May, August and October 2014; and March 2015. At the meetings, CAD requested the contractor to take all possible measures to minimise the delay of the project, including the deployment of additional resources and personnel with relevant experience, settling outstanding issues of the ATMS as early as possible, and submitting a practicable implementation plan for the project;

(3) weekly teleconferences are conducted between the subject ADGCA and Chief Electronics Engineer and the contractor's senior management since early 2014, with a view to reviewing the project progress, adjusting work priorities and human resources, etc, to tackle the major issues in a timely manner, and enhance communication and collaboration between the two sides; and

(4) as per CAD's request, the Contractor's project management and professional personnel visited Hong Kong on several occasions since early 2014 to discuss with CAD staff the outstanding issues of the ATMS. The expert project team of the Contractor was deployed to Hong Kong for four weeks between April and May 2014 to expedite the completion of the site acceptance test. The Contractor has deployed professional personnel to Hong Kong to work with the CAD at different implementation phases of the project.

There has been positive response from the ATMS Contractor, and enhancement measures have been taken in the implementation of the ATC system replacement project, including deployment of more resources, and solid progress has been made (details are set out in item (d) below).

(c) the updated figures on the outstanding deficiencies/observations of the ATMS system and whether all the deficiencies/observations recorded during the Factory Acceptance Tests have been addressed;

All the 204 deficiencies/observations recorded during the Factory Acceptance Test conducted in June – July 2012 have been rectified by the ATMS Contractor. Of the 1,000 follow-up items recorded on site during the Site Acceptance Test conducted in August – November 2014, about 80% of them are minor in nature and would not affect the safety and the commencement of operation of the ATMS. For the remaining 20% priority items, around 90% have already been

rectified/addressed. The remaining ones are expected to be ready for verification by mid-2015.

(d) the basis for having confidence that the new ATC system would be ready for operation in first half of 2016; and

With additional resources from the ATMS Contractor devoted to the project, progress has been made by the ATMS Contractor in rectifying the outstanding deficiencies/observations of the new ATMS. All the deficiencies/observations recorded during the Factory Acceptance Test have been rectified by the ATMS Contractor. Separately, around 90% of the priority items identified during the Site Acceptance Test have been rectified/addressed. The remaining ones are expected to be ready for verification by mid-2015. In addition, simulation training for ATCOs has commenced early this year.

Given the latest progress of the new ATMS, we expect completing all the acceptance test events of the new ATMS by Q3 2015, followed by full-fledged training for ATCOs. Upon completion of training, the new ATC Centre will commence operation. In view of the development above, we are confident that the new ATC Centre will be ready for operation in the first half of 2016.

(e) according to paragraph 1.8 of the Audit Report, under the Government's "user pays" principle, the amortized capital cost and the recurrent cost for providing ATC services are recovered through ATC service charges and en-route navigation charges. In this connection, how can CAD ensure that the Government's "user pays" principle is followed when determining the ATC service charges and en-route navigation charges and whether the capital cost of the new ATC system should be borne by present users or future users as only the latter group of users could directly benefit from the new system.

There is established Government-wide mechanism for the regular review of government fees and charges. CAD follows strictly the stipulated procedures promulgated by the Financial Services and Treasury Bureau (FSTB) in the regular fee review with a view to ensuring that the "user pays" principle is followed when determining the ATC service charges and the en-route navigation charges. CAD strictly follows the Costing Manual published by the Director of Accounting Services in preparing and vetting the costing statements for the fee reviews on the ATC service charges and the en-route navigation charges and, where necessary, seeks the advice from FSTB and/or Department of Justice on the basis for including the relevant costs and imposing the revised charges on the users.

(II) Reply to PAC Letter Dated 1 April 2015

To facilitate the Committee's consideration of the above chapter of the Director of Audit's Report No. 63, I should be grateful if you could advise whether the Civil Aviation Department and/or other relevant parties, such as the Government Logistics Department, was/were aware of any articles/reports in the media concerning the performance of Autotrac III at airports in Delhi, Mumbai or Chennai of India prior to the award of the Air Traffic Management System contract in February 2011. If yes, please provide the relevant details and records.

We understand that the Indian newspapers referred to at the PAC meeting were media reports of 2010 related to the performance of Autotrac III systems at the Indian airports. According to the Airport Authority of India, the Autotrac III systems at the Indian airports, namely Delhi, Mumbai and Chennai, only commenced operations from July – September 2011. According to our record, we had not received any media reports in the Indian newspapers as mentioned before the award of the ATMS contract in February 2011.

Encl.

*Appendix I*

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**Appendix I**

## Costs incurred for annual maintenance of AT1

### System maintenance of the existing AT1:

| Year | Manpower for enhanced maintenance on AT1 (due to approaching end of operational life of AT1) ($M) | Procurement of specialised spares / repair for AT1 ($M) | Software maintenance for AT1 ($M) | Total ($M) |
|---|---|---|---|---|
| 2013 | 0.32 | 2.74 | 4.99 | 8.05 |
| 2014 | 0.46 | 1.61 | 1.59 | 3.66 |
| Average of 2013 and 2014 | 0.39 | 2.18 | 3.29 | 5.86 |

Average total expenditure for annual maintenance of AT1 was **$5.86M**.