

Chapter 8

Lessons to be learned

Introduction

8.1 An inquiry into a public fiasco identifying what went wrong, who should be held responsible and to what extent by nature focuses on the more “negative” aspects of a venture, even a venture so “positive” as to build one of the world’s largest and busiest airports. Yet this is not an entirely negative exercise. The Select Committee hopes that, through this inquiry, Hong Kong is to benefit from the lessons that can be learned.

8.2 The Select Committee believes that in Hong Kong the fearless expression of independent views should be encouraged, no matter whether they are critical or are at variance with the general sway or the apparent position of a superior officer. Where opposing and inconvenient views are branded as pessimistic or unco-operative, and therefore suppressed, checks and balances are lost and serious consequences may result. But for those who were not afraid to stand by their conviction, matters might have been worse.

8.3 There are other lessons to be learned, and they are set out below. Although the SAR may not be building another airport of comparable size for a long time, the Select Committee believes these lessons have meaning and application for all kinds of large scale projects in the future.

Lesson 1 Governing bodies of executive authorities must be given authority commensurate with their responsibility

8.4 The then Government vested the responsibility for constructing and managing the new airport at Chek Lap Kok in AA, which has been established by statute. The Chairman, Vice-Chairman and members of the AA Board were appointed in December 1995 by the then Governor of the Hong Kong Government, who also approved the AA Board’s appointment of CEO/AA. In other words, although the AA Board has the responsibility for supervising the AA Management, it does not have unfettered authority to hire or fire the Chief Executive Officer. This reduces the Board’s effectiveness.

8.5 The Select Committee is of the view that when the chairman of an authority is not also the chief executive, as in the case of AA, the board should be given unqualified power to hire or fire, particularly the most senior staff member in the authority.

Lesson 2 The authority of governing bodies should not be undermined

8.6 In order to ensure that the construction of all the projects in the Airport Core Programme would be properly coordinated, the Government set up ADSCOM chaired by CS to monitor the progress of these projects which included the new airport. When exercising this monitoring function, ADSCOM asked for progress reports from AA and invited CEO/AA and his team to attend its meetings, but not the chairman and the non-Government members of the AA Board. The Select Committee is of the view that ADSCOM should not have bypassed the AA Board and dealt with the AA Management directly as this raises the question: to whom was AA management answerable, the AA Board or ADSCOM?

8.7 In order not to undermine the authority of governing bodies of executive authorities, and also to hold such governing bodies responsible in the event of any problems or failures, the Government should deal directly with the governing bodies and not with the staff; staff participation at Government's meetings with such governing bodies should be limited to providing support to the governing bodies

Lesson 3 Only competent people who are prepared to commit their time and effort should be appointed to governing bodies of executive authorities

8.8 The Select Committee has already stated that the AA Board has not been effective in supervising AA Management. From documents available to the Select Committee, such as the minutes of AA Board meetings, it is clear that the attendance record of some members of the Board was far from satisfactory.

Some members did not appear to have made any meaningful contributions at Board meetings. The Select Committee considers that one lesson that the Government can learn from the AA Board's failure to supervise AA Management effectively is that, when appointing members to the governing bodies of executive authorities, the Government should ensure that only those who are competent and committed are appointed and that the chairman and deputy chairman of these bodies are people with leadership qualities. Before their appointment, they should be made aware of their responsibility clearly in the organization. To ensure the continued effectiveness of such governing bodies, the performance and commitment of the chairman and members should be evaluated regularly during their tenure, and those who are found unsuitable should be replaced at the first available opportunity.

Lesson 4 User requirements must be clear from the start of a project and there should be a point in time beyond which no further changes should be allowed

8.9 The Select Committee notes that PD/AA has claimed that when FIDS was being developed, he had no client who could tell him what the user requirements were. The result was that one year after the contract for FIDS had been awarded, the contractor claimed that it could not understand from the technical specifications what AA's requirements for FIDS were. Furthermore, when the development of the systems was in full swing, there were so many variations to the contract that AA had to settle substantial claims from the contractor to the tune of \$89 million, compared to the original project cost of \$230 million. There were similar problems with other facilities in PTB, because user requirements had not been identified at the right juncture. The Select Committee considers that when a project, be it a structure or a system, is being planned, the end users should be identified and involved from the very beginning so that their requirements can be taken into consideration early.

Lesson 5 The head of monitoring body for a large scale infrastructure project should be a professional

8.10 The current and former directors of NAPCO are Administrative Officers. They received advice from their own professional staff and consultants employed specifically to monitor ACP projects, and received progress reports on the projects from them. While they may be capable administrators, the inquiry shows that they failed to grasp the implications of the discrepancies between the actual work progress and the work schedule. When monitoring the progress of a project, a professional is more likely to concentrate on the technical aspects of the project, whereas Administrative Officers may not be fully aware of the technical implications and may take into account other considerations, thus failing to warn their seniors of the significance of the deviations and discrepancies.

8.11 In order to ensure that the true picture of the progress of a large-scale and complex project is reflected accurately and any problems detected in the monitoring process are flagged up in the appropriate forum, the head of the monitoring body for such a project should be a professional.

Lesson 6 Avoid creating too many committees with overlapping functions and responsibilities in the same organisation

8.12 One of the criticisms that the Select Committee has about the AA is that there was a proliferation of committees, task forces and working groups under the Board and within the AA Management, to the extent that the overlap in functions of these committees has significantly reduced their effectiveness. Some of these committees did not have any clear terms of reference and therefore their responsibilities and functions were not well defined, or the required action followed through. The AOR Steering Committee fizzled out when the Chairman/AA started asking for weekly progress reports. DCEO/AA started his own group shortly after he had taken up appointment in AA, but PD/AA, one of the key players, did not take part at this group's meetings.

8.13 The lesson to be learned from the organization structure of AA is that if committees are established to coordinate the activities of different units in an organization, the number of such committees should be kept to the minimum and the terms of reference of these committees clearly set out so as to avoid any overlapping of responsibility and confusion.

Lesson 7 Progress reports should be well prepared, studied and followed up

8.14 The Select Committee notes that many monitoring tools have been introduced to ensure satisfactory progress in all the projects. Examples of these tools were weekly reports, jointly signed by the CEO/AA, PD/AA and AMD/AA, to the Chairman of the AA Board, and Situation Reports prepared by NAPCO. Evidence shows that these reports had been repeatedly disregarded and the warning signals embodied in these reports either neglected or ignored.

8.15 A comparison of the contents in AA's progress reports on FIDS with those prepared by NAPCO will show the obvious disparity between the two sets of reports. For example, in a paper submitted to the AA Board, it was reported that *reliability* testing of FIDS was completed on 20 June 1998 with 98.7% *reliability*. However, in a NAPCO update on New Airport Projects dated 30 June 1998, it was reported that the FIDS host server was down for 9% of the time. Had these reports been analysed more critically, the problems with FIDS would have been brought up for more vigorous discussion at ADSCOM.

8.16 The Select Committee therefore suggests that another lesson to be learned is, that while it is good practice to set up a system to check the work progress in any organization, the frequency and number of progress reports should be appropriate and their accuracy assured so as to be effective. Duplicative reports from different sources should be avoided. If reports from different resources are deemed necessary, different observations, if any, in these reports should be analysed critically. Reports should not be treated as routine documents and just browsed through or merely filed away, but should be studied carefully and digested, and any problems that can be identified from such reports should be brought up for discussion in the appropriate forum.

Lesson 8 Decisions in any organisation should be well documented

8.17 In response to the Select Committee, AMD/AA, PD/AA and HIT said on several occasions that the problems encountered in the construction of the airport were known to all members of AA senior management at their regular meetings, but when pressed to produce records of such meetings, they said that records were not kept of such exchanges. Even serious slippages and problems that they had discovered were not put down in writing for discussion in the proper forum. It is therefore not easy to ascertain in such circumstances who in AA's senior management were made aware of the problems, and whether there were discussions to resolve those problems and whether they were indeed resolved.

8.18 The lesson to be learned here is, that in the interest of accountability, discussions and decisions made, and subsequent action should be properly documented.

Lesson 9 Development of large-scale and complex projects should be managed by personnel with relevant experience

8.19 The Select Committee observes that apart from DCA and AMD/AA, none of the members of the AA Board and AA top level management has relevant experience in managing airports, not to mention experience in constructing and commissioning a new airport. This imbalance was reflected in the strong emphasis on physical works, with inadequate considerations for operation and user facilities. Another lesson that the Government can learn is, that if the Government were to entrust a large-scale project such as the new airport to an outside organization, it is important to ensure that the senior key personnel in that organization must have relevant experience in managing project and operations.

Lesson 10 Activities of business partners should be co-ordinated

8.20 Also on the point of experience, the Select Committee notes that AA has out-sourced many services such as ramp handling, baggage handling and cleaning. Due to the lack of experience in running a new airport, the various service providers were not well co-ordinated on AOD. Another lesson to be learned is, that if outside agents or business partners are involved in the provision of services, the relationship of these agents should be carefully defined, their activities properly co-ordinated and the people involved fully briefed on their relationship and individual responsibilities.

Lesson 11 Project completion date should be fixed before related contracts are awarded

8.21 The Select Committee considers that there is a lesson to be learned from the award of contracts with no fixed completion dates.

8.22 The building contract for PTB and associated contracts were entered into at a time when a firm airport opening date was not established. Hence, the contract was written in such a way that substantial completion of contract can only take place on AOD, and not before. In other words, there was not a stipulated contractual completion period, and the contractor was allowed to work on the contract until the date of opening of the airport, without leaving any room for essential follow-on activities, such as identification and rectification of outstanding defects, adequate real-life testing and training. This type of unusual contractual arrangement, arising from not having established a contractual completion date, left no room for remedying problems after substantial completion and before actual opening for business.

8.23 In another example, the HACTL franchise agreement was initialled on 18 August 1995 with an agreed completion period of 36 months. This would mean a completion date of 18 August 1998, four months after the April 1998 airport opening date, to which the then Financial Secretary had said the Government was firmly committed. The Select Committee is of the view that under such circumstances, since the Government was not able to obtain

HACTL's agreement to complete ST1 by AOD, the Government should have required HACTL to complete ST1 by phases with the phased completion dates clearly stipulated in the franchise agreement. For a franchise as important as the HACTL air cargo handling service franchise, which has significant economic implications on Hong Kong, and may impact on the smooth operation of the airport on AOD, it is unacceptable that the Government had relied on a "best endeavours" understanding.

8.24 The lesson to be learned here is, that for large-scale projects, it is important to have from the very start a project completion date. After the completion date has been fixed, the relevant contracts or franchise or service agreements should be awarded in time so that they may tie in with the project completion date.

Lesson 12 Risk assessment and contingency plans are a must for large-scale or complex operations

8.25 One of the causes of the problems that occurred in the new airport on AOD is that neither the Government nor AA had conducted proper risk assessments on AOR. Had AA tried to identify the risks and the consequences of opening the airport with an unreliable flight information system, measured the risks identified and assessed whether the risks could be controlled, e.g. avoided, reduced or contained (definitely not ignored), AA might have second thoughts about the state of readiness and recommended deferral of the airport opening date.

8.26 Despite claims by AA that there were contingency plans to cope with any system or service breakdowns, such contingency plans were conspicuous by their absence on AOD. PD/AA said that he had arranged an army of maintenance contractors to standby on AOD to attend to emergencies, but the Select Committee has found that what was available was just a list of telephone numbers of the contractors. The standby FIDS, which had been developed with little enthusiasm from the AA Management, was not used on AOD in spite of the problems with FIDS. Other examples of the ineffectual measures have been already been covered in Chapter 5J earlier on.

8.27 The Select Committee therefore suggests that in the planning of any large-scale or complex operations or functions, the party responsible should carry out a thorough risk assessment. And having taken the decision to proceed with the operation or function, there should be detailed contingency plans to cope with any emergencies.

Lesson 13 Recognise the importance of information technology

8.28 There is strong evidence to prove that people, especially those in senior positions, either did not possess good knowledge of information technology or did not appreciate the importance of information technology and have failed to deploy IT expertise at all levels in project development and management and in progress monitoring. PD/AA and PM(E & M Works)/AA, both in charge of the development and installation of FIDS, said that they were not IT experts, and some of the major decisions on FIDS they had taken have proved to be fatal to the system.

8.29 It is important to recognise that in this day and age IT permeates every aspect of human activity and IT's importance should be given due regard. There should be IT expertise at the appropriate level in any organization and decisions on IT systems should take expert IT opinions into consideration.

Lesson 14 Allow ample time for testing and commissioning systems involving new and advanced technology

8.30 Despite reservations about the sophistication of FIDS, AA proceeded with its development and installation. From the point of view of the promotion and application of advanced technology, this is commendable. However, insufficient time had been allowed for testing and commissioning the sophisticated systems which were largely responsible for the problems on AOD. In order to meet the target airport opening date, the FAT of the system, which is an important step in the test procedure, was cancelled, and not enough time was allowed for carrying out the necessary tests. Staff training was carried out in a

disorganized and compressed manner at the same time the system was being tested.

8.31 The lesson to be learned from the FIDS project is that whenever projects or systems involving new and advanced technology are developed, ample time should be allowed for thorough testing, commissioning and staff training.

Lesson 15 Government should recognise the importance of community consideration in project planning

8.32 The community's reaction to the aircraft noise nuisance under the new flight paths provides another lesson to be learned. While it is necessary to stick to standards, especially international standards in any planning process, decision-makers should also be alert to the possible impact of a decision on the community, anticipate the community's reaction, and consult the people who may be affected. CAD is strongly advised to begin the consultation process well before the second runway comes into service.

8.33 The lesson to be learned is, that the Government should recognise the importance of community consideration when planning large-scale projects.