A. Introduction

The Audit Commission (Audit) conducted a value for money audit on the administration of the Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI). The review focused on the following areas:

- corporate governance;
- remuneration and recruitment;
- project management;
- project cost control;
- administrative issues; and
- cost and achievements of ASTRI.

2. The Committee held four public hearings on 26 April and 14, 19 and 21 May 2007 respectively to receive evidence on the findings and observations of the Director of Audit's Report (Audit Report). The Chief Executive Officer (CEO) of ASTRI, Dr Robert YANG Jih-chang, was invited to the Committee's hearings. However, as he had resigned from the CEO's position with immediate effect on 24 April 2007, he did not attend the hearings to give evidence on the audit observations.

3. In response to the Committee's invitation, **Dr YANG** stated that he had already responded to all of the audit observations and recommendations, which ASTRI had taken to heart, and all his responses could readily be found in the Audit Report. These responses were reviewed and approved by ASTRI's Board of Directors (Board) for submission to Audit for finalising the Audit Report. He also provided to the Committee a statement which he had issued to the press on 24 April 2007 announcing his resignation (in ***Appendix 16***). He pointed out that the media's reports on Audit's observations in the week following the publication of the Audit Report had inevitably affected ASTRI's image and reputation unfavourably. As a responsible CEO, he had resigned to minimise the possible damages on ASTRI due to the media's reports.

B. Corporate governance

4. At the Committee's first public hearing on 26 April 2007, **Dr Allan WONG Chi-yun, ASTRI Board Chairman**, made an opening statement. The full text of his statement is in ***Appendix 17***. In summary, he said that:

- the Board thanked Audit for its efforts in examining ASTRI's operation and pointing out with helpful recommendations on some of the problems in the administration of ASTRI. The Board accepted all audit recommendations and would follow up vigorously with ASTRI's management to implement the recommendations as soon as possible; and

- the Board had adopted an action plan in response to the Audit Report, comprising five major points, as follows:

  (a) a Special Committee had been appointed by the Board to closely monitor the implementation of the audit recommendations, with a view to completing the implementation by the end of 2007;

  (b) the current Head of Internal Audit of ASTRI had been appointed the Compliance Officer, who was responsible for all compliance issues in finance, administration and human resources (HR). The Compliance Officer reported directly to the Audit Committee of the Board;

  (c) the Board would rationalise the administration structure within ASTRI by creating a Chief Operating Officer post, who would be fully responsible for the administration of ASTRI;

  (d) the Board agreed to publish annually the key performance targets and achievements of ASTRI in its corporate mission to provide technology support to the local industry; and

  (e) the Board would critically consider ASTRI's budget in future years with a view to reducing the proportion of administration cost to the total cost of ASTRI from the current 45% to 25% within the next three years.

5. At the request of the Committee, the **ASTRI Board Chairman** provided an action plan drawn up by the Special Committee, in Annex 1 to his letter of 18 May 2007 in ***Appendix 18***, which set out the proposed time-frame for implementing the various audit recommendations.

6. The Committee noted that the Board had decided to renew the employment contract of the former CEO before he tendered his resignation. To ascertain whether the Board was aware of Audit's findings when it made the decision, the Committee asked:

- about the exact dates when Audit started its review on ASTRI's administration and when the draft Audit Report was provided to ASTRI for comments; and

- for a chronology of events setting out ASTRI's meetings during which the renewal of the former CEO's employment contract and the draft Audit Report were discussed.

7. In his letter of 26 April 2007 in ***Appendix 19***, **Mr Benjamin TANG, Director of Audit**, informed the Committee that Audit held an entry meeting on the audit review with ASTRI on 24 August 2006 and started audit work at ASTRI's office on 29 August 2006. The draft Audit Report was forwarded to ASTRI for comments on 8 February 2007. The chronology of events provided by the **ASTRI Board Chairman** is in ***Annex 4 of Appendix 18***.

8. The Committee asked:

- why the Board still decided to renew the employment contract of the CEO in March 2007 despite the unfavourable findings and observations in the draft Audit Report;

- why the CEO resigned soon after the publication of the Audit Report despite the fact that the Board had agreed to renew his employment contract; and

- whether the Board had ever informed the CEO of his management deficiencies, given that a number of problems in the administration and management of ASTRI had been identified by Audit.

9. The **ASTRI Board Chairman** responded at the public hearing that:

- the Board recognised that there were deficiencies and shortcomings in Dr YANG's administration and management, but having balanced all relevant factors, the Board considered him a capable CEO for leading ASTRI for a further three years. In particular, his technical expertise and contributions in building up ASTRI's research and development (R&D) capacity were commendable. Moreover, finding another CEO would be rather difficult given the unique attributes required of the post. The Board therefore agreed in principle to offer Dr YANG a renewal of contract in March 2007; and

- after the publication of the Audit Report, the media's report on the audit findings, although generally accurate, had inevitably brought about an adverse impact on the image and reputation of ASTRI. Dr YANG considered that under the circumstances, it would be difficult for him to continue to lead ASTRI. As stated in his resignation statement, he hoped that by resigning, people could start to balance their attention towards the many outstanding achievements ASTRI had already attained as a young R&D institution.

10. **Mr Francis HO Suen-wai, Permanent Secretary for Commerce, Industry and Technology (Communications and Technology)**[1], added that:

- the Board recognised that Dr YANG was not an "ideal" person that excelled in all respects. Nevertheless, having regard to his overall performance from 2004 to 2006, the Board decided to renew his employment contract. The Board also agreed that he should be informed of the areas where further improvement was required; and

- soon after the above decision was made, the Audit Report was published and widely reported by the media. Dr YANG's credibility and leadership was then called into question, both internally and externally. It would be very difficult for him to continue to lead and implement the reform of ASTRI. If he continued to stay, it would also become a burden to ASTRI. To allow ASTRI to move ahead, the Board had no choice but to accept his resignation.

11. The Committee further asked the Permanent Secretary for Commerce, Industry and Technology (Communications and Technology):

- whether, by saying that Dr YANG was a burden to ASTRI, he held a different view from the Board on the assessment of Dr YANG's performance; and

- why he supported the Board's decision to renew the employment contract of Dr YANG, if he considered Dr YANG a burden to ASTRI's future reform.

12. The **Permanent Secretary for Commerce, Industry and Technology (Communications and Technology)** explained that:

- he supported the Board's decision to renew Dr YANG's employment contract. By using the term "burden", he did not mean to criticise Dr YANG personally. He only used this word from a management's point of view, considering the difficulties that Dr YANG might face in leading the reform of ASTRI. After all, it was Dr YANG's own decision to resign, out of goodwill and with a view to allowing ASTRI to move forward under a new leadership; and

- Dr YANG's performance and suitability for future employment were considered at a Special Review Committee meeting held in January 2007 during which members exchanged views on his strengths and shortcomings. While acknowledging his deficiencies, members agreed that since joining ASTRI, he had successfully improved its structure and built up strong

[1] After the re-organisation of the Government Secretariat with effect from 1 July 2007, the Permanent Secretary for Commerce, Industry and Technology (Communications and Technology) has been retitled the Permanent Secretary for Commerce and Economic Development (Communications and Technology).

research teams. Having considered all relevant factors at that time, the Special Review Committee recommended that Dr YANG's employment contract be renewed. Although a meeting was held subsequently in February 2007 to discuss ASTRI's response to the draft Audit Report, the focus of the meeting was not on Dr YANG's performance. With the benefit of hindsight, some people might think that the Board had made a hasty decision to renew the employment contract of Dr YANG, and that the matter could have been handled in a different way. However, from the outset, the Board held a positive and forward-looking view on the draft Audit Report and its recommendations.

13. In response to the Committee's request, ASTRI provided to the Committee the membership list of the Board, the membership lists and terms of reference of the three functional committees under the Board, namely, the Finance and Administration Committee (FAC), Technology Committee (TC) and Audit Committee, as well as the duties of three senior management posts, i.e. the Chief Financial Officer (CFO), Director of Administration and Director of HR (in ***Annexes 1 and 2 of Appendix 20***).

14. According to paragraphs 2.6 and 2.9 of the Audit Report, the attendance of some non-government Directors at Board/Committee meetings was low, and the Permanent Secretary for Commerce, Industry and Technology (Communications and Technology), as the government Director, did not attend 10 TC meetings consecutively during the period July 2004 to September 2006, and was not represented at five of these 10 meetings. The Committee asked:

- whether the low attendance reflected a lack of effective monitoring over ASTRI by the Government; and

- whether any actions had been taken to improve the situation.

15. The **Permanent Secretary for Commerce, Industry and Technology (Communications and Technology)** said that:

- a total of 22 Board meetings were held between 2002 and 2006. He attended 20 of these meetings, with an attendance rate of 90%. For the remaining two meetings, an alternate director attended the meeting on his behalf; and

- for the TC meetings, although he or his alternate was not able to attend some of the meetings, scientists and advisors from the Innovation and Technology Commission (ITC) attended every meeting of the TC and participated in the discussion. Hence, the Government had a full understanding of and monitoring over the matters transacted in the TC.

16. **Hon Joseph WONG Wing-ping, Secretary for Commerce, Industry and Technology**[2], added that the Board agreed with Audit's observation that the attendance of some non-government Directors was low. As mentioned in paragraph 2.8 of the Audit Report, these Directors had not been re-appointed in October 2006. The Government would continue to take into account the attendance record of non-government Directors in considering their re-appointment, to ensure that they could actively participate in the Board's business. The attendance of the two government Directors at the Board meetings was high, and met the Government's expectation.

17. The Committee noted from paragraphs 2.4 and 2.14 of the Audit Report that although ASTRI's Corporate Governance Manual provided that the FAC, which oversaw ASTRI's finance and administration matters, should meet quarterly, the FAC held only two meetings in 2004-2005 and three meetings in 2005-2006. No meeting of the FAC was held between September 2004 and May 2005, and between December 2005 and June 2006. During the periods when no FAC meeting was held, discussion papers were circulated to Directors for information and decision, but ASTRI did not keep documentation to record Directors' comments and decisions in response to these papers. The Committee therefore asked:

- the reasons for not holding the FAC meetings in accordance with the meeting requirement in the Corporate Governance Manual; and

- why no documentation had been kept to record the Directors' comments and decisions in response to the papers circulated.

18. The **Permanent Secretary for Commerce, Industry and Technology (Communications and Technology)** and **Mr Victor CHIN, Director of Administration, ASTRI**, responded that:

- to enhance efficiency and effectiveness, sometimes the FAC's business was carried out by circulation of papers instead of formal meetings;

- although there was no formal documentation of the Directors' comments and decisions in response to the papers circulated, such comments and decisions had been recorded in ASTRI's intranet system; and

- the Board and the management agreed with the audit recommendation that ASTRI should maintain documentation of the Directors' comments and decisions when Board/Committee's business was conducted by circulation of papers.

[2] After the re-organisation of the Government Secretariat with effect from 1 July 2007, the Secretary for Commerce, Industry and Technology has been retitled the Secretary for Commerce and Economic Development.

19. Regarding the issues on management of conflict of interest, the Committee noted from paragraph 2.33 of the Audit Report that ASTRI's Register of Directors' Interests was not available for public inspection. According to paragraphs 2.31, 2.34 and 2.35, despite the Board's decision in December 2001 that all Directors should sign a non-disclosure agreement (NDA) relating to individual R&D project, of the 67 projects undertaken by ASTRI since December 2001, only some Directors signed NDAs for 11 projects. Since 2002, no Director had signed any NDAs. The Committee therefore enquired about:

- the time-frame and arrangement for making available the Register of Directors' Interests for public inspection; and

- the reasons for not requiring all Directors to sign NDAs.

20. The **ASTRI Board Chairman** said at the public hearing and in Annex 5 to his letter of 18 May 2007 in ***Appendix 18*** that:

- to achieve greater transparency and accountability, the Board Directors had no objection to making their declarations of interest available for public inspection. With effect from 1 June 2007, members of the public who wished to inspect the declarations could approach the Board Secretary to arrange for the inspection;

- according to the legal advice obtained by ASTRI, under the common law, the duty of confidentiality was imposed on a director because of the doctrine relating to confidentiality and the fiduciary duties owed by a director to the company. A director had a general duty of confidentiality which was subsumed under the wide nature of the fiduciary obligations of the director, including to act in good faith for the benefit of the company, not to gain an advantage for himself or another person from use of his position as director and a duty not to make unauthorised use of the company's property or information. Whether an NDA was signed or not, the common law duties described above still applied; and

- in the early years, ASTRI adopted a spin-off business model, whereby technologies successfully incubated would be sold to businesses on an exclusive basis. In such cases, the buyers would usually require all persons who had knowledge about the technology to observe confidentiality for a period of time after the sale of the concerned technology, in order to protect their interests. Therefore, ASTRI's Board Directors, though already bound by the common law duties of confidentiality, were also required to sign NDAs to satisfy potential purchasers. As the business model of ASTRI had been gradually changed to a model of non-exclusive licensing in recent years, the need for signing NDAs no longer existed. Having considered the legal advice obtained and ASTRI's change of business model, the Board decided on 16 May 2007 that Directors should no longer be required to sign NDAs.

21. Having noted ASTRI's change of business model in recent years, the Committee asked when such change commenced and completed, and whether Audit was informed of such change when it recommended that ASTRI should take action to ensure that NDAs were signed by all Directors for all projects undertaken by ASTRI.

22. The **ASTRI Board Chairman** replied in his letter of 24 May 2007 in ***Appendix 21*** that the transition from the spin-off model to the non-exclusive licensing model had been ongoing since 2003. The last successful spin-off project, which commenced in 2002, was completed in April 2004.

23. The **Director of Audit** said at the public hearing that when ASTRI responded to the audit recommendation on the signing of NDAs, it only referred to the legal advice obtained regarding the fiduciary duties of directors. The change of business model was not cited as the reason for not requiring Directors to sign NDAs. Audit was of the view that since ASTRI's Board already decided in 2001 that all Directors should sign NDAs relating to individual R&D projects, ASTRI should ensure that all Directors followed this requirement.

24. In the light of the problems revealed in ASTRI's corporate governance, the Committee asked whether and how the Board was responsible for such problems, and how it would strengthen the governance of ASTRI in future.

25. The **ASTRI Board Chairman** replied in Annex 3 to his letter of 18 May 2007 in ***Appendix 18*** that:

- the Board played its governing role and discharged its responsibilities by providing strategic guidance, oversight and monitoring of ASTRI. Such an approach was in line with the recommendation made by the Hong Kong Institute of Certified Public Accountants in its publication entitled "Corporate Governance for Public Bodies – A Basic Framework" that the role of the governing board included the provision of strategic guidance, oversight and monitoring, but it should not be involved directly in day-to-day management other than on a temporary basis in exceptional circumstances;

- the Board and the three functional committees held meetings regularly to discharge their duties. For example, the Board had established and strengthened the corporate governance of ASTRI during its inception years, by adopting a Corporate Governance Manual in 2003 and commissioning a study on knowledge management and a review of ASTRI's HR practices to align with the market median in 2004. In line with the change in the business model of ASTRI, the Board drew up guiding principles on licensing ASTRI's technologies in 2003. In addition, having regard to the review conducted by the ITC on the overall strategy of the Innovation and Technology Fund (ITF), the Board in 2005-2006 provided strategic guidance on the establishment of the R&D Centre on Information and Communications Technologies;

- the Board and the three functional committees had also monitored the performance of ASTRI, through, among other things:

  (a) scrutinising and approving the annual internal audit plans, and reviewing audit progress reports;

  (b) monitoring the implementation of the recommendations made by the Independent Commission Against Corruption in their studies on ASTRI's procurement procedures, commercialisation procedures and staff recruitment in 2004, 2005 and 2006 respectively;

  (c) recommending the setting up of a high calibre council of internationally renowned advisers (i.e. Technology Advisory Committee) to critically review ASTRI's strategy, technical programme and key personnel; and

  (d) reviewing the outstanding cases of staff receiving salaries exceeding their respective pay bands and instructing the management to take corrective measures in 2006;

- through regular meetings of the Board and the three functional committees, the Board received updated progress reports from the management on ASTRI's performance in project management, financial management and administrative issues, as well as internal controls. The Board would also enquire into any potential problems and difficulties that the management might encounter so that appropriate precautionary and improvement measures could be taken to contain such problems; and

- a vast majority of the audit recommendations had already been implemented with diligence shortly after the publication of the Audit Report, and the rest would be implemented as soon as possible. The Board believed that, with the implementation of the improvement measures, the corporate governance of ASTRI would be strengthened and the chances of deficiencies recurring would be minimised. The Board would continue to act in good faith and in the best interest of ASTRI.

26. Given the various problems and deficiencies identified in the Audit Report, it appeared to the Committee that the two government Directors appointed to the Board, i.e. the Permanent Secretary for Commerce, Industry and Technology (Communications and Technology) and the Commissioner for Innovation and Technology, the latter being the Controlling Officer of the Government's recurrent subventions to ASTRI and member of

ASTRI's three functional committees, had not effectively performed their role in monitoring and providing a check and balance on the management of ASTRI. The Committee asked:

- about the Secretary for Commerce, Industry and Technology's views on the performance of the two government Directors; and

- whether the two government Directors had detected the problems in ASTRI's governance and management, and had taken actions to address such problems.

27. The **Secretary for Commerce, Industry and Technology** stated that there were different levels of responsibilities under the current governance and management structure. The Bureau Secretary's responsibility was to ensure that public funds were properly disbursed in accordance with the Government's R&D strategies and policies. Two government Directors were hence appointed to help discharge this responsibility. They were not expected to be involved in the daily management and operation of ASTRI, which should be the responsibility of the CEO and the management. It would not be appropriate to ask the Board or the government Directors to take all the blame whenever management problems arose in an organisation. In fact, after the problems had been identified by Audit, the Board took prompt action to follow through the implementation of the audit recommendations.

28. The **Permanent Secretary for Commerce, Industry and Technology (Communications and Technology)** added that the Board was responsible for giving strategic direction to ASTRI and had assisted ASTRI in setting up systems in corporate governance, HR, administration and internal control, etc, to ensure good management in various aspects. The problems identified by Audit were mostly related to issues of non-compliance, instead of a lack of guidelines and regulations. There was a clear division of labour between the Board and the management. It would not be possible to expect the Board to know the problems in daily management.

29. **Mr Anthony WONG Sik-kei, Commissioner for Innovation and Technology**, stated that:

- the government representatives' role was to ensure that ASTRI's operation was in line with the major direction of government policy. The crux of the problems in ASTRI's administration was that the mechanisms or systems were not followed in some cases. It was the management's responsibility to ensure that the guidelines and regulations approved by the Board were complied with. As a matter of fact, he was the government director or alternate director of 12 different organisations similar to ASTRI, and was also member of more than 30 sub-committees of such organisations. He also had his daily work in the ITC. It was thus impossible for him to know the daily operation of ASTRI; and

- the two government Directors had recommended, among others, the setting up of an Audit Committee to help strengthen ASTRI's internal control. In fact, ASTRI's Internal Audit had also identified a number of problems before the audit study, and actions had been taken to address these problems.

30. At the Committee's request, the **ASTRI Board Chairman** provided, in Annex I to his letter of 12 June 2007 in ***Appendix 22***, a table comparing the similarities and differences of the problems on ASTRI's administration as identified by ASTRI's Internal Audit and the Audit Report. He said that since early 2004, ASTRI's Internal Audit had completed 34 full and 18 follow-up audit projects in accordance with the approved annual internal audit plans. The objective of such audits was to provide independent and reasonable assurance to the Board that adequate controls were in place to ensure efficient and effective management and, where appropriate, to provide recommendations on any improvement opportunities. However, the issues studied by Audit and ASTRI's Internal Audit were not entirely the same.

31. The Committee noted from the minutes of ASTRI's Board meeting that its Audit Committee had considered the Internal Audit Reports on audits conducted during the period from January to June 2006, just before Audit commenced its review on ASTRI. The Audit Committee was satisfied with the Internal Audit's conclusion that there were adequate internal controls to ensure cost-effective management of ASTRI's operations and agreed to the findings of the relevant audits. Given that a number of problems in the areas of HR management, project management, project cost control and administration were identified by Audit in its review, the Committee asked why ASTRI's Internal Audit concluded that there were adequate internal controls.

32. The **ASTRI Board Chairman** responded in his letter of 13 June 2007 in ***Appendix 23*** that the conclusion made by ASTRI's Internal Audit was based on the 10 audit projects completed during the period January to June 2006. These audit projects did not cover corporate governance, remuneration and recruitment, project management, project cost control and general administration. Having regard to the findings of these 10 completed audits, the Internal Audit concluded that adequate controls in respect of the areas studied were already in place and that some improvement options could be considered, as elaborated in the reports.

33. The Committee noted that under the five-point action plan adopted by the Board, ASTRI had appointed the current Head of Internal Audit as the Compliance Officer. The Committee asked:

- whether it was appropriate and effective to appoint an internal staff as the Compliance Officer;

- whether it was necessary to create an additional post of Compliance Officer given that ASTRI already had a well-established senior management team comprising the CFO, Vice President (VP) (Planning), Director of Administration, Director of HR, etc, who should be capable of ensuring compliance under their respective purviews; and

- whether the duties and functions of the Compliance Officer overlapped with those of the Head of Internal Audit.

34. The **ASTRI Board Chairman** replied that:

- the Board considered that appointing the current Head of Internal Audit as the Compliance Officer was the most appropriate arrangement at this stage in order to promptly address the problems identified by Audit. The Special Committee would, however, review whether this arrangement was desirable in the long run; and

- the appointment of a Compliance Officer was quite common nowadays in both public and private sectors as rules and regulations were getting more complicated. Since the management staff had to spend a lot of time on daily management, they might not be able to detect some non-compliance issues. The Compliance Officer would remind the management of those areas in need of improvement, and help ensure compliance with both internal and external guidelines. Further, as the Compliance Officer reported directly to the Board, he would be able to provide independent and useful information to the Board on issues of compliance, and provide a check and balance to the existing system.

35. As requested by the Committee, the **ASTRI Board Chairman** provided in Annex VIII to his letter of 1 June 2007 in ***Appendix 24*** the duties and functions of the Compliance Officer and the Head of Internal Audit, the division of labour between the two posts and their line of reporting.

36. Noting that the Board would rationalise ASTRI's administration structure by creating a Chief Operating Officer post, the Committee asked:

- about the reasons for creating a Chief Operating Officer post and whether there would be overlapping of duties with the existing senior management; and

- how the existing organisational structure could be streamlined with the addition of the Chief Operating Officer post.

37. The **ASTRI Board Chairman** replied in Annex 2 to his letter of 18 May 2007 (in ***Appendix 18***) and his letter of 15 June 2007 (in ***Appendix 25***) that:

- the existing administration functions of ASTRI were discharged by a number of divisions, with no unified structure assuming overall oversight. Overlaps and gaps in duties and responsibilities among the various divisions might occur, resulting in administrative inefficiency. The Board had therefore decided to create the post of Chief Operating Officer to take overall responsibility and central control of the administration function and operational matters;

- with effect from 18 May 2007, the VP (Planning) assumed the new post of Chief Operating Officer to oversee project planning and management, intellectual property management, market and competition intelligence as well as corporate communications. The post of VP (Planning) was deleted at the same time. The Director of Administration was retitled as Chief Administration Officer to take charge of Company Secretary, HR, quality management and general administration. The Chief Administration Officer reported to the Chief Operating Officer;

- as a consequence of these changes, the number of lines reporting to the CEO on administrative matters had been reduced from seven to two (namely, the Chief Operating Officer and the CFO). The organisational changes should be cost neutral; and

- the Board noted that some administration departments might have room for further streamlining and rationalisation and had requested the Acting CEO to review the matter and report the outcome to the Board. The Board would inform the Public Accounts Committee of the result of the review.

38. The **ASTRI Board Chairman** also provided in his letter of 15 June 2007 in ***Appendix 25*** two organisational charts of ASTRI demonstrating its administration structure before and after the above streamlining initiatives.

C. Remuneration and recruitment

39. Table 5 in paragraph 3.7 of the Audit Report revealed that in the consultant's review on ASTRI's pay levels in 2004, the pay level for Level One staff (i.e. senior management executives and R&D directors) was substantially above the market median whereas that for Level Six staff (i.e. junior supporting staff) was substantially below the market median. The Committee enquired about the reasons for such discrepancies.

40. The **ASTRI Board Chairman** stated in Annex 6 to his letter of 18 May 2007 in ***Appendix 18*** that:

- when ASTRI was newly established in 2001, pay scales were established for two main streams of staff, i.e. R&D personnel, and administrative, finance, information technology and other general support staff, having regard to the pay scales for research staff of the Hong Kong University of Science and Technology, pay data from global management/HR consulting firms and the Government pay scales for similar posts. The pay scales for all six levels of ASTRI staff were subsequently approved by the Board in June 2001, reflecting the market conditions prevailing at that time; and

- in 2004, the Board considered that the salary scales determined in 2001 might no longer reflect the prevailing market conditions, given the changes in the intervening years. It was therefore decided that ASTRI should engage an independent HR consultant to conduct a review. The Board accepted the findings of the review and decided to adjust ASTRI's pay bands to the market level with effect from October 2004.

41. The Committee further referred to Audit's observation in paragraphs 3.10 and 3.11 of the Audit Report that 18 staff still received salaries higher than the maximum of their respective pay bands as at November 2006, despite the fact that the Board had already decided to adopt the adjusted pay bands from October 2004, and asked:

- why no adjustment had been made to align the salary of these staff to the respective pay bands;

- about the positions and pay band levels of these staff; and

- about the actions that had been taken to avoid recurrence of similar incidents.

42. **Mrs Kitty LAM, Director of HR, ASTRI**, said that when the Board decided to adjust the pay bands in 2004, it directed that these staff should retain their salary until the expiry of their contracts. On renewal of their employment contracts, their salary should be reviewed for possible downward adjustment. Alternatively, they could be considered for promotion to a higher level. However, when their employment contracts were due for renewal, the R&D Director recommended that a longer time be given to observe their performance before deciding whether they could be promoted to a higher level. The alternative of reducing their salary would not be feasible in view of the high staff turnover rate at that time.

43. The **ASTRI Board Chairman** supplemented that:

- the Board noted the practical difficulties for not being able to bring the salary of the staff concerned to a level commensurate with their pay levels at that time. However, all such cases had been resolved by January 2007; and

- to prevent recurrence of similar incidents, the Board had already appointed a Compliance Officer to ensure that the management would comply with the guidelines approved by the Board. ASTRI's Internal Audit would also closely monitor whether staff salaries were within the respective pay bands.

44. The **ASTRI Board Chairman** also provided the following supplementary information:

- a table showing the positions and pay band levels of these 18 staff, who were mostly R&D personnel (in ***Annex I of Appendix 21***); and

- a table showing the number of staff in each pay band by four different salary quartiles as at 30 April 2007. No staff member was above or below his/her pay band (in ***Annex 7 of Appendix 18***).

45. According to paragraphs 3.18 and 3.20 of the Audit Report, of the 20 recruitment cases selected for examination, Audit noted that in four cases, local newspaper advertisements were placed after selection of the successful candidates. In response to Audit's enquiry, the Director of HR, ASTRI, advised in November 2006 that in three of these four cases, advertisements for job vacancies were placed in overseas newspapers. The R&D Directors interviewed the three candidates overseas. In the remaining case, the new recruit was referred by an ASTRI staff who was also a member of the selection panel. The Committee asked:

- why the vacancies in these four cases were not advertised in at least one local newspaper, as required by the guidelines approved by the Board;

- whether the HR Department was aware that the ASTRI staff who referred the candidate for interview was also a member of the selection panel; and

- whether follow-up actions had been taken by the Director of HR and/or the HR Department after noting that the recruitment and selection process for the above cases was not in compliance with the relevant guidelines.

46. The **ASTRI Board Chairman** provided in Annex 8 to his letter of 18 May 2007 in ***Appendix 26*** a chronology of the events relating to the recruitment and selection process of the four cases. He also stated that:

- the three posts in question concerned a specific technology in the Communication Technologies Group. The vacancies had been posted on ASTRI's website for some time but no one applied. In February/March 2005, these posts were advertised in a number of newspapers in San Francisco and San Jose, to tie in with a campaign to promote ASTRI at that time. However, no application was received;

- in July 2005, ASTRI mounted a promotion-cum-recruitment campaign in Hong Kong and placed advertisements in Hong Kong newspapers inviting applications from talents of different technologies, but still no suitable candidates were found;

- in January 2006, the VP and the R&D Director of the Communication Technologies Group attended a conference in the USA. Owing to the persistent difficulty in recruiting suitable staff, the VP and R&D Director had made contacts with their counterparts in the USA to explore if there might be suitable personnel to meet, and to persuade them to join ASTRI. At that time, the vacancies were still being advertised on ASTRI's website. A few candidates were then contacted and interviewed in the USA. The VP & the R&D Director subsequently completed and submitted their interview records and the candidates interviewed submitted their application forms. These candidates were at that time employees of another company which was undergoing restructuring, and were well qualified for the posts. ASTRI seized the opportunities, approved their applications and issued appointment letters to them quickly;

- in February 2006, the HR Department placed a recruitment advertisement in the South China Morning Post inviting applications for vacant posts in ASTRI's various groups and departments, including the then vacant posts in the Communication Technologies Group. The HR Department did not consider that there was a need to take any special follow-up action at that juncture;

- for the other case, an ASTRI staff referred a candidate, who was an ex-employee of ASTRI, to the VP and Group Director for interview. The staff who referred the candidate participated in the interview but did not declare his acquaintance with the candidate. The interview panel found the candidate suitable, but an appointment offer was put on hold pending the results of an open recruitment to be conducted;

- the HR Department then placed a recruitment advertisement in local newspapers, inviting applications for vacancies in ASTRI's various groups and departments, including the post concerned. Five applicants submitted applications. However, they were all considered unsuitable and not invited for interview because of the lack of relevant working experience; and

- in August 2006 the HR Department verbally reminded the concerned VP to conduct interview following the relevant recruitment guidelines as stipulated in the Corporate Governance Manual. The candidate assessment form was subsequently revised in September 2006 to ensure that ASTRI staff who made referrals would abstain from taking part in the screening, interview and selection process.

47. The Committee noted from paragraphs 3.22(a) and 3.23(a) of the Audit Report that of the 20 cases examined by Audit, contrary to the recruitment guidelines, the selection panel did not include a member from the HR Department because of the manpower constraint of the Department. The Committee asked why the HR Director had allowed this situation to continue, and whether the HR Department had informed the management of its shortage of manpower.

48. The **Director of HR, ASTRI**, responded that:

- despite the manpower constraint, the HR Department had tried to join the selection panel as far as possible, sometimes at a later time after the interview had commenced. The HR Department had reported the manpower shortage to the management but there was no immediate solution to the problem at that time; and

- having considered the audit recommendation, ASTRI decided that the selection panel should include a representative from the HR Department. A HR staff participated in all selection panels now.

49. According to paragraph 3.28 of the Audit Report, of the 20 cases examined by Audit, the new recruits in 11 cases were offered a higher entry pay at variance with that determined by the entry pay formula. The Committee asked:

- why ASTRI had not determined the entry pay according to the prescribed formula;

- whether ASTRI encountered recruitment difficulties; and

- whether the existing pay bands adjusted since 2004 were still in line with the market pay level.

50. The **Director of HR, ASTRI**, explained that:

- the entry pay formula, based on the candidates' qualifications and experience, only served as a reference rather than the sole and rigid requirement in making employment offers. Other factors such as the job market situation, the candidates' pay before joining ASTRI, etc, should also be considered. In fact, the new recruits in all these cases were R&D personnel. Prior to joining ASTRI, they worked overseas with a rather high salary. ASTRI had to negotiate with them and offer a competitive salary in order to attract them to join the company;

- since its inception in 2001, ASTRI had experienced recruitment difficulties, particularly for hiring staff at Levels 4 and 5. ASTRI had endeavoured to recruit the best possible talents from both local and non-local sources through continuous recruitment efforts; and

- to keep up with the market pay, ASTRI had already engaged a consultant in 2006 to review its pay levels again.

51. Paragraph 3.35 of the Audit Report revealed that the performance-based variable payments awarded for 2005-2006 were inconsistent with the performance of staff and there was no documentation recording how the performance-based variable payments were determined. The Committee asked why such inconsistency occurred.

52. The **Director of HR, ASTRI**, explained that the HR Department was only responsible for calculating the amount of variable payments to be distributed to each R&D team in accordance with an established formula. The line manager of each team would then decide the amount of variable payments to be awarded to individual staff members taking into consideration their performance and other relevant factors, as long as it did not exceed 15% of the staff's annual pay.

53. According to paragraph 3.47 of the Audit Report, the Board decided in 2004 to set aside $10 million derived from a spining-off exercise for a staff incentive scheme to reward 23 staff involved in three photonics packaging projects. The Committee asked:

- whether and when the Government was informed of the decision to make staff incentive payments and whether prior approval from the Government had been sought;

- whether the incentive payment was clearly indicated in the employment contracts of the staff concerned; and

- the basis for determining the amount of staff incentive payments.

54. The **ASTRI Board Chairman** replied in Annex 9 to his letter of 18 May 2007 in ***Appendix 26*** that:

- the Government began internal discussions on how to dispose of incomes generated by ASTRI projects since the projects had reached a certain stage of maturity;

- the Government decided to adopt a case-by-case approach, taking into account the need to balance the interests of both the public and ASTRI, and the conditions governing the administration of the public funding provided to ASTRI. In distributing the income, the following principles would apply:

  (a) development costs provided by the ITF and government recurrent subvention would be fully recovered first; and

  (b) for the remaining net income, it would be divided into an ITF portion which would be ploughed back to the ITF, and the government subvention portion which would be shared between the Government and ASTRI. ASTRI would keep its portion of net income in its reserve account to cater for activities or payments in furtherance of its objectives. The use of the reserve should be subject to the approval of the Board, and accumulation of the reserve should not exceed a certain ceiling; and

- the general principles set out above, the application of such principles to the sale of the photonics packaging projects, and the application of $10 million out of the portion retained by ASTRI as incentive to the concerned staff, were discussed at ASTRI's Board meeting on 27 February 2004.

55. In response to the Committee's question on the basis for determining the amount of staff incentive payments, the **ASTRI Board Chairman** informed the Committee that:

- when ASTRI started up in 2001, it adopted a spin-off business model whereby intellectual properties were sold to private investors in return for profits. In order to attract talents to join the Photonics Group initially, and to motivate and reward them in generating intellectual properties for commercialisation, ASTRI had to make reference to industry practice by providing financial incentives to the staff concerned. ASTRI had therefore promised to provide them with some kind of reward or bonus upon spinning-off, although this was not clearly stipulated in the employment contract; and

- in April 2004, ASTRI successfully sold three full projects in photonics packaging to an investor through a spinning-off exercise. After discussion with the Government, although only $13 million was kept by ASTRI as its share of profits, the total income generated from the sale included a cash lump sum of about $110 million and an annual royalty of 5% of the investor's annual revenue generated from the photonics packaging business for a period of three years. The Board therefore considered that setting aside $10 million to reward the staff concerned and motivate them to move to the buying company was reasonable. In fact, the economic benefits brought about by the sale of these projects, including the jobs created and the establishment of a photonics industry in Hong Kong, was far more than $110 million.

D. Project management

56. The Committee noted from paragraph 4.12 of the Audit Report that in three out of the four project proposals examined by Audit, the staff cost budget in the project proposal was larger than that computed by Audit. The Committee asked why the staff cost had not been accurately stated in the proposals.

57. **Mr Ernest WONG, CFO, ASTRI**, explained that the discrepancies in budgeting project staff cost were due to differences between using standard rates and actual salaries. ASTRI previously adopted standard rates to prepare staff cost budget proposals as the actual salaries for some positions could not be ascertained until the positions were filled. To enhance accuracy of the budget proposals, ASTRI decided to use actual salaries to prepare the budget if the staff members were already in post.

58. The Committee also noted from paragraph 4.22 of the Audit Report that ASTRI had not put in place any computerised project management information system to record project information, such as staff time spent on projects, project financial information and progress, and had yet to set a target implementation date for such system. To ensure effective project management, the Committee enquired about the time-frame and actions that would be taken by ASTRI to implement the system.

59. The **ASTRI Board Chairman** replied in his letter of 24 May 2007 in ***Appendix 21*** that ASTRI was evaluating centralised solutions to integrate its various management and accounting systems. As an interim measure, ASTRI was working with a local software provider to implement a standard new time card system for R&D teams as soon as possible.

60. Paragraphs 4.23 to 4.34 of the Audit Report revealed a number of problems in ASTRI's project monitoring. For example, monthly progress reports were not always submitted, monthly project progress review meetings were not always held, submission of annual audited accounts was delayed, and submission of requests for extension of project period was late. The Committee enquired about the actions that would be taken to ensure that the audit recommendations referred to in paragraph 4.35(b), (c), (d) and (f) of the Audit Report could be implemented.

61. The **ASTRI Board Chairman** replied in his letter of 24 May 2007 in ***Appendix 21*** that:

- regarding the audit recommendations referred to in paragraph 4.35(b) and (c) of the Audit Report, ASTRI had already put in place a review process that monitored all projects at least once a month;

- regarding the audit recommendation referred to in paragraph 4.35(d), ASTRI was reviewing the procedures with an aim to expediting the preparation and submission of the audited accounts. For instance, instead of submitting the reports to the Audit Committee (which met half-yearly) and then the Board (which met quarterly) for endorsement by Directors at the Committee/Board meeting, consideration might be given to obtain endorsement from the Audit Committee and Board through circulation of papers. ASTRI would also introduce measures to speed up the internal processing of the reports; and

- regarding the audit recommendation referred to in paragraph 4.35(f), ASTRI's Planning Manager had alerted all R&D teams to review if they needed to apply for project extension after the lapse of half of the project period.

62. According to paragraph 4.41 of the Audit Report, the final audited accounts of 14 projects were due for submission as at December 2006. However, only one project's final audited accounts had been submitted. The Committee enquired about the present status of the other 13 overdue final audited accounts.

63. The **ASTRI Board Chairman** replied in his letter of 1 June 2007 in ***Appendix 24*** that for the 13 overdue cases, seven of them had been submitted to ITC as of February 2007. The remaining six accounts had been endorsed by ASTRI's Audit Committee in May 2007 and would be submitted to ITC once they were endorsed by the Board in the coming Board meeting to be held in June 2007.

E. Project cost control

64. The Committee noted from paragraph 5.9 of the Audit Report that incorrect charging of project costs occurred in a number of areas, and enquired:

- for the five projects where incorrect charging of staff costs to other project accounts was noted, who authorised the charging;

- about the reason for the incorrect inclusion of material cost for other project and who should be held responsible; and

- measures that had been adopted to ensure that approved funding of a project was only used to cover the expenditure of that specific project.

65. The **ASTRI Board Chairman** responded in his letter of 1 June 2007 in ***Appendix 24*** that:

- the primary responsibility for controlling project costs rested with the project coordinator (PC). When a project progressed after project approval, the PC would provide the monthly budget data for charging the costs to the specific project, including manpower, material costs, etc, to the Accounting Department until the project was completed;

- the five projects examined by Audit were under the same core technology platform as well as the same key technology initiative. The projects were undertaken by the same group of R&D staff, some of whom were working on more than one of the projects simultaneously. The concerned PC had charged the manpower costs to the wrong projects, partly because of the lack of an integrated computerised HR system for the R&D team to record the time spent on each project on a real time basis. The mistakes were purely inadvertent ones;

- for the incorrect charging of material cost, the projects involved were under the same core technology platform, thus causing confusion. When the requisition for materials was made, the Accounting Department was not aware of the wrong information in the requisition order form which was endorsed by the PC and had charged the material cost in question to another project account. ASTRI's management was now correcting the concerned accounting records and financial reports;

- ASTRI's management had reminded the R&D teams and the PCs to ensure that all expenditure items were accurately and properly charged to the correct project, and that the Accounting Department should seek clarification from the R&D teams and PCs whenever there was any doubt on which project should be charged; and

- ASTRI was planning to implement a computerised and integrated HR and project management information system within 2007. With the new system, the R&D teams could record their time sheets into the system on a real time basis, thus allowing the PCs to review and endorse them in a timely manner. The Accounting Department would then be able to work out the monthly statement based on the manpower data in the same database, and the HR Department and Planning Department could review the manpower plan directly from the system on a real time basis. This would help ensure that the manpower cost was accurately and properly charged to the correct account.

F. Administrative issues

66. According to paragraph 2.37(a) of the Audit Report, the loss of the completed register of Director's interest forms for the period April 2003 to August 2006 was probably due to the relocation of ASTRI Headquarters in April 2006. The Committee asked:

- about the circumstances leading to the loss of the forms; and

- whether ASTRI's interests had been prejudiced because of the loss of the forms.

67. The **Director of Administration, ASTRI**, said at the public hearing and the **ASTRI Board Chairman** stated in his letter of 30 April 2007 in ***Appendix 20*** that:

- Directors were invited to make their declarations of interest upon their appointment to the Board, and to update the declarations every year. Before the relocation of the ASTRI Headquarters in April 2006, the last updating exercise was done in September 2005. During the office relocation, the register of interest forms since April 2003 was lost. With the appointment of a new term of ASTRI Directors in October 2006, all re-appointed and newly appointed Directors had been invited to declare their interests in October 2006; and

- under the two-tier system, Directors were required, apart from completing the interest forms every year, to disclose their interest to the Chairman if they had any interest in any matter under consideration at Board/Committee meetings. All cases of declaration of interests were recorded in the minutes of the meeting.

68. As revealed in paragraph 6.5 of the Audit Report, the actual entertainment expenses incurred in 2005-2006 were about $277,000, which exceeded the annual budget by 32%. The Committee asked why such over-expenditure occurred and who approved it.

69. The **CFO, ASTRI**, said that:

- the actual entertainment expenses had exceeded the budget because ASTRI's customer engagement activities had expanded rapidly. For example, the actual expenses in the Administration Headquarters exceeded the budget by 255% in 2005-2006 because ASTRI had sponsored official dinners hosted by industry associations. During the dinners, ASTRI staff could network with the industry and potential customers; and

- when it was anticipated that the entertainment expenses would exceed the budget, the Accounting Department would seek the CEO's approval. The CEO had approved all the excesses of budget in 2005-2006.

70. Despite ASTRI's guidelines that ASTRI staff should not outnumber the guest(s) by too great a margin, the Committee noted from paragraph 6.9 of the Audit Report that on seven occasions, the guests entertained were significantly outnumbered by ASTRI staff, and no explanations were provided in the claim forms to justify the large number of ASTRI staff. The Committee asked why ASTRI did not follow the guidelines and why the guests were significantly outnumbered by staff in these cases.

71. In response, the **CFO, ASTRI**, said that:

- three of the seven functions held on 15, 22 and 28 September 2005 were in fact "working lunches" with external advisors, at which lunch boxes of some 30 odd dollars per head were ordered;

- the dinner on 5 December 2005 was hosted by ASTRI for the opening of the Technology Advisory Committee Conference, during which many world-renown international technology experts attended to provide strategic and technical advice to ASTRI's R&D projects. A total of 26 R&D and management staff joined the dinner to exchange views with the advisors; and

- ASTRI had reminded staff to closely follow the entertainment guidelines and audit recommendations, and to clearly document the justifications if staff outnumbered the guests significantly.

72. In view of the explanation given by ASTRI, the Committee sought clarification from the Director of Audit on whether there were guidelines on the appropriate staff-guest ratio in attending entertainment functions, and whether Audit was aware that some of the lunches were "working lunches".

73. The **Director of Audit** replied that there were no government guidelines on the appropriate staff-guest ratio. It mainly depended on operational need. ASTRI had not, in the course of the audit study or in response to the draft Audit Report, informed Audit that the reimbursement claims concerned were related to "working lunches". In fact, it was not common to include "working lunches" as entertainment expenses.

74. The Committee further asked why ASTRI did not disclose to Audit the fact that three of the lunches were "working lunches" during the audit study. The **CFO, ASTRI**, said that ASTRI had provided the relevant Application Form for Hosting Official

Entertainment Functions to Audit for examination. The forms contained the names of ASTRI staff and guests who participated in the function and the expenses incurred. Although the word "lunch boxes" was stated in the forms, ASTRI did not specify that they were "working lunches". ASTRI would clearly document the justifications in future.

75. According to paragraph 6.13 of the Audit Report, Audit examination of the records of 50 randomly selected overseas duty visits in 2005-2006 revealed that in 11 cases, the staff concerned had not obtained prior approval for their project-related overseas duty visits. Instead, covering approval was sought upon return from the overseas visits. The Committee asked why no prior approval had been sought in accordance with ASTRI's guidelines.

76. The **Director of HR, ASTRI**, explained that for these 11 cases, the staff concerned had to leave Hong Kong urgently for R&D projects that they were working on and did not have time to complete the required procedures. However, they obtained the CEO's verbal approval before they left. Since December 2006, the application procedures for overseas duty visit were computerised and cases as such would not happen again.

77. According to paragraph 6.21 of the Audit Report, for non-project-related overseas duty visits, ASTRI's guidelines stipulated that economy class passage should be booked for all staff (except the CEO) as far as practicable. The CEO might give exceptional approval to upgrade the air passage to business class for essential operational reasons. Audit however noted that on three occasions, the former CEO approved upgrading from economy class to business class for a staff. According to the Director of HR, ASTRI, the staff concerned claimed that she could not fly economy class for health reasons. However, there were no supporting medical certificates or any justifications for arranging the staff to travel by business class. The Committee asked why no medical certificates were required from the staff concerned to support her claims.

78. The **Director of HR, ASTRI**, said that the Corporate Governance Manual did not stipulate that medical certificates were required if upgrading to business class was approved based on health reasons. The **ASTRI Board Chairman** also said that the management should have the discretion to approve upgrading to business class with sufficient justifications. ASTRI agreed that medical certificates should be required to support the claims.

79. Paragraph 6.43 of the Audit Report revealed that ASTRI had paid fees of about $181,000 for the engagement of fung shui consultants in April 2002, June 2004 and October 2005 to advise on relocation of office and the office environment. The Committee asked:

- about the reason for engaging fung shui consultants and whether the Board had approved the procurement of the consultancy services; and

- about the procurement procedures for the three "fung shui" cases, and who decided which fung shui consultants were to be invited for giving quotation for each of the three procurements and the criteria for selecting the consultants.

80. The **ASTRI Board Chairman** said at the public hearing and in his letters of 24 May and 1 June 2007 in ***Appendix 21*** and ***Appendix 24*** respectively that:

- the management did not believe in fung shui but thought that it was a local custom. As the expenses incurred for the fung shui consultancy services were within the CEO's approval authority, the Board's approval was not required. Neither did the management inform the Board of the engagement of fung shui consultants. Although there was no guideline prohibiting the engagement of fung shui consultants, the Board considered that fung shui consultation was inappropriate for an applied science and technology research organisation. The Board had already directed the management to discontinue such practice;

- according to ASTRI's Corporate Governance Manual, for any single purchase below $10,000, the user was normally expected to obtain more than one quotation for price comparison purpose. For any purchase over $50,000 but below $1 million, at least three quotations were required. Normally, the lowest quotation should be selected;

- for the first "fung shui" case in 2002, the only record that could be found was an ASTRI accounting voucher indicating that $1,000 had been paid for the fung shui consultancy service. For the other two cases in 2004 and 2005, ASTRI's records showed that verbal quotations from three fung shui consultants had been obtained each time. However, the records did not show who decided or the criteria for deciding which fung shui consultants were to be invited for giving the quotations; and

- while there was no further requirement on how or from whom the quotations should be obtained, to ensure fairness, ASTRI expected that the quotations would not be from related parties. To safeguard against potential conflict of interest, ASTRI staff were required under the Code of Conduct to declare to the CEO if they were called upon to deal with matters which might give rise to a conflict of interest with ASTRI.

81. Noting that ASTRI only obtained verbal quotations for the procurement of fung shui consultancy services in June 2004 and October 2005, the Committee invited Audit's comments on whether obtaining verbal, instead of written, quotations was in line with ASTRI's internal guidelines and the Government's procurement procedures.

82. The **Director of Audit**, in his letter of 31 May 2007 in ***Appendix 27***, advised that:

- according to ASTRI's Corporate Governance Manual which was in force prior to January 2006, for any purchase with a value over $50,000 but not exceeding $1 million, at least three quotations were required. The Manual did not specify whether the quotations should be verbal or written. In January 2006, ASTRI revised this requirement to the effect that at least three written quotations should be obtained for any purchase with a value between $50,000 and $500,000;

- the Government's procurement procedures currently in force were governed by the Stores and Procurement Regulations. The Regulations required that for purchases with a value over $50,000 but not exceeding $500,000, at least five written quotations should be invited. This requirement had been in force at the time when ASTRI procured the fung shui consultancy services in 2004 and 2005; and

- based on the above, Audit considered that obtaining verbal quotations for the procurement of fung shui consultancy services in June 2004 and October 2005 was in line with ASTRI's then prevailing internal guidelines but not in line with the Government's Stores and Procurement Regulations.

G. Cost and achievements of ASTRI

83. Paragraph 7.3 of the Audit Report revealed that ASTRI's administration cost, at 45% of the total cost for the period from 2004-2005 to 2006-2007 (up to December 2006), was high. The Committee referred to the action plan mentioned by the ASTRI Board Chairman in his opening statement that ASTRI planned to reduce the proportion of administration cost to 25% within the next three years, and asked how this could be achieved.

84. The **ASTRI Board Chairman** responded that the administration cost was naturally relatively higher in ASTRI's early development stage. As ASTRI built up both its operating and R&D capacities in the next few years, the administration structure could be further streamlined and more income would be generated from the projects. As a result, the proportion of administration cost would be lowered.

85. The Committee noted from paragraph 7.8(b) and Appendix D of the Audit Report that ASTRI did not file any patent application for six of the 17 completed projects, and asked about the reasons for not doing so.

86. The **ASTRI Board Chairman** replied in his letter of 13 June 2007 in ***Appendix 23*** that:

- for Project A, the right to patent the core technology rested with the Hong Kong University of Science and Technology;

- for Project K, ASTRI's Intellectual Property Department broadly grouped the patent applications under another project in the data presented to Audit. There were in fact three patent applications filed for this project;

- for Project L, ASTRI's Intellectual Property Department broadly, but incorrectly, grouped the patent application under another project in the data presented to Audit. After correcting the record, there should be one patent application filed for this project;

- Project N did not involve any new intellectual property; and

- no patent application was filed for Project R and Project U. Intellectual properties, including reference design and computer code, developed in this project had been successfully licensed.

87. In view of the additional information provided by ASTRI, the Committee invited Audit's comments on the above. The **Director of Audit**, in his letter of 15 June 2007 in ***Appendix 28***, said that the reasons provided by ASTRI for not filing patent applications for some of the projects were not given at the time of the audit study. Also, ASTRI had now clarified that some data previously presented to Audit was incorrect for two projects.

H. ASTRI's response to the Audit Report

88. On 11 June 2007, after the Committee's public hearings on the Audit Report, the Committee noted that the ASTRI Board Chairman was reported by the press to be saying that the Audit Report did not give a full account of the background to some of the audit observations. He cited two examples to support his comments. First, he stated that on seven occasions where the guests entertained were significantly outnumbered by ASTRI staff, three functions were only "working lunches" at which lunch boxes of some 30 odd dollars per head were ordered, but the Audit Report did not provide such information. Second, he stated that the $10 million incentive payment was determined based on the common industry practice of setting a bonus at 10% of the profit (the 10% bonus practice), and that the Audit Report did not mention the economic benefits of the projects.

89. In view of the ASTRI Board Chairman's comments, the Committee wrote to him expressing concern that he had chosen to counter the audit findings through the press at a time when the Committee was preparing its Report on the Audit Report, instead of at the public hearings. The Committee also found his comment on the "working lunches" unfair as it had already been established at the public hearing on 21 May 2007 that ASTRI had not informed the Audit that the reimbursement claims concerned were related to "working lunches". The information was only disclosed by ASTRI at the public hearing. Regarding the basis for setting aside $10 million as incentive payments, the Committee also asked the ASTRI Board Chairman to clarify whether the amount was determined based on the 10% bonus practice, as he mentioned to the press and, if it was, why he did not inform the Committee of such a percentage despite members' questions put to him on this issue at the public hearings.

90. In reply, the **ASTRI Board Chairman** said that it was quite common for R&D companies to provide staff with incentive payments, because the performance of such companies to a large extent depended on the creativity and innovation of their staff. The extent of R&D companies providing staff with incentive payments varied from company to company in the commercial sector, but generally speaking setting aside around 10% of a project's income as incentive payments for the staff of the concerned project was not uncommon. The Board agreed to the setting aside of $10 million as incentive payments having regard to a whole host of factors, including a suitable pay-back to the public purse, ASTRI's need to suitably award staff to motivate them in generating further successes, market practice in staff incentive payments, the need to attract some staff to move to the buying company, etc. He said that he had alluded to these considerations at the Committee's public hearing on 19 May 2007.

I. Conclusions and recommendations

91. The Committee:

<u>Corporate governance</u>

- expresses serious concern and finds it unacceptable that:

  (a) the Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI)'s Board of Directors (Board), which is responsible for giving strategic direction to ASTRI regarding its research and development (R&D) programmes and monitoring the performance of ASTRI's management, has not performed its responsibilities effectively, as reflected by the following:

    (i) although ASTRI's Corporate Governance Manual provides that the Board's Finance and Administration Committee (FAC), which oversees ASTRI's finance and administration matters, should meet quarterly, the FAC held less than four meetings per year in 2004-2005 and 2005-2006. The FAC's failure to follow the meeting requirement in the Corporate Governance Manual, coupled with the problems and deficiencies revealed in ASTRI's finance and administration matters, call into question the FAC's effectiveness as an overseeing body;

(ii) during the periods when no FAC meeting was held, discussion papers were circulated to Directors for information and decision, but ASTRI did not keep documentation to record Directors' comments and decisions in response to these papers; and

(iii) despite the Board's decision in December 2001 that all Directors should sign a non-disclosure agreement (NDA) relating to individual R&D projects, of the 67 projects undertaken by ASTRI since December 2001, only some Directors signed NDAs for 11 projects. Since December 2002, no Director had signed any NDA;

(b) the two government Directors appointed to the Board, i.e. the Permanent Secretary for Commerce, Industry and Technology (Communications and Technology)[3] and the Commissioner for Innovation and Technology, the latter being the Controlling Officer of the Government's recurrent subventions to ASTRI, have not detected the problems in ASTRI's governance and management, reflecting that they did not perform their monitoring role effectively; and

(c) the senior management team of ASTRI, headed by the former Chief Executive Officer (CEO), has failed to adopt the principles of good corporate governance in managing ASTRI, and has demonstrated a lack of internal control and compliance with the procedures and requirements stated in ASTRI's Corporate Governance Manual and other guidelines in areas of human resources (HR) management, project management, project cost control and administration;

- recommends that the Administration should:

(a) review the role and responsibility of the government officials appointed to sit on the governing bodies and committees of statutory bodies or publicly-funded organisations, and ensure that they are able to perform their role and responsibility; and

[3] See Note 1 on Page 37.

(b) in appointing government officials to sit on the committees under the governing bodies of any statutory bodies or publicly-funded organisations, pay due regard to the committees' terms of reference and the officials' expertise, so as to ensure that the officials can properly perform their responsibilities;

- notes that:

(a) ASTRI:

(i) has set up a Special Committee to closely monitor the implementation of the audit recommendations, with a view to completing the implementation by the end of 2007;

(ii) has appointed the current Head of Internal Audit as the Compliance Officer, who is responsible for all compliance issues in finance, administration and HR;

(iii) has appointed the Vice President (Planning) to assume the new post of Chief Operating Officer, who takes overall responsibility and central control of the administration function and operational matters;

(iv) has implemented the audit recommendations referred to in paragraphs 2.10, 2.17, 2.21, 2.25 and 2.36(a) of the Director of Audit's Report (Audit Report);

(v) regarding the audit recommendation referred to in paragraph 2.36(b) of the Audit Report, the Register of Directors' interests has been made available for public inspection with effect from 1 June 2007; and

(vi) regarding the audit recommendation referred to in paragraph 2.36(c) of the Audit Report, the Board has decided that the Directors should no longer be required to sign NDAs in view of the legal advice obtained by ASTRI about the fiduciary duties of directors under the common law, and ASTRI's change of business model from spin-off to non-exclusive licensing; and

(b) the Secretary for Commerce, Industry and Technology[4]:

(i) will continue to take into account the attendance records of the non-government Directors in considering their re-appointment; and

[4] See Note 2 on Page 39.

(ii) has agreed to appoint another officer as the alternate of the Permanent Secretary for Commerce, Industry and Technology (Communications and Technology) whenever the Commissioner for Innovation and Technology is unable to represent the Permanent Secretary at meetings of the Technology Committee;

Remuneration and recruitment

- expresses serious dismay and finds it unacceptable that, of the 20 recruitment cases during the period April to October 2006 examined by Audit:

  (a) contrary to the guidelines approved by the Board, the vacancies in four cases were not advertised in at least one local newspaper. In three of the four cases, the vacancies were only advertised in local newspapers after the Vice President and the R&D Director had interviewed the candidates overseas, and candidates who responded to the local advertisement were not invited to interviews;

  (b) in three cases, ASTRI staff who referred candidates for recruitment were also members of the selection panel. There was no documentary evidence that these staff had informed the selection panel of the referral to avoid possible conflict of interest;

  (c) the selection panels did not include a member from the HR Department as required by ASTRI's guidelines, and in six cases the selection panels comprised staff who were at a lower pay band than that of the post under recruitment; and

  (d) the requirement of inviting all qualified candidates for interview was not complied with in six cases;

- expresses serious concern that:

  (a) the performance-based variable payments awarded for 2005-2006 were inconsistent with performance and there was no documentation recording how the performance-based variable payments were determined;

  (b) the annual salary adjustments made for 2006-2007 varied significantly and were not consistent with staff's performance ratings; and

  (c) despite the Board's approval for setting aside $10 million for making incentive payment to reward 23 staff involved in the sale of three ASTRI projects to an investor, the basis for determining such an amount of payment was not documented;

- notes that ASTRI:

  (a) has implemented the audit recommendations referred to in paragraphs 3.13, 3.31, 3.36(b), 3.42(b) and 3.49 of the Audit Report; and

  (b) will implement the audit recommendations referred to in paragraphs 3.36(a), 3.42(a) and 3.55 of the Audit Report by 31 July 2007;

Project management

- expresses serious dismay and finds it unacceptable that, as revealed in the 18 projects examined by Audit, ASTRI's management and project teams have failed to ensure compliance with the policy and procedures set out in ASTRI's Corporate Governance Manual, the requirements laid down in the Innovation and Technology Fund (ITF) funding guidelines, and the project agreements in a number of areas, and good project management practice has not always been observed, as follows:

  (a) expected project income was estimated in only four projects;

  (b) systematic risk analysis was not conducted;

  (c) the staff cost budget was not accurately stated in three project proposals;

  (d) the statement about the availability of similar equipment for sharing within ASTRI or with other ITF recipient organisations was found in only one project proposal;

  (e) project annual audited accounts were always submitted late;

  (f) information about updated market conditions was not always provided in the half-yearly project progress reports;

  (g) in cases where there was project slippage, information about the impact of the slippage and follow-up actions taken to make up for the slippage was not always provided in the progress reports;

  (h) requests for extension of project period were often made towards the end of the original project period;

  (i) there was delay in the submission of final project reports, final project audited accounts and equipment lists; and

  (j) key information (such as customer feedback on the practical usefulness and benefits of project deliverables) was not always provided in the final project reports;

- notes that:

  (a) the Commissioner for Innovation and Technology has agreed to implement the audit recommendations referred to in paragraphs 4.35, 4.46, 4.47 and 4.57 of the Audit Report; and

  (b) ASTRI:

    (i) has implemented the audit recommendations referred to in paragraphs 4.18(a) and (e), and 4.35(b), (c), (e) and (f) of the Audit Report; and

    (ii) will implement the audit recommendations referred to in paragraphs 4.18(b) to (d) and 4.35(a) and (d) of the Audit Report by 31 July 2007;

<u>Project cost control</u>

- expresses serious dismay and finds it unacceptable that:

  (a) ASTRI had yet to set a target implementation date for the computerised manpower management information system;

  (b) incorrect charging of project costs was found in nine out of 18 project accounts examined;

  (c) project staff cost was charged to the subvention account of ASTRI in 2004-2005, 2005-2006 and 2006-2007; and

  (d) there was no accounting policy regarding the charging of performance-based variable payments to the relevant project accounts and the subvention account;

- notes that ASTRI:

  (a) has implemented the audit recommendations referred to in paragraph 5.21(b), (d) and (f) of the Audit Report; and

  (b) will implement the audit recommendations referred to in paragraph 5.21(a), (c), (e) and (g) of the Audit Report by 31 July 2007;

Administrative issues

- expresses serious concern that:

  (a) the file of completed register of Director's interest forms for the period April 2003 to August 2006 was lost;

  (b) in 11 of 50 cases examined by Audit, contrary to the guidelines in ASTRI's Corporate Governance Manual, the staff concerned had only obtained verbal approval from the CEO prior to their overseas duty visits; and

  (c) in two overseas trips, the staff concerned travelled by business class instead of economy class although the ITF funding guidelines on project-related overseas duty stipulate that ITF funding should only be used to cover the cost of economy class air fares;

- expresses concern that:

  (a) the justifications for approving the entertainment expenses which exceeded the annual budget in 2005-2006 were not documented;

  (b) in nine of 50 cases examined by Audit, the justifications for approving the entertainment expenses which exceeded the cost-per-head spending limits were not documented;

  (c) contrary to the requirement laid down in ASTRI's guidelines, of the 175 air tickets purchased in 2005-2006, 21 were purchased without obtaining a second quotation;

  (d) the number of participants in two project-related overseas duty visits exceeded the limit stipulated in the ITF funding guidelines, i.e. no more than one person for each project team; and

  (e) on the procedures for the procurement of fung shui consultancy services, ASTRI only obtained verbal, instead of written, quotations from three fung shui consultants in June 2004 and October 2005 respectively. Although this complied with ASTRI's then prevailing guidelines which did not specify whether the quotations should be verbal or written, it was not in line with the Government's Stores and Procurement Regulations, which should be good reference for publicly-funded organisations;

- notes that ASTRI:

  (a) has implemented the audit recommendations referred to in paragraphs 6.10, 6.19, 6.30(a), 6.41(a) and (c) and 6.45 of the Audit Report; and

(b) will implement the audit recommendations referred to in paragraphs 6.24, 6.30(b), 6.41(b) and 6.49 of the Audit Report by 31 July 2007;

- urges ASTRI to review its procurement guidelines by making reference to the Government's Stores and Procurement Regulations where appropriate;

Cost and achievements of ASTRI

- expresses serious concern that as revealed in Audit's review of ASTRI's performance since its inception to December 2006, no information was reported to the Commerce and Industry Panel of the Legislative Council on the number of jobs created, income, joint-ventures or start-ups created from the application of ASTRI's technologies;

- notes that:

(a) regarding the audit recommendation referred to in paragraph 7.4 of the Audit Report, the Board will critically consider ASTRI's budget in future years with a view to reducing the proportion of administration cost to total cost from the current 45% to 25% within the next three years;

(b) ASTRI will implement the audit recommendations referred to in paragraph 7.11(b) to (d) of the Audit Report by 31 July 2007, and the recommendation referred to in paragraph 7.11(a) by 30 September 2007. In particular, the Board has undertaken to publish annually the key performance targets and achievements of ASTRI in its corporate mission to provide technology support to the local industry; and

(c) the Commissioner for Innovation and Technology has agreed to implement the audit recommendations referred to in paragraph 7.12 of the Audit Report;

ASTRI's response to the Audit Report

- expresses dismay that ASTRI did not, in the course of the audit study or in response to the draft Audit Report, provide to Audit explanations for some of the problems identified. On some occasions, the information provided to Audit was incorrect. For example, ASTRI did not inform Audit of the fact that three of the seven entertainment functions, at which the guests entertained were significantly outnumbered by ASTRI staff, were only "working lunches". Also, the reasons for not filing patent application for some completed projects were not provided to Audit, and some data previously presented by ASTRI to Audit on patent application was incorrect;

- is disappointed that the ASTRI Board Chairman chose to counter some of the audit findings through the press after, instead of at, the Committee's public hearings; and

Follow-up actions

- wishes to be kept informed of:

  (a) the result of the Administration's review on the role and responsibility of the government officials appointed to sit on the governing bodies and committees of statutory bodies or publicly-funded organisations;

  (b) any further progress made by ASTRI in rationalising its administration structure;

  (c) progress on the implementation of a computerised and integrated HR and project management information system; and

  (d) the progress made in implementing other audit recommendations.