HONG KONG APPLIED SCIENCE AND TECHNOLOGY RESEARCH INSTITUTE COMPANY LIMITED 香港應用科技研究院有服公司



Your Ref. : CB(3)/PAC/R48

18 May 2007

Clerk to Public Accounts Committee Legislative Council Legislative Council Building 8 Jackson Road Central, Hong Kong

(Attn: Ms Serena CHU)

Dear Ms CHU,

The Director of Audit's Report on the results of value for money audits (Report No. 48)

## Chapter 2: Administration of Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI)

Further to my letters of 30 April and 2 May 2007, and your letters of 14 and 16 May 2007, enclosed please find the required information and documents, as follows –

Annex 1	An action plan to implement all the Audit recommendations.	
Annex 2	The streamlined organisation structure after addition of the Chief Operating Officer post.	
Annex 3	Role of Board of Directors and how the Board will strengthen governance.	
Annex 4	Chronology of meetings concerning renewal of employment contract with ex-CEO and draft Audit Report.	
Annex 5	Time-frame and arrangement for making available the Register of Directors' Interests for	

	public inspection and the signing of non-disclosure agreements by Directors.	
Annex 6	Reason for pay level of Level One staff above the market median whereas that for Level Six below market median as revealed in the consultant's review in 2004.	
Annex 7	Breakdown on the number of staff in each pa band by four different quartiles as at 30 Apr 2007.	

We will provide you with the following information once available -

Annex 8	Chronology of events relating to the recruitment and selection process of four cases referred to in paragraphs 3.18 and 3.32(a) of the Audit Report; and follow-up actions taken by the Director of Human Resources and the Human Resources Department after noting that the process was not in compliance with the relevant recruitment guidelines.
Annex 9	Regarding the Board's decision in 2004 to set aside \$10 million derived from a spin-off exercise for a staff incentive scheme, whether and when the Government was informed of the decision and whether prior approval from Government had been sought; a copy of the document indicating the agreed principles for the distribution of income between the Government and ASTRI as mentioned in paragraph 3.45 of the Audit Report.

Yours sincerely,

(Victor Chin) for Chairman

**Board of Directors** 

### c.c. Secretary for Commerce, Industry and Technology (Attn: Mr Joseph W P Wong)

Permanent Secretary for Commerce, Industry and Technology (Communications and Technology) (Attn: Mr Francis Ho)

Commissioner for Innovation and Technology (Attn: Mr Anthony S K Wong)

Secretary for Financial Services and the Treasury (Attn: Miss Amy Tse)

Director of Audit (Attn: Mr Tony Ng)

### Annex 1

### Action Plan to implement all the Audit recommendations

After the publication of the Audit Report on 18 April 2007, the Board of Directors convened a meeting at the earliest possible instance to discuss the Report.

- 2. That meeting was held on 24 April 2007. After the meeting, the Board announced a five-point action plan. One of the five actions is to appoint a Special Committee to closely monitor the implementation of the recommendations in the Audit Commission's Report No. 48, with a view to completion as soon as possible and not later than end 2007.
- 3. The Special Committee held its first meeting on 27 April 2007 and had drawn up, inter alia, the attached action timetable in respect of each recommendation of the Report. Based on the action timetable, follow up actions/reviews will be completed in three phases, namely, 15 May 2007, 31 July 2007 and 30 September 2007, according to the complexity of the matter involved.
- 4. As at 18 May 2007, with the guidance and advice of the Directors, ASTRI management has implemented and introduced improvement measures to address all the action items targeted to be completed by 15 May 2007. In other words, over 50% of the Audit recommendations have been implemented in less than one month after the publication of the Audit Report.
- 5. The Special Committee will continue to monitor the progress of the follow-up actions. Both the Board and management are dedicated to improve the administration of ASTRI, and will ensure the timely implementation of all the Audit recommendations according to the attached timetable.

### **Attachment to Annex I**

## Timetable of implementation of the recommendations in Audit Commission's Report by ASTRI

	Audit's Recommendation	To be completed by
PART 2	CORPORATE GOVERNANCE	
	Attendance rate of Directors at Board/Committee meetings	
2.10 (a)	Monitor the attendance of Directors at Board/Committee meetings and ascertain, where necessary, the reasons for low attendance.	15 May 2007
2.10 (b)	Consider taking action to improve the attendance of Directors at Board/Committee meetings by, for example:  (i) providing adequate guidelines on the role and responsibility of Directors. and  (ii) issuing reminders to the Directors concerned if their attendance is low.	15 May 2007
	Documentation of Committee proceedings	
2.17	Maintain documentation of Directors' comments and decisions when Board/Committee's business is conducted by circulation of papers.	15 May 2007
	Submission of discussion papers to Board/Committees	
2.21	Remind its staff to comply with the seven-day requirement for distributing papers for Board/Committee meetings.	15 May 2007

	Audit's Recommendation	To be completed by
	Minutes of Board/Committee meetings	
2.25 (a)	Ensure the accuracy of information recorded in minutes of Board/Committee meeting.	15 May 2007
2.25 (b)	Ensure that draft minutes for Board/Committee meetings are issued to Directors for comments as soon as possible, and that Directors' comments are documented.	15 May 2007
2.25 (c)	Provide information on the votes taken at Board/Committee meetings in the minutes of meeting.	15 May 2007
	Management of conflict of interest	
2.36 (a)	Investigate the reasons for the loss of Directors' completed register of interest forms, and take action to improve the record keeping system to ensure that company records are properly maintained and safely kept.	15 May 2007
2.36 (b)	Consider setting a time-frame for making available the Register of Directors' Interests for public inspection.	1 June 2007
2.36 (c)	Take action to ensure that NDAs are signed by all Directors for all projects undertaken by ASTRI.	16 May 2007
PART 3	REMUNERATION AND RECRUITMENT	
	Pay structures	
3.13	Review the cases where staff are receiving salaries higher than the maximum of the respective pay bands, and take action to revise their salaries where appropriate.	Resolved

	Audit's Recommendation	To be completed by
	Staff recruitment	
3.31 (a)	Ensure that all staff are recruited in accordance with the guidelines approved by the Board. Where there are cases which require different treatment, the justifications should be documented and approval should be sought from the appropriate authority.	15 May 2007
3.31 (b)	Ensure an open and fair recruitment process in cases where the job applicants are referred by ASTRI staff.	15 May 2007
3.31 (c)	Review the composition of selection panels.	15 May 2007
3.31 (d)	Ensure that selection panels comprise staff of suitable seniority.	15 May 2007
3.31 (e)	Ensure that all candidates (or at least five if the number of qualified candidates is exceedingly large) who meet the pre-requisites of the job should be invited to attend selection interviews.	15 May 2007
3.31 (f)	Ensure that the justifications and basis for determining the entry pay for new recruits are documented for approval.	15 May 2007
	Performance-based variable payments	
3.36 (a)	Establish a mechanism to determine the performance-based variable payments to staff based on performance rating.	31 July 2007
3.36 (b)	Where it is considered necessary to award a performance-based variable payment different from the established mechanism, document the justifications.	Implemented

	Audit's Recommendation	To be completed by
	Annual salary adjustments	
3.42 (a)	Establish a mechanism to determine the annual salary adjustments for staff based on performance rating and seek the Board's approval for the mechanism and the annual salary adjustment rate.	31 July 2007
3.42 (b)	In cases where an adjustment made would deviate from the approved guidelines, seek approval from the appropriate authority and document the justifications for the deviation.	15 May 2007
	Staff incentive payments	
3.49 (a)	In future spinning-off cases, document the basis for determining the amount of staff incentive payments.	15 May 2007
3.49 (b)	In future spinning-off cases, consider disclosing the staff incentive payment made to enhance transparency and demonstrate the prudent use of public money.	15 May 2007
	Review of senior staff's remuneration package	
3.55 (a)	Make reference to market practices in assessing the remuneration packages for its top three-tier executives, including that for the CEO.	31 July 2007
3.55 (b)	Consider disclosing publicly the remuneration packages of its top three-tier executives (e.g. showing the amount that they receive in different bands without identifying the individuals) to enhance transparency.	31 July 2007

	Audit's Recommendation	To be completed by
PART 4	PROJECT MANAGEMENT	
	Project Planning	
4.18 (a)	Ensure that information, such as the expected project income and estimated number of customers, about the commercialisation potential of the R&D projects being proposed and the basis for making the estimates are provided in the project proposals.	15 May 2007
4.18 (b)	Establish a risk management process as part of its project management system (see paras. 4.8 and 4.9).	31 July 2007
4.18 (c)	Ensure that the staff cost budget is accurately stated in the project proposal.	31 July 2007
4.18 (d)	Ensure that the staff time is budgeted for correctly in the project proposal.	31 July 2007
4.18 (e)	Remind project teams to check and document in the project proposals the availability of similar equipment for sharing within ASTRI or with other ITF recipient organisations.	15 May 2007
	Project monitoring	
4.35 (a)	Consider implementing a computerised project management information system to facilitate effective project management.	31 July 2007
4.35 (b)	Ensure that monthly progress reports are submitted by the R&D Divisions for review by the Planning Department of the HQ Division.	15 May 2007

	Audit's Recommendation	To be completed by
4.35 (c)	Ensure that project monthly review meetings are held between the R&D Divisions and the Planning Department as scheduled. If a meeting cannot be held, the justifications should be documented for approval by the appropriate authority.	15 May 2007
4.35 (d)	Ensure that the annual audited accounts of projects are always submitted to the ITC in accordance with the ITF funding guidelines.	31 July 2007
4.35 (e)	Remind project teams to provide, in the half-yearly progress reports to the TC and the ITC, information about the updated market conditions, project slippages and its implications, and the corrective actions taken.	15 May 2007
4.35 (f)	Ensure that projects are completed within the target completion date. In cases where extension of time is required, approval should be sought as soon as possible.	15 May 2007
	Project evaluation	
4.46	Take measures to ensure that the reporting requirements laid down in the ITF funding guidelines are complied with in future projects.	31 July 2007
4.47	Provide key information (such as customer feedback, jobs created and sales generated from technology transferred) for assessing and reporting the practical usefulness and benefits of the project deliverables to the relevant industry.	31 July 2007

	Audit's Recommendation	To be completed by
PART 5:	PROJECT COST CONTROL	
	Control of project costs	
5.21 (a)	Take action to ensure that the computerised manpower management information system under development could be implemented as soon as practicable.	31 July 2007
5.21 (b)	Ensure that the ITF's funding guidelines are complied with, including:	
	(i) charging project expenditure (e.g. staff cost, overseas duty visit expenses and other costs) to the correct project accounts. And	15 May 2007
	(ii) obtaining funding approval from the ITF before commencement of a project.	15 May 2007
5.21 (c)	Where there are difficulties in the deployment of staff during the period when a project is pending approval, consider putting in place arrangements for recording and funding staff resources engaged in non-project- related work before commencement of projects.	31 July 2007
5.21 (d)	Keep records of the deployment of R&D staff, including those who are not yet engaged in approved projects.	15 May 2007
5.21 (e)	Develop an accounting policy for charging performance-based variable payments made to R&D staff to relevant accounts.	31 July 2007
5.21 (f)	Where it is not possible to comply with the ITF's funding agreement and guidelines, ensure that the justifications for non-compliance are documented and approval is obtained from the appropriate authority.	15 May 2007
5.21 (g)	Make necessary adjustments for the project costs not charged to the correct project accounts	31 July 2007

	Audit's Recommendation	To be completed by
PART 6:	ADMINISTRATIVE ISSUES	
	Entertainment expenses	
6.10	Tighten controls on entertainment expenses.	15 May 2007
6.10 (a)	Remind its staff to limit entertainment expenses within budget.	15 May 2007
6.10 (b)	Ensure that approval for entertainment expenses in excess of budget is only given under exceptional circumstances and with sufficient justifications.	15 May 2007
6.10 (c)	Remind staff that they should observe the cost-per-head spending limits. In cases where the limits are exceeded, justifications should be provided and approval should be sought.	15 May 2007
6.10 (d)	Ensure that the number of ASTRI staff participating at entertainment functions would not be excessive.	15 May 2007
,	Project-related overseas duty visits	
6.19 (a)	Ensure that prior approval is obtained for all overseas duty visits.	15 May 2007
6.19 (b)	Remind staff of the requirement that applications for overseas duty visits must be submitted at least ten days in advance. In cases where urgent approval is needed, the justifications should be documented.	15 May 2007
6.19 (c)	Ensure that staff undertaking overseas duty visits relating to ITF funded projects would travel by economy class.	15 May 2007

	Audit's Recommendation	To be completed by
6.19 (d)	Ensure compliance with the requirement for limiting the number of participants in project-related overseas duty visits to no more than one person from each project team.	15 May 2007
	Non-project-related overseas duty visits	
6.24	Clarify if the Board's approval is needed for staff to travel by business class for reasons other than essential operational reasons.	31 July 2007
	Procurement of air tickets	
6.30 (a)	Ensure that at least two quotations are obtained for purchasing air tickets.	15 May 2007
6.30 (b)	Revisit the feasibility of entering into an agreement with travel agents or airlines for the bulk purchase of air tickets.	31 July 2007
	Company vehicles	
6.41 (a)	Ensure that all journeys of company vehicles are recorded in the vehicle log books and countersigned by the staff who have taken the journey.	15 May 2007
6.41 (b)	Review whether there is scope for reducing the number of company vehicles.	31 July 2007
6.41 (c)	Remind its staff to pay due regard to economy in the use of company vehicles (e.g. by using public transportation instead).	15 May 2007
	Fung shui consultancy fees	
6.45	Review whether the use of fung shui consultants should be continued, having regard to the nature of its work.	Stopped

	Audit's Recommendation	To be completed by				
	Low interest income					
6.49	.49 Consider implementing measures to improve the rate of return on its surplus funds.					
PART 7	COST AND ACHIEVEMENTS OF ASTRI					
	Cost of ASTRI's operations					
7.4	Critically examine its administration cost and take action to contain such cost to a lower level.	30 Sept 2007				
	Evaluation of ASTRI's performance					
7.11 (a)	Evaluate its performance by the yardsticks (see para. 7.7) as reported to the LegCo CI Panel.	30 Sept 2007				
7.11 (b)	Report the evaluation results to the ITC at regular intervals.	31 July 2007				
7.11 (c)	Based on good overseas practices, set performance targets and indicators for assessing and reporting to the public its achievements and performance.	31 July 2007				
7.11 (d)	Periodically evaluate and report its performance to the public (e.g. posting of its performance data on its website).					

### Streamlined organizational structure of ASTRI

As one of the five actions to follow up with Audit Report No.48, the Board of Directors will rationalize the administration structure within ASTRI with a view to creating a Chief Operating Officer (COO) post within three months to be fully responsible for the administration of ASTRI.

- 2. At present, the administrative functions of ASTRI are discharged by a number of divisions, with no unified structure assuming overall oversight. Overlaps and gaps in duties and responsibilities among the various divisions may occur, resulting in administrative inefficiency.
- 3. The ASTRI Board has reviewed the current structure with a view to enhancing administrative efficiency of the company. An organization chart showing the new structure is attached.
- 4. Under the new structure, the COO will take overall responsibility for all operational matters, with the assistance of the Chief Administrative Officer. The COO himself will take over the current Vice-President (Planning)'s responsibilities in project planning and management, IP management, and market and competition intelligence, as well as overseeing corporation communications. The Vice-President (Planning) post will be deleted correspondingly.
- 5. The Director of Administration post will be re-titled Chief Administration Officer (CAO), and will take up additional responsibilities in Company Secretary, human resources and quality management. The CAO will report to the COO.
- 6. As a consequence of these changes, the number of lines reporting to the CEO on administrative matters will be streamlined from seven to two (namely, the COO and the Chief Finance Officer).
- 7. Our assessment is that the organizational changes should be cost neutral. The Board will continue to explore further room for rationalization under the new organizational structure.
- \*Note by Clerk, PAC: See Appendix 25 for the organisation chart referred to in paragraph 3 above.

# Whether and how the Board of Directors (Board) is responsible for the problems and deficiencies identified in the Audit Report, and how it will strengthen the governance of ASTRI

As the governing body of ASTRI, the Board is appointed to steer the strategic direction of the Company and ensure that the public missions and objectives of the Company are achieved. In the performance of such duty, the Board, composed of 2 Official Directors and 17 Non-Official Directors appointed from the industry or academia, is assisted by three functional Committees, namely the Technology Committee, Finance and Administration Committee, and Audit Committee, as well as the management of ASTRI, headed by the Chief Executive Officer (CEO).

- 2. The Board plays its governing role and discharges its responsibilities by providing strategic guidance, oversight and monitoring of ASTRI. Such an approach is 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 includes 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.
- 3. The Board and the three functional Committees hold meetings regularly to discharge their duties. For example, the Board established and strengthened the corporate governance of the company during the inception years of the company, by adopting a Corporate Governance Manual for ASTRI in 2003, commissioning a study on knowledge management in 2004 to help retain the knowledge developed by R&D teams, and commissioning a review of ASTRI's human resources practices to align with the market median in 2004. In line with the change in business mode 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 Innovation and Technology Commission on the overall strategy of the Innovation and Technology Fund, the Board in 2005-6 provided strategic guidance on the establishment of the R&D Centre on Information and Communications Technologies.
- 4. The Board and the three functional Committees have also monitored the performance of ASTRI, through, among other things,
  - scrutinizing and approving the annual internal audit plans prepared by ASTRI's Head of Internal Audit,

and reviewing audit progress reports;

- monitoring the implementation of the recommendations made by ICAC in their studies on ASTRI procurement procedures, commercialisation procedures and staff recruitment in 2004, 2005 and 2006 respectively;
- recommendeding ASTRI to set up a high calibre council of internationally renowned advisers (i.e. Technology Advisory Committee) to critically review ASTRI's strategy, technical program and key personnel; and
- reviewing the outstanding cases of staff receiving salaries exceeding their respective pay bands and instructing the management to take corrective measures in 2006.
- 5. Through regular meetings of the Board and the three functional Committees, the Board gets 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 will also enquire into any potential problems and difficulties ASTRI management might encounter so that appropriate precautionary and improvement measures can be taken to contain such problems.
- 6. The Board accepts all the Director of Audit's observations and recommendations given in the Audit Report, and has adopted a five-point action plan to follow up with ASTRI management to implement the recommendations as soon as possible. As of 18 May 2007, a vast majority of the Audit recommendations have indeed already been implemented with diligence, and the rest will be implemented as soon as possible. The Board believes that, with the implementation of the improvement measures, the corporate governance of ASTRI will be strengthened and the chances of deficiencies recurring will be minimised. The Board will continue to act in good faith and in the best interest of ASTRI.

## Chronology of meetings concerning renewal of employment contract with Dr. Robert Yang and the draft Audit Report

<u>Date</u>	<u>Event</u>
19.1.2007	The Special Review Committee delegated by the Board to make a recommendation on the renewal of the employment contract of Dr. Robert Yang met and agreed to recommend to the Board that the contract be renewed for three years upon expiry. The minutes of that meeting were submitted to the Public Accounts Committee on 30 April 2007.
12.2.2007	ASTRI uploaded the draft Audit Report to its intranet, and sought Directors' comments on the draft Report.
15.2.2007	The Board Chairman, Chairmen of the three functional Committees, the two Government Directors and ASTRI management, met to discuss the proposed response to draft Report. A copy of the brief notes of the meeting is attached at Appendix A.
20.3.2007	The Board accepted the recommendation of the Special Review Committee and agreed in-principle to renew the employment contract of Dr. Robert Yang. At the same Board meeting, Directors were informed of the latest development regarding the Audit Report. The minutes of that meeting were submitted to the Public Accounts Committee on 30 April 2007.
24.4.2007	A Special Board meeting was held to discuss Dr Robert Yang's resignation and the follow up actions of the Audit Report. A copy of the brief notes of the meeting is attached at Appendix B.

<sup>\*</sup>Note by Clerk, PAC: Appendices A and B not attached.

### Timeframe and arrangement for making available Register of Directors' Interests for public inspection and the signing of non-disclosure agreements by Directors

### Register of Directors' Interest

ASTRI Board Directors have no objection to making their declarations of interest available for public inspection. With effect from 1 June 2007, members of the public who wish to inspect the declarations may approach the Board Secretary to arrange for the inspection.

### Non-disclosure agreements (NDAs) by Directors

- 2. Under the common law, the duty of confidentiality is imposed on a director (including a non-executive director) because of the doctrine relating to confidentiality and the fiduciary duties owed by a director to the company.
- 3. Under the doctrine of confidentiality, if confidential information is provided to a person in circumstances in which the person knows that such information is to be kept confidential, but the person proceeds to use the information to the detriment of the provider of the information, then legal action can be taken against him.
- 4. Under the fiduciary duties owed by a director to the company, a director has a general duty of confidentiality which is 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 unauthorized use of the company's property or information.
- 5. Whether a NDA is signed or not, the common law duties described above still subsist.
- 6. In the early years, ASTRI adopted a spin-off business model, whereby technologies successfully incubated will be sold to businesses

on an exclusive basis. In such cases, the buyers will usually require all parties concerned who have 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 Board Directors, though already bound by the common law duties of confidentiality, were also required to sign NDAs to satisfy potential purchasers.

7. The business model of ASTRI has been gradually changed to a model of non-exclusive licensing. Therefore, the need for NDAs no longer exists. The Board of Directors has reviewed the situation on 16 May 2007, and decided that Directors should no longer be required to sign NDAs.

### Annex 6

Reason for pay level of Level One Staff substantially above the market median whereas that for Level six staff was substantially below the market median, as revealed in the consultant's review in 2004

When ASTRI was newly established in 2001, pay scales were established for two main streams of staff: (a) R&D personnel and (b) administrative, finance, IT and other general support staff.

- 2. For (a), reference was made to HKUST's pay scale for its Research Grades, for setting the pay scale for ASTRI's Level Two to Level Six R&D personnel. Because of the absence of comparable local benchmarks for top-notch research talents, for the Level 1 research posts, ASTRI sought advice from Arthur D Little, a global management consulting firm and Russell Reynolds Associate, an HR Consulting firm in devising the pay scale for Level One research directors. For (b), reference was made to Government's pay scale for posts of similar duties.
- 3. The pay scales for all six levels of ASTRI staff were subsequently approved by the Board in June 2001. These pay scales reflected the market conditions prevailing at that time.
- 4. In 2004, the Board considered that the salary scales determined in 2001 might no longer be reflecting the prevailing market conditions, given the changes in the intervening years. It was therefore decided that ASTRI should engage an independent human resources consultant to conduct a review.
- 5. The findings of that review were endorsed by the Board in September 2004, as set out in Table 5 of the Audit Report.

Annex 7

### Number of staff in each pay band $^*$ as at 30 April 2007

Pay band	Annual Salary \$1,018,644 - \$2,008,594			1st quartile	2nd quartile	3rd quartile	4th quartile	Total
Level 1				-	quartne	-		TUIAI
Level 1	\$1,010,044	<u>  - </u>	\$2,008,594	0	1	0	4	3
Level 2	\$832,192	-	\$1,468,548	5	3	4	5	17
Level 3	\$381,014	-	\$886,548	12	29	17	22	80
Level 4	\$257,424	-	\$507,598	85	46	18	13	162
Level 5	\$133,835	-	\$263,900	37	30	23	26	116
Level 6	\$95,986	-	\$189,268	2	6	0	0	8
	Total			141	115	62	70	388

As at 30 April 2007, no staff member is above or below his/her pay band.

<sup>\*</sup> Adopted since September 2004