

**For consideration  
on 4 March 2003**

**Legislative Council  
Panel on Information Technology and Broadcasting**

**IT Manpower**

**Introduction**

This paper briefs Members on the progress of implementation of the initiatives recommended by the Task Force on IT Manpower.

**Background**

2. To ensure Hong Kong has the capability to compete in the global information economy, it is important to build a competent IT workforce. The Government is committed to providing adequate and quality IT manpower to meet market demand.

3. The Task Force on IT Manpower, which was set up under the Information Infrastructure Advisory Committee, has examined the situation in Hong Kong and elsewhere, and issued a report in July 2001 recommending a package of immediate and longer term measures to address the IT manpower needs in Hong Kong. The prime objective is to train local IT talents to meet the needs in the community. Where there is a gap or shortage in specific areas, IT talents elsewhere can be recruited to meet the requirement.

**Progress of implementing the measures recommended in the Report of the Task Force on IT Manpower**

4. The Task Force on IT Manpower has recommended a package of immediate and longer term measures in July 2001 to address the IT manpower needs in Hong Kong. These measures are to:

- (a) expand post-secondary programme;
- (b) encourage world-renowned private IT training institutions to operate in Hong Kong;
- (c) develop professional IT talents in the Cyberport;
- (d) accredit IT skills below degree level;
- (e) encourage Hong Kong and Mainland talents overseas to work here;
- (f) intensify exchange/internship programme with emphasis on IT;
- (g) collaborate with the industry to provide professional IT training for secondary students;
- (h) enhance output of university graduates in IT and related disciplines and increase IT content in both IT and non-IT disciplines;
- (i) promote and accept credit transfer/exemption in universities for IT-related disciplines;
- (j) explore the feasibility of establishing a community IT college and set up corporate schools in IT field in collaboration with the industry;
- (k) implement the scheme to admit Mainland IT professionals; and
- (l) streamline the admission regime for overseas IT professionals.

5. We briefed Members on the recommendations of the Task Force at the Panel meeting held in July 2001. The progress in the implementation of these measures is set out at the Annex.

## **Current Situation**

6. According to the Manpower Survey Report 2002 in respect of the IT sector published by the Vocational Training Council (VTC) at the end of last year (covering a sample of over 1,500 companies with effective response rate of over 96%), about 63,100 people were engaged in the principal jobs of the IT sector as at March 2002. At the time of the survey, the number of vacancies in the IT sector stood at 775, or 1.2% of the total IT posts of around 63,900. Based on employers' forecast, it was estimated that there would be around 64,850 IT posts by March 2003, representing an increase of 1.5% over March 2002. However, as compared with the average annual growth of about 0.5% in the number of IT posts between March 2000 and March 2002 which also reflected the economic slowdown and a smaller demand for IT manpower, the Report concluded that the 1.5% increase could be somewhat optimistic.

7. Having regard to past and present data, the Report estimated that, in order to meet the growth of the sector and to replenish natural wastage, the projected IT manpower requirement would increase from around 64,700 in 2003 to around 71,780 in 2006 (a low-end projection, i.e. estimated at a slower economic recovery rate); or increase from around 68,000 in 2003 to around 80,900 in 2006 (a high-end projection, i.e. estimated at a faster economic recovery rate). Based on such estimates, the Survey also forecast that there would be an annual additional training requirement for 4,500 to 5,500 IT employees up to 2006, of which around 50% (i.e. around 2,250 to 2,750) should be at degree level or above, and around 50% (i.e. around 2,250 to 2,750) should be below degree level.

8. Based on the average annual supply of local degree and below-degree level graduates from IT and related disciplines of University Grants Committee-funded institutions, Open University and the Hong Kong Institute of Vocational Education, and taking into account participation rates (percentage of graduates from IT and related disciplines actually engaged in IT-related work) based on previous trends, there should be sufficient local talents trained to meet the projected annual increase. Where there is shortfall in specific areas, it should be readily met by recruiting talents from places outside Hong Kong, IT graduates returning from overseas, or non-IT graduates with appropriate or conversion IT training.

9. As regards the quality of local graduates, the Survey found that employers of all sectors were in general satisfied with the competencies and technical skills of the local fresh graduates in the IT field but there is a need to improve language skills in particular.

### **Way Forward**

10. The VTC's IT sector Manpower Survey Report 2002 provides a useful reference for IT manpower demand and supply in the next few years. We will continue to implement the measures recommended by the Task Force on IT Manpower to ensure the adequate provision of quality IT manpower in Hong Kong.

**Commerce, Industry and Technology Bureau  
(Information Technology and Broadcasting Branch)  
February 2003**

**Progress of Implementing Immediate and Longer Term Measures  
as Recommended in the Report of the IT Manpower Task Force**

<b>Measures</b>	<b>Progress</b>
1. Expand post-secondary programme	In response to the Government's policy initiative to expand access to higher education, post-secondary institutions have provided 9,000 self-financing post-secondary programme places in 2002/03. Of these, about 1,300 are in IT-related disciplines for Form 5 and Form 7 school leavers.
2. Encourage world-renowned private IT training institutions to operate in Hong Kong	Various overseas and Mainland institutions have collaborated with local institutions to roll out IT-related programmes in Hong Kong. One notable example is the collaboration of the School of Professional and Continuing Education of the University of Hong Kong (HKU) and the world-renowned National Institute of Information Technology (NIIT) of India to introduce NIIT courses in Hong Kong. A Basic Diploma course was rolled out last year with an intake of 25 students.
3. Develop professional IT talents in the Cyberport	<p>The Cyberport Institute of Hong Kong, which is operated by HKU with the support of five founding Industrial Partners, namely, Cisco, Hewlett Packard, IBM, Microsoft and Oracle, was inaugurated in June 2002. The first Postgraduate Diploma in Information Technology course of the Cyberport Institute was rolled out in October 2002 with an intake of 26 students.</p> <p>The Internship and Placement Service of the Cyberport Institute raised 8 IT internship (local and overseas) places in the summer of 2002 for university students to work in multi-national IT companies in order to widen their exposure and outlook.</p>

Measures	Progress
<p>4. Accredite IT skills below degree level</p>	<p>Since establishment in July 2001, the Hong Kong IT Skills Assessment Centre of the Vocational Training Council has received 7,716 applications by end 2002.</p> <p>Since the launch of the International Computer Driving Licence (ICDL) Programme by the Hong Kong Computer Society in May 2001, a total of 2,140 Skills Cards and 292 ICDL Certificates have already been issued by 8 January 2003.</p> <p>A localization of the ICDL examination is now in process which is expected to be available in the first quarter of 2003.</p>
<p>5. Encourage Hong Kong and Mainland talents overseas to work here</p>	<p>We have started the programme to encourage Hong Kong students studying IT abroad to return to work in Hong Kong. Representatives of the Commerce, Industry and Technology Bureau (CITB) have visited Hong Kong students studying in major institutions abroad, such as Stanford University, University of British Columbia and Simon Fraser University, Imperial College of Science, Technology and Medicine of the University of London, University of Waterloo, etc. to update the students on IT development in Hong Kong and to encourage them to return to work in Hong Kong after graduation. The response from the students was positive and they were keen to know IT development and job market situation in Hong Kong.</p> <p>While we could not quantify the results of these visits, we consider them useful and should be enhanced. We have made it a standing arrangement for CITB officers and other senior Government officials to visit, during their overseas trips where feasible, Hong Kong IT students in cities covered in the trips where there is a considerable number of such students in these cities (e.g. Boston, Silicon Valley, London, Toronto, Vancouver, Sydney, etc.).</p> <p>In this connection, we have also produced a short video to introduce IT development and job situation</p>

Measures	Progress
	<p>in IT field in Hong Kong to facilitate the discussion with the students.</p> <p>We have also established a database of overseas Hong Kong student associations and fed them with information about latest IT development in Hong Kong through the Internet.</p>
<p>6. Intensify exchange / internship programme with emphasis on IT</p>	<p>We have sponsored local universities to organize IT-related exchange programmes with overseas tertiary institutions during the summer of 2002. A total of 10 programmes and about 130 students were sponsored. An internship programme is also being implemented under Item 3 above.</p>
<p>7. Collaborate with the industry to provide professional IT training for secondary students</p>	<p>We have collaborated with the industry to provide professional IT training to secondary students through the “train the trainer” approach, i.e. multinational IT companies provide free training for selected teachers who return to schools to teach their students respective IT skills as extra-curricular activities. So far, over 1,000 teachers have been trained and 5,560 students have benefited from these training programmes.</p> <p>We also collaborated with the academic sector and the industry in organising IT summer camps for secondary students in 2001. In the camps, the students would receive training on professional IT skills, visit interesting IT establishments and carry out IT-related community work. Four IT camps were organized in the summer of 2002, including one camp for local secondary students, one camp for exchange amongst students in Hong Kong, Shanghai and Macau, and two camps for primary students and their parents.</p> <p>We have also launched a pilot scheme to recruit IT trainers to provide practical IT training at secondary schools to students as extra-curricular activities for the academic year 2002/03. Over 3,500 students from 50 schools have benefited from the scheme since its commencement in November 2002.</p>

<b>Measures</b>	<b>Progress</b>
8. Enhance output of university graduates in IT and related disciplines and increase IT content in both IT and non-IT disciplines	Many different programmes on IT and IT-related disciplines are now being offered by the University Grants Committee-funded institutions. The institutions also offer choices of different IT courses for students of non-IT disciplines. Some have also introduced IT exit-tests for the students. These institutions will continue with the momentum to enhance IT content in both IT and non-IT related curricula.
9. Promote and accept credit transfer / exemption in universities for IT-related disciplines	Following a higher education review, the University Grants Committee (UGC) has decided to introduce a credit unit accumulation and transfer system among UGC-funded institutions. IT-related disciplines will be covered under the system.
10. Explore the feasibility of establishing a community IT college; Set up corporate schools in IT field in collaboration with the industry	<p>Non-profit making education institutions may apply for an interest free loan from the Government to offer self-financing, full-time and accredited IT programmes leading to sub-degree qualifications. Students who are under 25 and do not possess sub-degree or above qualifications are eligible to apply for funding support under the student financial assistance schemes to study the above programmes.</p> <p>The Cyberport Institute has established a corporate school-like operation through collaboration with its Founding Industrial Partners, i.e. Cisco, Hewlett Packard, IBM, Microsoft and Oracle. These leading IT companies will contribute to curriculum development, coursework and job placement of students at the Cyberport Institute.</p>



Measures	Progress
11. Implement the scheme to admit Mainland IT professionals	<p>The Admission of Mainland Professional Scheme was launched in June 2001. As at 31 December 2002, 467 applications have been received, out of which 276 (59.1 %) were IT applications. A total of 268 applications were approved, out of which 158 (58.9%) were IT professionals. The monthly remuneration of 85.4% of the successful IT applicants is below \$40,000. The remaining cases involve monthly remuneration from \$40,000 to below \$100,000. 65.2% of the successful IT applicants have Bachelor degree or equivalent and relevant experience. The remaining 34.8% have Master or Doctoral degree.</p>
12. Streamline the admission regime for overseas IT professionals	<p>The Immigration Department has streamlined its procedures for processing applications for work permits by overseas IT professionals. 99% of the applications can be processed within two weeks. In 2001 (from January to December), a total of 1,011 applications were received and 886 applications (88%) were approved. In 2002 (from January to December) 702 new applications were received. A total of 744 applications (including 85 outstanding applications carried forward from 2001) were approved in 2002.</p>

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