

**EMBARGOED TILL AFTER DELIVERY
PLEASE CHECK AGAINST DELIVERY**

**Speech by Mr Philip Yeo, Chairman,
Agency for Science, Technology and Research (A*STAR),
at the Seminar on Growing with Technology Roadmapping
cum Secondment of T-Up Talents,
on Thursday, 29 May 2003, 4pm,
at the Singapore Institute of Manufacturing Technology (SIMTech)**

Distinguished Guests,

Ladies and Gentlemen,

Good afternoon.

1. It has been about three months since we launched the GET-Up initiative and officially sent off our pioneer batch of 12 research scientists and engineers to work with local enterprises. How time flies!
2. When we first conceived and launched GET-Up, Singapore's growth forecast for 2003 was moderate, in the region of 2 to 5 percent. We saw the need for our local manufacturing companies to climb the technology value chain and sharpen their competitiveness. Four key agencies – EDB, SPRING, IE Singapore, A*STAR and its research institutes – got together under the GET-Up initiative to concertedly focus on helping our local enterprises upgrade their technology.

3. I asked the GET-Up team to individually meet up with 500 growth-oriented Singapore enterprises in the manufacturing sector this year. These individual visits would enable us to better understand the specific needs of each company. A*STAR would then help the companies to tap into the relevant talent and technology in our research institutes, and tap into the many industry support programmes from EDB, SPRING and IE Singapore. Within the short span of five months, the GET-Up team has already met 200 companies.
4. Unfortunately, this was also the period in which we had to cope with two major global crises. The Iraq war, and closer to home, the **viral** war. It took just one microscopic bug attack to completely change the way we work, enjoy and organise our lives in that short space of time. While our parents and forefathers may talk with nostalgia about pre-war days, we now all have another common reference of time for the 21st century – pre-SARS days.
5. The SARS bug is putting Singapore through one of its most challenging tests. Business, travel, trade and global uncertainties abound. Growth forecast was revised downwards to 0.5 to 2.5 percent. But just as Singapore learns to “STEP-OUT” whilst resolutely putting in place check and controls to contain SARS, **local enterprises must also resolve to “GET-UP” and equip themselves to Grow, Glow and Globalise in these uncertain times.**

3G-ENABLED THROUGH T-UP

6. It is heartening to see that many of our local enterprises are indeed rising to the challenge. The following are three good examples.

7. Takumi Unitech provides companies in the hard disk drive industry with surface treatment technologies based on existing know-how provided by its Japanese joint-venture partner. Through T-Up, or the Technology Upgrade programme, Takumi Unitech now has an expert in surface science from A*STAR's Data Storage Institute on its technical team. The team will further develop the existing technologies to provide miniature contaminant-free, high-clamp fasteners for the disk drive industry. This will give Takumi Unitech competitive leading edge technology in the industry's drive towards miniaturisation.

8. In the printing industry, we find an already successful company actively sharpening its competitive edge through T-Up. Kikuze is using technology to tackle the common industry nightmare of inconsistent digital colour output and standards. A specialist in knowledge-based systems from the Singapore Institute of Manufacturing Technology will apply SIMTech's expertise to automate the colour calibration process. This will reduce the painstaking manual process of inspection and calibration that can take industry players up to 8 man-hours. Kikuze with its T-Up researcher has set its sights on a 30 minute automated process. This 16-fold reduction in turn-around time will propel Kikuze ahead of its competitors.

9. Valen Technologies is another growing enterprise that aims to exceed its customers' expectations. Valen has moved into the new field of polymer optics and is harnessing the know-how of A*STAR's research institute. The coating technology group at SIMTech has both a collaborative R&D project with Valen, and a specialist in precision moulding and polymer science seconded to the company. Tapping into SIMTech's expertise and R&D facilities, the research team will help the company optimise its polymer based optical molding process and develop new materials in coating moulded lenses.

10. To date, the GET-Up team has brokered a total of 25 high-tech marriages for companies involving 32 researchers. We are sending off 20 researchers to join 16 local enterprises **today**. Our match-making team is busy handling new requests for T-Up secondments in the areas of electronics, precision engineering, infocomm and chemicals.

NEW 3G-ENABLING TOOL

11. Another new tool that GET-Up has introduced to help companies become 3-G enabled is a strategic process **called Operations and Technology Roadmapping (OTR)**. Experts from the research institutes will apply the assessment and roadmapping tools to help our high-tech enterprises assess their capacity to meet future challenges, identify technology gaps, and plan long term capabilities needed for growth.
12. Operations and Technology Roadmapping involves close discussion and strategic review with the company's senior management. The first stage is an assessment of the company's operations and technology capability to capture new markets and meet future challenges. This is followed by Technology Roadmapping to help companies link their technological capability to specific product and business plans.
13. Technology Roadmapping is a process developed by Cambridge University, and has been successfully used by various multi-national companies. Introduced by GET-Up for the first time to Singapore enterprises, Technology Roadmapping will systematically help our local companies link growth and market strategy with technology development.

14. Companies have welcomed this new 3G-enabling tool. 29 companies have completed or are in the process of working through the assessment and roadmapping tools.
15. Tru-Marine Pte Ltd, one of the companies that embarked early on the assessment and roadmapping process, has already proceeded to implement their strategies. A full service provider for marine turbocharger repair services, Tru-Marine is now positioning itself to expand globally. They have defined their growth strategy with a focus on developing specialised ship repair service systems through a consortium of similar service providers. A T-Up researcher will also work with Tru-Marine to address technology gaps identified in the technology roadmap.
16. Another company that has taken advantage of the technology roadmapping is Aluminium Extrusion Industries, or AEI, in short. AEI is a leading supplier of aluminium products and services to the construction and electronics industry. Through the process of assessment and technology roadmapping, they have identified their niche of being the preferred supplier in the regional automotive industry. They are now on the route to integrating with supplier and machining houses, securing a quality service certification and developing a new range of specialty alloys.
17. I am pleased to announce that **SPRING Singapore will offer LETAS grants to eligible local enterprises embarking on Operations and Technology Roadmapping** . That is the beauty of the multi-agency initiative like GET-Up, where resources from various agencies can be tailored to meet industry needs. With LETAS, or the Local Enterprise Technical Assistance Scheme, I urge many more companies to embark on systematic review and gear up to grow, glow and globalise.

18. To keep the GET-Up companies posted of such technology offerings and financial assistance, we have launched GET-Up's inaugural e-newsletter in April. A total of 500 local enterprises are on GET-UP's mailing list for the bi-monthly e-newsletter. The e-newsletter provides bite-sized information on GET-Up's initiatives, success stories and the latest technology trends.

3G IN UNCERTAIN TIMES

19. The uncertain economic outlook and the spiky coronavirus have cast a shadow on the industry. The imperative for our manufacturing companies to upgrade their technologies is now greater than ever before.
20. I am thankful that experienced CEOs from seven of our growth-oriented local companies have agreed to form the GET-Up Advisory Committee. As individuals who have personally grown your companies, carved a name for your products and ventured in the global marketplace, your wealth of experience will be invaluable to the GET-Up team. We look forward to your frank views on the effectiveness of GET-Up strategies, as well as your insights and solutions to industry-wide technology issues faced by local enterprises.
21. With the Advisory Committee, multi-agency resources, R&D talent and the tenacity of our local enterprises, I am sure we will have many more 3G-enabled enterprises who will "GET-Up" to Grow, Glow and Globalise.
22. Thank you.

=====