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**SPEECH BY RADM (NS) LUI TUCK YEW, MINISTER OF STATE,
MINISTRY OF EDUCATION, AT THE OFFICIAL LAUNCH OF
SoC INFOCOMM FEST ON FRIDAY, 14 DECEMBER 2007, 6PM,
AT NUS, UNIVERSITY CULTURAL CENTRE**

Professor Lily Kong, Vice President, University and Global Relations, and Vice Provost, Education

Professor Mohan Kankanhalli, Acting Dean, School of Computing,
Organisers and participants of SoC Infocomm Fest,

Ladies and Gentlemen,

Good evening, and to our foreign visitors, a very warm welcome to Singapore.

THE SOC INFOCOMM FEST

1. I am very happy to be here with you today at the launch and prize giving ceremony of the SoC Infocomm Fest, a series of events organised by NUS School of Computing to promote interest in infocomm among our young people.

2. The SoC Infocomm Fest targets a wide spectrum of young people from the ages of 9 to 23, including university students from several countries in the region who are taking part in the Association of Computing Machinery International Collegiate Programming Contest (ACM ICPC) for Asia¹. I would like to welcome our young guests from Bangladesh, China, Hong Kong, India, Indonesia, Iran, Japan, South Korea, and Vietnam. I hope you enjoy your time here in Singapore, learn much from one another, and form new friendships.

3. Other participants include Secondary School, Junior College and polytechnic students taking part in the Algo*Mania competition²; and the youngest group, taking part in the FIRST LEGO League national championships³.

¹ ACM ICPC for Asia is an annual computer science competition that spans a global network of universities. Out of thousands of teams competing at regional contests, 90 will advance to the World Finals. Every year there are 20 cities hosting the Asian regional contests. Singapore is hosting one of the 20 ACM ICPC for Asia regional events this year.

² Algo*Mania is an annual competition targetted at local secondary, JC and polytechnic students and follows the rules and procedures of ACM ICPC. It is part of the annual National Infocomm Competition and is supported by IDA.

³ FIRST LEGO League (FLL) Competition is targetted at young people age 9 to 16. It is a competition in which participants demonstrate robotic inventions and programming skills using LEGO Mindstorm sets. The event is organised by the not-for-profit FIRST Society (Singapore) and supported by NUS SoC. FIRST aims to inspire young people's interest and participation

IMPORTANCE OF INFOCOMM TECHNOLOGIES TO SINGAPORE

4. Developing infocomms skills in our young people is critical. In an age of accelerating change spurred by technological advancement, infocomm technology already has and will continue to significantly impact the everyday lives of people. Everyday conveniences such as ATMs, or communicating through SMS or Voice Over IP applications like Skype, are the result of advances in infocomm technology.

EDUCATION

5. For our young people, Infocomm is an increasingly important part of education in our schools. Learning is no longer limited to reading textbooks, nor confined to the physical space of the classroom. Students can now make use of infocomm technologies to interact with virtual communities and tap on other interactive

in science and technology. FIRST designs programs that motivate young people to pursue education and career opportunities in science, technology, engineering, and math, while building self-confidence, knowledge, and life skills.

digital resources to make learning come alive and to ensure they have the latest information that has not yet found its way into the textbooks.

6. Our schools are constantly generating new ideas to facilitate the use of infocomm in teaching and learning, for instance, Tao Nan School's Zooscape application. Tao Nan pupils use personal digital assistants (PDAs) to access multi-media resources on various animals, their habitats and diet at specific locations at the Singapore Zoo, thus enhancing pupils' understanding of science in an authentic learning environment.

7. At River Valley Primary School, teachers engage and motivate underperforming pupils in an immersive and fun way using a 3D Multi-User Virtual Environment (MUVE). In completing adventures and quests, students learn more about English, Mathematics and Science. The different quests provide pupils with opportunities to work both independently and interdependently.

8. At Teck Whye Secondary School, teachers make learning science more fun and meaningful by integrating the use of dataloggers with the inquiry-based learning approach. Through first-hand experimentation, observation and data analysis with the use of ICT tools, the school's Secondary One and Two students acquire lasting and meaningful insights into concepts like photosynthesis. At the same time, they develop vital 21st century dispositions like curiosity, imagination and scientific objectivity.

9. Infocomm technology thus serves to give individual students greater control over their own learning and helps them to better visualise and understand abstract and complex concepts.

WORKFORCE

10. In the workforce, it is becoming increasingly important not simply to have computing expertise, but more importantly, to be able to apply computational thinking. Computational thinking is using analytical reasoning to discover a solution; and to plan, learn

and organise in the presence of uncertainty. These essential skills will help workers to solve real-life problems.

11. Computational thinking is increasingly influencing other disciplines. I have been told that computer science has transformed biology, with computational biology changing the way biologists think. Similarly, computational game theory is changing the way economists think; nanocomputing, the way chemists think; and quantum computing, the way physicists think. This kind of thinking will be part of the skill set of not just scientists but all members of the workforce.

12. Moving forward, it is important for new entrants to our workforce to acquire infocomm knowledge and embrace computational thinking in problem solving from a young age. These skills will help them become the vanguard that will propel new technological innovations, and help Singapore compete with global leaders in this field.

RESEARCH

13. Infocomm technology will thus be one of the key sectors in Singapore's economy going forward. We will be promoting R&D to strengthen our infocomm capabilities, especially in the area of Interactive and Digital Media, or IDM. To demonstrate our resolve in developing this area of R&D, the Government is investing \$500 million over the next five years to fund the development of a strategic IDM research programme.

14. A multi-agency IDM R&D Programme Office was set up within the Media Development Authority of Singapore in October last year, with the support of MOE, MICA, EDB, IDA and A*STAR. It oversees R&D initiatives to spur this important sector's growth. An R&D programme has also been established at the Ministry of Education to leverage IDM to transform education, by harnessing IDM to teach and learn in fun and engaging ways. MOE also sees great potential for IDM R&D to transform society, by ensuring that we will be competitive as a nation and preparing young

Singaporeans to explore the exciting opportunities opened up by the IDM space.

CONCLUSION

15. Today's Infocomm Fest serves to promote an area of technology that is of great importance to Singapore. The young participants and winners sitting in the audience this evening are proof that young people can apply their knowledge and have fun at the same time.

16. I hope the SoC Infocomm Fest will enable all participants to forge strong and deep links that will last far beyond the event. I am also heartened that this outreach effort has found resonance with industry, having successfully obtained sponsorship from technology-based companies like IBM and Lenovo.

17. To our young participants, may the SoC Infocomm Fest serve as a milestone in your interest in infocomm technology, and

sow the seeds for greater achievements in future. I look forward to seeing you become Singapore's future icons in this field, pushing Singapore to the forefront of infocomm technology in the global arena.

18. Thank you