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**PRESS RELEASE**

**OFFICIAL LAUNCH OF SG@SCHOOLS  
(PC GRID COMPUTING FOR SCHOOLS PROGRAMME)**

**SINGAPORE, 06 DECEMBER 2005** – The PC Grid Computing for Schools programme, also known as SG@Schools, is officially launched today by Mr. Richard Lim, Chairman of the National Grid Steering Committee (NGSC) at a two-day vacation camp for students and teachers to kick-off the programme.

The SG@Schools programme is jointly organised by Defence Science & Technology Agency (DSTA), Ministry of Education and the National Grid Office, with support from the National University of Singapore and Singapore Computer Systems.

Mr. Richard Lim, Chairman of NGSC, said “Through participating in this programme, the students will be able to generate interesting solutions to solve computationally intensive problems in Science and Engineering by harnessing the enormous amount of processing cycles achieved through aggregating the available PCs in schools.”

A total of 64 students and 11 teachers from nine schools and junior colleges will be attending the vacation camp. The next phase involves the students to develop applications to be used on the PC Grid setup for the SG@Schools programme.

“Our students have a great appetite for learning. Grid Computing will provide them with the opportunity to solve challenging problems in various disciplines through the optimisation of computing resources in schools,” added Dr Koh Thiam Seng, Director of Educational Technology Division, Ministry of Education.

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### **Background**

The NGO was established by the Agency for Science, Technology and Research (A\*STAR) in January 2003 to promote Grid Computing and to develop a cyber-infrastructure that steers Singapore towards a Grid-enabled economy where computing resources, services and intellectual property can be provisioned securely on a high-speed network.

The roles of the National Grid are:

1. To develop a cyber-infrastructure for science and engineering research and education; and
2. To promote the use of Grid Computing for research, academic, commerce and industry.

Annex 1: SG@Schools

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## **Annex 1: SG@Schools**

The SG@Schools programme is an effort to reach out to schools using PC Grid Computing. Through participating in this programme, the students will be able to generate interesting solutions to solve computationally intensive problems in Science and Engineering by harnessing the enormous amount of processing cycles achieved through aggregating the available PCs in schools.

Grid Computing involves the aggregation, virtualisation and sharing of compute resources for collaboration. A Grid makes compute resources (such as CPU, data, storage, instruments, and applications) securely and transparently accessible to authorised users and applications, across sites and between organisations.

Grid Computing runs the gamut from the humble low-end PC through clusters to supercomputers. Indeed, through the aggregation of a huge number of PCs, it is possible to obtain the computing power of a supercomputer. This is typically referred to as PC Grid Computing. In fact, with the proliferation of mobile computing devices, such as pocket digital assistants (or PDAs) and new generation mobile phones with PDA functionality, it is not unrealistic that Grids could even penetrate into the mobile device environment.

To bring greater awareness of grids, numerous initiatives and projects have been started to excite and engage the masses to contribute idle compute resources to solve complex, yet divisible problems for a common goal. Examples of such projects are seti@home (to look for extra-terrestials), folding@home (to understand protein folding, protein aggregation and related diseases), LigandFit@home (to help process molecular cancer research), Internet Mersenne Prime Numbers Search, cell computing (Japan), and korea@home.

To participate in any of the above projects, a user downloads a client software that runs on the PC as a screensaver. When a PC is idle, the screensaver is activated and it requests a task from its master server. Upon completion of the task, results are returned to the master server, and another task gets dispatched to the PC.