

June 2008

FACT SHEET

National Grid

Aim – “Grid for All”

- The National Grid is built upon commercial grid service providers, and seeks to equip industry and consumers with on-demand and pay-as-you-use access to high performance computing capabilities, software, and immense data storage capacity.
- Grid Computing will be more affordable to the masses as it is based on a pay-per-use model. Businesses, from multi-national corporations to small-and-medium sized firms, can enjoy:
 - cost savings, since they no longer need to fork up hefty upfront investments in IT servers or software, and pay subsequent maintenance costs
 - better utilisation of IT resources, as they can buy only what they need, and reduce idle computing resources.
 - increased competitiveness, as they can focus on core competencies instead of IT maintenance, by leveraging Grid's high performance computing capabilities to deliver new and innovative business models.
- Singapore is one of the first in the world to embark on such a national effort that draws together commercial grid service providers to offer pay-per-use access to compute, storage and software facilities.

Action Plan

- Today (17 June 2008), IDA awards three consortia to be the first National Grid Service Providers. They are led by Singapore Computer Systems Ltd, PTC System (S) Pte Ltd, and New Media Express Pte Ltd.
- The award comes after a Call-For-Collaboration (CFC) that began in November 2007, and which closed in February 2008. Keen grid service providers and software vendors were invited to submit proposals for the provisioning of compute, software and data storage on a pay-per-use basis in Singapore.
- The National Grid service providers are expected to offer commercial services by the end of 2008 and businesses can approach any of the three consortia then.

- By 2013, Singapore envisions a Grid Market Hub, an infocomm-enabled marketplace of grid service providers offering the global community a platform to share, buy and sell infocomm resources such as software, computing and storage, on-demand and on a pay-per-use basis.

What's in it for Users

- **Lower Cost** - With the National Grid effort, businesses can buy high performance compute capabilities for as low as S\$0.33 per core hour, and data storage capacity for as low as S\$0.48 per GB per month. This is opposed to having to spend thousands of dollars buying and maintaining in-house servers, or leasing them from overseas Grid providers who typically charge about US\$1 per CPU hour.
- **Compute-As-A-Service** - Firms requiring high performance computing, such as financial organisations that do data-crunching, or animation producers in Singapore, can look forward to local access to the compute capabilities of more than 2,500 cores for a start, then more than 3,500 cores by 2011, all on a pay-per-use basis. Typically, an animation company would have invested in one computer dedicated for animation rendering, for instance. But that process can be time-consuming. If more compute power is available, the process can be sped up. The Grid will offer such companies the option to scale up their computing power when needed.
- **Storage-As-A-Service** - The National Grid will offer immense storage capacity of more than 30 TB, making it possible to back-up massive amount of data. Educational institutions, for instance, which are increasingly adopting online learning models, will no longer need to fear the loss of their material stored on their in-house servers. Others, such as pharmaceutical companies that need massive archival space to keep the data generated by their experiments, can also tap on the National Grid's huge storage capacity.
- **Software-As-A-Service (SaaS)** – By 2011, businesses can look forward to choosing their software and obtaining them through on-demand pricing, from more than 80 SaaS providers who will be part of the National Grid. They will offer services such as productivity and desktop publishing tools on a pay-per-use basis.

To further catalyse adoption of Grid Computing, IDA is prepared to consider facilitating the private and public sectors to use the National Grid's services to meet their infocomm needs. These would include organisations that require the National Grid's services for projects that are of national impact; significantly strategic to Singapore's economic competitiveness; will enhance the Grid sector; or demonstrate infocomm leadership.

Numbers to Note

- By 2011, more than 3,000 SMEs are expected to leverage the National Grid for on-demand, pay-per-use compute, storage and software resources.

FOR MORE INFORMATION

- **IDA Communication Contact:** Ms Angeline TAN, Assistant Manager, +65 6211 0640, angeline_tan@ida.gov.sg
- **Consortia Led By New Media Express Pte Ltd:** Ms Shirley LEE, Marketing Manager, 68730128, shirley@newmediaexpress.com
- **Consortia Led By PTC System (S) Pte Ltd:** Ms Sejal UDANI, Marketing Manager, 62820255, sejal@ptcsys.com.sg
- **Consortia Led By Singapore Computer Systems Ltd:** Mr Mervin WANG, Senior Manager, 68278888, Mervin.Wang@scs.com.sg