

# Ministry of Trade and Industry: Opening Ceremony of ST Electronics' Satellite Systems Centre

Aug 19, 2014

## **SPEECH BY MR S ISWARAN, MINISTER, PRIME MINISTER'S OFFICE & SECOND MINISTER FOR HOME AFFAIRS & SECOND MINISTER FOR TRADE & INDUSTRY, AT THE OPENING CEREMONY OF ST ELECTRONICS' SATELLITE SYSTEMS CENTRE, 19 AUGUST 2014, 9:50 AM AT ST ELECTRONICS**

Mr Soo Kok Leng, Chairman, ST Electronics

Mr Lee Fook Sun, President, ST Electronics,

Distinguished Guests,

Ladies and Gentlemen,

### **Introduction**

1. It gives me great pleasure to join you today at this important event. Let me first congratulate ST Engineering and ST Electronics on the official opening of ST Electronics' Satellite Systems Centre.
2. This marks a yet another milestone for Singapore's space industry, and it bears testament to the progress that we have made thus far in this new and dynamic industry. With the establishment of the Office for Space Technology and Industry, or OSTIn in short, under EDB in February 2013, Singapore has embarked on a journey to develop and drive the growth of our space industry. Over the course of the last one and a half years, we have witnessed increasing interest from satellite companies seeking to build their businesses and innovation activities from Singapore. Within the Government, the Defence Science and Technology Agency (DSTA) has commenced efforts to support other Government agencies in exploring the use of satellite technologies to meet Singapore's needs, such as monitoring of haze hotspots and detection of oil spills.

### **ST Electronics' Satellite Systems Centre is aligned with Singapore's efforts to build a sustainable satellite industry**

3. In 2013, the global space economy grew to over US\$314billion [1], reflecting a compounded annual growth rate (CAGR) of about 6.5 per cent over the previous five years. In particular, there has been an increasing demand for small satellites within the satellite manufacturing space. For instance, out of the 197 satellites launched in 2013, more than half were small satellites that weighed below 100kg [2]. Driven by growing Asian demand for satellite-enabled applications in areas such as urban planning, and environmental monitoring, small satellites are expected to become ubiquitous within the space industry.
4. Singapore offers a compelling value proposition for companies that wish to grow their businesses in the small satellites industry space. Companies will be able to tap on Singapore's strengths in adjacent industries such as Electronics and Transport Engineering, as well as our market connectivity, geo-political neutrality, pro-business environment, and R&D infrastructure to bring their business and innovation initiatives to fruition. Situated at

the heart of Asia, Singapore is also well placed to capture the growth opportunities within the small satellite segment for export to the emerging regional market.

5. By enabling the production of multiple small satellites concurrently, this Satellite Systems Centre will enhance ST Electronics' capacity to meet this burgeoning demand. In addition, this centre will be equipped with state-of-the-art facilities for design, testing and simulation of satellite equipment. It will enable ST Electronics to develop new small satellite components and subsystems, to improve the performance of ST Electronics' own satellites, or to be sold to other satellite manufacturers.

#### **ST Electronics will catalyse a vibrant satellite ecosystem in Singapore**

6. As ST Electronics continues to grow its base of satellite activities, this will also help to spur the growth of the satellite ecosystem in Singapore. Today, ST Electronics is already working with a selected pool of SMEs such as Wizlogix, Loop Electronics, and Fong's Engineering to jointly design and manufacture specialised components for its first satellite, the TeLEos-1. TeLEos-1 will be used to capture high resolution satellite images of the earth for applications such as environmental monitoring, maritime surveillance, urban planning, and mineral exploration.
7. With ST Electronics as a lead demand driver, there will be more opportunities for our SMEs to extend their capabilities in space technology. I understand that ST Electronics has already trained and certified five SMEs as suppliers of space-qualified components. Such partnerships have helped to raise the capabilities of SMEs in ensuring that their products are able to meet prevailing space qualification standards. Over time, this will allow our SMEs to break into the lucrative global supply chain for space-qualified components.
8. Beyond SMEs, ST Electronics' push to grow its satellite business will also benefit the local research community. Currently, ST Electronics is collaborating with local universities and research institutes on three of the 11 satellite R&D projects that were approved under the first OSTIn grant call. These collaborations have been invaluable in guiding the efforts of our researchers toward industry-relevant outcomes, and ensuring technologies developed have a clear pathway to commercialisation. Moving forward, we hope to see more of such R&D collaborations as we build our public sector capabilities in satellite technologies.

#### **Satellite industry will create good jobs which meets the aspirations of Singaporeans**

9. It is important that the satellite industry and public sector continue to work together, not only to build up technical capabilities, but also to create a vibrant satellite ecosystem with good jobs that will meet the aspirations of Singaporeans.
10. Jobs in the satellite industry have the potential to ignite the interest of our youths to carve out their careers in the fields of science and engineering. This is already evident in the strong participation from undergraduate students in satellite-related curricula in both the National University of Singapore (NUS) and the Nanyang Technological University (NTU). With its close nexus to science and technology, as well as research and innovation, space is a sector that is aligned with Singapore's vision to become a knowledge-intensive economy, as our workforce becomes increasingly educated.
11. Today, ST Electronics employs over 70 satellite engineers, of whom more than 85 per cent are locals. This group of individuals hail from different backgrounds and diverse academic fields such as mechanical, electrical, and radio frequency (RF) engineering. As a team, they harness each other's expertise to develop cutting-edge products that can withstand one of the harshest environments known to man. Such collaborative efforts to translate engineering challenges into innovative and useful solutions can be immensely fulfilling and

rewarding. I look forward to learning more about some of your exciting experiences later today.

12. As Singapore's satellite industry continues to grow, there will be a heightened demand for such highly-skilled and innovation-centric jobs. I therefore encourage Singaporeans to pursue careers in science and engineering, and to be part of this exciting journey to break new frontiers and help bring Singapore's satellite industry to the next level.

### **Conclusion**

13. In closing, the opening of ST Electronics' Satellite Systems Centre is an exciting milestone, marks a significant addition to Singapore's satellite industry ecosystem. It is aligned with our efforts to build a dynamic and sustainable satellite industry in Singapore. Once again, I would like to congratulate ST Electronics on the opening of its centre, and I look forward to ST Electronics establishing itself as a world class player in the satellite industry. Thank you.

[1] <http://www.spacefoundation.org/media/press-releases/space-foundations-2014-report-reveals-continued-growth-global-space-economy>

[2] Same source as above

Source: <http://www.nas.gov.sg/archivesonline/speeches/view-html?filename=20140826001.htm>