OPENING ADDRESS BY MR S. ISWARAN, MINISTER FOR TRADE AND INDUSTRY (INDUSTRY) AT SME DAY ON THURSDAY, 20 APRIL 2017, 9.30 AM AT RESORTS WORLD CONVENTION CENTRE, CENTRAL BALLROOM

Distinguished Guests

Ladies and Gentlemen

Introduction

1. Good morning. I am pleased to join you for SME Day 2017, which is jointly organised by A*STAR and SPRING. This year's event brings together over 1,000 participants, including solution providers, industry partners, Trade Associations and Chambers (TACs), and researchers, to explore technology co-creation and business opportunities.

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2. At this year's Budget Debate, I emphasised that SMEs are critical to Singapore's economic future, and a central focus of our industry transformation efforts. Collectively, SMEs have a significant impact on our economic value add and employment. For our economy to thrive, it is vital that SMEs actively participate in, and benefit from, our industry

transformation programme. However, the SME landscape is diverse. Some have already embarked on innovation and internationalisation strategies, while many others are just starting on their capability development journeys and face different challenges.

- 3. The Government is committed to helping our SMEs succeed in their transformation efforts. One important aspect of transformation is innovation, which is the focus of today's event and underpins long term competitiveness. The urgency to innovate is even greater today, with rapid technological advances disrupting business models and changing industries.
- 4. To date, our efforts to build our SMEs' innovation capacity has yielded encouraging progress. From 2011 to 2015, Business Expenditure on R&D by SMEs grew from \$550 million to \$700 million, a CAGR of nearly 6%¹. A*STAR worked on over 4,000 projects with local enterprises to help them drive innovation in their businesses over the same period. In 2016, SPRING worked on over 16,000 capability development projects with local companies, with 50% of these in productivity improvement and technology innovation.

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¹ Exact CAGR is 5.9%.

The Government is committed to helping SMEs overcome barriers to innovation, R&D and technology adoption. We will ensure that SMEs are not left behind in the technological and digital revolution.

- 5. Nevertheless, many SMEs still lack the capacity, resources and connections to partake in innovation and technology co-creation. The Government will actively support our SMEs to innovate, overcome barriers, and harness the opportunities from the technological and digital revolution.
- 6. We recognise that innovation can be uncharted territory for SMEs, and are aware of the common pain points they face, through the Committee on the Future Economy (CFE) engagement sessions and recommendations surfaced by the TACs. Based on this feedback, A*STAR and SPRING have worked to expand and refine the range of programmes available to help SMEs innovate. Let me elaborate.

Helping SMEs access technology-related business opportunities through A*STAR Collaborative Commerce Marketplace (ACCM)

7. To help SMEs connect with large local and foreign companies, A*STAR's research institutes, and the universities, A*STAR has developed an online business networking portal, the Collaborative Commerce Marketplace (ACCM). The ACCM portal highlights local companies' capabilities so that large enterprises can source for prospective

suppliers in Singapore more quickly. At the same time, SMEs can gain insights into the needs of MNCs and develop relevant and differentiated products in response.

8. The ACCM is off to a promising start. Since its launch in May 2016, more than 200 companies and two trade associations, namely the Singapore Precision Engineering and Technology Association (SPETA) and the Singapore Manufacturing Federation (SMF), have used the ACCM platform. Four out five of the companies listed on ACCM are local SMEs.

Helping SMEs to access technology and digital solutions with Tech Depot

- 9. The Technology Adoption Programme (TAP), which was launched in 2013 to develop ready-to-go technologies for easy deployment by SMEs, has also achieved good progress. Initiated by A*STAR and now administered by SPRING, more than 2,300 technology adoption projects have been undertaken by SMEs since 2013. Participating companies were able to save more than 600,000 man-hours in aggregate, with each technology adoption leading to at least 20% productivity improvement.
- 10. SMEs now have an additional resource to tap on for technological solutions. The recently announced Tech Depot provides SMEs with a quick overview of easy-to-adopt technological solutions identified by A*STAR, IMDA and SPRING that can enhance SMEs' operations, including inventory and asset tracking processes, supply chain management and planning processes. The Tech Depot will go live today on the SME

portal hosted by SPRING, which serves as the first stop for SMEs to access key government e-services such as GeBiz Alerts and other commercial resources.

Helping SMEs with Intellectual Property (IP) and Commercialisation Needs

- 11. SMEs that are ready to go beyond technological adoption, to undertake product and service development, as well as R&D, can also tap on a comprehensive range of support.
- 12. For example, Intellectual Property Intermediary (IPI) Singapore, a SPRING affiliate, aims to help SMEs by matching them with relevant domestic and international, public and private IP. To offer companies comprehensive solutions, IPI will be partnering the Intellectual Property Office of Singapore (IPOS) to analyse and bundle complementary IP from Singapore and overseas.
- 13. Good Pharma Dermatology (GPD), a consumer healthcare company that aims to provide accessible healthcare solutions, has benefited from this effort. IPI facilitated a licensing agreement between GPD and the National Skin Centre (NSC) to develop an itch-relief moisturising cream for the mass market. The product, Suu Balm, combines itch-relief with moisturising properties, allowing eczema patients to moisturise their skin while addressing symptoms. It is now available in Singapore, Ireland, China, Thailand, Philippines and Hong Kong.

- 14. At the SME Day held three years ago, I announced A*STAR's Headstart programme, which provides SMEs with 18 months' royalty-free, exclusive licenses to IP arising from their research collaborations with A*STAR. The feedback from the SME Committee (SMEC) led by the Singapore Business Federation (SBF) was that although this is a good initiative, SMEs might need more time to translate R&D outcomes into market-ready products and services. In response, A*STAR will be doubling the royalty-free and exclusive licensing period to 36 months.
- 15. FXMedia, a local multimedia design and production firm, is a beneficiary of the extended licensing period. FXMedia worked with A*STAR's Institute for Infocomm Research (I²R) to develop a virtual reality (VR) training system to provide an immersive 3D environment for realistic, scenario-based training for firefighters, soldiers and emergency medical personnel. With the support of A*STAR's commercialisation arm, Exploit Technologies Pte Ltd (ETPL), FXMedia successfully engaged Singapore Airlines (SIA) to test-bed this Virtual Training And Learning (VITAL) System for ground crew training. FXMedia is now planning to expand into other industries like retail, interior design and hospitality.

Growing Enterprises Through Technology Upgrade (GET-Up)

16. SMEs who wish to go even further in their innovation efforts by building up inhouse R&D and innovation capabilities can tap on A*STAR's GET-Up programme. Since

its inception in 2003, the Growing Enterprises through Technology Upgrade or GET-Up programme has benefitted 580 SMEs.

- 17. Under GET-Up's operational technology road-mapping (OTR) thrust, A*STAR helps companies to identify technology areas that are critical to the company's business strategy and future business growth. A*STAR will scale up this initiative to support 400 companies over the next four years, by partnering TACs such as SMF and SPETA to expand its network of trained OTR facilitators.
- 18. As part of the GET-Up programme, A*STAR seconds researchers to SMEs to build in-house R&D and technology expertise to develop new products or services. Under this initiative, called T-UP, about 700 research scientists and engineers have been seconded to work on over 600 projects since 2003. T-Up has also been expanded to include the secondment of commercialisation experts who can help companies bring products or services to market. This year, the first technology transfer executive from ETPL, Mr Heng Yee Meng, was seconded to AIT Ventures, the investment division of biotechnology company AITbiotech. Mr Heng will support the commercialisation of the company's life sciences and diagnostic technologies.

T-Up Excellence Awards

- 19. The annual T-Up Excellence awards were introduced in 2011 to recognise researchers for their significant R&D contributions to the enterprises to which they have been seconded.
- 20. The first award goes to Dr Chang Chia-Pin from the Institute of Microelectronics (IME). Dr Chang was seconded to INEX Innovations Exchange, a company producing molecular diagnostic technologies to enhance the well-being of women, specifically in the pre-natal health market and gynaecological space.
- 21. During his secondment, Dr Chang helped to enhance the company's Ovarian Cancer Diagnostic Kit (OvaCis™) by developing a quantitative colourimeter that could indicate the malignancy of an ovarian cyst through the colour of the digital readout, removing the need for human interpretation. Dr Chang also discovered storage and handling issues with the original kit, prompting him to work with the INEX team to prototype a second generation kit, which could be stored at ambient room temperature with at least 12 months of shelf life. This helped INEX to reduce costs related to handling temperature-sensitive materials.
- 22. The second award goes to Dr Pearline Teo Zhaoying from A*STAR's Molecular Engineering Laboratory. Dr Teo was seconded to AyoxxA Living Health Technologies, a

company which manufactures patented protein biochip diagnostic kits for very small volume samples.

- 23. AyoxxA found it challenging to accurately analyse proteins in eye fluids due to its low volume and high viscosity. With Dr Teo's support, AyoxxA was able to successfully develop an analysis kit for eye fluid samples. The kit is now commercially available for research purposes and AyoxxA is planning to further develop it for clinical use. Eventually, this kit will enable more accurate dosages of drugs to be prescribed for patients with blood vessel diseases related to the eye.
- 24. The third award goes to Dr Sivanand Krishnan from I²R, who was seconded to land surveying firm S C Ang Consortium Pte Ltd.
- 25. Prior to Dr Sivanand's secondment, S C Ang employed the conventional surveying method for piling, which required two to three workers, and a set-up time of 30 minutes. Once the set-up was complete, the team would physically mark the designated piling positions using pegs, which were oftentimes displaced when heavy machinery or vehicles moved on-site. The Global Navigation Satellite System (GNSS) solution, which Dr Sivanand helped to develop, reduces the manpower requirement to one man, and setup time to 5 minutes. Further, the surveyor could digitally verify the marked positions to guide the piling machines more precisely, leading to better accuracy.

The Government is committed to helping SMEs tap on innovation and technology to upgrade capabilities, create new value propositions, and enhance productivity. SMEs must also empower their workers to manage and deploy technology so that employees can become value creators and multipliers.

- 26. As evident from this wide range of programmes and initiatives, the Government stands resolute in our support of SMEs in their transformation journey. To sharpen their competitiveness, SMEs must be open to embracing technology, and understand how innovation can help their businesses. While the Government can create a conducive environment for innovation and technology adoption, the onus is on SMEs to appreciate the potential, seek out solutions, execute them effectively in order to realise the full benefits.
- 27. SMEs must also take their workforce along with them as they move forward, and empower their workers with new skills to manage and deploy technology. This is the surest way for SMEs to derive synergy from technology and talent, and unlock employees' potential to become value creators and multipliers. I urge all our SMEs to embark on the transformation process, and to partner our public and private sector collaborators to access, develop and deploy technology.
- 28. I wish you a productive conference, and encourage you to seize the opportunity to network and develop new R&D collaborations and business partnerships. Thank you.