OPENING ADDRESS BY DR AMY KHOR, SENIOR MINISTER OF STATE FOR SUSTAINABILITY AND THE ENVIRONMENT, AT GEO CONNECT ASIA ON 15 MARCH 2023

Mr Yeoh Oon Jin, Chairman, Singapore Land Authority

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Distinguished guests

Ladies and gentlemen

It is my pleasure to join you at Geo Connect Asia 2023 today. I am delighted to see so many attendees joining us in-person. A warm welcome to everyone and to our friends from abroad – welcome to Singapore.

Sustainability in an interconnected world

- 2 The theme of this year's conference is "Advancing sustainable and resilient geospatial solutions for an interconnected world".
- 3 The phrase "interconnected world" is a reminder that we live in a world that is interdependent and connected by the global flows of trade, capital, people, data, and ideas.
 - a. Our close linkages present both opportunities and challenges for individuals, businesses, and societies around the world.
 - b. Achieving sustainable development in an interconnected world requires us to strike a balance between economic growth, social development, and environmental protection.

- c. Geospatial technology has proven to be a key enabler in supporting these sustainability goals, and Geo Connect Asia provides us with an excellent platform to explore more ideas and solutions.
- d. I am heartened that such conversations and sharing will take place over the next two days amongst academics, researchers and professionals in various fields across engineering, artificial intelligence and governance.

Threats of climate change

4 Climate change poses an existential threat to all countries. We need to take immediate actions to keep our ambition of limiting global warming to 1.5 degrees Celsius alive. Singapore is particularly vulnerable to the threat of rising sea levels.

Mean sea levels around Singapore have risen 10cm in the last four decades, and are projected to rise by up to 1 metre by 2100 based on the Intergovernmental Panel on Climate Change (IPCC) report.

- 5 To address the impacts of climate change, we launched the Singapore Green Plan in 2021 as a whole-of-nation movement to catalyse bold and collective climate action.
 - a. In October last year, we announced that Singapore will raise our climate ambition to achieve net zero emissions by 2050. To lead the way for Singapore's decarbonisation journey, the public sector also committed to achieving net zero emissions around 2045.

- Just last month, Singapore was the first country in the world to be certified as a Sustainable Destination by the Global Sustainable Tourism Council (GSTC), based on our performance in sustainable management, socioeconomic, cultural and environmental sustainability.
 - a. The recognition by the GSTC serves as a validation that Singapore is heading in the right direction and that our coordinated sustainability efforts are making an impact.

Onwards with geospatial

- 7 There is much potential in leveraging geospatial data and technologies to drive our sustainable development efforts. Let me share three examples of how we are doing so.
- 8 First, we leverage geospatial technology to reduce our carbon footprint.

- a. Today, the Singapore Land Authority will be signing a memorandum of understanding with the Container Depot and Logistics Association Singapore (CDAS).
- b. Under this collaboration, CDAS and SLA will utilise geospatial data such as road conditions and restrictions to enable the CDAS' member companies to route their heavy vehicles efficiently and safely.
- c. This will translate into time and cost savings, and lower carbon emissions.
- 9 Second, geospatial technology is being harnessed to help us monitor and understand the physical impacts of climate change on our surroundings.

- a. In a recent collaboration between SLA and the NTU's Earth Observatory Singapore, SLA is sharing data from our Singapore Satellite Positioning Reference Network or SiReNT for short, to support research in sea level rise and vertical land motion.
- b. This allows us to more accurately assess the impact of climate change on our island, particularly our shorelines. Such precise information enables policy makers to make data-informed decisions to mitigate the impact of such changes on our environment.
- 10 Third, while we develop local geospatial capabilities to achieve our sustainability goals, we also need to work with our global partners to cross-share expertise and experiences, and adopt best practices in the industry.

- a. Last October, I attended the Singapore Geospatial Festival, where the Singapore Land Authority, Maritime Port Authority of Singapore and the Open Geospatial Consortium (OGC) agreed to embark on a global pilot project to integrate land and marine data for coastal protection planning, and critical infrastructure protection. I am happy to share that SLA has continued to actively engage our overseas geospatial partners.
- b. Earlier this week, Singapore hosted an Executive Board Meeting and an International Seminar for geospatial experts from United Nations member states.
- c. The international seminar discussed how interoperability innovation land and in administration support sustainability can initiatives, as well as the need for reliable geospatial information effective for land administration.

- d. Earlier, SLA's Chairman mentioned that SLA will be collaborating with Saudi Arabia's General Authority for Survey and Geospatial Information to exchange knowledge and experiences on geospatial developments. I am confident that through this collaboration, both agencies will find new ways to tap on geospatial information and technology to improve the lives of citizens in both Singapore and Saudi Arabia.
- e. These engagements demonstrate Singapore's commitment to partner with the international geospatial community, share industry best practices and be at the forefront of technological advancements in this field.

Geospatial for inclusivity

11 Geospatial technologies have enabled us to be more inclusive as a community.

A new initiative that SLA has embarked on, in collaboration with SG Enable and Gardens by the Bay, will map barrier-free routes starting with pilots in Bukit Merah and Gardens by the Bay.

- a. This addresses a current gap, where routing services on mainstream platforms do not differentiate between regular pedestrian routes and barrier-free ones.
- b. By collecting hyperlocal data and identifying routes that are barrier-free, we can enable the less physically-abled to travel with ease.
- 12 Inclusivity also means seeding interest through education and exciting our youths about the potential of geospatial technologies to address everyday challenges in our community.

- a. The ASEAN Geospatial Challenge 2023 brings together youths from the ASEAN region to solve real life problems using geospatial technology and information.
- b. We are heartened to have 33 teams participate in the competition, unleashing their creativity to address sustainability challenges.
- c. Solutions include volunteer or donor management systems to better connect volunteers with their beneficiaries to build cohesive and sustainable communities.
- d. To enhance food sustainability in agriculture, the students also proposed mobile applications to assess land suitability for crop production and prioritise areas for irrigation development.
- e. I look forward to meeting and presenting awards to the top two teams from the ASEAN Geospatial Challenge 2023 later this morning.

Conclusion

13 Let me conclude. The diverse initiatives, collaborative projects and test-bedding across many sectors demonstrate the value and tangible outcomes that geospatial technologies bring.

- a. They draw us closer to our sustainability goals in an interconnected world.
- b. As we deepen our efforts and expertise to tackle the full range of global sustainability challenges, your contributions in geospatial technology and data will play a critical role to enable solutions that will shape the future.
- c. It is only through collective action and a shared commitment to sustainability, across sectors and regions, that we can create a more equitable and resilient world for all.

- 14 I wish everyone a fruitful and enjoyable conference.
- 15 Thank you.