

**CLOSING REMARKS BY DEPUTY PRIME MINISTER AND
CHAIRMAN NRF HENG SWEE KEAT AT THE THIRD SINGAPORE-
FRANCE JOINT COMMITTEE ON SCIENCE AND INNOVATION
MEETING, AT CREATE TOWER ON MONDAY, 23 OCTOBER 2023
AT 12.10 PM**

Minister Sylvie Retailleau,

Ambassador Minh-Di Tang,

JCSI Co-chairs,

Ladies and Gentlemen,

Bonjour.

Welcome

1 On behalf of Singapore, I would like to extend a warm welcome to Minister Retailleau and the French delegation. This is our third JCSI, and the first attended by Minister Retailleau and Ambassador Tang. We are delighted to have you here.

- I am heartened by the strong representation from France. We have some 40 senior delegates from over 10 higher education and research institutions who joined us for this meeting.
- Your presence reflects the longstanding and deep partnerships between Singapore and French institutions on the science and innovation fronts.

Extensive Partnerships in Research and Innovation

2 Singapore and France have extensive collaborations across the science and technology ecosystem, ranging from research to innovation to talent exchanges.

- We are privileged to host CNRS at our Campus for Research Excellence and Technological Enterprise, or CREATE. This is CNRS' first overseas subsidiary.
- French companies such as Thales have also formed close partnerships with our institutions to push the boundaries of innovation together.
- We also have a vibrant exchange of talents, with more than 20 French students enrolled in our Autonomous Universities for PhDs, and five joint PhD programmes between French and Singapore universities.

Discussions at the 3rd JCSI

3 Earlier today, Minister Retailleau and I took stock of our collaborations to tackle key challenges and seize new opportunities in a post-COVID world, to enhance the resilience of our societies.

- One key challenge is climate change, and there are many facets to this. For example, waste treatment is a pressing environment issue for many countries, but especially for a small, resource-scarce and densely populated city-state like Singapore.
- Since 2018, the Singapore-CEA Alliance for Research in Circular Economy (SCARCE) collaboration has been working on developing innovative and energy-efficient solutions to recycle and recover resources from challenging waste streams such as electronic waste. These include our lithium-ion batteries, silicon solar panels and printed circuit boards.
- Minister and I were therefore happy to hear about the excellent progress made and the next phase of this joint collaboration.
- Another area we discussed was the significant advancements in AI, which will transform many aspects of work and life, yet also can create new risks and challenges.

- At today's meeting, we heard about the progress of the DesCartes Programme, which was first unveiled at the 2nd JCSI meeting in 2021. DesCartes aims to develop intelligent hybrid twin technologies built on the foundations of mathematics and physics to model different components of smart-city infrastructures. These technologies will enable decision-making processes that are human-centric, ethical and trustworthy.

4 We are also exploring new frontiers like quantum research and space together.

- Quantum mechanics may sound esoteric to most of us, but it has practical applications that can revolutionise the way we approach computing and communication. A coalition of seven French and Singapore institutions led by CNRS is studying how to manipulate hybrid states of light and matter, to create a platform for quantum computing.
- We also had productive conversations today between Singapore's Office for Space Technology and Industry (OSTIn) and the French National Centre for Space Studies (CNES). We discussed R&D activities in diverse fields such as 3D printing for telescopic applications, using satellite technology to estimate the amount of biomass in a forest, as well as applications for Quantum Key Distribution (QKD).

Signing of Agreements

5 These examples are but a snapshot of the diverse collaborations between our S&T ecosystems. I am thus very pleased that Minister Retailleau and I will be witnessing the signing of eight agreements immediately after this. These reflect the substantive progress that our institutions have made, and the diverse partnerships that our researchers have built up over the years. I wish our institutions and researchers from Singapore and France every success in their collaborations.

6 In closing, I am reminded of a quote by French scientist Louis Pasteur, who said that “Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world”.

- We are glad to have a like-minded partner like France, who share our belief that science must be global, so that its benefits can uplift people and communities everywhere.
- Singapore is happy to serve as a Global-Asia node for research, innovation and enterprise, and welcome different partners and stakeholders to explore collaborations in the region from here.

- In that same spirit, I hope that we will always remain open-minded to new perspectives, and seek new partnerships to build a more innovative, sustainable, and resilient future for all.

Thank you.