

**DEPARTMENT OF INDUSTRY, SCIENCE AND RESOURCES**

MS22-002010

To: Minister for Industry and Science (For Information only)

**TECHNOLOGY SAFEGUARDS AGREEMENT WITH THE UNITED STATES OF AMERICA**

Timing: Routine

**Recommendations:** That you

- 1. **Note** the progress and next steps on the negotiation of a Technology Safeguards Agreement between Australia and the United States of America.

**Noted / Please Discuss**

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**Noted / Please Discuss**

**Minister:**

Date:

**Comments:**

<b>Clearing Officer:</b>	Dara Williams	Deputy Head, Australian Space Agency	s22	
<b>Contact Officer:</b>	s22	Executive Director, International Engagement, Australian Space Agency	s22	
<b>For Parliamentary Services' use only.</b>				
Date Submitted to the Minister's office in PDMS:			15/11/2022	

**Key Points:**

- 1. The Australian Space Agency (the Agency) is leading negotiations on behalf of the Australian Government on a treaty level Technology Safeguards Agreement (TSA) with the United States of America (the U.S.), led by the U.S Department of State.
- 2. The U.S. requires a TSA to be in place to allow for the launch and/or return of sensitive U.S. launch technology in Australia. A TSA will place legally binding obligations on Australia to ensure that sensitive U.S. technology remains under U.S. control, at all times, while on Australian soil. Further background on a TSA is at Attachment A.

3. Signing a TSA will strengthen Australia's long-standing partnership with the U.S. on space and is supported by the Australian space sector. The December 2021 House of Representatives inquiry report into developing Australia's space industry noted the importance of a TSA, as stated by public submissions from key launch sector participants and the peak body for Australia's space industry.

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Progress on negotiations and next steps

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The Agency was provided a mandate to negotiate a TSA in June 2021. Formal negotiations started in October 2021 and have progressed through several virtual and two in-person meetings.

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11. If text is agreed, the TSA will require formal consideration by the Federal Executive Council (ExCo) and the Joint Standing Committee on Treaties (JSCOT). Assuming text is agreed by Q1 2023, the ExCo and JSCOT processes will take an additional 6-9 months, potentially bringing the TSA into effect in late 2023. We anticipate that changes to domestic legislation will not be required as a result of the TSA.

Potential opportunities for Ministerial engagement

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**Data referenced: NIL**

**Consultation: YES**

13. The Agency is consulting a range of Commonwealth agencies including DFAT and Defence, as well as state and territory governments through Interdepartmental Committees. The Agency has also consulted with key industry stakeholders, providing several industry briefings facilitated by the Space Industry Association of Australia.

**ATTACHMENTS**

**A:** Background on the TSA  
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## DEPARTMENT OF INDUSTRY, SCIENCE AND RESOURCES

## ATTACHMENT A

**Background on the Australia-U.S. Technology Safeguards Agreement****What is a TSA?**

- A Technology Safeguards Agreement (TSA) is a legally binding bilateral treaty-level agreement with the U.S. which establishes principles for non-proliferation (not sharing) and safeguarding of U.S. launch technology including launch vehicles (rockets), equipment (e.g. radar support, sensors), data and spacecraft (satellites).
- A TSA is required by the U.S. to allow for the controlled movement of sensitive U.S. launch technology and data from the U.S. to other countries by ensuring foreign governments will protect U.S. technology consistent with U.S. non-proliferation policy, the Missile Technology Control Regime (MTCR) and U.S. export control laws and regulations.

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- To date the U.S. has concluded TSAs with five other countries: Russia (2006), India (2009), New Zealand (2016), Brazil (2019), and the UK (2020) – s33

**What a TSA does not do?**

- The TSA will not allow for collaboration on U.S. technology and will not override long standing U.S. non-proliferation policy of not supporting other countries' development of launch capability, including Australia. The TSA will also not bypass U.S. export control policy requirements for the export of sensitive technology and does not override U.S. International Traffic in Arms Regulation (ITAR) requirements.

- The TSA scope does not refer to items on the U.S. Munitions List within ITAR nor the Commerce Control List in the Export Admin Regime (EAR). The interpretation, management and application of these lists by the U.S. will remain outside of the TSA.
- The TSA does not override the Missile Technology Control Regime (MTCR), which Australia is also party to. Australia's international commitments under the MTCR include not supporting other nations to develop systems capable of delivering weapons of mass destruction.
- While the TSA will allow for U.S. companies to launch and return U.S. technology from Australian soil if approved via established application processes in the U.S. and Australia, nothing in the TSA will override U.S. policy and decision making with respect to issuing export permits and authorisations.

### **Intersection of the TSA with MTCR non-proliferation principles**

- The TSA is designed to ensure that any sensitive space launch equipment or technology which could be used in the development of delivery systems for weapons of mass destruction (e.g. rockets), is used only for the purposes of space launch activities, and that both governments take certain actions to prevent its unauthorised transfer.
- This is consistent with the principles established under the Guidelines of the Missile Technology Control Regime (MTCR) which aim to limit the risks of proliferation of weapons of mass destruction (i.e. nuclear, chemical and biological weapons), by controlling transfers that could make a contribution to delivery systems (other than manned aircraft) for such weapons. The Guidelines are also intended to limit the risk of controlled items and their technology falling into the hands of terrorist groups.
- The MTCR was established in 1987 with Partner countries agreeing to adopt the principles through binding government-to-government undertakings (less than treaty level instruments under international law). Both the U.S and Australia are Partners to the MTCR.
- The MTCR groups technology into two categories depending on their ability to be used in the delivery of weapons of mass destruction. The most sensitive technology is in Category I, which includes:
  - complete rocket systems (including ballistic missiles, space launch vehicles and sounding rockets) and unmanned air vehicle systems (including cruise missiles systems, target and reconnaissance drones) with capabilities exceeding a 300km/500kg range/payload threshold; production facilities for such systems; and major sub-systems including rocket stages, re-entry vehicles, rocket engines, guidance systems and warhead mechanisms.
- All other sensitive technology is grouped into Category II. While Category II items still require control and restriction of their transfer, MTCR Partners have greater flexibility in the treatment of applications within this category.

**Benefit to Australian industry from a TSA**

- Given the size of the U.S. space sector and the depth of the U.S. launch market, there are potentially significant benefits to Australian industry through promoting U.S. launch activities in Australia.
- A TSA will create opportunities for Australian spaceports to meet the growing U.S. demand for launch capability. It will assist the growth of our domestic launch sector and create jobs in developing infrastructure to support U.S. launch activities. Benefits will likely be concentrated in Australia's launch sector, however, there are likely to be some economy wide benefits. Related industries such as transport, hospitality, security, maintenance, operations and logistics will see increased economic activity, particularly in rural and remote areas aligned with the location of launch facilities.
- Entering into a TSA is consistent with the objective of, and strategy for, growing Australia's space sector by strengthening our relationship with the U.S., gaining access to new markets, creating commercial opportunities for Australia's launch sector and strongly signalling to the global market that Australia is 'open for launch'. Increasing the cadence of launches occurring in Australia through U.S. launch activities under a TSA is also likely to reduce the cost of launch in Australia sector-wide, which in turn will reinforce the attractiveness of Australia as a global launch hub and lead to more launches occurring in Australia.
- Increasing launches from Australia may also pay future dividends by uplifting the entire space sector and 'inspiring the future workforce' through increased visibility of highly symbolic launches from Australian soil.

**Benefit to U.S. industry from a TSA**

- Australia has a number of advantages for launch activities that are very attractive to the U.S. Our large landmass and ideal geographic location provide access to uncongested

launch corridors and access to both polar and equatorial orbits. Australia will also be an ideal location for the return of spacecraft and reusable launch systems due to our sparsely populated landmass.

- We have a wide range of usable site latitudes and low population density which make Australia well suited for launch facilities that are capable of attaining most orbit inclinations. This can provide great flexibility to U.S. companies seeking additional launch corridors.

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- Gaining access to Australian launch sites will also enable the U.S. to increase the cadence of launch globally. Australia can provide U.S. companies with a solution to the crowded U.S. launch corridors and congested launch windows they are experiencing.
- An increase in cadence can translate to an increase in responsiveness in required strategic launches and also assists commercial satellite industries in their business plans supporting replenishment of satellites and space assets in a more deterministic and economical way.
- Australia's proximity to Asia can also facilitate U.S. access to the burgeoning Asian market, particularly through hosting payloads "in region" for major Asian customers.

#### **NASA/ELA launch campaign and implications for the TSA**

- In June and July 2022, NASA conducted three successful launches of sounding rockets from the Arnhem Space Centre in Nhulunbuy, operated by Equatorial Launch Australia.
- The launch was the first time NASA has undertaken a launch from a commercial facility outside of the U.S.

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- The launches signal to a global audience that the U.S. and Australia are the closest of allies and there is high level of trust in the protections offered by Australia's existing laws and regulations.
- This is a testament to our robust regulatory framework for approving launches which allows Australia to place legally binding obligations on anyone launching from Australia to ensure launches are safe, sustainable and secure. This same framework will be used to ensure the requirements of a TSA are upheld.

#### **Origins of the TSA with the U.S.**

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- On 16 June 2020, the United Kingdom signed a TSA with the U.S.
  - In November 2020, the Australian House of Representatives commenced an Inquiry into Developing Australia's Space Industry, which noted a TSA with the U.S. as a priority. A number of submissions were provided to the Inquiry in support of a TSA, including from key Australian launch sector companies Gilmour Space, Equatorial Launch Australia and Southern Launch Australia.
    - The final report 'The Now Frontier: Developing Australia's Space Industry' was released in December 2021. The report noted the importance of a TSA as stated by public submissions from key launch sector participants and the peak body for Australia's space industry.
  - In March 2021, the Space Coordination Committee endorsed actions to seek a mandate to negotiate a TSA with the U.S.
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- In June 2021, the former Minister for Foreign Affairs, Senator the Hon Marise Payne, provided a mandate to commence treaty negotiations.
- On 23 June 2021, the U.S. Department of State confirmed they were ready to start TSA negotiations.

### **Funding of a TSA**

- Development and implementation of the TSA is being funded from within the Agency's existing budget allocations.

### **Amending laws**

- The Agency has consulted with a number of Commonwealth, state and territory agencies about potential impact to their respective legislative frameworks from the TSA. At this stage, implementation of the TSA is not expected to require amendments to primary legislation at the Commonwealth, state or territory level.

### **Side Arrangement**

- In April 2022, the Agency started parallel negotiations on a 'less-than-treaty-status' Side Arrangement.
- The TSA gives authority to the Side Arrangement through a number of enabling provisions. The Side Arrangement elaborates on the process and implementation of the overarching enabling provisions.

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- The Side Arrangement will be concluded in accordance with the guidance note 'Australia's practice for concluding less-than-treaty-status instruments' issued by DFAT.



























DEPARTMENT OF INDUSTRY, SCIENCE AND RESOURCES

PDR ID: MS22-000837

To: Minister for Industry and Science (For Information)

TECHNOLOGY SAFEGUARDS AGREEMENT WITH THE UNITED STATES OF AMERICA

Recommendations: That you

- 1. **Note** progress of negotiations of a Technology Safeguards Agreement between Australia and the United States of America;

Noted / Please Discuss

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Noted / Please Discuss

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Noted / Please Discuss

Minister:

Date:

Comments:

<b>Clearing Officer:</b> Sent 4/7/2022	Paul Trotman	Deputy Head, Australian Space Agency	s22
Contact Officer:	s22	Executive Director, International Engagement, Australian Space Agency	s22

Key Points:

- 1. The Australian Space Agency (the Agency) is leading negotiations on behalf of the Australian Government on a treaty level Technology Safeguards Agreement (TSA) with the United States of America (the U.S.). s33
- 2. Signing a TSA will strengthen Australia's long standing partnership with the U.S. on space and is supported by the Australian space sector. It will assist the growth of our domestic launch sector and create jobs in developing infrastructure to support U.S. launch activities. A TSA will not permit sharing of U.S. launch technology with Australia or enable the U.S. to support the development of Australian domestic launch capability, consistent with long-standing U.S. policy. Further background is at Attachment A.

3. A TSA establishes a legally binding framework to protect U.S. technology while in Australia by ensuring the technology remains under U.S. control at all times. s33

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Progress on negotiations and next steps

4. A mandate to negotiate a TSA was provided in July 2021. Since then, the Agency has led a whole of government effort with support from our core negotiating partners, the Department of Foreign Affairs and Trade (DFAT) and the Department of Defence (Defence), and in close consultation with affected Commonwealth, state and territory agencies, to negotiate a favourable TSA that is in Australia's national interest.
5. Formal negotiations commenced in October 2021 and have progressed through several virtual meetings. The U.S. negotiations are led by the U.S. State Department. The first face-to-face round of negotiations were held in Washington D.C. in April 2022. A timeline for the negotiations and development of the TSA to date is included at Attachment B.

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9. Once text has been agreed, the TSA will require formal consideration by the Federal Executive Council (ExCo) and the Joint Standing Committee on Treaties (JSCOT). Assuming agreement on treaty text in September 2022 following face-to-face negotiations, the ExCo and JSCOT processes will take an additional 6-9 months, bringing the TSA into effect in the first half of 2023.

Potential opportunities for Ministerial engagement

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**Data referenced: NIL**

**Consultation:** The Agency is consulting with our core partners DFAT and Defence, central agencies, as well as other impacted agencies and state and territory governments through respective Interdepartmental Committees, and key industry stakeholders as appropriate.

**ATTACHMENTS**

- A:** Background on the TSA
- B:** Timeline for TSA Negotiations to Date

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## DEPARTMENT OF INDUSTRY, SCIENCE AND RESOURCES

## ATTACHMENT A

**Background on U.S. Technology Safeguards Agreements****What is a TSA?**

- A Technology Safeguards Agreement (TSA) is a legally binding bi-lateral treaty-level agreement with the U.S. which establishes principles for non-proliferation (not sharing) and safeguarding of U.S. launch technology including launch vehicles (rockets), equipment (e.g. radar support, sensors), data and spacecraft (satellites).
- A TSA is required by the U.S. to allow for the controlled transfer of sensitive U.S. launch technology and data from the U.S. to other countries by ensuring foreign governments will protect U.S. technology consistent with U.S. non-proliferation policy, the Missile Technology Control Regime (MTCR) and U.S. export control laws and regulations.

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- To date the U.S. has concluded TSA's with five other countries: Russia (2006), India (2009), New Zealand (2016), Brazil (2019), and the UK (2020). s33

**What a TSA does not do?**

- The TSA will not allow for collaboration on U.S. technology. The TSA will also not bypass U.S. export control policy requirements for the export of sensitive technology and does not override International Traffic in Arms Regulation (ITAR) requirements.
- Further items on the U.S. Munitions List within ITAR and on the Commerce Control List in the Export Admin Regime (EAR) are not addressed within the context of the TSA.
- The TSA does not override the Missile Technology Control Regime (MTCR), which does not allow U.S. support for the development of Australian launch capability.
- While the TSA will allow for U.S. companies to launch from Australian soil under supervision if approved via application processes in the U.S. and Australia, nothing in the TSA will override U.S. policy and decision making with respect to issuing export permits and authorisations.

### **Intersection of the TSA with MTCR non-proliferation principles**

- The TSA is designed to ensure that any sensitive space launch equipment or technology, which could in theory be used in the development of delivery systems for weapons of mass destruction (e.g. rockets), is used only for the purposes of space launch activities, and that both governments take certain actions to prevent its unauthorised transfer.
- This is consistent with the principles established under the Guidelines of the Missile Technology Control Regime (MTCR) which aim to limit the risks of proliferation of weapons of mass destruction (i.e. nuclear, chemical and biological weapons), by controlling transfers that could make a contribution to delivery systems (other than manned aircraft) for such weapons. The Guidelines are also intended to limit the risk of controlled items and their technology falling into the hands of terrorist groups.
- The MTCR was established in 1987 with Partner countries agreeing to adopt the principles through binding government-to-government undertakings (less than treaty level instruments under international law). Both the U.S and Australia are Partners to MTCR.
- The MTCR groups technology into two categories depending on their ability to be used in the delivery of weapons of mass destruction. The most sensitive technology is in Category I, which includes:
  - complete rocket systems (including ballistic missiles, space launch vehicles and sounding rockets) and unmanned air vehicle systems (including cruise missiles systems, target and reconnaissance drones) with capabilities exceeding a 300km/500kg range/payload threshold; production facilities for such systems; and major sub-systems including rocket stages, re-entry vehicles, rocket engines, guidance systems and warhead mechanisms.
- All other sensitive technology is grouped into Category II. While Category II items still require control and restriction of their transfer, MTCR Partners have greater flexibility in the treatment of Category II transfer applications.

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**Benefit to Australian industry from a TSA**

- To maximise space industry growth and development in the near term, seven priority areas for targeting investment in space have been identified in Australia's current Civil Space Strategy (the Strategy) including growing Australia's launch sector ('access to space').
- A major driver of global space industry growth and development has been the significant reduction in cost to launch payloads into space, which has been achieved through the commercialisation of the launch sector. In particular, the U.S. commercial sector has led the way on launch.
- Similar to the U.S., Australia has embraced the commercial reality that space is no longer just the domain of governments.
- Given the size of the U.S. space sector and the depth of the U.S. launch market, there are potentially significant benefits to Australian industry through promoting U.S. launch activities in Australia.
- A TSA will create opportunities for Australian spaceports to meet the growing U.S. demand for launch capability. Benefits will likely be concentrated in Australia's launch sector, however there are likely to be some economy wide benefits. Ancillary industries such as transport, hospitality and other garrison services, will receive a boost, particularly in rural and remote areas.
- Entering into a TSA is consistent with the objective of and strategy for growing Australia's space sector by strengthening our relationship with U.S., gaining access to new markets, creating commercial opportunities for Australia's launch sector and strongly signalling to the global market that Australia is 'open for launch'. It may also help contribute to an additional objective outlined in Australia's Civil Space Strategy of 'inspiring the future workforce' through increased visibility of highly symbolic launches from Australian soil.

**Benefit to U.S. industry from a TSA**

- Australia has a number of unique and strategic advantages for launch activities that are very attractive to the U.S. Our large landmass and ideal geographic location provide access to uncongested launch corridors and access to both polar and equatorial orbits.
- We have a wide range of usable site latitudes and low population density which make Australia well suited for launch facilities that are capable of attaining most orbit inclinations. This can provide great flexibility to U.S. companies seeking additional launch corridors.

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- Gaining access to Australian launch sites will also enable the U.S. to increase the cadence of launch globally. Australia can take some of the burden off U.S. launch corridors and crowded launch windows.
- An increase in cadence can also translate to an increase in responsiveness in any required launches and assists commercial industries in their business plans supporting replenishment of satellites and space assets in a more deterministic and economical way.
- Australia's proximity to Asia can also facilitate U.S. access to the burgeoning Asian market, particularly through hosting payloads closer to home for major Asian customers.

### **NASA/ELA launch campaign and implications for the TSA**

- On 27 June 2022, NASA successfully launched a sounding rocket from Equatorial Launch Australia's Arnhem Space Centre in the Northern Territory. Two more launches are planned over the period to 12 July 2022.
- The launch was the first time NASA has undertaken a launch from a commercial facility outside of the U.S.

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- It signals to a global audience that the U.S. and Australia are the closest of allies and there is high level of trust in the protections offered by Australia's existing laws and regulations.
- This is a testament to our robust regulatory framework for approving launches which allows Australia to place legally binding obligations on anyone launching from Australia to ensure launches are safe, sustainable and secure. These same protections will be used to ensure the requirements of a TSA are upheld.

### **Origins of the TSA with the U.S.**

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- On 16 June 2020, the United Kingdom signed a TSA with the U.S.
- In November 2020, the Australian House of Representatives commenced an Inquiry into Developing Australia's Space Industry, which noted a TSA with the U.S. as a priority. A number of submissions were provided to the Inquiry in support of a TSA, including from key Australian launch sector companies Gilmour Space, Equatorial Launch Australia and Southern Launch Australia.
  - The final report 'The Now Frontier: Developing Australia's Space Industry' was released in December 2021 and the Agency is developing a government response to

the Committee report. No specific recommendations on the TSA were included in the final report.

- In March 2021, the Space Coordination Committee endorsed actions to seek a mandate to negotiate a TSA with the U.S.

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- In July 2021, the former Minister for Foreign Affairs, Senator the Hon Marise Payne provided a mandate to commence treaty negotiations.
- On 29 June 2021, the U.S. State Department confirmed they were ready to start TSA negotiations.

### **Amending laws**

- The Agency has consulted with a number of Commonwealth, state and territory agencies about potential impact to their respective legislative frameworks from the TSA. At this stage, implementation of the TSA is not expected to require amendments to primary legislation at the Commonwealth, state or territory level.

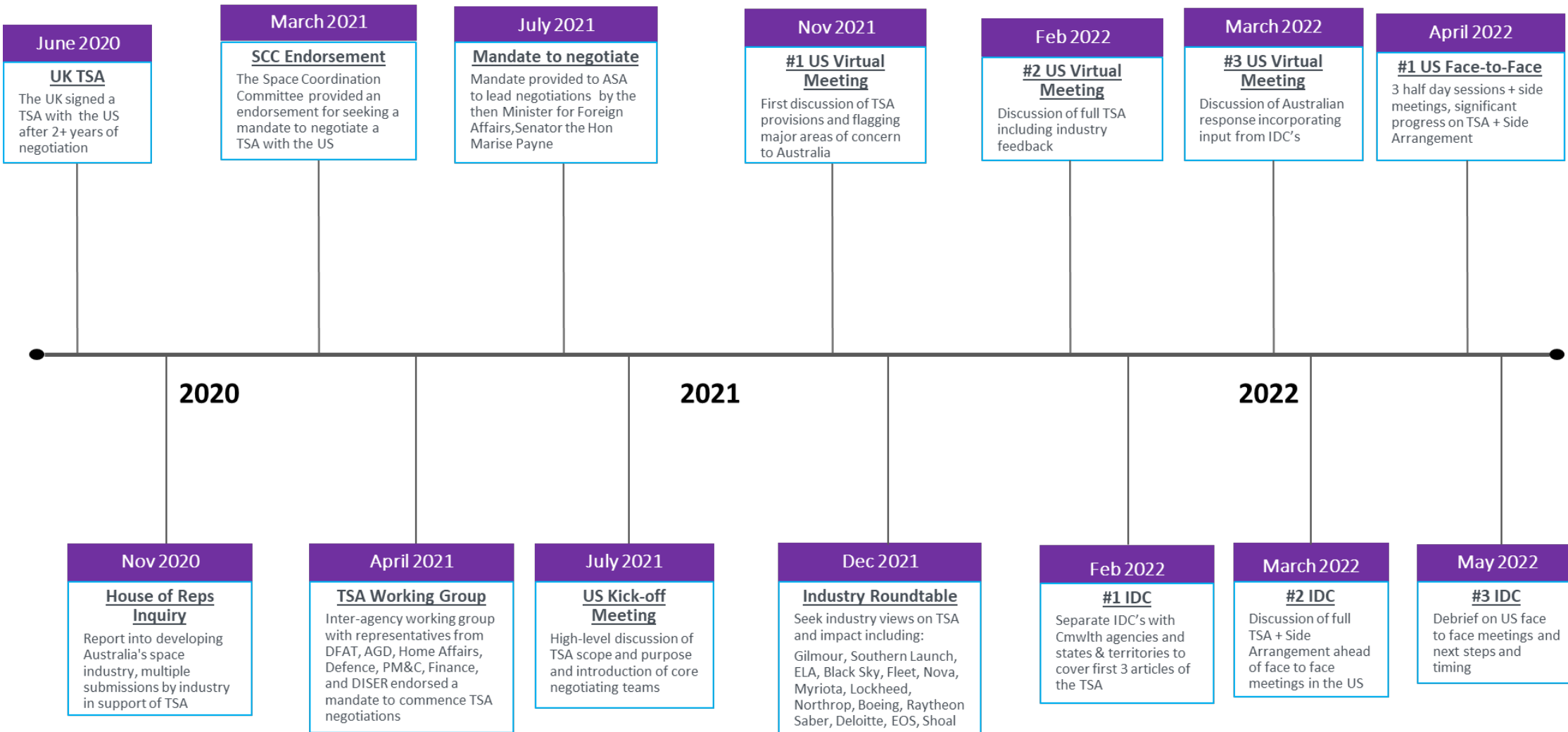
### **Side Arrangement**

- In April 2022, the Agency started parallel negotiations on a 'less-than-treaty-status' side arrangement.
- The TSA gives authority to the Side Arrangement through a number of enabling provisions and then the Side Arrangement elaborates on the process and implementation of the overarching enabling provisions.

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- The side arrangement will be concluded in accordance with the guidance note 'Australia's practice for concluding less-than-treaty-status instruments' issued by DFAT.

# Timeline for TSA Negotiations to Date







**DEPARTMENT OF INDUSTRY, SCIENCE AND RESOURCES**

MS23-000838

To: Minister for Industry and Science (For Information only)

**TECHNOLOGY SAFEGUARDS AGREEMENT – LEADERS’ ANNOUNCEMENT OF IN-PRINCIPLE AGREEMENT**

**Timing:** Routine – noting announcement to be made during G7 Summit on 19-21 May.

<b>Recommendation:</b>			
1. That you <b>note</b> the proposed announcement between the Prime Minister and the President of the United States on in-principle agreement of the text of the Technology Safeguards Agreement during the G7 Summit 19-21 May.			
			<b>Noted / Please Discuss</b>
<b>Minister:</b>		Date:	
<b>Comments:</b>			
<b>Clearing Officer:</b>	Dara Williams	Deputy Head, Australian Space Agency	s22
Contact Officer:	s22	Executive Director, International and Government Engagement (treaty lead)	s22
<b>For Parliamentary Services’ use only.</b> Date Submitted to the Minister’s office in PDMS:			18/5/2023

**Key Points:**

1. Following significant progress in negotiations over the last month in the lead-up to US President Biden’s now cancelled visit to Australia to attend the Quad Summit, Australia and the US have reached in-principle agreement on the text of the Technology Safeguards Agreement (TSA).
2. The TSA is a treaty-level agreement between the US and Australia with the purpose of permitting export of US space technology for operation in Australia. s33
3. The Department of the Prime Minister and Cabinet (PM&C) and the White House have been working towards announcement of in-principle agreement by Prime Minister Albanese and President Biden. Originally this was intended to take place during President Biden’s visit to Sydney on 23-24 May. With that visit now cancelled, it is proposed that the announcement take place when the leaders meet in the margins of the G7 meetings scheduled for 19-21 May in Hiroshima, Japan.

4. The TSA will strengthen Australia's long-standing partnership with the US on space and is almost unanimously supported by the Australian space sector.
5. Formal negotiations started in October 2021. Respective leads for Australia and the US are the Department of Industry, Science and Resources through the Australian Space Agency and the US Department of State respectively.

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7. Public announcement of in-principle agreement of a treaty is permissible subject to approval of the Governor-General, which PM&C is seeking.
8. Announcement of in-principle agreement does not prejudice the Commonwealth treaty-making process. The TSA will still require formal consideration by the Joint Standing Committee on Treaties (JSCOT) and the Federal Executive Council (ExCo) in June and July 2023.
9. The final treaty text, post legal review, will be presented to you with associated less-than-treaty side arrangements for consideration and submission to the Foreign Minister for further referral to the ExCo and then to JSCOT.

**Sensitivities and Handling:**

10. PM&C and the White House have been closely involved in reaching this outcome.

**Data referenced: NIL**

**Consultation: YES**

11. The Australian Space Agency continues to work closely with the Department of Foreign Affairs and Trade and PM&C. Extensive consultation has occurred over the course of the negotiation across Commonwealth Departments and Agencies as well as states and territories.
12. Key industry stakeholders were also consulted, including several industry briefings over the course of the negotiation.

**Attachments: NIL**



DEPARTMENT OF INDUSTRY, SCIENCE AND RESOURCES

MB22-001371

To: Minister for Industry and Science

**GILMOUR SPACE VISIT**

**Timing:** Sunday, 6 November 2022 (10:30am AEST)

**Meeting with:** Adam Gilmour, CEO, Gilmour Space

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<b>Clearing Officer:</b> Sent: 03/11/2022	Dara Williams	Deputy Head, Australian Space Agency	s22
Contact Officer:	Christopher De Luis	General Manager, Office of the Space Regulator	s22

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10. The Technology Safeguards Agreement (TSA) with the United States (US) is currently under active negotiation. By convention, the details of treaty negotiations are confidential to the negotiating partners. s33

. Further information on the TSA is at Attachment B.

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### Attachments

**A:** Discussion points

**B:** Background

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## **Discussion points**

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### Technology Safeguards Agreement (TSA) (if raised)

- Finalising a TSA remains a high priority for the Australian Government.
- A TSA will help grow Australia's launch sector. It will also benefit the broader Australian economy through increased U.S. investment and space activity in Australia.
- The TSA may create greater competition in Australia but the TSA is likely to grow the size of the Australian launch sector more broadly. Therefore creating opportunities for Australian space companies.
- The Australian government will not agree to a TSA that materially damages our domestic space sector.

**ATTACHMENT B**

**Background**

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### Technology Safeguards Agreement (TSA)

- A TSA is a treaty level agreement that is required by the US to permit the export of sensitive US launch technology to Australia. A TSA establishes a legally binding framework to protect US technology while in Australia by ensuring the technology remains under US control at all times.
- A TSA will not permit the US to share sensitive technology with Australia or enable the US to assist with the development of Australian launch capability.
- A mandate to negotiate a TSA was given in July 2021. The Australian Space Agency is leading negotiations on behalf of the Australian Government with support from the Department of Foreign Affairs and Trade and the Department of Defence. The US negotiations are being led by the US Department of State.
- There have been two rounds of face-to-face negotiations, in April and late-August 2022. Once negotiations conclude, the TSA must go through the Australian Government treaty-making process before it becomes binding on Australia.
- To date the US has concluded TSAs with five other countries: Russia (2006), India (2009), New Zealand (2016), Brazil (2019), and the UK (2020).



**Discussion points**

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## Science, technology and Space

- Seek Ambassador Sinodinos' views on the highest order opportunities for Australia in the US spanning science, technology and space noting:

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- Bilateral collaboration in space under the **Moon to Mars initiative** and progress towards a **Technology Safeguards Agreement**.

**Attachment B**

**BACKGROUND**

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## Space

- The Australian Space Agency (the Agency) has a close working relationship with the Australian Embassy Washington. Most recently, the Head of Agency met with Ambassador Sinodinos on 26 October 2022 to discuss progress on the TSA and broader US collaboration. Mr Palermo briefed the Ambassador on remaining items under negotiation and an anticipated timeline for conclusion based on both parties resolving the outstanding issues.

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## Technology Safeguards Agreement (TSA)

- A TSA is a treaty level agreement required by the US to launch and return their sensitive launch technology in Australia. A TSA establishes a legally binding framework to protect US technology while in Australia by ensuring the technology remains under US control at all times.

- A TSA will not enable the US to assist Australia with the development of Australian launch capability, consistent with long-standing US policy to not help other nations develop technology that can potentially be used as missiles.
- A mandate to negotiate a TSA was given in July 2021. The Australian Space Agency is leading negotiations on behalf of the Australian Government with support from the Department of Foreign Affairs and Trade and the Department of Defence. The US negotiations are being led by the US Department of State.
- There have been two rounds of face-to-face negotiations, in April and late-August 2022. Once negotiations conclude, the TSA must go through the Australian Government treaty-making process before it becomes binding on Australia.
- To date the US has concluded TSAs with five other countries: Russia (2006), India (2009), New Zealand (2016), Brazil (2019), and the UK (2020).



## Discussion points

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## Space collaboration

- Australia and the US are the closest of partners on space. We have a long history of space partnership dating back over 60 years.
- A big part of this history has involved your family – and I note this year is the 60<sup>th</sup> anniversary of your father’s moon speech. We are excited to have you here in Australia, and I know Australia will benefit from your passion for space.
- Australia and the US are working together on several space-related collaborations, including Australia’s Moon to Mars initiative and launch activities under a Technology Safeguards Agreement (TSA).
- I understand you will be meeting in the coming weeks with the Head of the Australian Space Agency to look more closely at areas for further space collaboration.

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### Technology Safeguards Agreement (TSA)

- The historic launch by NASA in the Northern Territory in July has signalled to the world that Australia is open for launch.
- It was the first time NASA has launched from a commercial facility outside of the US. Our launch sector is growing rapidly and is hungry for more opportunities to partner with the US.
- Australia has a number of strategic and economic benefits that are attractive to US launch companies seeking to launch in Australia. I anticipate that once a TSA is in place, significant US activity and investment will commence.
- Finalising a TSA remains a high priority for the Australian Government and for Australian industry.
- I understand significant goodwill has been established on both sides towards finalising the negotiations. I am keen to see this momentum continue.
- As like-minded countries, I am confident that we can soon reach an understanding that works for both parties.

**Background**

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**Space**

- Former President John F. Kennedy led the expansion of the US space program during the 1960s which resulted in the successful Apollo 11 mission to the Moon in 1969. Australia played a crucial role in broadcasting images of the Apollo 11 Moon landing to the world and has supported the US in every deep space mission since then.
- Ambassador Kennedy has also been a strong advocate for space and continuing the strong US space heritage established under the Kennedy administration.
- The NASA led Artemis Program follows on from the earlier Apollo missions and aims to return humans to the Moon. Through collaboration with international partners (including Australia), the Artemis Program aims to establish a long-term presence on the Moon with a view towards going to Mars. The launch of the first Artemis I rocket is scheduled for 14 November after several earlier launch attempts were cancelled.

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Technology Safeguards Agreement (TSA)

- A TSA is a treaty level agreement that is required by to the US to permit the export of sensitive US launch technology to Australia. A TSA establishes a legally binding framework to protect US technology while in Australia by ensuring the technology remains under US control at all times.
- A TSA will not permit the US to share sensitive technology with Australia or enable the US to assist with the development of Australian launch capability.
- A mandate to negotiate a TSA was given in July 2021. The Australian Space Agency is leading negotiations on behalf of the Australian Government with support from the Department of Foreign Affairs and Trade and the Department of Defence. The US negotiations are being led by the US Department of State.
- There have been two rounds of face-to-face negotiations, in April and late-August 2022. Once negotiations conclude, the TSA must go through the Australian Government treaty-making process before it becomes binding on Australia.
- To date the US has concluded TSAs with five other countries: Russia (2006), India (2009), New Zealand (2016), Brazil (2019), and the UK (2020).

DEPARTMENT OF INDUSTRY, SCIENCE AND RESOURCES

MB23-000180

To: Minister for Industry and Science

**JOINT MEETING BETWEEN MINISTER HUSIC AND DEPUTY PRIME MINISTER MARLES WITH SENATOR BILL NELSON, NASA ADMINISTRATOR**

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- To reinforce Australia’s commitment to the Trailblazer grants program in support of the US Artemis Program, and the Technology Safeguards Agreement which will enable US companies to undertake launch activities in Australia.

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- To make progress on international agreements that will enable stronger participation for Australia in the world’s largest economy and civil space sector, including the Technology Safeguards and Space Framework Agreements.

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<b>Clearing Officer:</b>	Dara Williams	Deputy Head, Australian Space Agency	s22
<b>Contact Officer:</b>	s22	Executive Director, Australian Space Agency	s22
<b>For Parliamentary Services’ use only.</b> Date Submitted to the Minister’s office in PDMS:			21/3/2023

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## Discussion points

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New legal frameworks to enable increased space cooperation

- We have made excellent progress toward finalising the Technology Safeguards Agreement (TSA) and hope it will open the door for a regular cadence of US launches in Australia.

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This meeting is an opportunity to query:

- Following the TSA's successful conclusion, how would the Australian launch sector feature in NASA's plans over the coming years?

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**Background**

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Technology Safeguards Agreement (TSA) (under negotiation)

- Australia and the US are currently negotiating a Technology Safeguards Agreement to establish a legally binding framework to protect US space launch technology while in Australia.
- A successfully concluded TSA would enable the US Government and companies to undertake space launch from Australian soil. s33  
or enable the US to assist with the development of Australian launch capability.

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**PROTECTED**

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finalise a Technology Safeguards Agreement with the US to permit the transfer of sensitive  
US launch technology to Australia in early 2023.

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OVERVIEW | KEY MESSAGES

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- Australia looks forward to the conclusion of negotiations on a **Technology Safeguards Agreement** as soon as possible, given the economic and strategic benefits to both countries and this important step towards greater collaboration on space technology.

**OFFICIAL: SENSITIVE**

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- We are also keen to catalyse further advances in science and technology through targeted bi-lateral agreements and bringing to a successful conclusion the negotiations on a Technology Safeguards Agreement and Space Framework Agreement.

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**OFFICIAL: SENSITIVE**

BILATERAL | SPINLAUNCH

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- A Technology Safeguards Agreement (TSA) with the US is required for SpinLaunch to operate in Australia. s33

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**OFFICIAL: SENSITIVE**

**OFFICIAL: SENSITIVE**

*If raised - Technology Safeguards Agreement (TSA)*

- Finalising a TSA remains a high priority for Australia, and we are keen to bring the negotiations to a successful conclusion as soon as possible. Once a TSA is in place, what timeframe would be involved in SpinLaunch establishing an orbital launch system in Australia?

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*Technology Safeguards Agreement (TSA)*

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- A mandate to negotiate a TSA was given in July 2021. The Agency is leading negotiations on behalf of the Australian Government with support from the Department of

**OFFICIAL: SENSITIVE**

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Foreign Affairs and Trade and the Department of Defence. The US negotiations are being led by the US Department of State.

- There have been 2 rounds of face-to-face negotiations, in April and late-August 2022. Once negotiations conclude, the TSA must go through the Australian Government treaty-making process before it becomes binding on Australia.
- To date the US has concluded TSAs with five other countries: Russia (2006), India (2009), New Zealand (2016), Brazil (2019), and the UK (2020).

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- Australia is seeking to conclude a Technology Safeguards Agreement (TSA) with the US as soon as possible as a positive first step toward greater collaboration on space technology.

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- Australia looks forward to finalisation of a **technology safeguards agreement** as soon as possible. A TSA offers economic and strategic benefits to both countries and is an important step towards greater collaboration on space technology.

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- Australia looks forward to the conclusion of negotiations on a **Technology Safeguards Agreement** as soon as possible given the economic and strategic benefits to both countries and important step towards greater collaboration on space technology.

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**OFFICIAL: SENSITIVE**

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- Australia looks forward to the conclusion of negotiations on a **Technology Safeguards Agreement** as soon as possible, given the economic and strategic benefits to both countries, and as an important step towards greater collaboration on space technology.

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**OFFICIAL: SENSITIVE**

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- The partnership is underpinned by several formal agreements including the Space Tracking Treaty (2018) and Artemis Accords (2020). It will be strengthened by future agreements that support greater space cooperation, including a Technology Safeguards Agreement (TSA) and Space Framework Agreement.

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- Australia would like to bring the negotiations on a TSA to a successful conclusion as soon as possible. A TSA offers a number of economic and strategic benefits to both countries and is an important first step towards greater collaboration on space technology.

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