



ICAO

International Civil Aviation Organization

Ninth Meeting of the ICAO Asia/Pacific Search and Rescue Working Group (APSAR/WG/9)

Bangkok, Thailand, 07 – 10 May 2024

Agenda Item 4: Asia/Pacific and inter-regional SAR planning, coordination and cooperation

ASIA/PACIFIC REGIONAL READINESS FOR AUTONOMOUS DISTRESS TRACKING

(Presented by Secretariat)

SUMMARY

This paper presents the survey results of the Asia/Pacific regional readiness for the planned Autonomous Distress Tracking (ADT) applicability.

1. INTRODUCTION

1.1 Amendment 48 to Annex 6 Operation of Aircraft Part 1, adopted by the Council of ICAO on 18 July 2022, deferred the applicability of Standard for the location of an aeroplane in distress. The planned Autonomous Distress Tracking (ADT) applicability date of 01 January 2023 has been deferred until 01 January 2025 (ICAO (HQ) State Letter AN 22/75, 29 July 2022 refers). However, it is expected that increasing numbers of aircraft equipped with (ADT) devices will become operational from late 2022 and that ADT alerts will be distributed through the Cospas-Sarsat system and the ICAO LADR (when commissioned). Therefore, there was an urgent need:

- for effort to be made to improve knowledge of GADSS among Regulatory, Airline, SAR and ANSP stakeholders, and;
- to promote development of procedures among them in preparation for the likely appearance of ADT, including ELT(DT) before the end of 2022 and increasingly after the applicability date.

1.2 The ICAO Asia/Pacific Regional Office organised the Global Aeronautical Distress and Safety System (GADSS) Workshop, held on 23 May 2022 in conjunction with the APSAR/WG/7 meeting. A pre-workshop poll revealed that more than 50% of respondents had indicated their knowledge of the GADSS topic was either 'low' or 'none'.

1.3 In discussing the outcomes of the GADSS workshop, the APSAR/WG/7 meeting agreed that ICAO would issue an APAC State Letter to:

- Remind States of the applicability date;
- Inform them of the OPS CTRL and LADR registration process and encourage them to register;
- Include a survey on readiness for the 01 January 2023 applicability of ADT;
- Be circulated informally to all relevant POCs, in addition to the formal State Letter distribution.

1.4 The Checklist of Considerations supported the following ATM/SG Conclusion drafted by APSAR/WG/7 formed the basis of the survey on ADT readiness that was circulated by the ICAO APAC Regional Office in State Letter (APAC) AP128/22 (ATM), 13 September 2022:

Conclusion ATM/SG/10-12): Checklist of Considerations in Readiness for Autonomous Distress Tracking

Noting:

1. *the recent deferral of applicability of Autonomous Distress Tracking (ADT) from 01 January 2023 to 01 January 2025; and*

2. *the likelihood that ADT equipped aircraft will increasingly be operating from late 2022 onwards;*

States are urged to implement a programme of education and procedure development for aviation regulators, aircraft operators, SAR services and ANSPs, using the Checklist of Considerations for Response to ADT Notifications at Appendix H to the Report.

2. DISCUSSION

Background

2.1 APSAR/WG/8 meeting agreed and distributed a modified survey to seek update the status of APAC Administrations of their readiness and also serve as a reminder to prepare for the advent of ADT. In additional, ICAO agreed to circulate the State Letter (ICAO APAC Regional Office in State Letter (APAC) AP143/23 (ATM), 24 October 2023) communicating the survey to ATM and SAR POCs identified in the ATM POC List to ensure that the survey was distribute to a wider audience. The revised survey consisted of additional questions and some texts were modified for clarity shown in **Attachment A**.

2.2 A total of 17 Administrations responded to the revised survey, a decrease as compared to the previous survey. **Attachment B** and **C** list the survey response and comments by APAC Administrations respectively. Overall response results of the survey showed that majority of Administrations are not ready for ADT in **Table 1**. The average number of items marked “Yes” is 51%.

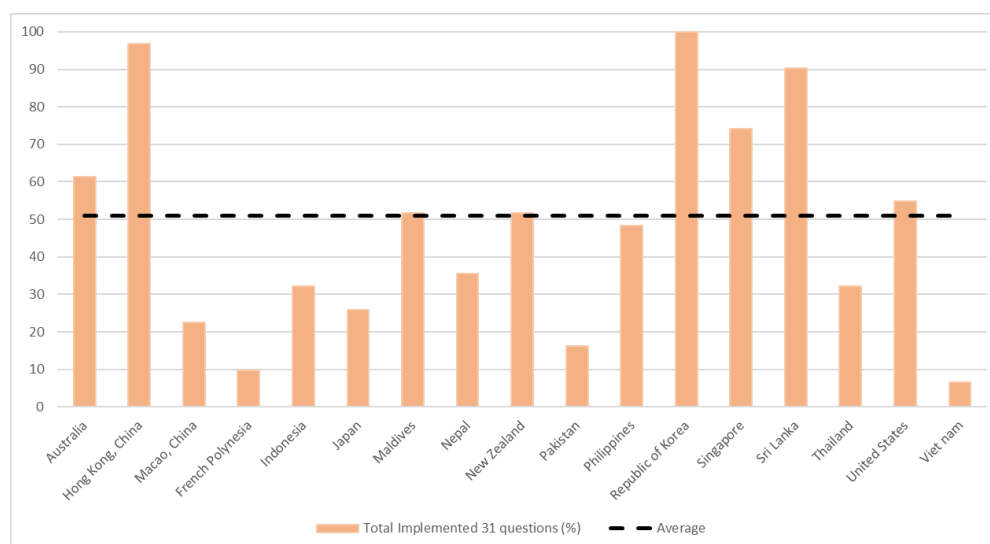


Table 1: Overall responses rate for all questions in the survey

- The majority of APAC Administrations have yet to develop procedures for the response to ADT notification or ELT(DT) alerts;

- Training of relevant SAR personnel, ATS personnel and flight despatchers to understand ADT notifications and ELT(DT) alerts has not been conducted.
- Registration to the ICAO OPS CTRL Directory has not been conducted.

2.3 Further analyses are shown in the four categories used in the survey based on the 17 APAC administration responses.

State

2.4 In this category the rate of response is shown in **Table 2** with an average rate of 50%.

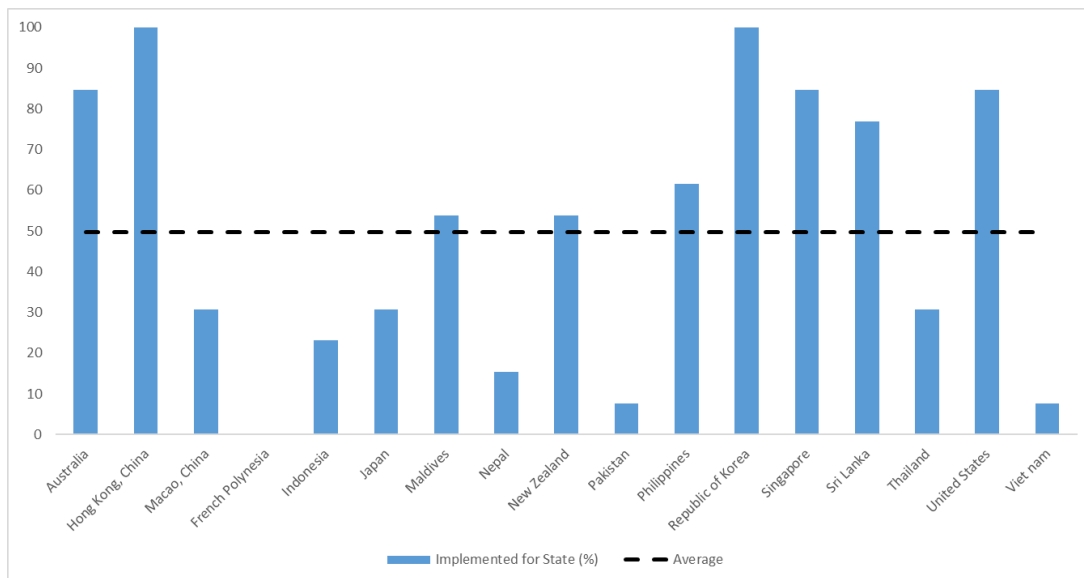


Table 2: Rate of response Category - State

2.5 Amongst the respondents, the question with highest score (65%): Qn #2 - "Taken action to ensure and facilitate the registration of all relevant State organizations in the OPS CTRL Directory including ANSP and aircraft operators."

2.6 Questions with lowest score (29%):

- Qn #12 - Incorporated ADT considerations in procedures and manuals for safety oversight of aircraft operators, ANSPs and SAR service organizations; and
- Qn #13 - Published and promulgated educational material on ADT for aircraft operator, ATS Unit and RCC personnel and other necessary stakeholders.

2.7 It is noted, from the other survey questions (Qn #9 and Qn #10) in the State Category, that about half the respondents have commenced preparation to incorporate procedures for ADT notification and verification and procedures for RCC actions.

Aircraft operators

2.8 The average rate of response was 27%. Five out of six questions in this category had less than 30% of response rate.

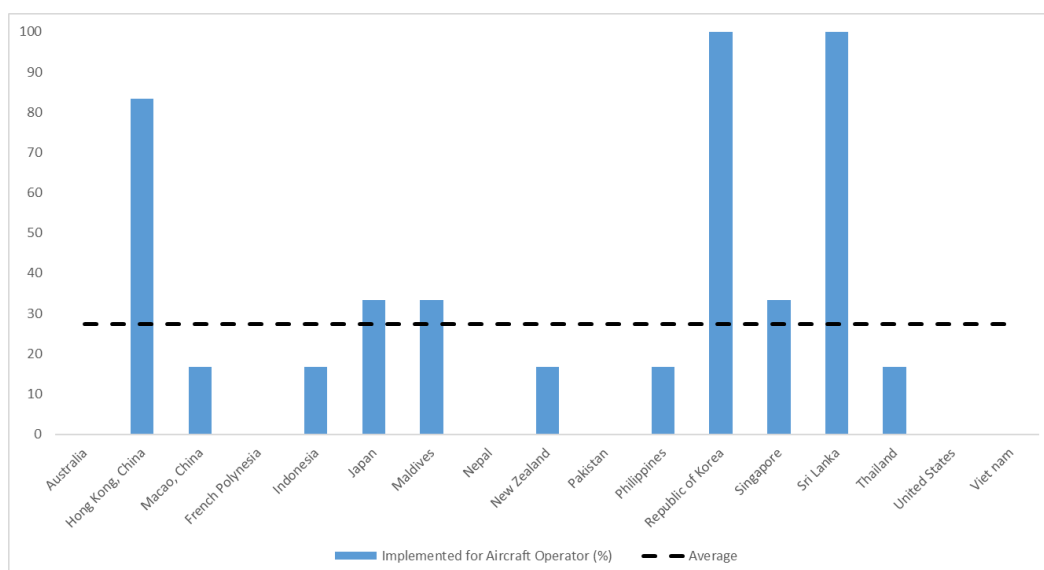


Table 3: Rate of response Category - Aircraft Operator

2.9 Question with highest score (53%): Qn #1 - "Registered in the ICAO OPS CTRL Directory"

2.10 Questions with lowest score (18%):

- a) Qn #4 - Commenced preparation for development of procedures for the initial aircraft operator response to ADT notifications and for informing appropriate ATS units of the outcome of ADT validation checks; and
- b) Qn #6 - Trained flight despatch and other relevant personnel to understand ADT notifications and ELT(DT) alerts (according to fleet equipage), and to execute ADT procedures accordingly.

Search and Rescue Service Provider (RCC/RSC)

2.11 In the category of SAR service provider, the average rate of response was highest amongst the four categories recorded as 60%.

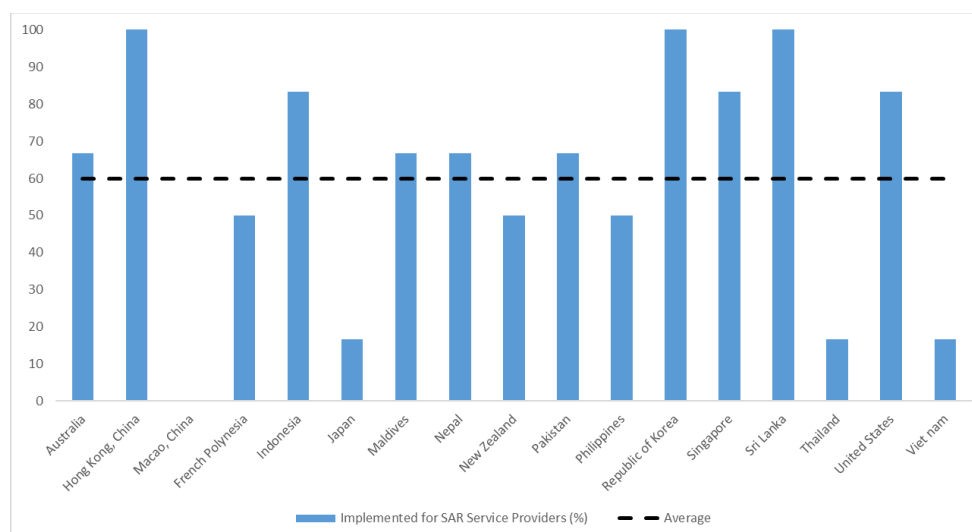


Table 4: Rate of response Category - SAR Service Provider

2.12 Question with highest score (71%): Qn #3 - “Ensured State RCCs will have the capability to receive LADR notifications and access the LADR to obtain further ADT notification information and data”.

2.13 Question with lowest score (47%): Qn #4 - “Developed procedures for the response to ADT notifications and coordination with ATS units”.

Air Navigation Service Providers

2.14 The average rate of response was 51%.

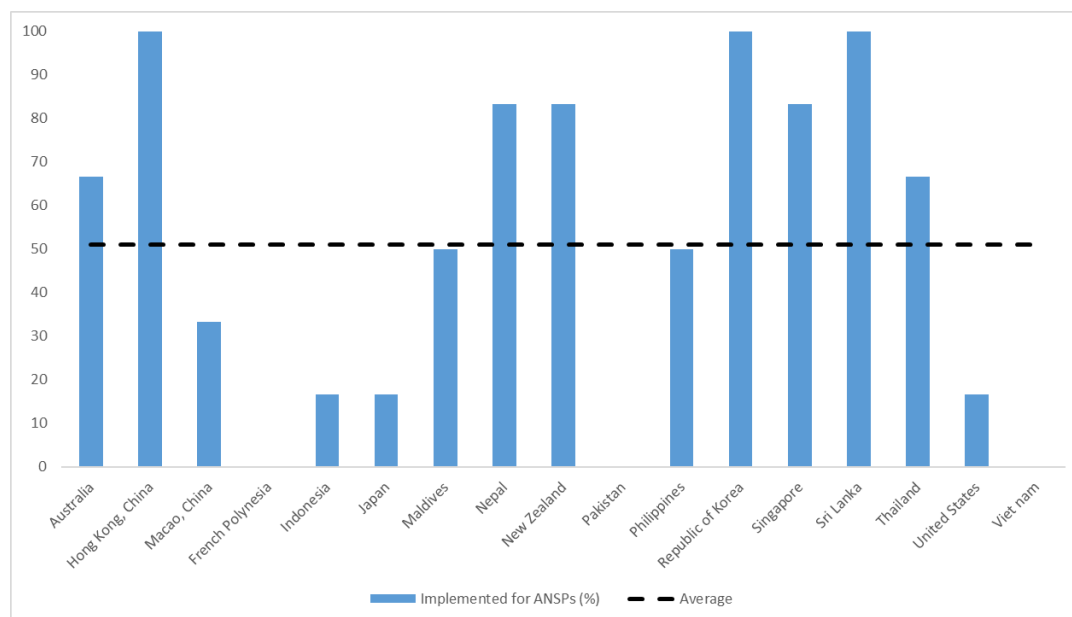


Table 5: Rate of response Category - ANSP

2.15 Questions with highest score (59%):

- Qn #1 - Registered in the ICAO OPS CTRL Directory when this is commissioned for RCCs;
- Qn #2 - Commenced preparation for subscription to LADR notifications when the service is commissioned; and
- Qn #5 - Developed procedures for the response to ELT(DT) coordination received from SAR authorities.

2.16 Questions with lowest score (41%):

- Qn #4 - Developed procedures for the response to ADT notifications received from aircraft operators; and
- Qn #6 - Trained relevant ATS personnel to understand ADT notifications and ELT(DT) alerts, and to coordinate in accordance with procedure.

2.17 In conclusion, majority of APAC Administrations are not fully ready for the planned Autonomous Distress Tracking (ADT) applicability with various tasks listed in the survey that have yet to be completed.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) urge States/Administrations to step up efforts to conduct the various actions required for ADT implementation such as:
 - i) development of procedures in preparation for the likely appearance of ADT, including ELT(DT) with stakeholders;
 - ii) register with the OPS CTRL and LADR; and
- c) discuss any relevant matters as appropriate.

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SURVEY OF STATE READINESS FOR AUTONOMOUS DISTRESS TRACKING (ADT)

STATE		
Check the box if State has:		
1.	<input type="checkbox"/>	Registered a State Focal Point in the ICAO OPS CTRL Directory (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)
2.	<input type="checkbox"/>	Taken action to ensure and facilitate the registration of all relevant State organizations in the OPS CTRL Directory including ANSP and aircraft operators.
3.	<input type="checkbox"/>	Taken action to ensure the required operational contact details are recorded in the OPS CTRL Directory for ANSP and aircraft operators.
4.	<input type="checkbox"/>	Taken action to ensure and facilitate the registration of State RCCs in the OPS CTRL Directory when this is commissioned for SAR services.
5.	<input type="checkbox"/>	Take action to ensure the required operational RCC contact details are recorded in the OPS CTRL Directory when commissioned for SAR services.
6.	<input type="checkbox"/>	Developed and implemented regulations requiring aircraft operator compliance with Annex 6 Section 6.18
7.	<input type="checkbox"/>	Identified relevant State LADR entities and ensured they are prepared to subscribe to LADR notifications when the service is commissioned
8.	<input type="checkbox"/>	Ensured relevant State LADR entities will implement the capability to receive LADR notifications and access the LADR, when commissioned, to obtain further ADT notification information and data.
9.	<input type="checkbox"/>	Commenced preparation for the incorporation of procedures for ADT notifications, and verification by aircraft operators, in existing for ATS alerting services.
10.	<input type="checkbox"/>	Commenced preparation for the incorporation of procedures for RCC actions in response to ADT notifications.
11.	<input type="checkbox"/>	Ensured the development of procedures for RCC actions in response procedures to ELT(DT) alerts via the Cospas-Sarsat system.
12.	<input type="checkbox"/>	Incorporated ADT considerations in procedures and manuals for safety oversight of aircraft operators, ANSPs and SAR service organizations
13.	<input type="checkbox"/>	Published and promulgated educational material on ADT for aircraft operator, ATS Unit and RCC personnel and other necessary stakeholders

AIRCRAFT OPERATORS		
Check the box if relevant State-based Aircraft Operators have:		
1.	<input type="checkbox"/>	Registered in the ICAO OPS CTRL Directory (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)
2.	<input type="checkbox"/>	Commenced preparation for subscription to LADR notifications when the service is commissioned.

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AIRCRAFT OPERATORS		
3.	<input type="checkbox"/>	Ensured relevant aircraft operators will implement the capability to receive LADR notifications and access the LADR, when commissioned, to obtain further ADT notification information and data on their aircraft.
4.	<input type="checkbox"/>	Commenced preparation for development of procedures for the initial aircraft operator response to ADT notifications and for informing appropriate ATS units of the outcome of ADT validation checks.
5.	<input type="checkbox"/>	Commenced preparation for the development of procedures for the initial aircraft operator response to ELT(DT) alert coordination received from SAR authorities or ATSUs
6.	<input type="checkbox"/>	Trained flight despatch and other relevant personnel to understand ADT notifications and ELT(DT) alerts (according to fleet equipage), and to execute ADT procedures accordingly

SAR SERVICE PROVIDER (RCC/RSC)		
Check the box if the SAR Service Provider has:		
1.	<input type="checkbox"/>	Registered in the ICAO OPS CTRL Directory when this is commissioned for RCCs (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)
2.	<input type="checkbox"/>	Commenced preparation for subscription to LADR notifications when the service is commissioned.
3.	<input type="checkbox"/>	Ensured State RCCs will implement the capability to receive LADR notifications and access the LADR, when commissioned, to obtain further ADT notification information and data.
4.	<input type="checkbox"/>	Developed procedures for the response to ADT notifications and coordination with ATS units.
5.	<input type="checkbox"/>	Developed procedures for the response to ELT(DT) alerts and coordination with ATS units.
6.	<input type="checkbox"/>	Trained SAR personnel to understand ADT notifications and ELT(DT) alerts, and to execute ADT procedures accordingly.

AIR NAVIGATION SERVICE PROVIDER		
Check the box if all relevant Air Traffic Service (ATS) Units have:		
1.	<input type="checkbox"/>	Registered in the ICAO OPS CTRL Directory (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)
2.	<input type="checkbox"/>	Commenced preparation for subscription to LADR notifications when the service is commissioned
3.	<input type="checkbox"/>	Ensured ATS Units will implement the capability to receive LADR notifications and access the LADR, when commissioned, to obtain further ADT notification information and data.
4.	<input type="checkbox"/>	Developed procedures for the response to ADT notifications and coordination with aircraft operators and RCCs.
5.	<input type="checkbox"/>	Developed procedures for the response to ELT(DT) alerts received from RCCs.
6.	<input type="checkbox"/>	Trained relevant ATS personnel to understand ADT notifications and ELT(DT) alerts, and to execute procedures accordingly.

Updated Oct 2023

Reference Material

Eighth Meeting of the Asia/Pacific Search and Rescue Working Group

ICAO Annex 6 *Operation of Aircraft* Part I

ICAO Annex 11 Air Traffic Services

ICAO Annex 12 *Search and Rescue*

ICAO Annex 13 *Accident and Incident Investigation*

ICAO Doc 4444 *Procedures for Air Navigation Services – Air Traffic Management* (PANS-ATM)

ICAO Doc 100542 *Manual on Location of Aircraft in Distress and Flight Recorder Data Recovery*

ICAO Doc 10165 Global Aeronautical Distress and Safety System (GADSS) Manual (NEW)

Expected availability Q3/Q4 2022

International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual Volumes I and II

ICAO Asia/Pacific Regional SAR Plan Version 4.0

Subject to approval by the Tenth Meeting of the ATM Sub-Group of APANPIRG, November 2022

ICAO Web Resources:

Global Tracking Initiatives

<https://www.icao.int/safety/OPS/OPS-Section/Pages/Global-tracking.aspx>

Update on GADSS-Related Global Aircraft Tracking Initiatives

<https://www.icao.int/safety/globaltracking/Pages/GADSS-Update.aspx>

ICAO Skytalk: GADSS Implementation Support Tools

<https://www.youtube.com/watch?v=ZbD3IIdkzbk>

ICAO OPS Control Directory

<https://www4.icao.int/opsctrl/>

Cospas-Sarsat Documentation:

C/S A.001 (data distribution procedures for ELT(DT)s)

C/S A.002 (structure and samples of ELT(DT) distress alert messages sent to SPOCs)

C/S T.001 and C/S T.018 (respectively, FGB and SGB (ELT(DT) specifications)

C/S G.007 (RCC handbook)

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SURVEY OF STATE READINESS FOR AUTONOMOUS DISTRESS TRACKING (ADT)		Afghanistan	Australia	Bangladesh	Bhutan	Brunei	Cambodia	China	Hong Kong, China	Macao, China	Cook Islands	DPRK	Fiji	French Polynesia	India	Indonesia	Japan	Kiribati	Lao PDR	Malaysia	Maldives	Marshall Islands	Micronesia	Mongolia	Myanmar	Nauru	Nepal	New Caledonia	New Zealand	Pakistan	Palau	Papua New Guinea	Philippines	Republic of Korea	Samoa	Singapore	Solomon Islands	Sri Lanka	Timor Leste	Tonga	Thailand	Tuvalu	United States	Vanuatu	Viet nam	% of 17		
STATE																																																
Check the box if State has:																																																
1	Registered a State Focal Point in the ICAO OPS CTRL Directory (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)	X						X	X												X						X					X	X		X				X							53		
2	Taken action to ensure and facilitate the registration of all relevant State organizations in the OPS CTRL Directory including ANSP and aircraft operators.	X						X	X								X				X											X	X		X		X			X		X					65	
3	Taken action to ensure the required operational contact details are recorded in the OPS CTRL Directory for ANSP and aircraft operators.	X						X	X								X				X												X	X		X		X					X				53	
4	Taken action to ensure and facilitate the registration of State RCCs in the OPS CTRL Directory when this is commissioned for SAR services.	X						X													X								X				X	X		X		X			X		X				59	
5	Take action to ensure the required operational RCC contact details are recorded in the OPS CTRL Directory when commissioned for SAR services.	X						X													X								X				X	X		X		X					X				53	
6	Developed and implemented regulations requiring aircraft operator compliance with Annex 6 Section 6.18							X	X							X											X		X					X		X		X						X	X			59
7	Identified relevant State LADR entities and ensured they are prepared to subscribe to LADR notifications when the service is commissioned	X						X													X								X				X	X		X		X					X				47	
8	Ensured relevant State LADR entities will have the capability to receive LADR notifications and access the LADR to obtain further ADT notification information and data.	X						X													X									X			X	X		X								X				47
9	Commenced preparation for the incorporation of procedures for ADT notifications, and verification by aircraft operators, in existing for ATS alerting services.	X						X								X													X				X	X		X		X						X				53
10	Commenced preparation for the incorporation of procedures for RCC actions in response to ADT notifications.	X						X									X												X					X	X		X		X				X				53	
11	Ensured the development of procedures for RCC actions in response procedures to ELT(DT) alerts via the Cospas-Sarsat system.	X						X									X												X					X	X		X							X				47
12	Incorporated ADT considerations in procedures and manuals for safety oversight of aircraft operators, ANSPs and SAR service organizations							X								X																		X							X							29
13	Published and promulgated educational material on ADT for aircraft operator, ATS Unit and RCC personnel and other necessary stakeholders	X						X																											X	X			X									29
Sub percentage implemented for State (%)		0	85	0	0	0	0	0	100	31	0	0	0	0	0	23	31	0	0	0	54	0	0	0	0	0	15	0	54	7.7	0	0	62	100	0	85	0	76.9	0	0	31	0	85	0	7.7	0		
AIRCRAFT OPERATOR																																																
Check the box if the Aircraft Operator has:																																																
1	Registered in the ICAO OPS CTRL Directory (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)							X	X								X				X							X					X		X		X				X							53
2	Commenced preparation for subscription to LADR notifications when the service is commissioned.							X													X												X		X		X											29
3	Ensured relevant aircraft operators will have the capability to receive LADR notifications and access the LADR to obtain further ADT notification information and data on their aircraft.							X									X																				X											24
4	Commenced preparation for development of procedures for the initial aircraft operator response to ADT notifications and for informing appropriate ATS units of the outcome of ADT validation checks.							X																										X			X											18
5	Commenced preparation for the development of procedures for the initial aircraft operator response to ELT(DT) alert coordination received from SAR authorities or ATSUs							X								X																		X				X										24
6	Trained flight despatch and other relevant personnel to understand ADT notifications and ELT(DT) alerts (according to fleet equipage), and to execute ADT procedures accordingly																																	X	X			X										18
Sub percentage implemented for Aircraft Operator (%)		0	0	0	0	0	0	0	83.3	17	0	0	0	0	0	17	33	0	0	0	33	0	0	0	0	0	0	0	17	0	0	0	17	100	0	33	0	100	0	0	17	0	0	0	0	0	27	

SURVEY OF STATE READINESS FOR AUTONOMOUS DISTRESS TRACKING (ADT)		Afghanistan	Australia	Bangladesh	Bhutan	Brunei	Cambodia	China	Hong Kong, China	Macao, China	Cook Islands	DPRK	Fiji	French Polynesia	India	Indonesia	Japan	Kiribati	Lao PDR	Malaysia	Maldives	Marshall Islands	Micronesia	Mongolia	Myanmar	Nauru	Nepal	New Caledonia	New Zealand	Pakistan	Palau	Papua New Guinea	Philippines	Republic of Korea	Samoa	Singapore	Solomon Islands	Sri Lanka	Timor Leste	Tonga	Thailand	Tuvalu	United States	Vanuatu	Viet nam	% of 17				
STATE																																																		
SAR SERVICE PROVIDER (RCC/RSC)																																																		
1	Registered in the ICAO OPS CTRL Directory when this is commissioned for RCCs (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)							X								X					X						X		X						X		X		X			X					53			
2	Commenced preparation for subscription to LADR notifications when the service is commissioned.	X						X								X					X						X		X					X	X		X		X					X				65		
3	Ensured State RCCs will have the capability to receive LADR notifications and access the LADR to obtain further ADT notification information and data.	X						X								X					X						X		X	X				X	X		X		X				X					71		
4	Developed procedures for the response to ADT notifications and coordination with ATS units.							X						X		X														X					X		X		X					X					47	
5	Developed procedures for the response to ELT(DT) alerts and coordination with ATS units.	X						X						X		X														X						X		X		X					X		X		59	
6	Trained SAR personnel to understand ADT notifications and ELT(DT) alerts, and to execute ADT procedures accordingly.	X						X						X			X				X							X			X				X	X				X				X					65	
Sub percentage implemented for SAR Service Providers (%)		0	67	0	0	0	0	0	100	0	0	0	0	50	0	83	17	0	0	0	67	0	0	0	0	0	67	0	50	67	0	0	50	100	0	83	0	100	0	0	17	0	83	0	17			60		
AIR NAVIGATION SERVICE PROVIDER																																																		
Check the box if all relevant Air Traffic Service (ATS) Units have:																																																		
1	Registered in the ICAO OPS CTRL Directory when this is commissioned for RCCs (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)	X						X									X				X						X		X						X		X		X			X							59	
2	Commenced preparation for subscription to LADR notifications, when the service is commissioned	X						X													X							X		X					X	X		X		X				X					59	
3	Ensured ATS Units will have the capability to receive LADR notifications and access the LADR to obtain further ADT notification information and data.							X													X						X		X					X	X		X		X										47	
4	Developed procedures for the response to ADT notifications received from aircraft operators.	X						X																					X							X	X		X			X								41
5	Developed procedures for the response to ELT(DT) coordination received from SAR authorities.	X						X	X							X											X		X						X		X		X			X							59	
6	Trained relevant ATS personnel to understand ADT notifications and ELT(DT) alerts, and to coordinate in accordance with procedure.							X	X																		X								X	X			X			X								41
Sub percentage implemented for ANSPs (%)		0	67	0	0	0	0	0	100	33	0	0	0	0	0	17	17	0	0	0	50	0	0	0	0	0	83	0	83	0	0	0	50	100	0	83	0	100	0	0	67	0	17	0	0			51		
Percentage of implemented 31 questions		0	61	0	0	0	0	0	97	23	0	0	0	10	0	32	26	0	0	0	52	0	0	0	0	0	35	0	52	16	0	0	48	100	0	74	0	90	0	0	32	0	55	0	6					

Form Last updated: Oct 2023

	SURVEY OF STATE READINESS FOR AUTONOMOUS DISTRESS TRACKING (ADT)	Australia	Macao, China	New Zealand	Singapore	Sri Lanka	Thailand	United States
	STATE							
1	Registered a State Focal Point in the ICAO OPS CTRL Directory (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)			Currently being worked on.			ICAO mailed, currently ACC/OCC accepted in OPS CTRL. To wait for RCC/SAR users access.	
2	Taken action to ensure and facilitate the registration of all relevant State organizations in the OPS CTRL Directory including ANSP and aircraft operators.			Currently being worked on.			Bangkok RCC	<u>U.S. Comment:</u> In progress. The U.S. Government, including ANSP, continues to discuss and coordinate plans for participation in the OPS CTRL directory. With respect to operators, the United States has notified differences to the distress tracking standards in Annex 6, Part I, 6.18. Consistent with those differences, the United States does not require U.S. operators to maintain contact details in the ICAO OPS CTRL.
3	Taken action to ensure the required operational contact details are recorded in the OPS CTRL Directory for ANSP and aircraft operators.			Currently being worked on.				<u>U.S. Comment:</u> Please refer to comment provided in 2., above.
4	Taken action to ensure and facilitate the registration of State RCCs in the OPS CTRL Directory when this is commissioned for SAR services.							
5	Take action to ensure the required operational RCC contact details are recorded in the OPS CTRL Directory when commissioned for SAR services.						To wait for ICAO to allow access	
6	Developed and implemented regulations requiring aircraft operator compliance with Annex 6 Section 6.18	Australia has not developed and implemented regulations requiring aircraft operator compliance with Annex 6 Section 6.18. This is reflected in the Australian EFOD for ICAO Annex 6 Part 1.		Civil Aviation Regulations in New Zealand are subject to approval from the Minister of Transport. Policy work has been completed on these SARP's but is pending approval by the Minister. Once approved, development of regulations will take place. The implementation of our new primary legislation (Civil Aviation Act 2023) places a freeze on the introduction of new regulations until late 2024/early 2025. As a result, New Zealand will file an interim difference for these SARP's until the regulations can be introduced.				<u>U.S. Comment:</u> The United States has notified ICAO of a difference to the provisions in Annex 6, Part I, 6.18.1. The United States will provide a means to track aircraft using primary radar, secondary radar, ADS-B and space based ADS-B. ADS-B will track aircraft every second within the United States and every 2-8 seconds for flights outside of the U.S. airspace.
7	Identified relevant State LADR entities and ensured they are prepared to subscribe to LADR notifications when the service is commissioned							<u>U.S. Comment:</u> In progress. The U.S. Government, including ANSP and State SAR/RCCs, continues to discuss and coordinate an envisioned approach to interaction with LADR. However, the information currently available to States regarding the LADR deployment remains limited. The ICAO North Atlantic (NAT) Region Autonomous Distress Tracking Exercise with Location of an Aircraft in Distress Repository Project Team (NAT DISTREX PT) is established to develop and conduct an exercise to test the operation of the LADR and the coordination between ANSPs, SAR/RCCs, and air operators upon receipt of a notification (Summary of Discussions and Conclusions from the 59th NAT Systems Planning Group refers). The United States expects to review outcomes from the NAT DISTREX PT and exercise to inform continued planning for the LADR notification service.
8	Ensured relevant State LADR entities will have the capability to receive LADR notifications and access the LADR to obtain further ADT notification information and data.							<u>U.S. Comment:</u> Please refer to comment provided in 7., above.
9	Commenced preparation for the incorporation of procedures for ADT notifications, and verification by aircraft operators, in existing for ATS alerting services.							<u>U.S. Comment:</u> Please refer to comment provided in 7. and 8., above.
10	Commenced preparation for the incorporation of procedures for RCC actions in response to ADT notifications.							
11	Ensured the development of procedures for RCC actions in response procedures to ELT(DT) alerts via the Cospas-Sarsat system.							
12	Incorporated ADT considerations in procedures and manuals for safety oversight of aircraft operators, ANSPs and SAR service organizations			To be completed when regulations are introduced				<u>U.S. Comment:</u> The responsible safety oversight organizations within the U.S. Federal Aviation Administration do not anticipate revising existing procedures and manuals at this time. However, changes may be considered as additional information regarding ADT implementation and LADR deployment continues to become available, including outcomes from the NAT DISTREX PT and exercise.
13	Published and promulgated educational material on ADT for aircraft operator, ATS Unit and RCC personnel and other necessary stakeholders	Yes for RCC		To be completed when regulations are introduced				
	AIRCRAFT OPERATOR							
1	Registered in the ICAO OPS CTRL Directory (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)	Australia has not yet mandated that relevant aircraft conducting air transport operations be fitted with an ELT(DT)		Air operator comments: Note 1: Whilst registered, no procedures have been developed and this site is not actively reviewed. Note 2: Air New Zealand has specified ELT(DT) for equipage of future deliveries in 2024.	Yes for SLA & Jetsatr Asia, Nil for Scoot			<u>U.S. Comments – Aircraft Operators:</u> While aircraft must be appropriately equipped to operate in non-U.S. airspace consistent with the applicable requirements, there is no additional U.S. requirement in place for U.S. operators specific to Annex 6, Part I, 6.18.1-3 in addition to existing surveillance capabilities. These questions are therefore Not Applicable to U.S. operators.
2	Commenced preparation for subscription to LADR notifications when the service is commissioned.				Yes for SLA & Jetsatr Asia, Nil for Scoot			
3	Ensured relevant aircraft operators will have the capability to receive LADR notifications and access the LADR to obtain further ADT notification information and data on their aircraft.							
4	Commenced preparation for development of procedures for the initial aircraft operator response to ADT notifications and for informing appropriate ATS units of the outcome of ADT validation checks.							
5	Commenced preparation for the development of procedures for the initial aircraft operator response to ELT(DT) alert coordination received from SAR authorities or ATSU's					Not For Sri Lankan Airline: Not capable of receiving alerts from ELT(DT)		
6	Trained flight despatch and other relevant personnel to understand ADT notifications and ELT(DT) alerts (according to fleet equipage), and to execute ADT procedures accordingly					Not for FTT's aviation		
	SAR SERVICE PROVIDER (RCC/RSC)							
1	Registered in the ICAO OPS CTRL Directory when this is commissioned for RCCs (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)	It is our understanding that this hasn't been made available to RCCs.	RCC is not established due Macao has ATZ only					
2	Commenced preparation for subscription to LADR notifications when the service is commissioned.							
3	Ensured State RCCs will have the capability to receive LADR notifications and access the LADR to obtain further ADT notification information and data.							

	SURVEY OF STATE READINESS FOR AUTONOMOUS DISTRESS TRACKING (ADT)	Australia	Macao, China	New Zealand	Singapore	Sri Lanka	Thailand	United States
	STATE							
4	Developed procedures for the response to ADT notifications and coordination with ATS units.	Awaiting LADR implementation		RCC comment: RCC has made contact with Airways (ANSP) to establish procedures and co-ordination between our organisations. Expecting procedures to be in accordance with guidelines that have already been set out in IMO COMSAR.1/Circ.59/Rev.1 3 July 2023. (ICAO annex 11 and 12).				U.S. Comment: Please refer to comment provided in STATE question 7., above.
5	Developed procedures for the response to ELT(DT) alerts and coordination with ATS units.			RCC comment: RCC has made contact with Airways to establish procedures and co-ordination between our organisations. Expecting procedures to be in accordance with guidelines that have already been set out in IMO COMSAR.1/Circ.59/Rev.1 3 July 2023. (ICAO annex 11 and 12).				U.S. Comment: Please refer to comment provided in STATE question 7., above.
6	Trained SAR personnel to understand ADT notifications and ELT(DT) alerts, and to execute ADT procedures accordingly.			RCC comment: Material is under development for handling of ADT and ELT(DT) alerts by Search and Rescue Officers (SAOs). Initial training for SIT183 "Distress Tracking" will be provided, once LADR is commissioned additional training will be conducted on its use and procedures				
	AIR NAVIGATION SERVICE PROVIDER							
1	Registered in the ICAO OPS CTRL Directory when this is commissioned for RCCs (email: aircrafttracking@icao.int website: https://www4.icao.int/opsctrl/)		Note: According to the OPS Control Directory, the information is for the Area Control Centre of ANSP. Macao, China has only Aerodrome Control Unit to provide ATS within Macao ATZ. However, the Macao Aerodrome Control Unit has implemented the procedures for point 5 & 6 in this section.					
2	Commenced preparation for subscription to LADR notifications, when the service is commissioned							U.S. Comment: Please refer to comment provided in STATE questions 7., through 9., above.
3	Ensured ATS Units will have the capability to receive LADR notifications and access the LADR to obtain further ADT notification information and data.	LADR will be with National Coordination Centre not in ATS unit						
4	Developed procedures for the response to ADT notifications received from aircraft operators.							
5	Developed procedures for the response to ELT(DT) coordination received from SAR authorities.							
6	Trained relevant ATS personnel to understand ADT notifications and ELT(DT) alerts, and to coordinate in accordance with procedure.	Information already provided , further training planned for March 2024 completion.						