



ICAO

International Civil Aviation Organization

**Twenty Fourth Meeting of the Communications/
Navigation and Surveillance Sub-group (CNS SG/24) of
APANPIRG**

Web-conference, 30 November – 4 December 2020

Agenda Item 13: CNS related work/projects impacted by COVID-19

IMPACT OF COVID-19 TO CNS WORKS

(Presented by the Secretariat)

SUMMARY

This paper presents the impact of COVID-19 to all related CNS Meetings/projects which scheduled in 2020 and some various observations arisen from the virtual meeting.

1. INTRODUCTION

1.1 The COVID 19 has started to be known since January 2020. Presently, the infected people are more than 50 million around the world.

1.2 The pandemic caused a great impact to various business sectors, especially, the aviation industry. The interconnection could not be arranged as usual and all scheduled plans/meetings were postponed.

2. DISCUSSION

2.1 Most of the ICAO ASIA/PAC meeting schedules of 2020 were postponed and some had to be cancelled. As the report of progress and some action requirements need effective communication and efficient cooperation between Regional Office and member States, the COVID pandemic caused a great challenge to ICAO ASIA/PAC to achieve and accomplish all work programme.

2.2 For the consequence, the use of several online meeting platforms i.e. MS Teams, WebEx and Zoom could bring member States and ASIA/PAC to have virtual meetings. Some observations were found during the virtual meeting efforts:

- *Number of participants increased significantly compare to face-to-face meeting.* In the normal situation, there could be some limitation of traveling cost and number of traveling days. With the new meeting platforms, participants can easily join the meetings by the invitation link sent to the registered email at the meeting. (See **Attachment A**)

Agenda Item 13

30/11/20 – 04/12/20

- *Webinars were widely recognized:*

The webinars organized during this pandemic time were widely recognized, it provided a much easier access to ICAO events for many participants who may not be able to join in the past. Presentations to ICAO APAC Webinars – Fundamentals of Air Navigation Services (ANS) were provided at:

<https://www.icao.int/APAC/Meetings/Pages/2020-ANS.aspx>

Presentations to ICAO APAC Webinars – Safety and Air Navigation Services were at: <https://www.icao.int/APAC/Meetings/Pages/2020-Safety-Air-Navigation-Services.aspx>

- *Time Zone for meeting arrangement:*

The meeting Secretariat is required to arrange and adjust the appropriate meeting programme for all participants in different time zone which normally should not more than 5 hours during the meeting day (including breaks and lunch if any). From the arrangement, it make participants more comfortable and less stress, but significantly shortened the meeting time and negatively impacted the meeting effectiveness.

- *Difficulty of demonstration:*

Frequency Finder (FF) Workshop was scheduled in June 2020. The participants were required to bring their laptop/notebook and downloading a specific programme to manage the VHF frequency on their own. The workshop would work well for face-to-face meeting to allow real time demonstration for introducing how software is working together with Q & A between participants and the instructor.

- *Postponement and re-scheduling of meetings:*

Before the virus has been heavily spreading, only CRV OG/7 meeting was conducted as face-to-face in January 2020. Rest of the related CNS meeting have been postponed and res-scheduled for virtual meetings. 2020 APAC Aeronautical Fixed Service Safety and Protection Planning Working Group meeting (AFSSP WG 2020) originally planned for 21-23 April 2020, was postponed to 2021, and the Frequency Finder Workshop was postponed to 2021 as well.

- *Postponement of required update:*

The progress for *Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers* to be updated and be reported to CNS SG/24 in July 2020 was delayed. (See **Attachment B**)

- *Limitations on networking and coordination via video conference:*

Face-to-face meeting has provided an excellent forum for discussion and networking among meeting delegates on various CNS related topics during breaks and after formal meetings. Moreover, there were occasions for the Chair and Secretary to coordinate on adhoc issues and small working group meetings to be established among delegates on specific topics. Preparation or discussion can be arranged before meeting get starts. By human nature, facial expression in a good environment is also important and necessary. On the contrary, virtual meetings impose various constraints on the above and seriously affect the effectiveness.

- *Workload of the Secretariat:*

There were not only papers or presentation which Secretariat had to focus more on the virtual meeting; Q & A in the Chat box and hand-raising sign were also monitored.

2.3 The target year of regional CRV implementation was shifted from 2020 to end of 2021 (refer to WP/04 paragraph 2.5).

2.4 SURICG/5 encouraged to mandate forward fit of Mode S of EHS by 1 Jan 2022, while deferred retrofit of Mode S transponder. (refer to WP/10 paragraph 2.37). IATA was also invited to take part in discussion on Mode S roadmap/mandate in the coming meetings of DAPs WG in 2021.

2.5 Quick Reference Guides (QRGs) were developed by ICAO, with the support of relevant subject matter experts, to provide guidance of a particular subject area in addressing COVID-19 related risks to the continuity of business and operations that were under consideration by a State for alleviations, while ensuring that the safety risks introduced by any changes from alleviations were also addressed. The *Periodicity of flight inspection of radio navigation aids* is provided under ANS section at: <https://www.icao.int/safety/COVID-19OPS/Pages/QRGs.aspx>

2.6 The ICAO Asia and Pacific (APAC) Director-General of Civil Aviation (DGCA) Information Sharing web-conference, 31 March 2020, on the subject of “COVID-19”, decided to form a task force/group to assist the DGCAs in coordinating their approach to the management of civil aviation through, and out of, the current extraordinary circumstances resulting from the COVID-19 pandemic. Consequently, the ICAO APAC COVID-19 Contingency and Recovery Planning Group (ACCRPG) was established, and relevant information is provided at: <https://www.icao.int/APAC/Meetings/Pages/default.aspx>

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information in this paper;
- b) encourage representatives from States/Administration to take advantage of virtual platform to join meeting;
- c) contribute experts in support of webinars on various topics; and
- d) discuss any relevant matter as appropriate.

Compared numbers of participants between face-to-face and virtual meetings

No. 1	Name of Meeting	Face-to-face Meeting	Name of Meeting	Virtual meeting
1	CRV OG/6 (7-10 May 2019)	70		
	CRV OG/7 (20-22 Jan. 2020)	57		
2	DAPs WG/2 (12-14 Mar. 2019)	28	DAPs WG/3 (12-15 May 2020)	64
3	SRWG/3 (31 May to 2 June 2016)	11	SRWG/4 (9-10 Jun.2020)	43
4*	<i>Meeting hosted by APAC-RSO</i>		SBAS/GBAS ITF/1 (23-24 Jun. 2020)	112
5	APA TF/5 (AIDC TF) (23-25 Apr.2019)	32	APA TF/6 (AIDC TF) (14-16 July 2020)	75
6	ACSICG/6 (13-15 May 2019)	69	ACSICG/7 (21-23 Jul. 2020)	95
7*	<i>Meeting hosted by APA-RSO</i>		SBAS/GBAS ITF/2 (9-10 Sept. 2020)	120
8	SURICG/4 (9-12 Apr. 2019)	97	SURICG/5 (22-24 Sept. 2020)	120
9*	PBNICG/6 (24-26 Apr. 2019)	71	* PBNICG/7 (21-23 Oct. 2020) (hosted by APAC-RSO)	98
10			ATMAS Seminar (27 Oct. 2020)	179
			ATMAS TF/1 (28-30 Oct. 2020)	167
11	SWIM TF/3 (7-10 May 2019)	83	SWIM TF/4 (3-6 Nov. 2020)	135
12	CNS SG/23 (2-6 Sept. 2019)	102	CNS SG/24 (30 Nov.-4 Dec. 2020)	177
13			AFS SP WG (TBC)	
14			Frequency Finder (FF) Workshop (TBC)	



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авиации

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المدني الدولي

国际民用
航空组织

Ref.: T 8/5.3 – AP098/20 (CNS)

27 April 2020

Subject: To update the *Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers*

Action required: To return your completed form to the APAC Office **by 24 July 2020**

Sir/Madam,

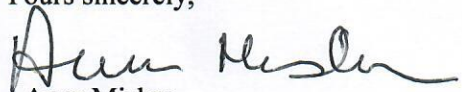
The Seminar on Flight Inspection and Procedure Validation (FIPV) was successfully held in the ICAO APAC Regional Office, from 24 to 27 September 2019. The need was emphasized during the seminar to update the *Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers* more regularly to reflect the latest information that would facilitate coordination and cooperation between the potential customers and service providers to comply with the requirement of the flight inspection/validation services within the APAC Region or beyond.

States/Administrations are therefore requested to provide information on the capabilities of their flight inspection and/or flight validation service providers to update the *Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers, 10th Edition*, which was posted on the ICAO APAC website at <https://www.icao.int/APAC/Pages/edocs.aspx> under NAV section. The APAC Office will gather the received information and update the current catalogue for review and adoption by CNS SG/24 meeting.

States/Administrations are also encouraged to incorporate into the catalogue any capability for inspection of ADS-B and other emerging facilities involving the use of new technologies. The form used to update the catalogue is attached herewith.

Please return the completed forms to the ICAO APAC Office through e-mail at apac@icao.int with copy to yluo@icao.int; bsirapongkosit@icao.int **by 24 July 2020**, and the new edition of the Catalogue is expected to be published by end of October 2020.

Yours sincerely,


Arun Mishra
Regional Director

Enclosure:

Capabilities of Flight Inspection / Flight Validation Service Provider

Asia and Pacific Office
252/1 Vibhavadi Rangsit Road
Chatuchak
Bangkok 10900
Thailand

Postal Address:
P.O. Box 11
Samyaeak Ladprao
Bangkok 10901
Thailand

Tel.: +66 (2) 537-8189
Fax: +66 (2) 537-8199

www.icao.int/apac
E-mail: apac@icao.int

Capabilities of Flight Inspection /Flight Validation Service Provider

1. Name, Country and Address of the service provider: *The name of State in CAPITAL*

The name of flight validation/flight inspection service provider

Address:

Tel:

Fax:

E-mail:

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>Beach 350</i>	<i>1</i>	<i>Negotiable</i>	<i>2,500</i>		<i>V or I or V/I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y or N</i>			<i>Automatic, or</i>
<i>DME</i>				<i>Manual</i>
<i>MLS</i>				
<i>ILS CAT I</i>				
<i>ILS CAT II</i>				
<i>ILS CAT III</i>				
<i>PAR</i>				
<i>SAR</i>				
<i>SRE</i>				
<i>NDB/LOC</i>				
<i>Marker Beacon</i>				
<i>PAPI</i>				
<i>VASIS</i>				
<i>RF Interference</i>				
<i>GNSS interference</i>				<i>(in relation to item 8.)</i>

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y or N</i>			<i>Automatic, or</i>
<i>RNP APCH (LNAV/VNAV)</i>				<i>Manual</i>
<i>RNP APCH (LPV)</i>				
<i>SBAS CAT I</i>				
<i>GBAS CAT I</i>				
<i>GBAS CAT II/III</i>				
<i>RNAV/RNP SID</i>				
<i>RNAV/RNP STAR</i>				

5. Type of Flight Management System which is used for flight data coding:
- *Provide the type of FMS system*
6. Location and Type of flight simulators which is used for flyability check, if available:
- *Provide the type of simulator and its location*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
- *Provide overall cost for using simulator*
8. GPS interference detection capability, if equipped:
- *Provide the type of detection equipment and detection method.*
9. Languages possibly used by flight testing team:
- *Provide available language for flight validation/inspection and report. If they are different, state separately.*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
- *Provide available time that can be used for other Administrations, e.g. 100 hours / Negotiable / etc.*
11. Advance notice expected before delivery of the service:
- *Provide the time for prior coordination required, e.g. 15 days, 3 months, etc.*

12. State Regulation(s) commonly complied with when delivering flight inspection services:

- *Provide State regulation(s) applied to the flight inspection and if available, referenced ICAO documents or criteria.*

13. State Regulation(s) commonly complied with when delivering flight validation services:

- *Provide State regulation(s) applied to the flight inspection and if available, referenced ICAO documents or criteria.*

14. Provide a link for further information, if any:

- *Website information, if available*

15. Other information:

- *May include certification/approval from other States or organization, type of flight inspection/validation system, support experiences to other States, other services related to PBN implementation, etc.*
- *May provide a point of contact for prior coordination.*

Catalogue of Flight Inspection October 2020 - Eleventh Edition (Latest edition published on July 2018 as 10th Edition)

	States/Administrations	Name of Service Provider	Email	Status
1	Australia	For Flight Inspection: AeroPearl Pty Ltd. For Flight Validation: Civil Aviation Safety Authority (CASA)	admin@aerpearl.com.au CNS.atm@casa.gov.au ;	Updated Updated
2	China (People's Republic of)	Flight Inspection Center of CAAC (Ms. Cui Ji) Civil Aviation Administration of China (CAAC)	cuij@chinacfi.net yangwei@caac.gov.cn china_icao@caac.gov.cn ; shan_wang@icscc.org.cn cc: zhangxiaoying@atmb.net.cn ; mahui@atmb.net.cn ;	To follow up
3	France	DSNA / DTI / CEV	joel.faucon@aviation-civile.gouv.fr	To follow up
4	India	Flight Inspection Unit, AAI Airport Authority of India	edfiu@aai.aero chairman@aai.aero cc: dgoffice.dgca@nic.in ; dgca.india@nic.in ; tuhi.dgca@nic.in ;	To follow up
5	Indonesia	Balai Besar Kalibrasi Fasilitas Penerbangan	info@flightcalibration.co.id bbkfp-hubud@dephub.go.id	Updated
6	Japan	Japan Civil Aviation Bureau (JCAB)	hqt-g_cab_knr_kkk@gxb.mlit.go.jp ; g_cab_knr_kkk@gxb.mlit.go.jp ; fujisaki-a01hn@mlit.go.jp ; jinnai-s10ut@mlit.go.jp ; nishimata-y97k6@mlit.go.jp ;	To follow up
7	Malaysia	Flight Calibration Division Civil Aviation Authority of Malaysia	cvo0@caam.gov.my azman.hitam@caam.gov.my raslina@caam.gov.my	To follow up
8	Mongolia	Flight Inspection and Procedure Design Services Civil Aviation Authority of Mongolia	fipds@mcaa.gov.mn byambasuren.l@mcaa.gov.mn tuvshinbayar.d@mcaa.gov.mn ;	To follow up

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	States/Administrations	Name of Service Provider	Email	Status
			atd@mcaa.gov.mn ;	
9	Myanmar	Department of Civil Aviation	dfsd@dca.gov.mn aungkyawtun@dcamyanmar.aero ; dgca@dca.gov.mm ; atr212a@gmail.com ; gmgr2@dca.gov.mm	To follow up
10	New Zealand	Radiola Limited	richardt@radiola.co.nz	Updated
11	Pakistan (Islamic Republic of)	Flight Inspection Unit of Pakistan Civil Aviation Authority	riaz.chishti@caapakistan.com.pk ;	Updated
12	Philippines	Civil Aviation Authority of the Philippines	dg@caap.gov.ph ; cc: icacs01@yahoo.com ; icacs@caap.gov.ph ;	To follow up
13	Republic of Korea	Ministry of Land, Infrastrucutre and Transport (MoLIT)	jewelry@korea.kr ; c172@korea.kr cc: totosoojeong@gmail.com 8	To follow up
14	Solomon Islands	Airways Corporation of New Zealand Ltd.	Philip.pinkney@airways.co.nz	Updated
15	Thailand	Aeronautical Radio of Thailand Ltd. (AEROTHAI)	bs@aerothai.co.th ; tirachai.su@aerothai.co.th ;	Updated
16	USA	Federal Aviaiton Administrations (FAA)	Bradley.W.Elliott@faa.gov	Updated