

AMHS Readiness Report for Supporting IWXXM Traffic

| No. | States/Administration | Name of State (Administration)/name of BBIS/BIS location where AMHS is installed: | AFTN/AMHS transition date/schedule | Readiness Status of AMHS for supporting File Transfer Body Part (FTBP), the Interpersonal Message (IPM) Heading Extension (IHE) to support for exchanging IWXXM reports of a maximum size of 4MB and FTBP of maximum 2MB: | Capacity status of the operational AFS links to support the exchange of the required meteorological information in both IWXXM GML form and TAC form: |
|-----|-----------------------|---|--|---|---|
| 1 | Australia | Airservices - Brisbane | Completed. AMHS exchange in place with USA, Fiji, New Zealand, Singapore and South Africa. AFTN still in place with Indonesia and PNG, migration to AMHS based on pending readiness both partners Several Pacific island nations connecting via FCO CADAS ATS Terminal, currently over AFTN. Airservices plans to migrate to AMHS P3 CADAS but will need to provide user training. All domestic users and data originators still on AFTN, no desire by external partners to migrate to AMHS, awaiting SWIM installed | Full compliance and support since Nov 2020 | Airservices has contracted a 2.0Mbps bandwidth using CRV Package C+ for Voice & AMHS services. Bandwidth on the leased line with South Africa / Johannesburg is also 2Mbps. |
| 2 | China | Beijing | AMHS deployed in 2008 which was upgraded to support ATN/IPS in 2013 and upgraded to support exchanging IWXXM in 2020. | support | CRV bandwidth is 3M. Minimally 64kbps for each AMHS connection.. |
| 3 | Hong Kong China | Hong Kong China | December 2009 | Support | 2MB for CRV and 64kbps for IPLCs |
| 4 | Fiji | Fiji Airport/Air Traffic Management Centre | Completed. In June 2019, Fiji completed the transition of ATN BBIS to IPS for the AMHS service from Nadi to Salt Lake, USA & Brisbane, Australia over the CRV network. The local end User still operates on AFTN terminal and is converted to AMHS over the AFTN/AMHS Gateway. | The Comsoft AMHS System supports File Transfer Body Part (FTBP). Our system has the capability of exchanging IWXXM reports of a maximum size of 4MB and FTBP of maximum. | Nadi has contracted a 1.0Mbps bandwidth using CRV Package C+ for Voice & AMHS services. The total bandwidth usage for voice and data is 768K from the total 1.0Mbps. The bandwidth for AMHS is 64Kbps each to Brisbane & Salt Lake Center. It is noted in the ACSICG/7 WP04 presented by USA that 64Kbps is the minimum recommended required bandwidth for AMHS to exchange FTBP for IWXXM. |
| 5 | India | AAI/Mumbai Airport | AMHS is in operation since 2011. | | |

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| | | | <p>Note:</p> <p>1. PO was awarded to Frequentis Comsoft on Jan-2023 for the replacement of existing AMHS System at Mumbai.</p> <p>2. New AMHS System will be having DC at Mumbai & DR at Delhi. Subsequently second CRV connection will be implemented with at Delhi for DR AMHS Operation.</p> <p>3. SDR (System Design Review) meeting with Frequentis Comsoft is planned in May 2023</p> <p>4. Tentative timeline for commissioning of new AMHS System is Dec 2024.</p> | Presently India is not able to exchange the required 4 MB messages and 2 MB FTBP attachments. | Indian Meteorological Department is in the process of upgradation of HPC & DB to support IWXXM. |
| 6 | Japan | Japan/Fukuoka | <p>ATN BBIS router and AMHS installed at 2000.</p> <p>Connection tests with USA 2000 - 2004 and put into operational use in 2005 and over CRV in February 2019.</p> <p>Put into AMHS operation with Hong- Kong and Singapore in 2021.</p> <p>AMHS implementation with China in 2021 , Korea and Taipei in 2022.</p> | <p>Already support exchange of IWXXM messages based on FTBP in August 2015.</p> <p>It is possible to send , receive and transfer up to 2GB for the contents such as FTBP,IPM and IHE in AMHS,and the size of IWXXM supported system by Japan Meteorological Agency is 2MB</p> | AFS links over CRV is a Package A, Bandwidth 2M. |
| 7 | Macao China | Macao China | Q4/2009 | Support exchange of IWXXM messages based on FTBP. | To be determined |
| 8 | Maldives | Maldives / Velana International Airport (VRMM) | Contract awarded to replace existing AFTN system to an AMHS in 1Q2023. Installation and commissioning of AMHS to be completed by 3Q2023 | AMHS supports FTBP | Discussion with PCCW for 128k bandwidth CRV package D |
| 9 | New Zealand | Airways – Christchurch | AMHS connections are in place with Australia, USA and the New | Support | Airways New Zealand has contracted a 1.0Mbps bandwidth using CRV Package C+ for Voice and AMHS services from Auckland and Christchurch. |

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| 10 | Philippines | Philippines/ATMC Manila | Completed March 2018 | Can support IHE and FTBP maximum 1MB (tested with Taipei on 13-May-20) | 1MB Philippines has contracted 2Mbps bandwidth using CRV package "A" voice and data services. |
| 11 | Republic of Korea | Gimpo international airport | ATN/AMHS with China put into operational use in June, 2011. AMHS implementation with China and Japan over CRV will be in 4Q, 2022. | AMHS implementation for supporting FTBP and IHE will be in 4Q, 2022. | AFS links over CRV is a Package A, Bandwidth 2M. |
| 12 | Singapore | Singapore | March 2011 | Yes | 2MB for CRV and minimally 64kbps for IPLCs |
| 13 | Thailand | Thailand | BBIS/BIS Routers already implemented. AMHS has been implemented since July 2011. Connection with Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Myanmar, Singapore, Hong Kong China, and Malaysia implemented. Connection with SITA (SITA AMHS Gateway inter-connections) implemented. Bangkok - Vietnam Circuit IOT Test : Done POT Test: Planned for end of 3Q2021 Bangkok - Rome Circuit IOT Test: Planned for 3Q2021 POT Test: Planned for 4Q2021 | Completed, the IWXXM exchange has been implemented since November 2020. | The capacity of links readied to support in both form. |
| 14 | USA | Federal Aviation Administration | Q4, 2020 | Yes. FAA AMHS has FTBP capability. National Weather Service (NWS) projected to implement IWXXM by Q3, 2021 | Yes. 2MB bandwidth over CRV |