

**Summary of Discussions of the
Fourteenth Meeting of the
Cross Polar Trans East Air Traffic Management Providers Working Group
(CPWG/14)
10-14 December 2012 – Chicago, USA**

1. Background

1.1 The Fourteenth Meeting of the Cross Polar Trans East Air Traffic Management (ATM) Providers Working Group (CPWG/14) was hosted by the United States (US) Federal Aviation Administration (FAA) at the Renaissance Downtown Chicago Hotel in Chicago, Illinois, USA from 10-14 December 2012. The week allowed time for a meeting of the Air Navigation Service Providers (ANSPs), a Pacific Project Team (PPT) Meeting and Workshop, as well as the CPWG/14 plenary meeting.

1.2 The CPWG was established to provide a forum for ANSPs and airspace users to meet and explore solutions for improving air traffic services (ATS) to aircraft which operate between North America and Asia via Cross Polar (CP) and Russian Trans East (RTE) routes.

1.3 Leah Moebius, FAA, facilitated the meeting. Forty-nine participants attended, representing the ANSPs from Canada, Iceland, Japan, Mongolia, Norway, Russia, and the US; the International Air Transport Association (IATA); international airlines and operators, and representatives from industry. Eight guests were invited to make presentations of special interest to the meeting. The list of participants is at **Appendix A**.

2. Opening of the Meeting

2.1. Leah opened the meeting and welcomed participants. She noted that CPWG is an informal group, but the work is acknowledged by the International Civil Aviation Organization (ICAO) through the Trans-Regional Airspace and Supporting ATM Systems Steering Group (TRASAS).

2.2. Susan Horn, FAA, welcomed those attending the meeting and encouraged everyone to continue to participate and progress the work of the group.

2.3. Gene Cameron, United Airlines, invited the participants to visit the United Airlines Network Operations Center (NOC) located on the 27th Floor of the Willis Building on Wed, 12 December. Arrangements had also been made for those interested to visit the SkyDeck on 103rd Floor following the tour of the NOC.

3. Agenda Item 1: Review and approve Agenda

3.1. The following agenda was approved by the meeting

Agenda Item 1: Review and approve Agenda

Agenda Item 2: Administrative Matters (CPWG/13 Report)

Agenda Item 3: Summary of Pertinent Issues from the ANSPs Meeting and other relevant meetings

Agenda Item 4: Report from the Pacific Project Team Meeting

Agenda Item 5: Provide Status on CPWG/13 Actions

Agenda Item 6: ATS Route Catalogue Update

Agenda Item 7: 2012-2013 Cross Polar Work Program

- Respective ANSPs' efforts for improving communications in the area
- Development of a single separation standard in region
- Improve/Increase efficiencies and predictability on Polar Routes

Agenda Item 8: Communications, Navigation, Surveillance (CNS) and Air Traffic Management (ATM) issues

- ANSP Updates/Presentations
- Airline Updates/Presentations
- Others

Agenda Item 9: Other Business

Agenda Item 10: Next Meeting

4. Agenda Item 2: Administrative Matters

4.1. The Summary of Discussions from CPWG/13 was reviewed and approved.

4.2. Nine working papers (WPs) and 19 information papers (IPs) were presented for discussion during the meeting:

Paper	Agenda Item	Action Item	Title	Presenter
WP/01	1		Proposed Meeting Agenda and Timetable	FAA
WP/02	2		Summary of Discussions of CPWG/13	FAA
WP/03	7	CP13-04	Proposed CPWG Work Program	FAA
WP/04	5	CP12-08	Final Draft - Second Edition of the Arctic Air Traffic Management Operational Contingency Plan	FAA
WP/05	5		Action Item List	FAA
WP/06	5	CP12-05 CP13-03	Status of Six-Month Trial to Track Load Russian Trans East Entry Points PILUN, LISKI, and MARCC (BESAT) at Zero Minutes	FAA
WP/07	8		Slot Conflict Management	Delta Air Lines
WP/08	8		NextGen Oceanic Operation Concept Development (NOOCD)	FAA

Paper	Agenda Item	Action Item	Title	Presenter
WP/09	5, 6	CP08-03	ATS Route Catalogue	State ATM
IP/01	2		List of Papers	FAA
IP/02	8		Outcome of ICAO Communications Failure Coordination Group (CFCG) Meeting	FAA
IP/03	8		Status of the Harmonization Process of the Interface Control Document for the North Atlantic and Asia/Pacific Regions (PAN ICD)	FAA
IP/04	5	CP10-14	Information of ETOPS Alternative Airports Development as of November 2012	State ATM
IP/05	5	CP06-01 CP10-08	Summary of the Outcomes of the 4th Air Traffic Control Operation Coordinating Meeting between Civil Aviation Bureau, Japan and Federal Air Navigation Authority of Russia	JCAB
IP/06	8		US ADS-B Activities	FAA
IP/07	8		FAA RNP 4 Authorization	FAA
IP/08	5	CP12-02	Required Communication Performance/Required Surveillance Performance Questions and Answers	FAA
IP/09	5	CP12-04	Updates to Track Advisory Users Guide for Dispatchers (TAUG)	FAA
IP/10	3		The Volcanic Ash Exercise in Kamchatka (VOLKAM13)	JCAB
IP/11	3		Preparation for VOLKAM/13 volcanic ash exercise in the (far) eastern part of ICAO European Region in January 2013	State ATM
IP/12	5	CP06-01	Harmonization of Data Exchange Systems between ACCs	State ATM
IP/13	8		Survey – Level requests within Reykjavik CTA	Isavia
IP/14	5	CP10-02	Update on Traffic Load vs. Capacity	State ATM
IP/15	8		Russian Airspace Improvements	State ATM
IP/16	8		Globally-Interoperable CNS/ATM	ICCAIA
IP/17	5	CP04-35	Update on Revised R-Form and Flight Plan Filing Requirements	State ATM
IP/18	8		New ATM System in Bodo Oceanic FIR	Avinor
IP/19	3		Proposed Change to PANS-ATM	Isavia

4.3. Copies of all WPs and IPs, as well as additional information presented during the meeting were made available on the CPWG web site at http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/enroute/oceanic/cross_polar/

5. Agenda Item 3: Summary of Pertinent Meetings

Air Navigation Service Providers (ANSPs) Meeting, 10 December 2012

5.1. Leah presented a brief overview of the ANSPs Meeting, noting that there had been good discussions on topics to be covered during the plenary meeting. Details would be provided as specific action items are addressed.

5.2. The ANSPs had reviewed and updated the CPWG Work Program, and a revised working paper was made available to all participants. For more information, refer to Agenda Item 7.

5.3. The matter of industry participation at CPWG meetings had been raised prior to the CPWG/14. The ANSPs discussed their concerns and agreed that industry participation would be *by invitation only* to address topics of specific interest to the meeting. It was agreed that a representative from Jeppesen would continue to be invited as a regular participant to address charting issues. Any other industry requests should be forwarded to Leah in advance of CPWG meetings for coordination with ANSPs.

Route Development Group – Eastern Part of the ICAO EUR Region (RDGE/17) Meeting, 24-28 September 2012

5.4. State ATM informed the meeting that they had represented the CPWG at the RDGE/17 meeting. They presented the meeting with information on new routes and changes to the CPWG Terms of Reference.

First Meeting of the Volcanic Ash Exercises Steering Group for the (Far) Eastern Part of the EUR Region (EUR (EAST) VOLCEX/SG/1), 21-23 August 2012

5.5. State ATM provided information on the outcome of the EUR (EAST) VOLCEX/SG/1 meeting held on 21-23 August 2012 in Petropavlovsk-Kamchatsky, Russia. ICAO, EUROCONTROL, Kamchatka Volcanic Eruption Response Team (KVERT), the University of Alaska – Anchorage, Japan Civil Aviation Bureau (JCAB), Japan Meteorological Agency (JMA) and the local meteorological (MET) office had shared information related to observing volcanic ash, issuing advisories, significant meteorological information (SIGMET) and Notices to Airmen (NOTAMs) as well as managing airspace during volcanic events.

5.6. The discussions laid the ground work for an Exercise Directive that would be used in guiding the volcanic ash exercise in Kamchatka on 15-16 Jan 2013 (2100-0600 UTC). The Exercise Directive will be available on the ICAO web site.

5.7. JCAB described the Volcanic Ring of Fire that impacts the North Pacific (NOPAC) air traffic routes. The exercise will simulate an eruption on the Kamchatka peninsula. The Tokyo Volcanic Ash Advisory Center (VAAC) is responsible for that area, and a description was provided as to the flow of volcanic ash information from the observer to Tokyo VAAC to the MET center in order for appropriate SIGMETs to be issued.

5.8. State ATM thanked JCAB and the FAA for their support of the exercise.

5.9. Isavia presented information regarding the proposed change of *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM), paragraph 15.8, by the Air Traffic Management Subgroup (ATM SG) of the International Volcanic Ash Task Force (IVATF).

5.10. The most critical point identified by the IVATF ATM SG was related to the responsibilities of Air Traffic Service (ATS) units and flight crews in determining if the airspace for which an ash cloud was reported or forecast could be used. It was agreed that flight crews, in collaboration with their airline operation centers (AOCs), and based on an established safety management system (SMS), would ultimately be the final authority as to whether to avoid or proceed through a reported or forecast volcanic ash cloud.

ICAO Communication Failure Coordination Group (CFCG)

5.11. The FAA informed the meeting that the CFCG had been formed by the ICAO Air Navigation Bureau in order to address conflicting amendment proposals to change existing communication failure provisions. The Secretariat recognized that many States and some regions preferred to develop communication failure procedures that differed from those in Annex 2. Leah reminded the meeting that CPWG had submitted a proposed change that led to the establishment of this global group.

5.12. ANSPs and airlines are invited to participate in the CFCG. The next meeting will be conducted on 5 Feb 2013 via Internet, with an in-person meeting planned for May 2013.

4th Air Traffic Control Operation Coordinating Meeting between JCAB and Federal State Unitary Enterprise of the State ATM Corporation, 28-29 November 2012

5.13. JCAB presented a summary of the outcomes and accomplishments from the 4th Air Traffic Control Operation Coordinating Meeting between JCAB and the Federal State Unitary Enterprise of the State ATM Corporation, hosted by JCAB in Tokyo, Japan on 28-29 November 2012.

5.14. A one-year-review of the letter of agreement regarding ATC operations between Sapporo and Khabarovsk Area Control Center (ACCs) was completed. With the implementation of Reduced Vertical Separation Minima (RVSM) in Russian airspace in November 2011, transfer of aircraft using altitudes based on feet instead of meters had been introduced. These changes alleviated Sapporo ACC from the responsibility for altitude conversions. The additional usable altitudes have eased controller workload in altitude assignment, and have brought huge benefits to operators. Neither State ATM nor JCAB had identified any problems with regard to RVSM operations and agreed to move forward in order to enhance the efficiency of aircraft operations as follows:

- a. Reduction of longitudinal separation: Sapporo ACC and Khabarovsk ACC will commence consideration of the feasibility of reducing longitudinal separation from 20 nautical miles (NM) to 15NM; and
- b. Implementation of radar hand-off procedures around Sakhalin and Hokkaido.

5.15. State ATM commented that the Russian side would work to expedite signature of the letter of agreement between the JCAB Air Traffic Management Center (ATMC) and the Main Air Traffic Management Center (MATMC) of Russia which both sides have been coordinating.

5.16. Sapporo ACC and Khabarovsk ACC exchanged points of contact for sharing information such as airspace restrictions and coordinating ATC issues.

5.17. Discussions also took place regarding the plans to introduce Air Traffic Services (ATS) Interfacility Data Communication (AIDC). JCAB reported that AIDC would be implemented between Fukuoka ACC

and Shanghai ACC, People's Republic of China in 2014. Considering the resources and workload required for development, JCAB and State ATM agreed to target introduction of AIDC between Sapporo and Khabarovsk ACCs in 2015.

6. Agenda Item 4: Report from the Pacific Project Team (PPT) Meeting/Workshop

6.1. Joel Morin, IATA, facilitated the PPT meeting and workshop held on 11 December 2012. He presented IATA's objectives for the Pacific Project, which are:

- a. User Preferred Routes (UPRs) everywhere between Asia and North America;
- b. Elimination of fixed routes and tracks; and
- c. Organized Track Systems (OTS):
 - § only where and when UPRs lead to excessive penalties to flights;
 - § geographically restricted to minimum area; and
 - § temporarily restricted to high demand periods.

6.2. Joel thanked the FAA for the modeling work that had been undertaken, but indicated that no further modeling of this type was foreseen.

6.3. A discussion ensued regarding what was seen as a conflict between the Pacific Project, and the work in progress by the Informal Pacific Air Traffic Control Coordination Group (IPACG) and the CPWG. The ANSPs took the position that IPACG and CPWG should maintain their initiatives, relatively near-term and mid-term work. JCAB expressed the position that NOPAC changes should be worked bilaterally between JCAB and FAA at IPACG because ongoing studies are related to the airspace between JCAB and FAA. Also, JCAB explained that PACOTS and associated UPRs have long been reviewed and developed at IPACG; therefore, detailed work by the Pacific Project on PACOTS issues should also be avoided so as not to duplicate work. The meeting recognized the need for the clarification of the work of Pacific Project and agreed that close coordination between associated Working Groups should be sought in order to achieve efficient flight operations between North America and Asia via the Arctic Ocean, Siberia and the North Pacific.

6.4. NavCanada provided the following information on the status of communication and automation systems needed to implement UPRs in the Vancouver Flight Information Region (FIR):

- a. AIDC would be explored between Oakland Air Route Traffic Control Center (ARTCC) and Vancouver ACC in early 2014.
- b. Controller Pilot Data Link Communication (CPDLC) was scheduled for implementation in February 2013.
- c. Conflict prediction was scheduled for September 2013.
- d. Automatic Dependent Surveillance - Contract (ADS-C) was considered to be a required enabler, however, the timing had not yet been determined. NavCanada agreed to provide IATA with information regarding opportunities for fast tracking this implementation.

6.5. JCAB provided information on the movement towards more flexible routings in the NOPAC. This issue will continue to be worked by the IPACG and updates will be shared at the Pacific Project Team meetings.

6.6. The PPT Action Items were updated and are provided at **Appendix B**.

7. Agenda Item 5: Provide Status on CPWG/13 Actions

Administration

CP01-08C: Air Traffic Flow Management (ATFM) collaboration between FAA/ATO and State ATM

7.1. FAA and State ATM informed the meeting that bilateral coordination continued on the ATFM Annex and letter of agreement between the FAA Air Traffic Control System Command Center (ATCSCC) and State ATM Main Air Traffic Management Center (MATMC).

CP13-06: Provide comments on the format of the Jeppesen Arctic Polar and North Pacific charts

7.2. Since no comments had been provided by the airlines, it was agreed that this action item would remain open.

7.3. State ATM requested that Jeppesen publications accurately reflect all route restrictions from the Russian Aeronautical Information Publication (AIP). Examples will be provided to Jeppesen. **New Action Item CP14-01** was opened to reflect this action.

CP13-07: Request that TRASAS designate an ICAO representative to attend CPWG meetings

7.4. Although this was deferred for discussion at the TRASAS/4 meeting, the ICAO European and North Atlantic (EUR/NAT) Office was invited to send a representative to CPWG/14. Due to schedule conflicts, they were not available to attend. Another invitation will be issued for CPWG/15.

Reduce Separation Standards

CP12-01: Further reduce separation minima within Arctic airspace

7.5. Anchorage ARTCC (ZAN) reported that 30 NM lateral and 30 NM longitudinal separation had been implemented in Sectors 10 and 11 in November 2012. It was agreed that this action had been completed.

Improve Communications

CP06-01: Harmonize Flight Data Exchange between Facilities

7.6. During CPWG/13, FAA agreed to look into the technical feasibility of rerouting the existing Russian CPDLC/ADS-C circuit via Anchorage to Annapolis. FAA reported that they would not be able to reroute the circuit due to legal concerns. Additional information was provided to State ATM regarding planned FAA telecommunications updates.

7.7. It was agreed to close Action Item CP06-01 and open a **new Action Item CP14-02**. State ATM will continue to consider the feasibility of implementing AIDC with ZAN. FAA will send a letter to the Russian Federal Air Transport Agency (FATA) detailing the need for AIDC at Magadan ACC.

CP10-13: Expand CPDLC/ADS-C capability for Magadan FIR and install CPDLC/ADS-C at Murmansk

7.8. State ATM will expand ADS-C/CPDLC services in two additional sectors at Magadan ACC in early 2013. A CPDLC/ADS workstation will also be added at Murmansk ACC in 2014-2015.

CP11-01 & CP12-14: Advance communications capabilities for the Arctic area

7.9. It was agreed at CPWG/12 and CPWG/13 that the CPWG membership did not have the technical expertise to progress further improvements to communications in the Polar region. The terms of reference of the Communications Task Force were revised to limit their role to monitoring communication initiatives and technologies. It was agreed that TRASAS/4 would be informed accordingly and a recommendation would be made to dissolve the CPWG Communications Task Force.

Improve Efficiencies

CP04-31: Implement use of radar procedures between Magadan ACC and Anchorage ARTCC

7.10. State ATM advised that the target date for Providenia radar had been delayed to the end of 2014.

CP04-35: Shorten and simplify Form "R" and filing process

7.11. State ATM informed the meeting that the revised R-form and flight plan (FPL) filing requirements were published in the Russian AIP effective 15 November 2012. This was a step toward the centralization of FPL addressing and processing. Filing of FPLs is now allowed at least 120 hours before the flight but should not be later than three hours before the flight. Full details of the new procedure are available in the Russian AIP, GEN 1.2-1 through 1.2-10; ENR 1.10-1 through 1.10-4; and ENR 1.11-1 through 1.11-2.

7.12. United Airlines asked State ATM if it would be acceptable to list all possible entry/exit points unpaired on the Form R. State ATM agreed to look into this matter and respond at the next meeting.

CP06-02: Implement Ocean21 in the Arctic FIR

7.13. FAA notified the meeting that the expansion of Ocean21 into Anchorage Center's Arctic airspace had been delayed until late 2014/early 2015 due to software issues and an effort to integrate Automatic Dependent Surveillance – Broadcast (ADS-B).

7.14. Concerns were raised by IATA and the airlines regarding the delay, and FAA was asked to work with the appropriate program office to reconsider their priorities in order to move this item forward. FAA explained that there was a recent re-prioritization of all Ocean21 change requests. Due to budget cuts, existing safety issues had to take priority over new implementations.

7.15. IATA requested a list of the priority sequence items for Ocean21. FAA will provide the information that can be released to the next meeting.

CP06-12: Tactical Reroutes Prior to Entering Russian Airspace

7.16. The meeting was advised that the need for tactical reroutes had been discussed during a bilateral meeting between FAA and State ATM. It was agreed that recent changes had eliminated the need for a formal tactical reroute procedure. In response to a need expressed by Air Canada for a tactical reroute procedure, State ATM explained that the new amendment to the Russian AIP described the Change Message procedure in place to conduct a tactical reroute. It was agreed that this action item could be closed.

CP07-02: Add additional entry/exit fixes on the FIR boundaries

7.17. New Cross Polar boundary fixes were published effective 18 Oct 2012. State ATM will continue their efforts to establish additional Cross Polar entry fixes and provide an update to the next meeting.

7.18. The meeting agreed to consider a State ATM proposal to implement new high level boundary fixes to correspond with low level fixes BATNI, ADLEN, LARSA, and OLTON. State ATM will assess the possibility of realigning the routes from these entry/exit fixes. **New Action Item CP14-03** was opened.

7.19. The FAA commented that these fixes might be more valuable once radar is available, and would reduce loading over VALDA. **New Action Item CP14-04** was opened.

CP08-07: Implement DOTS+ Online (DPO)

7.20. In response to concerns raised at CPWG/13, FAA informed the meeting that the latest version of the Firefox web browser works with DPO. The FAA is unable to test recent versions of Internet Explorer. Any users experiencing problems should contact the DPO Help Desk.

7.21. The DPO technical staff is looking to make improvements to DPO. Any specific questions or suggestions should be submitted directly to the DPO Help Desk at the e-mail address provided to DPO users. Delta Airlines requested that DPO make live traffic information available. The FAA suggested that operators could access the Traffic Situation Display (TSD) through the FAA ATCSCC, which provides information on live traffic.

7.22. Anyone requesting access to DPO was asked to contact Susan Horn at susan.e.horn@faa.gov. Susan will validate the need and notify the DPO Help Desk, who will then contact the requestor with a list of required actions. Unless the requestor responds to the Help Desk, no further action will be taken.

7.23. NavCanada presented a review on their view of DPO. Software issues identified prior to CPWG/13 had been rectified, and Edmonton ACC expected to begin using the system on a daily routine basis in the very near future as DPO supports NavCanada corporate objectives.

7.24. DPO has been satisfactorily implemented, and the meeting agreed that Action Item CP08-07 had been completed.

7.25. Delta Airlines had noticed an increase in the number of flights receiving track, altitude and speed changes for Russian entry without contact by the FAA ATCSCC or the NavCanada National Operations Centre to the Airline Operations Center (AOC) Dispatch office.

7.26. They informed the meeting that certain aircraft, particularly the Boeing 747-400, are very speed sensitive and burn more fuel with a speed reduction versus a slight change in altitude or track. These are usually weight and fuel critical long haul flights.

7.27. Delta re-emphasized the procedures that had been in place for years, and recommended that the ATCSCC and National Operations Centre advise the AOC of conflicts in order to jointly determine the best resolutions at the earliest possible time.

7.28. The FAA again explained that access to the TSD would help the airline dispatchers. A live display was presented to the meeting, and the airlines were informed that the tool was available if they requested access. Airlines wishing to request access to the TSD may contact leah.moebius@faa.gov for an application form.

CP08-12: Eliminate restrictions where possible

7.29. FAA provided a list of current restrictions on Cross Polar routes. Further discussions regarding the reduction and elimination of restrictions and constraints were held during the PPT meeting. An update will be presented to CPWG/15.

CP10-02: Provide flow constraint information

7.30. State ATM presented an update on Khabarovsk ACC peak hour traffic load vs. capacity for the period between 1 January and 24 Nov 2012.

CP10-03: Consider mixed fleet capabilities in the delivery of future operational efficiencies

7.31. The preliminary results of the 2012 Avionics Survey were presented by IATA. The survey covered fleet capabilities and equipment. Final results will be presented to the next meeting.

CP10-04: Consider establishing additional fixes in a “core area” of Edmonton FIR based on Great Circle Routes

7.32. NavCanada has continued to hold internal discussions on this action item and agreed to update at the next meeting.

CP10-14: Provide information on minimum level of service maintained outside operational hours for emergency diversions

7.33. Information was presented by State ATM on Russian en-route alternate airports. At CPWG/13 an additional request was made to add major accepted wide-body aircraft types and minimum levels of service during airport closures. State ATM informed the meeting that the airports were unwilling to provide information on minimum services available during closure hours.

7.34. Norilsk Airport, which is close to the routes, was planning a multi-million dollar investment in airport development. The owner expected that the airport would be assigned international status in 2016. In order to obtain such a status, an international terminal was to be designed for a capacity of 220-250 passengers per hour. It was also possible that the existing runway would be rebuilt. The current runway location was not compatible with the annual wind patterns, which sometimes made landings difficult. The preliminary calculations had been undertaken to expand and change the runway profile. The airport was officially certified to handle A319 and A320 aircraft.

7.35. United Airlines commented that this was extremely helpful information and airlines appreciated the updates, which contribute to the safety of flight in the region. State ATM will continue to provide updates.

CP12-04: Monitor changes to Track Advisory Users Guide

7.36. The FAA provided updated information regarding the ATFM procedures outlined in the Track Advisory Users Guide for Dispatchers (TAUG). Anchorage ARTCC track advisory procedures had been revised to reflect the inclusion of two new waypoints, LURUN and AMATI. The update also reflected that Russian Trans East (RTE) fixes FRENK, KUTAL, and ERNIK were being track loaded at zero minutes in trail.

7.37. Airlines were asked to continue to track load these fixes in order to make early intent information available.

CP12-05: Reduction of track loading time over FRENK, KUTAL and ERNIK

7.38. The original trial to track load flights crossing the ZAN/Russian FIR boundary at fixes FRENK, KUTAL, and ERNIK at zero minutes commenced in January 2012. Following a successful trial and with agreement from the adjacent FIRs, ZAN made this a permanent procedure on 28 August 2012. The meeting agreed that Action Item CP12-05 had been completed.

CP13-03: Reduce track loading time over LISKI, PILUN and MARCC

7.39. In August 2012, ZAN began a new six-month trial to track load the ZAN/Russian FIR boundary fixes PILUN, LISKI, and MARCC (BESAT) at zero minutes. At the time of the meeting, the trial appeared to be meeting everyone's objectives and no negative feedback had been received. It is likely that these changes will be made permanent at the conclusion of the trial. The FAA will provide an update to the next meeting.

7.40. State ATM suggested that consideration be given to reducing track loading time to zero minutes for fixes LUMES, KUNAD, KOKES, RUSOR, and BAMOK which have low traffic levels. ZAN agreed to coordinate as appropriate and report to the next meeting. **New Action Item CP14-05** was opened in this regard.

CP12-06: Coordination between State ATM and General Administration of Civil Aviation of China (CAAC) Air Traffic Management Bureau (ATMB)

7.41. During CPWG/12, it was agreed to pursue a proposal for a new entry/exit point east of SIMLI. No update was available. An update will be provided to the next meeting.

CP12-11: Remove ACA M Tracks and NCA L Tracks.

7.42. NavCanada reported that this issue was still under discussion at the Head Office in Ottawa, and that an update was expected to be available for the next meeting.

CP13-02: Justify need for route requests

7.43. United Airlines had been asked at CPWG/13 to consider how the implementation of AMATI would affect previous route requests for ORVIT-LUMEN. United Airlines agreed to prioritize all route proposals and report to CPWG/15.

CP13-05: Increase use of Area Navigation (RNAV) routes in Russian airspace

7.44. State ATM provided a review of traffic density on RNAV routes. The review showed poor utilization by the airlines. Airlines were requested to look into the use of those routes and try to increase utilization. Further information will be provided by IATA and airlines to CPWG/15.

Contingency Response

CP10-08: Improved contingency collaboration between State ATM and JCAB

7.45. Collaboration was undertaken during the 4th Air Traffic Control Operation Coordinating Meeting between JCAB and Federal State Unitary Enterprise of the State ATM Corporation. (Paragraph 5.16 refers). State ATM offered to follow up with FATA regarding coordination with JCAB.

CP12-08: Expand Contingency Plan

7.46. FAA presented an updated draft of the 2nd Edition of Arctic Air Traffic Management Operational Contingency Plan which contained added material for Fukuoka FIR. ATMB had declined to submit information for the Plan.

7.47. During the ANSPs Meeting, it was agreed to defer publication in order to consider adding new information following the volcanic ash exercise in January 2013. FAA will present the final draft of the Second Edition to CPWG/15.

8. Agenda Item 6: ATS Route Catalogue Update

CP08-03: Establish ATS Route Catalogue

8.1. The meeting reviewed the updated ATS Route Catalogue presented by State ATM, which contained status and information on route proposals since the CPWG/13.

8.2. United Airlines commented regarding the proposed Trans East Route Segment (TVRS)/42 between FA and SIMLI, noting that it may take a long time to get resolution with China for this, but it would provide a definite advantage. They would also like this to become an international route. IATA Beijing has documented the savings, and will make that information available to State ATM. State ATM asked United Airlines to provide written comments due to the complexities to implement this route.

8.3. Since it was agreed at CPWG/13 that the ATS Route Catalogue would be a standing agenda item for each meeting, it was agreed that this action item could be closed.

9. Agenda Item 7: 2012-2013 Cross Polar Work Program

CP13-04: Replace the CPWG Planning Chart with a CPWG Work Program and associated lists of Accomplishments, Near-Term Projects and Mid-Term Projects

9.1. The ANSPs developed a Work Program, list of ongoing tasks and accomplishments to replace the CPWG Planning Chart. This would be reviewed at each ANSPs Mtg and presented as a standing agenda item.

9.2. Based on the discussions during the meeting, it was agreed that the Tactical Reroute Procedure could be moved to the list of accomplishments (paragraph 7.16 refers).

9.3. The new CPWG Work Program is at **Appendix C**.

9.4. The ANSPs also agreed that they should consider the feasibility of reporting communications and data link performance to CPWG meetings based on information collected from Pacific Central Reporting Agency (CRA) and North Atlantic Data Link Monitoring Agency (DLMA). It was therefore agreed that a **new Action Item CP14-06** be opened to monitor communications and data link performance.

10. Agenda Item 8: Communications, Navigation, Surveillance (CNS) and Air Traffic Management (ATM) issues

Status of Harmonization Process of Interface Control Document for the North Atlantic and Asia/Pacific Region (PAN ICD)

10.1. The FAA updated the meeting on the status of the process to consolidate the Interface Control Document (ICD) for the North Atlantic (NAT) and Asia/Pacific (APAC) Regions, to provide for harmonized AIDC. With the concurrence of the ICAO APAC Office, the ICAO EUR/NAT Regional Director took appropriate measures to establish the inter-regional APAC/NAT AIDC task force with a task to develop a harmonized AIDC document for the endorsement by the North Atlantic System Planning Group (NAT SPG) and Asia Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG). The eventual goal of this process would be to have a global AIDC.

10.2. The United States will lead this work. The first meeting of the task force was proposed from 16 to 18 January 2013, in Paris, France. The majority of the work was anticipated to be conducted via e-mail and web-based meetings. In furtherance of this effort, a group was created on the new ICAO Secure Portal website entitled, "AIDC", where all materials concerning this effort are available to all who have become regular users of the portal website.

10.3. A new Action Item CP14-07 was established to monitor the progress made by the Inter-Regional APAC/NAT AIDC Task Force.

Required Navigation Performance 4 (RNP-4) Authorization

10.4. FAA Flight Standards Inspector Trent Bigler provided an informational briefing on the FAA's Procedures for Obtaining Authorization for RNP-4 Oceanic and Remote Area Operations in accordance with FAA Order 8400.33.

CP12-02: Disseminate information on RCP and RSP

10.5. Tom Kraft, FAA subject matter expert, attended the meeting to present an introduction to Required Communications Performance (RCP) and Required Surveillance Performance (RSP), highlighting why these criteria are needed. In addition, the FAA had developed a Question and Answer document the NAT Region, which was made available for the benefit of CPWG participants.

10.6. Participants were given the opportunity to ask technical questions for better understanding of the RCP and RSP concepts. The meeting was also informed that a NAT Performance Based Communication and Surveillance (PBCS) Workshop had been scheduled to be held at the ICAO EUR/NAT Office in Paris, France on 20-22 February 2013. The aim of the workshop is to provide training and education for ANSPs. Anyone interested in participating was asked to contact the ICAO EUR/NAT Office at icaoeurnat@paris.icao.int and make reference to EUR/NAT 12.0719-TEC (NAE/DAC) dated 10 October 2012.

CP13-01: Consider the need for a global Performance Based Communication and Surveillance Implementation Plan

10.7. Based on discussions during the ANSPs Meeting, it was agreed that a global PBCS plan would be more appropriate than a plan for Arctic airspace. Action Item CP13-01 was closed.

Global Operational Data Link Document (GOLD) Amendment Program

10.8. The FAA provided background on the GOLD amendment program. It was noted that the GOLD Working Group expected the GOLD, Second Edition, to be completed by March 2013. This document will supersede the NAT Data Link Guidance Material and the FANS 1/A Operations Manual (FOM).

10.9. The GOLD includes guidance material for data link service provision, operator preparation and aircraft equipage, controller and flight crew procedures, and includes performance-based specifications for communications and surveillance and post-implementation monitoring and corrective actions. The GOLD has become widely recognized as a very significant step towards the global harmonization of ADS-C and CPDLC procedures for pilots and air traffic controllers.

10.10. While the GOLD is considered a regional document, the GOLD Working Group is currently facilitating cross-regional coordination of changes for the GOLD, Second Edition, to ensure they are acceptable by all participating ICAO Regions. The ICAO Operational Data Link Panel is monitoring this work.

10.11. The amendment program will allow GOLD to be applicable to existing and new data link implementations throughout the world. Procedures for submitting changes are contained in Paragraph 8 of the Foreword to the GOLD.

Satellite Voice (SATVOICE) Guidance Material (SVGGM)

10.12. In June 2010, at the request of the Air Navigation Commission (ANC), the NAT SPG and the APANPIRG, the Inter-Regional SATCOM Voice Task Force (IRSVTF) was tasked to develop globally applicable guidance material to promote global harmonization of SATVOICE services. The SVGGM does not mandate or advocate use of SATVOICE, but only provides standardized guidance for those wishing to use this communications capability.

10.13. The IRSVTF issued the SVGGM, First Edition, on 24 July 2012. The guidance material has been endorsed by the APANPIRG and NAT SPG.

FAA NextGen Oceanic Operation Concept Development (NOOCD)

10.14. The FAA introduced the NextGen Oceanic Operational Concept Development project. The goal of the project will be to produce an oceanic concept of operations, roadmap and validation plan for the near-, mid and far-term. These products will identify appropriate benefits, and recommend automation systems, equipment, and procedures, taking into account future technologies developed both nationally and internationally.

10.15. The collaborative involvement of flight operators, air traffic control facilities, related groups (i.e., CPWG) and others to identify baseline operations, current and future initiatives, desired technological and operational improvements, and most importantly, shortfalls within oceanic and offshore operations, is crucial to the success of this project.

10.16. The focus of the current data collection is US controlled oceanic and offshore airspace, however any relevant comments regarding adjacent air navigation services that may affect US oceanic operations were invited.

10.17. An initial shortfalls document will be drafted in early 2013.

10.18. FAA invited Pacific and Arctic flight operators from CPWG to provide input. IATA was also invited to work with FAA to gather data from other regional flight operators. Airlines and operators provided points of contact who received detailed information and questionnaires. The FAA asked that comments and responses to questionnaires be submitted by **14 Jan 2013** to John Noblitt at john.noblitt@faa.gov, with copy to Peter Hruz at Peter.Hruz@metronaviation.com.

ANSP Updates

NavCanada

10.19. NavCanada presented an update on the activities in the Edmonton FIR, addressing the communications and surveillance coverage; traffic flows; technology advancements (ADS-B, CPDLC, and medium term conflict detection); FIR enhancements, including the status of the Canadian Automated Air Traffic System (CAATS), sector amalgamation, reduced separation for Polar Region; and customer priorities.

10.20. NavCanada informed the meeting that AIDC was planned for spring 2013 between Edmonton ACC and Reykjavik ACC, and that work was underway to implement AIDC between Vancouver ACC and Oakland ARTCC. Updates will be provided to the next meeting under new Action Item CP14-02.

10.21. IATA expressed concern that Cold Lake military airspace impeded operations between Houston and Tokyo. More timely notice was needed if there is an opportunity to allow access to the Cold Lake airspace. A **new Action Item CP14-08** was opened to address this.

10.22. The meeting was advised that details regarding CPDLC Phase 3 capabilities were included in an Aeronautical Information Circular (AIC). ADS-C is planned to be used for separation in Fall 2013. In areas with direct controller pilot communications, NavCanada will be able to use smaller separations than those associated with RNP4. CPDLC was implemented between ZAN and Edmonton North in February 2012. Since that time, there have not been many trouble reports regarding data transfer.

10.23. The history of the Northern Control Area (NCA) routes and Northern Organized Track System (NOR OTS) was reviewed. NavCanada informed the meeting that they were committed to remove the requirement to file NOR OTS and NCA in order to go to full random routing by Spring 2013. Some NCA routes will remain for operators who want to use them. The enabling factors for this change are ADS-B and VHF PAL coverage, CAATS, CPDLC, RNP10/RNP4, and controller training on operator issues.

10.24. A trial began to validate the removal of the NOR OTS on 10 Dec 2012. Based on feedback gathered in January 2013, the trial may be extended. A final assessment will be conducted in March 2013, with ongoing customer consultations for another six months to one year. **New Action Item CP14-09** was opened to follow the progress.

10.25. United Airlines and Delta Airlines commented that preliminary indications show that this will be a major efficiency improvement.

FAA/Anchorage ARTCC

10.26. ZAN updated the meeting on current activities, including ADS-B service volumes, a trial to merge PACOTS tracks C and E, PACOTS track generation restrictions, traffic count data and Unmanned Aircraft System (UAS) operations. Information was provided on planned military exercises in summer 2013. A **new Action Item CP14-10** was opened regarding the trial to merge PACOTS tracks C and E.

10.27. IATA requested that FAA look into the feasibility of eliminating the requirement to flight plan over a named or latitude/longitude fix at 141W. **New Action Item CP14-11** was established in this regard.

10.28. In addition, IATA requested that FAA expand the ADS-C CDP trial underway in ZOA airspace to ZAN airspace. FAA will hold internal discussions on the feasibility and respond to CPWG/15. A **new Action Item CP14-12** was opened.

State ATM Corporation

10.29. A report on Russian airspace improvements was provided, noting increases in Cross Polar, Russian Trans East, Trans Siberian and Transpolar traffic. The Russian Federation operates 52 Air Traffic Services Units, including the MATMC, seven Zone ATM Centers, 36 ACCs (including 17 with Traffic Management responsibilities) and eight auxiliary ACCs.

10.30. In 2012 State ATM Corporation of Russia accomplished a number of important initiatives aimed at meeting user requirements, establishing and expanding transit ATS routes and keeping balance between the available ATC capacity and growing traffic. As a result of ongoing cooperation with neighboring ANSPs and the airline community, new entry/exit points were opened with adjacent FIRs in Latvia and the US. Information on newly implemented routes was presented. Information was also made available on improvements to ATS route networks, traffic density and main traffic flows.

10.31. The Northwest Air Navigation Branch briefed the meeting on the status of Magadan ACC, including flight density, construction of the new ACC, fixed satellite communications/VHF comm/radar coverage and measures to be taken to expand radar coverage.

10.32. An update was also presented on Murmansk ACC airspace changes, traffic density in oceanic sectors, new routes to be added in early 2013, a new fix on the border with Norway and HF radio equipment and coverage.

10.33. United Airlines expressed their appreciation for the changes in Magadan ACC.

ISAVIA

10.34. Information was presented on a survey made by Isavia to find out the number of pilot change requests and the percentage that were approved. The survey was conducted on level requests by westbound traffic exiting at/north of 66N060W from 15-31 July 2012.

10.35. Aircraft entry and exit flight levels were noted as well as any flight level requests made via data link (CPDLC or ARINC 623) or Iceland radio. Isavia noted that this excluded any requests made by aircraft to Reykjavik Control on VHF as those requests were not available in the AFTN or data link log. The number of requests was therefore likely to be higher than indicated in this report. The outcome of the trial was that:

- a. 47% of 864 aircraft made a level request
- b. 79% were approved (357) – 95 requests were rejected or partially approved
- c. 63% changed levels – 37% did not
- d. At least 79% got what they wanted transiting through Reykjavik into Edmonton, does not consider requests made on VHF

10.36. It was noted by both ANSPs and operators that the NAT culture had not supported requests for changes to speed or altitude. Efforts are currently underway to encourage operators to make those requests. NavCanada has been briefing the NAT cultural issues during their users' forums.

10.37. Isavia stated that the survey was very work intensive as requests had to be manually counted. Based on the workload, they would not be willing to provide this information to CPWG on a regular basis.

Avinor

10.38. Information was provided on the new automation system replacement in Bodø FIR. The new system will provide several improvements and implement new services within the Bodø Oceanic FIR. It will consist of two controller working positions, a control and monitoring position, and a simulator. A simulator has not been available for the old system, so this will also make training of new controllers easier and more efficient.

10.39. In addition to improved conflict probing, the new system will implement radar data integration, data link services, and On-Line Data Interchange (OLDI) services with adjacent units. Data link services will consist of ADS and CPDLC, as well as Oceanic Clearance Delivery.

10.40. The level of automation in the new system will facilitate increased capacity as well as improved quality of the service provided. It will reduce the workload of controllers as well as flight crew. The implementation of OLDI will also reduce the time spent on manual coordination with adjacent units significantly.

10.41. The new system will also be compatible with recently implemented features such as FPL 2012 and the Centralized Code Assignment and Management System (CCAMS). **New Action Item CP14-13** was opened to reflect that an update on the new automation system replacement in Bodø FIR will be presented to the next meeting.

10.42. The meeting was also informed that Avinor is responsible to both the ICAO NAT (Bodø Oceanic FIR) and EUR regions. There are three ACCs located at Oslo, Stavanger and Bodø. New VHF stations have been established for oceanic use. Information for flight planning had been made available at <https://www.ippc.no>. Most of the information is available without a user logon.

10.43. United Airlines requested that Avinor provide information for Extended-range Twin-engine Operational Performance Standards (ETOPS) diversion airports. This was added to Action Item CP10-14.

JCAB

10.44. JCAB described the operational trial for data link departure clearances that was underway. The trial provides departure clearances by data link, preventing human error, mitigating controller/pilot workload and improving off-block delays due to voice communications congestion. The trial began 28 Jun 2012 at Tokyo and Narita Airports for domestic flights departing and previously coordinated with JCAB. Further details are provided in the Aeronautical Information Circular (AIC) 022/12.

Industry Updates

Iridium Aviation Services

10.45. Brian Pemberton, Director Product Management, Iridium presented a communications overview and roadmap to the meeting. He reviewed the market growth and technical advantages from the Iridium network's unique attributes. Summaries were provided on Short Burst Data service and FANS over Iridium.

10.46. He explained that the SATCOM Voice Platform is compliant with the SVGW, providing fully redundant, high availability service. Iridium will be participating in the FAA operational evaluation

coordinated through the Performance-based Operations Aviation Rulemaking Committee (PARC) Communications Working Group (CWG).

10.47. Schedule highlights were reviewed for the Iridium NEXT, which will replace current constellation of 66 LEO satellites. Deployment is planned for early 2015 to 2017 and will provide increased network capacity and high data speed capabilities.

10.48. The Aireon joint venture between Iridium and NAV CANADA was also summarized. FAA, Harris Corporation and ITT Exelis are also supporting this venture. Aireon will provide fully global (100%) ADS-B coverage by installing a space-based ADS-B receiver on each Iridium NEXT satellite. It may replace procedure-based airspace once it is fully operational. It is expected to provide global control, coverage, optimization and safety.

International Coordinating Council of Aerospace Industries Associations (ICCAIA)

10.49. Mike Matyas, representing ICCAIA, presented information concerning the efforts of ICCAIA members Boeing and Airbus to cooperatively promote globally-interoperable CNS/ATM solutions.

10.50. He explained that they had worked together to develop Baseline 2 ATS data link capability and to help define guidelines for PBN, initially through RNP Authorization Required approaches. Future capabilities will be initial 4D trajectory based operations with time of arrival control and Ground Based Augmentation System (GBAS) Category II and III approaches. They helped develop ADS-B Out and will provide future capabilities with ADS-B In applications.

10.51. Airbus and Boeing are participating in programs aimed at developing traffic flow management techniques for NAT traffic flows to increase efficiency of arrivals at busy coastal airports. These techniques are expected to be applicable to other regions.

10.52. Boeing and Airbus are cooperatively working with FAA and EUROCONTROL to incorporate needs from other areas of the world into regional programs in order to promote globally-interoperable CNS/ATM solutions. In parallel, Airbus and Boeing assist in bringing globally-interoperable CNS/ATM solutions to ICAO for worldwide adoption and deployment.

Space Weather

10.53. Joe Kunches, US National Oceanic and Atmospheric Administration (NOAA) presented key points on the space weather impacts to aviation, describing the 2012 events, and noting that increased activity was expected through 2016. He also gave an outlook for 2013.

10.54. A summary of ICAO Space Weather activities was provided:

- a. 2012: Develop initial set of performance requirements and complete CONOPS
- b. 2013: Validate performance requirements
- c. 2014: Adopt CONOPS
- d. 2016: Implement space weather procedures

10.55. The airlines thanked Joe for the information provided, and for his support to CPWG.

11. Agenda Item 9: Any Other Business

11.1. State ATM asked FAA to review previous studies regarding the relocation of BAGLI and present information to CPWG/15. **New Action Item CP14-14** was opened.

12. Agenda Item 10: Next Meeting

12.1. Avinor kindly offered to host CPWG/15 in Norway at the Bodø ACC. The meeting was tentatively scheduled for 13-17 May 2013. A local web site was recommended to obtain area information: <http://www.visitbodo.com>. Further information will be provided closer to the meeting.

12.2. NavCanada volunteered to host CPWG/16 in Fall 2013. Details will be discussed at the next meeting.

13. Closing of the Meeting

13.1. Leah thanked Leslie McCormick for her support to the CPWG over the previous three years, announcing that this was her last meeting due to other work responsibilities. The meeting concluded with Leah expressing her appreciation to all participants for their ongoing support and participation in the meeting.

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Pacific Project Team/4 Action Item List

Action Number	Goal	Information/Status	Responsible Organization	Action Pending	Action Due	Status
PP02-01	Model UPR scenarios	FAA presented model data at PPT/4. The workload required to generate the data was very onerous on FAA resources. Further modeling requirements to be determined.				Closed
PP02-02	Collect NOPAC traffic count data	ZAN presented detailed NOPAC traffic count data.	FAA	FAA to check into the feasibility of providing representative 24hr airspace loading to support analysis. This will be updated during the telcons.	May 2013	Open
PP02-04	Consider implementation of flexible tracks between approved entry and exit points within the RTE region on a daily basis	State ATM provided information on the regulatory and legislative requirements for operating off-routes and publishing routes. Some flexibility could be provided over the high seas under certain situations. UAL presented information on a paper trial conducted. Results indicated the potential for some time and fuel savings, however they were inconclusive.	IATA	IATA to continue working with FATA on finding an acceptable solution for increased flexibility of routings over the high seas controlled by the Russian Federation at and above FL290.	May 2013	Open
PP02-05	Realignment of the NOPAC	JCAB and FAA will continue to pursue options for realignment of the NOPAC in conjunction with the Pacific Project. JCAB presented an IP on potential efficiency improvements in the NOPAC.	JCAB/FAA	JCAB and FAA will report on any progress at future meetings.	May 2013	Open
PP02-06	Develop a draft Pacific Project plan with timelines.	Project plan to be developed collaboratively once the environment and constraints are better understood.	IATA	IATA to include this on the telcon agenda and progress development of a draft.	May 2013	Open

CPWG/14 Summary of Discussions
Pacific Project Team Action List
Appendix B

Action Number	Goal	Information/Status	Responsible Organization	Action Pending	Action Due	Status
PP03-01	Establish interim PPT telcons	The meeting agreed that telcons were needed in between meetings to progress the work of the PPT.	IATA	IATA to issue invitation to the first periodic telcon, which is scheduled for 17 Jan 2013 at 1800 EST	Jan 2013	Open
PP04-01	Eliminate constraints used for track generation	FAA/JCAB to provide details of variables and track generation rules to be reviewed collaboratively	FAA/JCAB/IATA	Collaboratively review information provided during the telcons. Provide update to PPT/5.	May 2013	Open
PP04-02	Eliminate constraints for flight planning	Collect and review information on airspace constraints, justification and any plans to eliminate them.	FAA/JCAB/IATA	FAA to provide catalog of constraints. JCAB to provide constraints from AIC for general discussion during telcons. IATA to review constraints and provide priority list for removal to PPT/5.	May 2013	Open

Cross Polar Trans East Air Traffic Management Providers' Work Group (CPWG)

Work Program

The Cross Polar Trans-East Air Traffic Management (ATM) Working Group (CPWG) is recognized by the International Civil Aviation Organization (ICAO) Trans-Regional Airspace and Supporting ATM Systems Steering Group (TRASAS) as a forum to improve the provision of air traffic services (ATS) to aircraft which operate between North America and Asia via Cross Polar and Russian Trans East routes. The CPWG is composed of representatives from the air navigation service providers (ANSPs) responsible for providing ATS in the Arctic and adjacent airspace, representatives from international organizations representing airspace operator groups, and international airlines that operate in the airspace.

Background

During the discussions at the sixth meeting of the CPWG (CPWG/6) held in Hong Kong China in November 2008, it was agreed a work program was needed that would focus on strategic objectives.

Further discussions during the seventh meeting of the CPWG (CPWG/7) held in Paris, France in June 2009 identified five objectives to provide the overall structure for the Work Program. They were:

- a. Reduce Separation Standards
- b. Improve Efficiencies for Traffic on Cross Polar and Russian Far East Routes (Routes, Procedures, and System Performance)
- c. Improve Communications
- d. Improve Weather Reporting
- e. Develop Contingency Plan/Safety

Based on these objectives, a Planning Chart was developed to document near- and mid-term activities, as well as to maintain a summary of accomplishments.

During a meeting of the air navigation service providers (ANSPs) held in Reykjavik, Iceland in June 2012 prior to the thirteenth meeting of the CPWG (CPWG/13), the group considered the value of the Planning Chart in the format that had been used. The meeting felt that the chart had expanded beyond the original intent, which was to serve as a list of near- and mid-term activities, as well as a summary of accomplishments.

It was agreed that the CPWG needed a written Work Program, which would describe and categorize the activities listed on the Planning Chart, and define near-term or mid-term planning goals. As goals are completed, they would be moved into a list of accomplishments that would be a part of the Work Program. The Planning Chart could become an appendix to the Work Program to track the status of the near-term items.

CPWG Objectives

This section describes the five current objectives of the CPWG.

1 *Reduce and Harmonize Separation Standards in International Airspace*

It was agreed that the international operators would benefit from a reduction, as well as harmonization of the vertical, lateral and longitudinal separation standards across the Arctic airspace. This would allow for more efficient altitude changes.

Separation reductions would need to take into account the equipage of aircraft operating in the Arctic and adjacent airspace, and provide for a mixed environment, recognizing the existing and planned aircraft capabilities while providing benefits to operators implementing Required Navigation Performance (RNP).

2 *Improve/Increase Efficiencies for Cross Polar and Russian Far East Air Traffic*

Efficiencies could be provided through the development and enhancement of ATS routes, ATM and operator procedures, and improved system performance.

Route efficiencies to be considered include, but are not limited to, the following:

- § New routes taking into account the reduced lateral separation standards
- § Bi-directional routes
- § Procedures for tactical re-routes
- § Airline route proposals
- § Additional boundary entry/exit points into China
- § Implementation of radar hand-offs and procedures between Magadan and Anchorage Flight Information Regions (FIRs)
- § ANSPs to work together to develop RVSM transition procedures between each FIR
- § Flex Track System
- § Simplifying Russian Form R Process
- § Improved Air Traffic Flow Management (ATFM) tools and exchange of information between ANSPs and operators through use of the Dynamic Ocean Tracking System Plus (DOTS+) Gateway Reservation List (GRL) and DOTS+ Online (DPO)
- § Polar Minimum Time Tracks

3 *Improve Communications in Arctic/Polar Region*

It is expected that improved communications in the Arctic airspace (*i.e.*, north of 80 degrees North) would provide enhanced operations.

Communication improvements to be considered include, but are not limited to, the following:

- § Benefits from satellite technology (Iridium)
- § High Frequency (HF) Air-Ground Data Link
- § Current ANSP communication capabilities
- § Implementation of Controller Pilot Data Link Communication (CPDLC) and Automatic Dependent Surveillance – Contract (ADS/C) capability for all polar routes

- § Automated flight data exchange between facilities
- § Monitor communications and data link performance

4 *Improve Awareness of Space Weather Issues in Arctic/Polar Region*

Although the CPWG does not have responsibility for weather reporting, some related issues to be considered include, but are not limited to, the following:

- § Improve exchange of long range weather and Notices to Airmen (NOTAM) information
- § Maintain an awareness of research on space weather and its impact on aviation
- § Recognition of the impacts of space weather, including sun spots and HF black outs

5 *Improve Safety*

Activities enhancing safety to be considered include, but are not limited to, the following:

- § Making contingency response information available, including volcanic activities
- § Procedures for the exchange of Russian missile launch information

Time Frames

It was agreed that Near-Term activities were defined as those planned to be completed within 1-3 years, and Mid-Term activities would be completed in 4-10 years.

Maintenance of the Work Program

The Work Program will be reviewed by the ANSPs prior to each CPWG meeting. As work commences on a particular goal, it will be moved from the Mid-Terms Goals (**Attachment A**) to the Near-Term Planning Chart (**Attachment B**). Similarly, as initiatives are completed, they would be moved to the list of accomplishments (**Attachment C**).

As new work programs are introduced, they will be added to the appropriate goal section.

Mid Term Goals (2016-2022)

REDUCE AND HARMONIZE SEPARATION STANDARDS IN INTERNATIONAL AIRSPACE

Implement further reductions to lateral separation (aircraft equipage requirements)
Reykjavik FIR (25NM)

Implement reduced longitudinal separation (aircraft equipage requirements)
Anchorage Arctic FIR (50NM)

Implement further reductions to longitudinal separation (aircraft equipage requirements)
Anchorage Arctic FIR (30NM)

IMPROVE COMMUNICATIONS IN ARCTIC/POLAR REGION

Implement AIDC/OLDI for Data Exchange
Reykjavik and Murmansk FIRs (OLDI)
Bodo and Murmansk FIRs

Implement Periodic ADS-C Reporting for All Polar Routes
Edmonton FIR

Implement CPDLC
Murmansk FIR

CPWG Planning Chart

Near Term Goals (2012-2015)

	Planning Goal	Action with	Status of Action and Target Date
1	REDUCE AND HARMONIZE SEPARATION STANDARDS IN INTERNATIONAL AIRSPACE		
	Harmonize RVSM Transition Procedures		
	Russian and Mongolian FIRs	State ATM/CAA Mongolia	2013
	Implement reduced longitudinal separation (aircraft equipage requirements)		
	Edmonton FIR (5 min or 50NM)	NavCanada	Fall 2013
	Reykjavik FIR (5 min)	Isavia	TBD
2	IMPROVE/INCREASE EFFICIENCIES FOR CROSS POLAR AND RUSSIAN FAR EAST AIR TRAFFIC		
	Create seamless and homogeneous airspace for the traffic from North America to Asia with the expansion of User Preferred Routes (Pacific Project)	ANSPs/Operators	TBD
	Improve Efficiency on Cross Polar Routes		
	Add entry/exit fixes on the Anchorage/Russian FIR boundary in order to provide additional parallel routes	FAA/State ATM	Ongoing (Polar 7, 8, & 9 have been added)
	Eliminate restrictions to file entry fixes on the Anchorage/Edmonton FIR boundary	FAA/NavCanada	TBD
	Improve Efficiency on Russian Trans East Routes		
	Eliminate 10 min track loading for RTE over Anchorage/Russian Boundary	FAA/State ATM	TBD (Trials completed for 3 fixes; trial underway for 3 fixes)
	Implement use of Radar Procedures between Magadan ACC and Anchorage ARTCC without Radar Data Sharing		
	Anchorage Arctic FIR	FAA	TBD
	Magadan FIR	FATA	TBD
	Improve Air Traffic Flow Management (ATFM)		

	Planning Goal	Action with	Status of Action and Target Date
	Provide DOTS Plus Online Track Advisory to State ATM for monitoring inbound flights (State ATM to request access)	FAA/State ATM	TBD
	Establish CTA in Anchorage Arctic FIR	FAA	TBD
	Remove requirement for flight to file NOR OTS routes over Canada	NavCanada	Spring 2013
3.	IMPROVE COMMUNICATIONS IN ARCTIC/POLAR REGION		
	Improve communications procedures		
	Change procedures to retain connection with Iridium and HF DL north of 80N	Isavia	Spring 2013
	Implement ADS-C periodic contract and lateral and vertical conformance monitoring	Isavia	Spring 2013
	Implement AIDC/OLDI for Data Exchange		
	Russian and Anchorage FIRs	State ATM/FAA	TBD
	Khabarovsk ACC and Sapporo ACC	State ATM/JCAB	2015
	Reykjavik and Edmonton FIRs	Isavia/NavCanada	Spring 2013
	Reykjavik and Bodo FIRs (AIDC)	Isavia/Avinor	Spring 2014
	Implement CPDLC for All Polar Routes		
	Murmansk FIR	State ATM	2015
	Bodo	Avinor	2014
	Magadan FIR (North Sector)	State ATM	2013
	Implement ADS-C		
	Anchorage Arctic FIR	FAA	TBD
	Bodo	Avinor	2014
	Magadan FIR (North Sector)	State ATM	2013
	Monitor Communications and Data Link Performance		
	Provide information on any issues relating to communications/data link performance at CPWG meetings	All ANSPs and Operators	Ongoing
5.	IMPROVE SAFETY		
	Develop Arctic ATM Operational Contingency Plan		
	Provide information on volcanic ash response to be included in Document v2	Isavia	2013
	Draft update to Document v2	FAA	2013
	Endorse/Publish Document v2	All	2013

CPWG Near-Term Planning Chart
Attachment B

	Planning Goal	Action with	Status of Action and Target Date
	Implement single AFTN address for each ANSP ¹		
	NavCanada	NavCanada	TBD
	State ATM	State ATM	TBD
	CAAC ATMB	CAAC ATMB	Unknown

¹ FAA and JCAB do not plan to implement a single AFTN address

Completed Activities

1 REDUCE AND HARMONIZE SEPARATION STANDARDS IN INTERNATIONAL AIRSPACE

Implement RVSM FL290-410

Harmonize RVSM Transition Procedures

- Anchorage Arctic FIR
- Anchorage Oceanic FIR
- Russian FIRs
- Fukuoka FIR

Implement 10 Minute Longitudinal Separation for ATS Route B932

Implement reductions to lateral separation based on aircraft equipage requirements

- Anchorage Oceanic FIR (30NM)

Implement reductions to longitudinal separation based on aircraft equipage requirements

- Anchorage Oceanic FIR (30NM)

2 IMPROVE/INCREASE EFFICIENCIES FOR CROSS POLAR AND RUSSIAN FAR EAST AIR TRAFFIC

Harmonize Procedures for ATS Route B932

Improve Efficiency on Cross Polar Routes

- Add entry/exit fixes on the Reykjavik/ Russian FIR boundary
- Open new Kamchatka routes from PILUN and LISKI
- Open new routes south of ABERI

Improve Air Traffic Flow Management (ATFM)

- Implement DOTS Plus Online Track Advisory
- Reduce track loading to 10 minutes for Cross Polar fixes

Improve ATFM Collaboration

- FAA/NAV CANADA
- FAA/State ATM
- NAV CANADA/State ATM

Make Tactical Re-Routes Available for Daily Operations

3. IMPROVE COMMUNICATIONS IN ARCTIC/POLAR REGION

Implement AIDC/OLDI for Data Exchange

- Anchorage Arctic, Oceanic and Continental FIRs (AIDC)
- Edmonton FIR (AIDC)

Implement CPDLC for All Polar Routes

- Anchorage Arctic FIR
- Reykjavik FIR
- Magadan FIR

Implement ADS-C for All Polar Routes

Edmonton FIR (waypoints only)

Reykjavik FIR

Magadan FIR

4. IMPROVE AWARENESS OF SPACE WEATHER ISSUES IN ARCTIC/POLAR REGION

Develop Space Weather User Needs

5. IMPROVE SAFETY

Develop Arctic ATM Operational Contingency Plan

Publish Document v1 on Web Site

Implement single AFTN address

Iceland

Norway

Implement ICAO Flight Plan 2012

CPWG/14 Action Item List

Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP01-08C	Administration	ATFM collaboration between FAA/ATO and State ATM	State ATM and FAA reported on the status of the ATFM Annex and LOA.	FAA/State ATM	Update to be provided to CPWG/15.	May 2013	Open
CP04-31	Improve Efficiencies	Implement use of radar procedures between Magadan ACC and Anchorage ARTCC	State ATM advised that the target date for Providenia radar has been delayed to the end of 2014.	State ATM	State ATM will provide an update to CPWG/15.	May 2013	Open
CP04-35	Improve Efficiencies	Shorten and simplify Form "R" and filing process.	State ATM presented the changes to the Russian AIP relating to Form R. United Airlines asked State ATM if it would be acceptable to list all possible entry/exit points unpaired on the Form R.	FATA	Response to UAL to be provided at CPWG/15.	May 2013	Open
CP06-01	Improve Communications	Harmonized flight data exchange between facilities	FAA will be unable to reroute the existing CPDLC/ADS-C circuit via Anchorage to Annapolis due to legal concerns. Additional information was provided to State ATM regarding telecommunications updates.				Closed - New Action Item CP14-10 opened for the establishment of AIDC with ZAN
CP06-02	Improve Efficiencies	Implement Ocean 21 in the Arctic FIR	FAA informed the meeting that Ocean21 within Anchorage Center's Arctic airspace had been delayed until late 2014/ early 2015.	FAA	FAA will provide an update at CPWG/15, to include a list of the priority sequence items for Ocean21 if it can be released.	May 2013	Open

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP06-12	Improve Efficiencies	Tactical Reroutes Prior to Entering Russian Airspace	Based on the implementation of RVSM and publication of procedures in the Russian AIP, it was agreed that no further procedures are needed for Tactical Reroute Procedures.				Completed
CP07-02	Improve Efficiencies	Add additional entry/exit fixes on the FIR boundaries	New CP fixes were published effective 18 Oct 2012. State ATM will continue working on establishing additional CP entry fixes.	State ATM	State ATM to report to the next meeting.	May 2013	Open
CP08-03	Improve Efficiencies	Establish ATS Route Catalogue	ATS Route Catalogue will be a standing agenda item for each CPWG meeting.				Closed
CP08-07	Improve Efficiencies	Implement DOTS+ Online (DPO) (formerly On-line Track Advisory)	DPO has been implemented. FAA advised the meeting that changes are now being considered for DPO. Operators were encouraged to submit requested changes directly to the DPO Points of Contact. NavCanada informed the meeting that problem areas had been resolved.		.		Completed
CP08-12	Improve Efficiencies	Eliminate restrictions where possible	ZAN provided information on restrictions that had been cancelled since the last meeting.	FAA	ZAN will continue to provide updates at future meetings.	May 2013	Ongoing

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP10-02	Improve Efficiencies	Provide flow constraint information	State ATM presented information on peak hour operations for various sectors.	State ATM	An update will be provided to the next meeting.	May 2013	Open
CP10-03	Improve Efficiencies	Consider mixed fleet capabilities in the delivery of future operational efficiencies	Information was presented on the 2012 Avionics Survey Initial Results. The final results will be available prior to the next meeting.	IATA	IATA to provide final results at CPWG/15	May 2013	Open
CP10-04	Improve Efficiencies	Consider establishing additional fixes in a "core area" of Edmonton FIR based on Great Circle Routes	Deferred to CPWG/15.	NavCanada/IATA	NavCanada to provide an update at CPWG/15.	May 2013	Open
CP10-08	Contingency Response	Improved contingency collaboration between State ATM and JCAB	State ATM to follow up with FATA regarding coordination between FATA and JCAB.	FATA/JCAB /State ATM	An update will be presented to CPWG/15.	May 2013	Open
CP10-13	Improve Communications	Expand CPDLC/ADS-C capability for Magadan FIR and install CPDLC/ADS-C at Murmansk.	State ATM will expand ADS-C/CPDLC services in two additional sectors at Magadan ACC in early 2013. A CPDLC/ADS workstation will also be added at Murmansk ACC in 2014-2015.	State ATM	Update to be provided to CPWG/15.	May 2013	Open
CP10-14	Improve Efficiency	Provide information on minimum level of service maintained outside operational hours for emergency diversions	State ATM provided updates on Russian enroute alternate airports of interest. Airlines requested that Avinor also provide this information for Norway. This will be an ongoing open action item.	State ATM/Avinor	Provide updates to CPWG/15.	May 2013	Ongoing

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP11-01	Improve Communications	Advance communications capabilities for the Arctic area	It was agreed at CPWG/12 and CPWG/13 that the CPWG does not have the technical expertise to progress further improvements to communications in the Polar region.	FAA	Recommendation to be developed to present to TRASAS/4.	4 th Qtr 2013	Open
CP12-01	Reduce Separation Standards	Further reduce separation minima within Arctic airspace	30 nm lateral and 30 nm longitudinal separation in Anchorage Sectors 10 and 11 were implemented in Nov 2012.				Completed
CP12-02	Improve communications	Disseminate information on RCP and RSP	FAA subject matter expert attended CPWG/14 and presented information to the meeting.				Completed
CP12-04	Improve Efficiencies	Monitor changes to Track Advisory Users Guide	ZAN presented the changes made to the TAUG.	FAA	FAA will provide updates on the TAUG as needed.	May 2013	Ongoing
CP12-05	Improve Efficiencies	Reduction of track loading time over FRENK, KUTAL and ERNIK	Effective 28 Aug 2012, with agreement from adjacent ACCs, FAA permanently implemented track-loading for RTE entry points FRENK, KUTAL, and ERNIK at zero minutes.				Completed
CP12-06	Improve Efficiencies	Coordination between State ATM and ATMB	During CPWG/12, it was agreed to pursue proposal for a new entry/exit point east of SIMLI.	State ATM/ATMB	This is a bilateral issue to be discussed outside of CPWG. An update will be provided to the next meeting.	May 2013	Open

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP12-08	Contingency Response	Expand Contingency Plan	FAA presented a draft version of the Second Edition of the Contingency Plan which contained material for Fukuoka FIR. ATMB declined to submit information for the Plan. ANSPs agreed to defer publication in order to consider adding new volcanic ash information.	ANSPs	ANSPs to provide information following the volcanic ash exercise in Jan 2013. FAA will present final draft of the Second Edition to CPWG/15.	May 2013	Open
CP12-11	Improve Efficiencies	Remove ACA M Tracks and NCA L Tracks.	NavCanada advised that internal discussions were ongoing.	NavCanada	NavCanada to provide update to the next meeting.	May 2013	Open
CP12-14	Improve Communications		Based on discussions during CPWG/12, it was agreed to amend the terms of reference of the Comm TF to continue to monitor initiatives and technologies. The CPWG agreed to recommend to the next TRASAS meeting that CPWG's communications activities be limited to a monitoring role.	NavCanada/FAA	FAA to present a CPWG paper to TRASAS/4 to recommend that the CPWG Comm TF be dissolved.	4 th Qtr 2013	Open
CP13-01	Improve Communications	Consider the need for a global Performance Based Communication and Surveillance Implementation Plan	It was agreed that a global plan would be more appropriate than a plan for Arctic airspace.				Closed

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP13-02	Improve Efficiencies	Justify need for route requests	UAL was requested to consider how the implementation of AMATI will affect previous route requests for ORVIT-LUMEN.	UAL	UAL to prioritize all route proposals and report to CPWG/15.	May 2013	Open
CP13-03	Improve Efficiencies	Reduce track loading time over LISKI, PILUN and MARCC	In Aug 2012, FAA commenced a six-month trial using zero minute track loading for LISKI, PILUN and MARCC. No negative feedback has been provided to date.	FAA	The trial will continue. Update to be provided to next mtg.	May 2013	Open
CP13-04	Administration	Replace the CPWG Planning Chart with a CPWG Work Program and associated lists of Accomplishments, Near-Term Projects and Mid-Term Projects	The ANSPs developed a Work Program, list of ongoing tasks and accomplishments to replace the CPWG Planning Chart. This will be reviewed at each ANSPs Mtg and presented as a standing agenda item.				Completed
CP13-05	Improve Efficiencies	Increase use of RNAV routes in Russian airspace	State ATM provided information on their review of traffic density on RNAV routes. The review showed their poor utilization by the airlines. Airlines were requested to look into the use of those routes and try to increase utilization.	IATA/Airlines	Further information to be provided by IATA and airlines to CPWG/15.	May 2013	Open

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP13-06	Administration	Provide comments on the format of the Jeppesen Arctic Polar and North Pacific charts	Jeppesen requested input on the AP (HI) 1/NP (HI) 2 charts.	IATA/Airlines	Airlines to provide comments to Volker.meyer@jeppesen.com	May 2013	Open
CP13-07	Administration	Request that TRASAS designate an ICAO representative to attend CPWG meetings	The meeting agreed to request that TRASAS designate a representative from ICAO to attend CPWG meetings as an advisor or observer, in order that information can be exchanged with ICAO more frequently.	FAA	Include request in the CPWG working/information paper to be presented to TRASAS/4.	4 th Qtr 2013	Open
CP14-01	Administration	Provide comments on the format of the Jeppesen Arctic Polar and North Pacific charts	State ATM requested that Jeppesen accurately reflect all route restrictions from the Russian AIP on Jeppesen publications.	State ATM/Jeppesen	State ATM to provide examples to Jeppesen.	May 2013	Open

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP14-02	Improve communications	Establish flight data exchange between facilities	State ATM will continue to address the feasibility of implementing AIDC with ZAN. FAA to write to FATA regarding the need for AIDC at Magadan ACC. AIDC between Edmonton ACC and Reykjavik ACC was planned for spring 2013, and work was underway to implement AIDC between Vancouver ACC and Oakland ARTCC.	State ATM/ FAA/ NavCanada	Provide updates to CPWG/15.	May 2013	Open
CP14-03	Improve Efficiencies	Add boundary entry/exit fixes at BATNI, ADLEN, LARSA, and OLTON	The meeting agreed to consider a State ATM proposal to implement new high level boundary fixes to correspond with low level fixes BATNI, ADLEN, LARSA, and OLTON. Assess the possibility of realigning the routes from these entry/exit fixes. .	State ATM/FAA	Coordination to take place between State ATM and FAA. Provide update to CPWG/15.	May 2013	Open
CP14-04	Improve efficiencies	Reduce traffic loading at VALDA	State ATM to analyze track loading at VALDA and consider options for re-distributing the traffic.	State ATM	Provide information to CPWG/15.	May 2013	Open

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP14-05	Improve Efficiencies	Reduction of track loading time over additional fixes LUMES, KUNAD, KOKES, RUSOR, and BAMOK	State ATM suggested that consideration be given to reducing track loading time to zero minutes for fixes with low traffic levels LUMES, KUNAD, KOKES, RUSOR, and BAMOK. ZAN will coordinate on fixes to be considered with appropriate ANSPs.	FAA	Update to be presented to CPWG/15.	May 2013	Open
CP14-06	Improve Communications	Monitor communications and data link performance	Consider the feasibility of reporting communications and data link performance to CPWG meetings based on information collected from Pacific Central Reporting Agency (CRA) and North Atlantic Data Link Monitoring Agency (DLMA).	ANSPs	Provide updates to CPWG/15.	May 2013	Open
CP14-07	Improve Communications	Monitor the progress made by the Inter-Regional APAC/NAT AIDC Task Force	FAA provided information on the process to consolidate the ICD for the North Atlantic and Asia/Pacific Regions to provide for harmonized AIDC.	FAA	Provide update to CPWG/15.	May 2013	Open

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP14-08	Improve efficiencies	Improve flexibility of military airspace	IATA expressed concern that Cold Lake military airspace impedes operations between Houston and Tokyo. More timely notice was needed if there is an opportunity to allow access to the Cold Lake airspace.	NavCanada	NavCanada to report on any progress for more flexible use of mil airspace to CPWG/15.	May 2013	Open
CP14-09	Improve efficiencies	Increase random routes	NavCanada committed to remove requirement to file NOR OTS and NCA in order to allow full random routing by Spring 2013.	NavCanada	Provide update on outcome of trial to CPWG/15.	May 2013	Open
CP14-10	Improve efficiencies	Provide information on the Oakland FIR trial to merge PACOTS tracks C/E	FAA reported on the trial underway to merge PACOTS tracks C and E.	FAA	Provide update to CPWG/15.	May 2013	Open
CP14-11	Improve efficiencies	Eliminate requirement to flight plan over named or lat/long fixes at 141W	IATA requested that FAA look into the feasibility of eliminating the requirement to flight plan over a named or lat/long fix at 141W.	FAA	Provide response to CPWG/15.	May 2013	Open
CP14-12	Improve efficiencies	Consider expanding trial for ADS-C CDP to ZAN airspace	IATA requested that FAA expand the ADS-C CDP trial underway in ZOA airspace to ZAN airspace.	FAA	FAA to hold internal discussions on the feasibility and respond to CPWG/15.	May 2013	Open
CP14-13	Improve efficiencies	Replacement of Bodo oceanic automation system	Avinor provided information on the planned replacement for the automation system at Bodo ACC.	Avinor	Provide update to CPWG/15.	May 2013	Open

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Action Number	Capacity Enhancement Goal	Supporting Goal Initiatives	Information/Status	Responsible Organization	Action Pending	Action Due	Status
CP14-14	Improve efficiencies	Consider options for relocating the fix at BAGLI	State ATM asked FAA to review previous studies regarding the relocation of BAGLI and present information to CPWG/15. Coordination to be accomplished with JCAB.	FAA/JCAB	FAA to report to next meeting.	May 2013	Open