

**REPORT OF THE
FIRST INTER-REGIONAL CO-ORDINATION MEETING (IRCM/1)
ASIA/PACIFIC – MIDDLE EAST – EUR/NAT
REGIONAL OFFICES**

(Bangkok, Thailand, 11-13 October 2000)

1. BACKGROUND

1.1 Following on Recommendation 3/10 c) of ALLPIRG/3, the First Inter-Regional Co-ordination Meeting (IRCM/1), Asia/Pacific, Middle East and the EUR/NAT Regional Offices was held in Bangkok Regional Office from 11-13 October 2000.

1.2 Mr. Vladimir Zubkov, C/RAO, Mr. Ahmed Zerhouni, Regional Director of Middle East Office, Mr. Robert Kruger, Deputy Regional Director representing Mr. Christian Eigl, Regional Director of the European/North Atlantic Office and Mr. Lalit B. Shah, Regional Director of the Asia and Pacific Office, participated in IRCM/1. The meeting was supported by the Bangkok Secretariat. The List of Participants is at Attachment D.

2. PROCEEDINGS

The meeting was moderated by RD, Bangkok Office and held in an informal working environment.

2.1 Agenda

2.1.1 The meeting adopted the following Agenda:

- a) Development of a Framework for Inter-regional – Co-ordination (IRC) Meeting
- b) Revised Route Structure between Asia and Europe/Middle East, South of the Himalayas
- c) Implementation of RVSM across regional boundaries
- d) Inter-regional CNS matters
- e) Other inter-regional issues
- f) Any other business
- g) Agenda, Scope and Date/Venue for next meeting

2.2 Development of a framework for inter-regional co-ordination (IRC) meetings

2.2.1 The meeting discussed the development of an Inter Regional Co-ordination Framework (IRC-F). The purpose of the framework was to facilitate IRC between the respective air navigation regions, currently served by the seven Regional Offices of ICAO.

2.2.2 It was noted that as air navigation continues to evolve into an increasingly seamless systems infrastructure, IRC would form a vital activity in enhancing the pace of implementation. In the course of

developing an Inter Regional Co-ordination Framework (IRC-F), it was agreed that care should be exercised so as not to create additional structured layers. Rather, maximum advantage should be taken of the current mechanisms in effecting IRC.

2.2.3 It was agreed that IRC should be more of a function than a structured body, therefore this function should be perceived, planned and executed on a need basis rather than making it a routine activity. IRC-F should focus on the management aspects of inter-regional activities, in terms of identifying, consolidating, re-distributing the tasks and carrying out a stringent follow-up on the progress.

2.2.4 The meeting considered a general overview of the flow of activities which would be a typical case between the various Regions, either two or more as the case may be. It was noted that the flow of activities would generally entail co-ordination inter-linkages at the level of ALLPIRG, PIRGs, and their contributory bodies, and very importantly, at the peer-to-peer level of the ICAO Secretariat inclusive of the Regional Directors. It was also agreed that all co-ordination activities shall take place with the full involvement of the respective ICAO Secretariat.

2.2.5 It was agreed that flexibility is the mainstay of the IRC function and this flexibility is totally dependent on the needs identified by the various levels. The IRC Framework could eventually expand its scope by involving the relevant chairpersons and secretariat of the various contributory bodies of the Regions however a further consolidation of the Framework may be required before this phase is introduced.

2.2.6 The meeting considered that as a first step they would attempt to outline a concept on inter regional-coordination, a function which has been tasked by ALLPIRG/3 at the regional level. This would subsequently be reported to the ALLPIRG/4. There was unanimous support that the IRC-F was a living concept and changes would be incorporated as and when appropriate.

2.2.7 With the understanding that inter-regional co-ordination requirements are generally well covered by existing ICAO procedures and practices, it was however agreed that the importance of the issue warranted a specific oversight of its effectiveness and a mechanism to prescribe specific actions where this was deemed necessary.

2.2.8 It was decided that the oversight of IRC is to be conducted by meetings of the RDs mainly from adjacent Regions as well as C/RAO. The task of these meetings would be:

- a) to review the current and planned activities of the Regions concerned in order to identify areas that require inter-regional co-ordination;
- b) to determine the specific co-ordination requirements necessary, either within the existing mechanisms or ad-hoc as required; to address matters identified in a) above; and
- c) to review progress of issues identified at previous meetings and take any corrective or follow-up action.

2.2.9 Draft Terms of Reference (TORs) for the meeting were developed as well as an IRC-F. The draft TORs and IRC-F could also be used for other regions. The IRC-F and draft TORs are at Attachments A and B.

2.3 **Revised ATS route structure between Asia and Europe/Middle East, South of the Himalayas**

2.3.1 The meeting noted that the present ATS route structure from Asia to Europe/Middle East had seen various attempts to increase aircraft operational efficiency over the past few years. Nevertheless, aircraft still encounter significant delays on departure out of Asian airports as well as many examples of uneconomical levels being assigned either on departure or enroute.

2.3.2 It was noted that the basic overall design of the present route structure is still based on ground based navigational aids technology and associated aircraft equipment. Although this was an operational requirement in the past due to aircraft performance and limited fuel endurance, this is not the case today.

2.3.3 Present medium and long-haul aircraft have the capability of operating with flight times averaging between 7-14 hours. Many of the aircraft fly non-stop between Asia and European/Middle East destinations. A significant number of these aircraft are equipped with CNS/ATM technology enhancements, which require little or no reliance on ground based enroute nav aids.

2.3.4 The meeting noted that, a revised ATS trunk route structure between Asia and Europe/Middle East, South of the Himalayas had been proposed and endorsed at two sub-regional ATS Co-ordination Group Meetings as well as APANPIRG meetings. The planning and development of these routes structures would take advantage of existing and on-going CNS/ATM technologies in order to provide safe and efficient air traffic management with the least impact to environmental concerns.

2.3.5 The meeting fully supported this project on a time-bound basis and further agreed that the development of these route structures would require constant co-ordination amongst all concerned States/ATS Providers and airlines as well as ICAO MID and EUR Regional Offices to achieve an effective operational result. A cost/benefit analysis should also be undertaken to reflect the advantages of this project to the provider States.

2.4 **Implementation of RVSM across regional boundaries**

RVSM Implementation – Asia/Europe South of the Himalayas

2.4.1 The meeting noted that APANPIRG is progressively managing the implementation of RVSM across the Asia/Pacific Regions. RVSM has already been implemented in the North, Central and South Pacific and is now being implemented in the Western Pacific/South China Sea area with a target implementation date of 21 February 2002. It was noted that the MID Region has commenced planning RVSM implementation for some time in 2003 and Europe has a target date of January 2002.

2.4.2 The meeting agreed to examine the possibility of appropriate MID States participating in the planned data collections, and also participating in at least some of the future meetings of the Asia/Pacific RVSM Task Force with the aim of achieving a co-ordinated implementation of RVSM for all the airspace involved in the major traffic flow from Asia to Europe south of the Himalayas.

2.4.3 The meeting noted that currently the FAA provides central monitoring agency services (in the form of the APARMO) and safety & mathematical analysis services to the Asia/Pacific RVSM/TF but that it was unlikely that these services would be fully available to a further stage of implementation. The meeting also noted that Eurocontrol provides similar services for the European implementation.

2.4.4 It was noted that while there was standardisation worldwide with respect to the assessment of

aircraft height keeping performance there was no global guidance for States with respect to the airworthiness and operational approval of aircraft for RVSM operations nor with respect to aircraft short-term and long-term minimum monitoring requirements.

2.4.5 The meeting confirmed the importance of RVSM implementation and agreed that Asia Pacific, MID and EUR regions must co-ordinate closely regarding implementation on the major traffic flow Asia to Europe, south of the Himalayas.

2.5 **Inter-regional CNS matters**

2.5.1 The meeting noted the inter-regional co-ordination carried out by the Asia/Pacific Office, particularly with the Russian Federation and the European COM Working Group of EANPG. Consequently, the upgrading of the inter-regional AFTN circuits and implementation of ASIA-EUR AFTN routing were accomplished. Russian Federation has since been attending the ATN Transition Task Force and the COM/MET/NAV/SUR Sub-Group of APANPIRG. The inter-regional AFTN-CIDIN interface issues were discussed and the ASIA-EUR AFTN circuits were reported to have been upgraded to higher speed but operating without any protocol due to technical interface problem between AFTN and CIDIN centres. This has, however, not affected normal operation of the circuits but the data integrity is not guaranteed. This interface problem is expected to be resolved when AFTN/AMHS and CIDIN/AMHS Gateways are implemented in respective regions following co-ordination with adjacent regions.

2.5.2 The ASIA/PAC-MID inter-regional AFTN circuits were also upgraded but the technical interface issues relating to introduction of protocol are yet to be resolved.

2.5.3 The meeting noted that the Guidance Material for Ground-to-Ground Elements in ATN Transition was developed by APANPIRG. The Guidance Material was updated based on outcome of ATNP/3 results. Furthermore, three planning documents and three technical documents were being developed to facilitate ATN implementation in the Asia/Pacific Regions. It was noted that such regional documents provide technical details to be used on a regional basis that are not covered in manuals published for global use. It was recognized that the regional planning and technical documents being developed by APANPIRG would serve as an useful tool in adjacent regions as well.

2.5.4 The view was also expressed that regional procedures should be reduced and global standards enhanced. It was, however, recognized that the global standards would not address all details required for regional implementation and would also take a considerable time for development of documents for worldwide use addressing regional issues. It was also recognized that it would reduce the inter-regional co-ordination if some technical and inter-regional connectivity issues are addressed in a top down approach at the global level.

2.5.5 The meeting also noted the need to use suitable inter-regional public digital network to support ATN. The need to use common digital signaling system to support ATS direct speech circuits and a standard protocol for RADAR data exchanges between adjacent inter-regional centers was noted. In this regard, it was noted that the Asia/Pacific Regions had already developed an interface control document (ICD) for the signaling system and had adopted the EUROCONTROL standard radar data exchange protocol known as "ASTERIX protocol" and has published an Asia/Pacific supplement to the ASTERIX protocol giving details of regional interface data based on coordination carried out with EUROCONTROL.

2.5.6 The meeting noted that AFTN based AIDC procedure is implemented in the Asia/Pacific Regions and this will continue to be in operation until replaced with ATN AIDC procedure. While discussing implementation of elements of ATN the meeting recognized that co-ordination should be carried out between planning bodies and inter-regional centers to harmonize the procedures and protocols and thereby ensure

system compatibility.

2.5.7 Protection of the aeronautical radio frequency spectrum from interference from adjacent regions were recognized as one of the important aspects requiring inter-regional coordination. The meeting also recognized the need to harmonize the frequency lists published by the ASIA/PAC and EUR/NAT Offices and expedite publication of the frequency list by the MID Office. It was agreed that inter-regional co-ordination should be carried out through mutually agreed arrangement to review the lists published by EUR/NAT and ASIA/PAC Offices and develop a co-ordination procedure to ensure that the frequencies included in the lists are adequately coordinated as lack of coordination may result in serious frequency interference problem and thereby affect safety. Following considerable discussions on the above issues the meeting noted that resource constraints would inhibit timely coordination however, a co-ordination procedure should be established to provide frequency protection. This is particularly relevant to the assignment of frequencies in adjacent regions.

2.5.8 It was also agreed that there was a need to coordinate implementation of ATN, VDL Mode 2 and GNSS augmentation systems to ensure harmonization.

2.5.9 Views were expressed that the report of the PIRG meetings of adjacent regions should be carefully studied and items requiring inter-regional coordination may be identified for appropriate action. It was agreed that a suitable matrix similar to the shortcomings/deficiencies table should be designed to incorporate issues requiring inter-regional co-ordination for this purpose.

2.5.10 The meeting noted the inter-regional co-ordination that is currently underway between EUR/MID Regions and ASIA/PAC and EUR Region. With the intention of making IRC more effective, it was recognized that IRC between ASIA/PAC and MID requires considerably more attention.

2.6 Other inter-regional issues

Use of Standard and Non-standard Metric Cruising levels

2.6.1 The meeting noted that the differing application of metric cruising levels by some States often creates difficulties with route planning and implementation. With considerable care and in many cases a loss of efficiency due to a reduction of available levels this issue can be overcome.

2.6.2 The meeting recognized that there were a number of other States that have a non-standard application of metric cruising levels and agreed to research this and additionally identify those States. The meeting agreed that the ways and means of facilitating a co-ordinated transition to standard ICAO metric cruising levels for all of these States should be developed and that this should be approached in a co-ordinated manner between the Asia/Pacific and European Regional Offices.

Review of inter-regional ATS Co-ordination Group meetings

2.6.3 The meeting recalled that several ATS Co-ordination Groups have been established to deal with ATM and CNS issues affecting more than one ICAO region. Some of these are based on agreements between States themselves and others are held under the auspices of ICAO. These meetings proved to be useful in assisting co-ordination and implementation between States on issues that traversed ICAO regional boundaries.

2.6.4 In reviewing the structure and composition of the groups, the meeting noted that several had not met for some time whereas others were still active and productive. It was agreed that a review and possible rationalisation of the work being undertaken by these groups was required and the three Regional Offices

would co-ordinate accordingly.

Co-ordination relating to overlapping areas

2.6.5 The meeting was advised that there are differences in ICAO co-ordination procedures concerning some States, for example Afghanistan and Pakistan which has the ability to impinge on timely co-ordination.

2.6.6 Consideration should be given at a Headquarters level regarding ways to improve timely co-ordination to overcome these difficulties, which mainly relate to operational matters.

Information sharing

2.6.7 The meeting agreed that greater use should be made of operational material already prepared by other Regions in order to make more efficient use of resources and foster a consistent and harmonised approach.

2.6.8 An example of this would be the production of regional guidance material and databases for items such as frequencies and five-letter name codes.

2.7 Harmonization of CNS/TM Activities

2.7.1 The meeting was presented with a draft Framework for Harmonisation of Air Navigation Systems, which was developed by RAO. The meeting was of the opinion that the Framework was of considerable value and agreed to review it at a Regional Office level and make comments to RAO for its further development.

2.8 Any other business

Global Navcom

2.8.1 The meeting was briefed regarding the next Global Navcom Conference, which is scheduled for October 2001 in Amman, Jordan. Consideration was given to what roles the RDs from Asia/Pacific, EUR and MID could have in the sessions of the Conference to highlight the efforts on inter-regional co-ordination.

2.9 Agenda, Scope and Date/Venue for next meeting

2.9.1 It was suggested that the next RDs IRC meeting be held in Cairo immediately prior to Global Navcom 2001 in Jordan.

3. ACTIONS AGREED

3.1 The following is a list of specific areas that have been identified as subject matters for inter-regional – co-ordination:

- a) The development of a Revised ATS route structure between Asia and Europe/Middle East, South of the Himalayas;
- b) The implementation of RVSM between Asia, Middle East and Europe, South of the Himalayas;

- c) Allocation of frequencies - co-ordination required between APAC & EUR/NAT;
- d) The implementation of ATN, VDL Mode 2 and GNSS augmentation systems;
- e) Identification of States who have a non-standard application of metric cruising levels and development of a strategy for transition to standard ICAO metric cruising levels;
- f) A review of the work being undertaken by Inter-regional Co-ordination Groups - co-ordination required between APAC, MID & EUR;
- g) Methodologies and sharing of information on traffic forecasting.

3.2 Taking into consideration the list of specific tasks identified as requiring inter-regional co-ordination, the following actions and principles were agreed to:

1. Project on “Revised ATS route structure between Asia/Europe/Middle East, South of the Himalayas” is fully supported. Co-ordination required between APAC, MID & EUR as well as all concerned partners;
2. The Project for RVSM implementation between Asia, Middle East and Europe, South of the Himalayas requires co-ordination between APAC, MID & EUR. The possibility of appropriate MID States participating in data collection and some of the future meetings of the Asia/Pacific RVSM/TF needs to be examined;
3. Co-ordinate implementation of ATN, VDL Mode 2 and GNSS augmentation systems to ensure harmonization;
4. With respect to non-standard application of metric cruising levels, co-ordination is required between APAC & EUR;
5. Care would be exercised to derive maximum advantage from the current mechanisms in effecting IRC and not create additional structured layers;
6. As IRC is considered more of a function than a structured body, it is to be perceived, planned and executed on a need basis;
7. IRC is to focus on management aspects of inter-regional activities in terms of identifying, consolidating, re-distributing the tasks and carrying out follow-up on progress;
8. All co-ordination activities are to take place with the full knowledge and/or involvement of the respective ICAO Regional Offices;
9. IRC as a living concept will incorporate changes as appropriate;
10. Oversight of IRC will be conducted by meetings of the RDs from adjacent Regions as well as C/RAO. The tasks of these meetings are as outlined in the IRC TOR;
11. Develop a matrix to reflect items requiring inter-regional co-ordination for tracking

progress. A sample with identified items is at Attachment C;

12. Greater use of material that has already been prepared by other Regions should be made and information should be shared on a dedicated basis;
13. Recognizing the considerable value of the Draft Framework for Harmonization of Air Navigation systems, it is to be reviewed for further development; and
14. The attached Draft Framework for Inter-regional Co-ordination and its Terms of Reference will be developed further by RD APAC in consultation with C/RAO and RDs MID and EUR.

FRAMEWORK FOR INTER-REGIONAL-CO-ORDINATION MEETINGS

The following principles were recognized as elements to be considered in developing a framework for IRC:

- 1) IRC may be carried out at the levels of
 - ALLPIRG
 - RDs
 - PIRGson a peer-to-peer basis within the auspices of ICAO Secretariat
- 2) IRC by RDs should also have the attendance of C/RAO. Care should be exercised not to involve too many regions at one time so that information, views and proceedings can be managed efficiently.
- 3) Support for RDs at IRC Meetings may be required when dealing with operational issues in order to come to a meaningful conclusion;
- 4) A practice of rotating the venue within the common area of interest should be followed.
- 5) The host RD will normally oversee the proceedings of the meeting;
- 6) IRC meetings will be kept at an informal level, with minimum focus on documentation and maximum focus on implementation enhancement;
- 7) IRC meetings will take place on a needs basis. The prime task will be to identify major impediments and issues as well as the progress of implementation of other air navigation matters;
- 8) A matrix is to be developed to follow-up on inter regional issues which will identify, prioritize and describe actions by appropriate parties with specific target dates. Consideration should be given to the development of a global common database of inter regional co-ordination issues.
- 9) Progress will be reported to ALLPIRG where appropriate.
- 10) On issues of major procedural or operational differences between Regions, which pose as major impediments to inter regional harmonization, the Commission or the Council may be advised as appropriate.
- 11) Care must be exercised to avoid duplication of efforts. The prime objective is to streamline and complement the functions of existing bodies;
- 12) Air navigation is the major thrust of IRC. Consideration should also be given to developing methodologies in other areas where gaps in States' capabilities require ICAO assistance;
- 13) IRC Meetings are unique opportunities and should be utilized to consider strategies that would give a common approach to issues of mutual interest in a manner that would enhance the visibility and presence of ICAO in the Regions;
- 14) Where projects or issues cross regional boundaries consideration should be given to common agenda items at relevant PIRG meetings.

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DRAFT TERMS OF REFERENCE

- a) Identify major impediments and issues and assess the progress of implementation of air navigation matters of inter-regional nature;
- b) Identify, prioritize and describe actions by appropriate parties with specific target dates;
- c) Develop a common database of inter-regional-co-ordination issues;
- d) Ensure that appropriate regional initiatives and information are shared with other regions;
- e) Strategize to give a common approach to air navigation issues of inter-regional nature.
- f) Keep the inter-regional – co-ordination process under continuous review to ensure optimum productivity and enhancement of the pace of implementation on air navigation matters.
- g) Facilitate and contribute to the work of ALLPIRG.

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INTER-REGIONAL - CO-ORDINATION TASKS LIST

No.	Identification					Action				
	1	2	3	4	5	6	7	8	9	10
	Field	Subject	Description of Tasks	Date first Identified	Priority	Regions Involved	Description of Action Taken	Progress Made	Target Date of Implementation	Remarks
1	COM	AFTN	<ul style="list-style-type: none"> Harmonize the AFTN and CIDIN interface issue and introduce circuit protocol. 	IRCM/1 Oct.2000	A	APAC EUR MID	Co-ordination meetings between China, Japan, Russian Federation and USA were held.	Circuits operating at a higher speed without protocol.	End 2000	Protocol issue still not revised. Need discussions.
2	COM	ATN Transition	<ul style="list-style-type: none"> Harmonize inter-regional ATN interconnection issues. Review planning and technical documents developed by PIRGS to ensure inter-regional operability. 	IRCM/1 Oct.2000	B	APAC EUR MID SAM	Need to coordinate inter-regional interface issues.	-	2002	States in the AFI, EUR and MID having interface with APAC will be invited to ATN Transition Task Force Meeting to be held in Singapore in March 2001.
3	NAV	GNSS Implementation Strategy	<ul style="list-style-type: none"> Harmonize strategies to ensure seamless flight operation between regions. 	IRCM/1 Oct.2000	A	APAC MID	Need to coordinate implementation plans.	-	2001	
4	COM	Frequency Management	<ul style="list-style-type: none"> Review and harmonize procedures adopted in determine suitability of frequencies used in the States in the adjacent regions to ensure frequency protection and to avoid any harmful interference to facilities in the adjacent region. 	IRCM/1 Oct.2000	A	APAC EUR MID	<ul style="list-style-type: none"> Coordination procedure between Regions needs to be discussed. 	-	2001	Frequency management database of MID is being developed.

The priorities assigned in the list have the following connotation:

A = Tasks of a high priority on which work should be expedited;

B = Tasks of medium priority on which work should be under taken as soon as possible but not to the detriment of Priority "A" tasks; and

C = Tasks of medium priority on which work should be undertaken as time and resources permit but not to the the detriment of priority "A" and "B" tasks.

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