

ACTION PAPER

**AP/ACG/10/11
16.11.00**

TENTH MEETING

Europa Conference Room
EUROCONTROL Headquarters, Haren
29-30 November 2000
commencing at 9.30 a.m.

AGENDA ITEM 5.1 : 8.33 HORIZONTAL EXPANSION

EXECUTIVE SUMMARY

The 8.33 kHz Horizontal Expansion Programme (8.33 HEP) and the 8.33kHz Vertical Expansion Study (8.33 VES) have been approved respectively by ACG/9 and ACG/8.

Actions identified for horizontal expansion will mirror those carried out in the original 8.33 kHz Implementation Programme.

Experience gained during the Implementation Programme will greatly facilitate the Horizontal Expansion Programme.

The 8.33 kHz Horizontal Expansion Programme will ensure that the potential spectrum benefit of 8.33 kHz channel spacing implementation within the ICAO EUR Region can be fully realised.

The efficient network of 8.33 Contact persons, established during the Implementation Programme, is available to support the horizontal expansion activities at regional level (ref. Annex C 'List of 8.33 Contact Persons').

In line with the ICAO EANPG/38Mandate, the 8.33kHz Vertical Expansion Study, carried out in conjunction with EANPG-FMG, will assess the need for vertical expansion of 8.33 kHz Airspace within the EUR Region.

RECOMMENDATION

The Members of the ACG are invited to :

- a) note that the Agency has begun preparation activities for the 8.33 kHz Horizontal Expansion Programme and the 8.33kHz Vertical Expansion Study;
- b) notify the 8.33 Programme Manager about any changes in the 8.33 Contact Persons list provided in Annex C;
- c) note the issues to be addressed at EANPG/42 as a result of FMG/4 and COG/18 and liaise with EANPG members.

1. INTRODUCTION

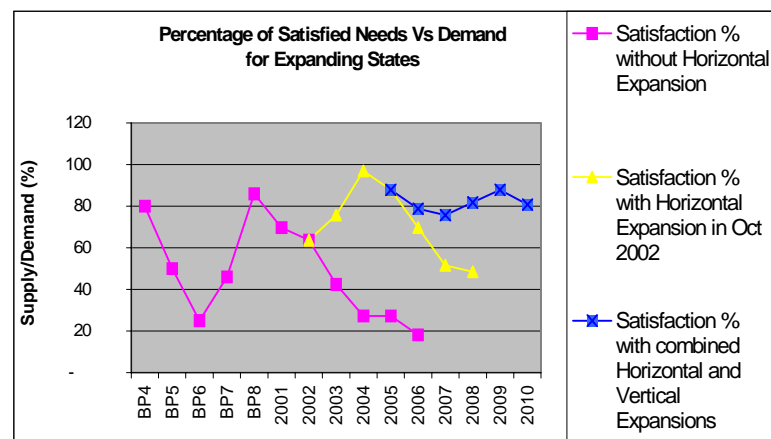
The 8.33 Horizontal Expansion Programme (8.33 HEP) and the 8.33 Vertical Expansion Study (8.33 VES):

- are the logical follow up to the 8.33 kHz Channel Spacing Implementation Programme closed in June 2000,
- were forecasted in the EATMP approved 8.33 PMP
- were strongly supported by ICAO EANPG and Frequency Management Group, and
- were approved respectively by ACG/9 and ACG/8.

2. STRATEGIC VALUE OF THE 8.33 kHz CHANNEL SPACING

As strongly emphasised by airspace users and ATS providers in fora such as ACG/8&9, IATA RTC and the US/FAA NEXCOM meeting, the provision of sufficient communication channels for voice communication is a strategic requirement, and will remain so for at least the next decade,.

As demonstrated in the original 8.33 kHz implementation, the programme and its expansion will help to prevent frequency spectrum congestion from occurring again within the next 5-10 years timeframe.



3. EXPANSION ACTIVITIES

In line with the CIP objectives (Ref. European Convergence and Implementation Plan for the Years 2000-2005 Ed. 1.0, June 2000), and as required by the ICAO EANPG/38/40/41 and approved by ACG/8 and ACG/9, the two following activities have been launched:

3.1. 8.33 Horizontal Expansion Programme (8.33 HEP)

This programme represents another logical step toward the ICAO EANPG mandatory carriage of 8.33 compatible radio equipment above FL 245 throughout the ICAO EUR Region (Ref. Plan for 8.33 kHz Channel Spacing Implementation in Europe; Ed. 2.0, 02/12/96).

It will involve at least 20 (+1)¹ additional States, from 31 October 2001, in addition to the 7 States currently operating the 8.33 kHz channel spacing (Annex B).

3.2. 8.33 Vertical expansion Study (8.33 VES)

With no evidence to indicate any new technologies ready for implementation² within the next decade, nor any downward trend in the demand for new VHF allocations which would relieve the congested radio spectrum, there is an urgent requirement to decide whether to increase the vertical area of 8.33 kHz operations. With regard to the significant number of stakeholders involved, an adequate notification period would be required i.e. 7 Years.

The initial findings of the 8.33 VES will be presented to ICAO EANPG/42 (4Q00), following simulations conducted in conjunction with EANPG/FMG. More substantiated results will be presented to EANPG/43 (4Q01).

4. OBJECTIVE

The main objective of the 8.33kHz Horizontal Expansion Programme is to co-ordinate the further implementation and operation of 8.33 kHz channel spacing in the EUR Region (above FL 245), in accordance with the original mandate given to EUROCONTROL by the ICAO EANPG/38 (1996).

Benefits resulting from the original 8.33 implementation and horizontal expansion programmes will be assessed. The 8.33kHz Horizontal Expansion Programme will also support any required fine tunings be carried out on the original 8.33 implementation.

The objective of the 8.33kHz Vertical Expansion Study is to assess, in conjunction with FMG, the need for a vertical expansion of the 8.33 airspace in the ICAO EUR Region, with respect to future frequency demand, the costs, benefits, and possible alternatives.

5. 8.33 EXPANSION PROGRAMME ORGANISATION

The activities required for the 8.33kHz horizontal expansion will mirror activities carried out during the original implementation programme.

¹ Bosnia & Herzegovina is to make a decision based on Yugoslavia and Croatia.

² The same problem is currently experienced in the US – Refer to the outcome of the FAA/NEXCOM meeting (18 Sept. 2000).

5.1. Working Arrangement

The working arrangements that proved to be successful for the Initial 8.33kHz Programme will be applied to the 8.33kHz Horizontal Expansion Programme. Consequently, the following groups are being reactivated:

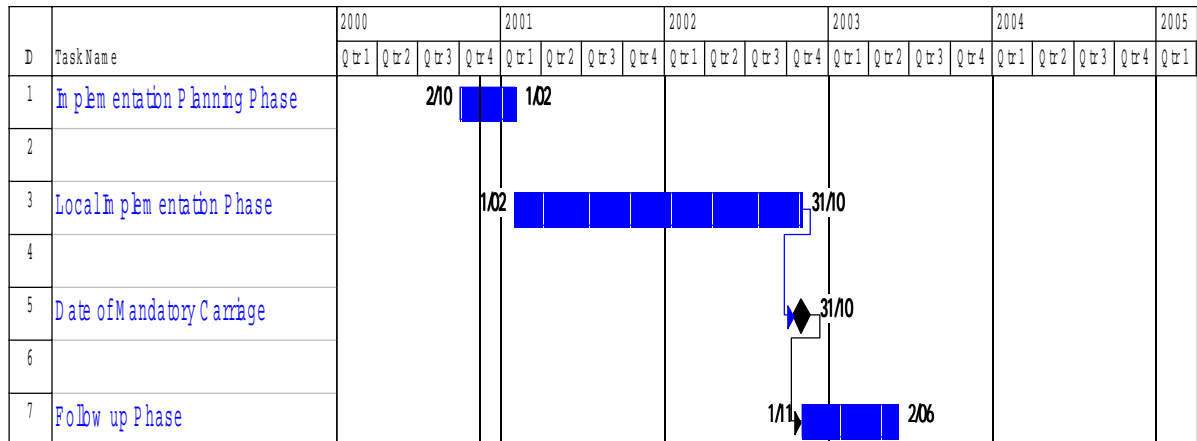
- 8.33 Contact Persons plenary and regional co-ordination meetings
- 8.33 Programme Steering Group (previously Project Management Cell) involving the States taking part in the horizontal expansion
- 8.33 Retrofit Group meetings

The very efficient network of 8.33 Contact persons, established during the original 8.33 Implementation Programme, will be used to assist and support the horizontal expansion activities at regional level. Therefore, ACG members, in accordance with Action B of the Recommendations to ACG 10, should notify any changes related to 8.33 Contact Persons

5.2. 8.33 Work Breakdown Structure

Similarly, a Work Break Down Structure based on the original 8.33 Programme organisation will apply and is provided in Attachment A.

6. GANTT CHART



7. ICAO EANPG/42

The EANPG/42 will be held at ICAO Paris from on 4-7 December 2000. ACG members are informed that further to FMG/4 and COG/18, EANPG/42 will be required to support the following issues :

- Endorsement of the requirement of 8.33 kHz Horizontal Expansion³ to as many as possible States and with EUROCONTROL Agency as a managing agent to co-ordinate the implementation.
- Confirmation of the need for the 8.33 kHz Vertical Expansion Study⁴ with conclusions to be provided at EANPG/43
- That an assessment on any alternative⁵ to the 8.33 kHz Vertical Expansion addressing the anticipated VHF frequency shortage be conducted before EANPG/43 by EUROCONTROL.

8. RECOMMENDATIONS

The Members of the ACG are invited to:

- a) note that the Agency has begun preparation activities for the 8.33 kHz Horizontal Expansion Programme and the 8.33kHz Vertical Expansion Study;
- b) notify the 8.33 Programme Manager about any changes in the 8.33 Contact Persons list provided in Annex C;
- c) note the issues to be addressed at EANPG/42 as a result of FMG/4 and COG/18 and liase with EANPG members.

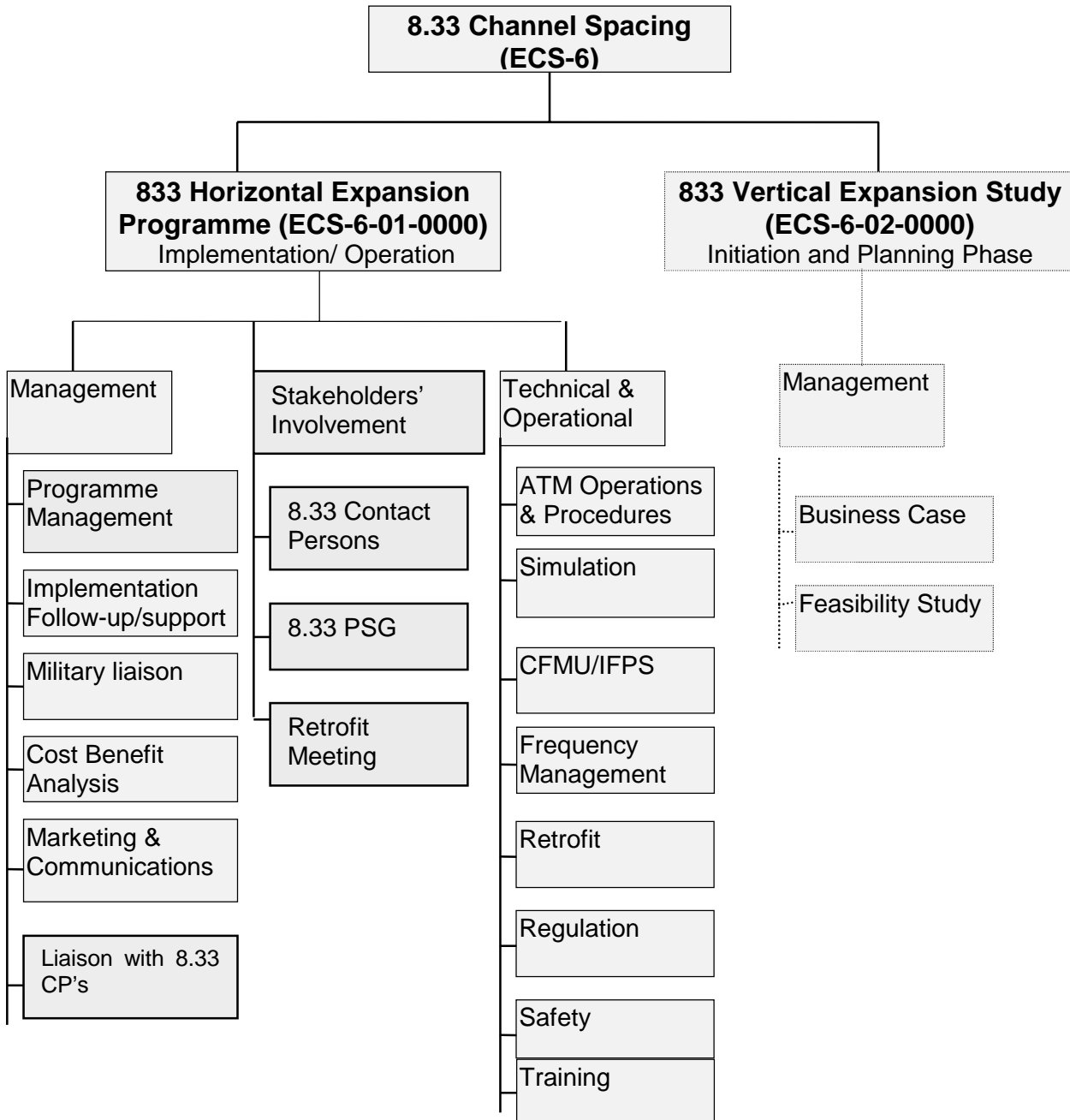
³ As requested by ACG/9

⁴ As approved at ACG/8

⁵ notably addressed by IATA at their RTC meeting (24-26 October 2000)

ANNEX A

8.33 Work Break Down Structure



ANNEX B

List of the States Participating In the 8.33 Horizontal Expansion

State Answers as per 15 November 2000	31-oct-02	Other AIRAC date	Coordination by EUROCONTRO L	Comments
Albania				No answer
Bulgaria	NO	NO	NA	possibly after 2005
Bosnia & Herzegovina				depend on ICAO mtg mid Sept.
Croatia	YES	NA	YES	
Czech Republic	YES	NA	YES	
Cyprus				No answer
Denmark	Possible		YES	depend on NO,FIN & SE
Estonia	NA	YES	YES	2003-2004
Finland	Possible		?	depend on NO,DK & SE
FYROM				No answer
Greece				No answer
Hungary	YES	NA	YES	
Ireland	NA	YES	YES	2005
Italy	YES	NA	YES	
Latvia	YES	NA	YES	
Lithuania	YES	NA	YES	
Moldova				No answer
Norway	Possible		?	will try 31-Oct 02 with DK,SE,FI
Poland	NA	YES	YES	oct-03
Portugal	NA	YES	YES	oct-03
Romania	YES	(OR YES)	YES	depend on Buccarest ACC
Slovak Republic	YES	NA	YES	with CZ, PL & HU
Slovenia	YES	NA	YES	
Spain	NA	YES	YES	mars-03
Sweden	Possible			No answer but with NY, DK & FI
Yugoslavia	YES	NA	YES	
UK	?	YES	YES	No date
Ukraine				No answer
Total State to go for 8.33	20		17	Support Agency coordination
	21 States with BA - BA should join with YU and HR becoming 8.33			

ANNEX C

List of the States 8.33 Contact Persons

CP Membership	State	Name	Telephone	Fax Number	Email
M	Albania	Kokona, Adriatik	355 42 26232	355 42 23969	dpac2@albnet.net
M	Austria	Pritz, Heinrich	43-1-17.03.20.20	43-1-17.03.20.06	heinrich.pritz@austrcontrol.at
M	Belarus	Bondar, Vladimir	375-17-2225585	357-17-2225264	gka-rb@fcoc.belpak.minsk.by
M	Belgium	De Ketelaere, Roland	32-2-753.83.40	32-2-753.82.22	roland_deketelaere@rlw-rva.be
M	Bosnia & Herzegovina	Raguz, Eldo	387-33-653 016	387-33-653 008	ello.raguz@bhdta.gov.ba
I		Singh, Vijendra	+387 71 665695 ext.122	+387 71 665681	vsingh@undp.com.ba
M	Bulgaria	Stoyanov, Ludmil	359 2 98441062, 359 2 843 5115	359 2 874643	LStoyanov@mt.government.bg
M	Croatia	Rosic, Ivan	385-1-6229 303	385-1-6229 304	skl@crocontrol.tel.hr
M	Cyprus	Orphanos, Costas	357 2 304908	357 2 766 552	acc@cytanet.com.cy
M	Czech Republic	Gajda, M.	420-2-20.37.26.86	420-2-20.37.20.11	gajda@ans.cz
M	Denmark	Feldberg, Bo	45 3644 0808/473	45-3644-0303	bofe@slv.dk
M	Estonia	Tarlap, Mati	372-62-582.22	372-62-582.00	mati@eans.ee
M	Finland	Puisto, Martti	358-9-82.77.22.48	358-9-82.77.22.92	martti.puisto@fcaa.fi
M	France	Lemarchand, Denis	33-1-69.57.72.55	33-1-69.57.73.73	LEMARCHAND_Denis@scta.dgac.fr
M	FYROM	Klimov, Dragan	389-91-148254	389-91-148239	accsmac@mol.com.mk
M	Germany	Morr, Michael	49-69-80.54.11.50	49-69-80.54.11.95	michael.morr@dfs.de
M	Greece	Savramis, Angelos	3 01-99 72 564	3 01-99 30 573	
A	Hungary	Cserhati, Andras	+361 296 9137	+361 296 9136	cserhati.andras@ans.lri.hu
M		Toth, Andras Jozsef	+361 296 6533	+361 296 8808	
I		Gyula Hangyal	361-296-9169	361-296-9113	hangyal.gyula@ans.lri.hu
M	Ireland	Burke, Tom	353-61-70.37.01	353-61-47.21.15	tom.burke@iaa.ie
M	Italy	Di Vincenzo, Claudio	39-06-8166658	39-06-8166586	cdivincenzo.enav@interbusiness.it
M	Latvia	Ansons, Maris	371 7207907	371 7207122	ansons@latcaa.gov.lv
M	Lithuania	Rudokas, Mindaugas	370-2-739197	370-2-739187	nrst@aiva.lt
A	Luxemburg	Klein, Henri	352- 478 4412 Or 352- 478 1	352- 467 790	
M	Malta	Borg Marks, George	356 25900507	356 239278	jbor5@um.edu.mt or gorgbm@hotmail.com
M	Moldova	Somov, Konstantin	373-2-529 161	373-2-529 118	k_somov@hotmail.com
M	Monaco	Bayol, Henri	377-93.15.80.24	377-93.15.87.08	
M	Netherlands	Bierling, Harry	31-20-406.36.24	31-20-406.35.38	h.bierling@lvnl.nl
M	Norway	Pedersen, Jan-Gunnar	47-22-94.23 36	47-22-94.23.97	jan-gunnar.pedersen@caa.no
M	Poland	Salwa, Wlodzimierz	+48 22 5745592	+48 22 5745599	w.salwa@polish-airports.com
M	Portugal	Cardoso, Edgar	351 21-855-3553/3100	351-21-847.37.66	ecardoso@nav.pt
A	Romania	Ionescu, Radu	+401 203 2737	+401 203 2762	radu@caa.ro
M	Russia	Samohin, Victor I.	7-095-155.58 61	7-095-155.55 35	
A	San Marino	Gatti, G.	378- 882-201	378- 992 018	

M	Slovak Republic	Bonda, Dusan	421-7-48.57.25.00	421-7-48.57.25.05	dusan.bonda@rlp.sk
M	Slovenia	Sarlah, Ivan	386-61-131.60.18	386-61-131.71.78	ivan.sarlah@caa-rs.si
I		Jansa, Srecko	386-61-1734 700	386-61-1734 777	srecko.jansa@caa-rs.si
M	Spain	Gonzalez, Enrique	34-91-321.32.66	34-91-321.31.16	egonzalez@aena.es
M	Sweden	Skarsfjaell, Sigge	46-11-19.25.27	46-11-19.26.40	sigge.skarsfjall@ans.lfv.se
M	Switzerland	Cottier, Francois	41-22-417.40.22	41-22-417.45.01	francois.cottier@swisscontrol.com
M	UK	Ennis, George	44-171-832-5451	44-171-832-5582	george.ennis@nats.co.uk
M	Ukraine	Antonov, Leonid A.	380-44-2218275	380-44-2168028	sertaru@sirena.net
M		Subbota, Vladimir	998-71-136-7375	998-71-133-24-29	vsubbota@uzcaa.uz
I	Yugoslavia	Bilbija, Branko	381 11 311 7801	381 11 311 7205	sukl@sszi.sv.gov.yu
M		Papulic, Radmila	38-11-15.49.00	381-11-154 151	sukl@sszi.sv.gov.yu
M		Pocuca, Milorad	38-11-15.49.00	381-11-154 151	sukl@sszi.sv.gov.yu

Key: M - Member; A - Alternative; I - For Information