CEPT - European Conference of Postal and Telecommunications Administrations ECTRA - European Committee for Telecommunications Regulatory Affairs ETO - European Telecommunications Office

CEPT / ECTRA Decision of 3 March 1999

On harmonisation of authorisation conditions in the field of Satellite Personal Communications Services (S-PCS) in Europe, operating within the bands 1525-1544/1545-1559 MHz, 1626.5-1645.5/1646.5-1660.5 MHz

(ECTRA/DEC(99)01)

CALL FOR COMMITMENT 26.03.1999

CEPT/ECTRA





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As Chairman of the European Committee for Telecommunications Regulatory Affairs (ECTRA), I hereby confirm that this decision was approved in Madrid on 3 March 1999 at the XXVIIIth ECTRA Plenary Meeting and that during the two months following the adoption of the decision I have received commitments in writing from the following CEPT member countires to implement the terms of this decision:

[Country A Country B Country C Country D Country E etc.

to be completed after <u>written confirmation</u> to be given by CEPT Members within two months of the adoption of the decision, that means until 03.05.1999]

Frédéric Riehl ECTRA Chairman 26.03.1999]

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(ECTRA/DEC(99)01)

The European Conference of Postal and Telecommunications Administrations,

CONSIDERING

- 1) that S-PCS systems will provide either global or regional coverage,
- 2) that harmonised conditions for authorisations, will benefit users, satellite network operators, service providers, manufacturers and administrations,
- 3) that the European Parliament and Council Decision 710/97/EC on a co-ordinated authorisation approach in the field of S-PCS in the European Union (EU) has been adopted,
- 4) that the granting of authorisations is the sovereign right of states, i.e. the responsibility of National Regulatory Authorities (NRAs), and that NRAs may require individual licenses for such authorisations,

TAKING INTO ACCOUNT

- 1) the time schedule laid down in the EU Mandate to CEPT ERC and ECTRA for the monitoring of frequency use and harmonisation of authorisation conditions and procedures for Satellite Personal Communications Services in the bands 1525-1544/1545-1559 MHz, 1626.5-1645.5/1646.5-1660.5 MHz (the 1.5/1.6 GHz band) for the implementation of S-PCS operating in that band,
- 2) that the frequency bands 1525-1544/1545-1559 MHz, 1626.5-1645.5/1646.5-1660.5 MHz are allocated for the provision of mobile satellite services, within which S-PCS will be provided,
- 3) that the use of radio spectrum is subject to multilateral agreement (ITU Radio Regions 1 & 3, 1.5/1.6 GHz band Memorandum of Understanding (1.5/1.6 GHz band MoU)) under the provisions of the international Radio Regulations, which are regularly reviewed.
- 4) that a Milestone Review Procedure has been implemented under the 1.5/1.6 GHz-Band MoU to determine if the milestones are met by satellite network operators (see Annex 1),
- 5) that, with regard to S-PCS mobile earth stations (MESs) operating within the bands identified in Taking Into Account 2) above, ERC has adopted Decisions concerning the free circulation and use of certain terminals,
- 6) that, within the EEA, Directive 97/13/EC on a common framework for general authorisations and individual licenses in the field of telecommunications services, as well a Directive 98/13/EC relating to telecommunications terminal equipment and satellite earth stations equipment including the mutual recognition of their conformity have been adopted

DECIDES

- 1) that this Decision shall not prejudice the obligation of the EEA member states to act in accordance with applicable Community law or CEPT members to act in accordance with their national legislation,
- 2) that in this Decision, the term authorisation shall cover any legal or administrative measures regarding telecommunications networks or services or terminals for S-PCS at 1.5/1.6 GHz,
- 3) that when granting the authorisations referred to in Decides 2 above, NRAs take into account the agreements reached in the 1.5/1.6 GHz band MoU with regard to frequency assignments for systems that have complied with the milestones specified by the 1.5/1.6 GHz band MoU (see Annex 2),

- 4) that the conditions that may be attached to the authorisations referred to in Decides 2 above shall be in accordance with Directive 97/13/EC, which does not refer to terminals.
- 5) that necessary measures of legal and administrative nature and the authorisation shall be granted within the time schedule compatible with the technical and commercial need of S-PCS under consideration,
- 6) that ECTRA will review this Decision at least every two years, if necessary,
- 7) that this Decision shall enter into force on 1 May 1999,
- 8) that CEPT Member Administrations shall communicate the national measures implementing this Decision to the ECTRA Chairman and the ETO when the Decision is nationally implemented.

Milestones specified in Annex 2 of the Memorandum of Understanding dated 14th December 1997 "Regions 1 & 3 Multilateral GSO/MSS intersystem co-ordination for the frequency bands 1525-1544/1545-1559 MHz, 1626.5-1645.5/1646.5-1660.5 MHz"

- 1. a) Submission of ITU Advance Publication and Co-ordination Documents and amendments hereto.
- 1. b) Submission of data required for consideration at SSA meetings including technical characteristics.
- 2. Satellite manufacturing or procurement

The Operator should provide clear evidence of a binding agreement for the manufacture or procurement of its satellites. The document should identify the milestones leading to the completion of manufacture or procurement of satellites required for the service provision. The Notifying Administration is responsible for authenticating the evidence proved.

3. Satellite launch agreement

The Operator should provide clear evidence of a binding agreement to launch the GSO satellite. The document should identify the launch date and launch service provider. The Notifying Administration is responsible for authenticating the evidence proved.

4. Gateway earth stations

The Operator should provide clear evidence of a binding agreement for the construction and installation of gateway Earth Stations that will be used to provide the GSO Mobile-Satellite Service. The Notifying Administration is responsible for authenticating the evidence proved.

5. Launch of satellite

a) The Notifying Administration is responsible for authenticating the documents provided confirming the successful satellite launch and in-orbit deployment.
b) In the event of a launch failure, the Operator will advise the Notifying Administration and provide an assessment of the impact of the launch failure on the schedule for commencement of service. The Notifying Administration is responsible for authenticating the documents provided to satisfy milestones 2 and 3, pertaining to the manufacture and launch of the replacement satellite. Based on the information provided by the Operator, it may be necessary to adjust the "milestones Date" for milestones 5 and 6.

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6. Availability of GSO MSS Networks service
The Operator will advise its Notifying Administration that it has launched, and has ready for the provision of service, the satellite previously identified under milestones 3 as necessary to provide continuous service, and that it will be providing service within the spectrum allocation as agreed under the current SSA.

Memorandum of Understanding dated 14th December 1997 "Regions 1 & 3 Multilateral GSO/MSS intersystem co-ordination for the frequency bands 1525-1544/1545-1559 MHz, 1626.5-1645.5/1646.5-1660.5 MHz" (including Amendment No. 1 dated 18th September 1998)

0) Guided by the desire to establish co-operation in the field of spectrum usage over the Indian and Pacific Ocean regions and pursuant to the International Telecommunication Union (ITU) Radio Regulations, the Administration of Australia (Australian Communications Authority), the Administration of Germany (Federal Ministry of Posts and Telecommunications), the Administration of the Republic of Indonesia (Directorate General of Posts and Telecommunications), the Administration of Italy (Ministero delle Comunicazioni), the Administration of Japan (Ministry of Posts and Telecommunications) the Administration of the Russian Federation (The State Committee for Communications and Informatisation of the Russian Federation), the Administration of the Republic of Singapore (Telecommunication Authority of Singapore), the Administration of the United Arab Emirates (Ministry of Communications), the Administration of the United Kingdom of Great Britain and Northern Ireland (the Radiocommunications Agency), the European Space Agency (ESA), and the International Mobile Satellite Organisation (Inmarsat), herein referred to as the "Parties" record the following understandings.

I. PREAMBLE

1. The Parties enter into this Memorandum of Understanding (MoU) pursuant to the ITU Radio Regulations (RR), to conclude, in a timely manner, the frequency coordination of GSO Mobile-Satellite Service (MSS) networks in Regions 1 and 3 in accordance with ITU procedures, through a series of successive Spectrum Sharing Arrangements (SSAs) agreed among system Operators. All Parties entering into this MoU will also agree to implement the milestones process specified herein in order to determine the eligibility of GSO MSS networks to be included in any SSA during the period of validity of that SSA. All Parties will co-operate in the development of the SSAs.

II. PURPOSE

2. This MoU established an ongoing multilateral process to develop a series of successive SSAs, each of which will be valid for a specified period of time, and which are periodically reviewed, for the operation of GSO MSS networks in the

- frequency bands 1525-1544/1545-1559 MHz (space-to-Earth) and 1626.5-1645.5/1646.5-1660.5 (Earth-to-space) in regions 1 and 3, as defined by the ITU.
- 3. The accomodation of the spectrum requirements of GSO MSS networks, which are published but may not be brought into use during the period of validity of an SSA, would inhibit the use of the above bands by GSO MSS networks. To avoid this difficulty, this MoU establishes milestones criteria to be adopted by the Parties to this MoU by which the progress of a GSO MSS network toward the offering of service can be monitored, with a view to considering only the authenticated spectrum requirements of GSO MSS networks in the development of SSAs.

III. PARTIES

4. The Parties to this MoU are those Administrations and recognised International Organisations listed in paragraph 0. The provisions of this MoU and the SSA apply to the satellite networks listed in Tables in Annex 1.

IV. PROVISIONS RELATING TO SPECTRUM SHARING ARRANGEMENTS

- 5. In preparation of data required for consideration at SSA meetings, the following schedule will be followed:
 - a. six months prior to the SSA meeting, the Operators will submit their GSO MSS Networks' technical characteristics to an agreed co-ordinator;
 - b. five months prior to the SSA meeting, the Co-ordinator dispatches a consolidated technical document, from information received in a. above, to the Operators;
 - c. the Operators will review this document and exchange comments and possible agreements among themselves;
 - d. two months prior to the SSA meeting, the Operators submit their reviewed GSO MSS Networks' technical characteristics, projected spectrum requirements and results of any agreed frequency reuse matrix to the coordinator; and
 - e. one month prior to the SSA meeting, the Co-ordinator dispatches a consolidated technical document from information received in d. above, to the Operators.
- 6. The Parties will urge the Operators to use GSO MSS system spectrum assignments within the frequency bands 1525-1544/1545-1559 MHz (space-to-Earth) and 1626.5-1645.5/1646.5-1660.5 MHz (Earth-to-space) in the most efficient manner practicable.

- 7. The Parties will ensure that the Operators develop SSAs for successive years, reviewed at least annually, in accordance with the relevant positions of the ITU Constitution, Convention and the Radio Regulations. The Operators will provide their developed SSAs to their Notifying Administrations.
- 8. Each SSA will also take into account the plans for the deployment of satellites for both existing operational satellite networks and the planned networks of GSO MSS Operators and consider their spectral efficiency.
- 9. In the development of SSAs for Regions 1 and 3, the necessary consultation will be made with Parties of Region 2 who have entered into frequency co-ordination or similar SSAs, in order to meet the requirements for the seamless operation of GSO MSS networks in more than one Region, or to ensure compatibility with networks operating in Region 2.
- 10. In the deployment of all new networks, the Parties will accommodate the in orbit testing of the new satellites and the operational transition of traffic from existing to new networks, where required, recognising the need for limited access to uncoordinated frequencies by prior agreement.
- 11. In the development of SSAs the Operators:
 - a. will as a minimum, demonstrate compliance with milestone 1 of the milestone criteria described in Annex 2. For any given year only those networks can apply for spectrum that have, as a minimum, completed milestones 1 to 4 of Annex 2.
 - b. will subject the GSO MSS networks to milestone evaluation as described herein, to monitor the progress of each GSO MSS networks. The Notifying Administration will certify the compliance by Operators of the relevant milestones
 - c. will ensure that the spectrum is shared in the most efficient manner practicable. The Operators will seek to minimise spectrum for global beams and will not seek to expand, where applicable, global beam usage.
 - d. will state the effective date of coming into force of an SSA.
- 12. The SSA specified in Annex 3 will provide the basis for spectrum use during the current planning period i.e. 1998 for the second MLM.
- 13. In accordance with milestone 1b the Operators will exchange relevant information on the systems listed in Tables of Annex 1, and meet in the 3rd quarter 1998 to negotiate any revisions to the SSA for the period expiring at the end of 1999 (Annex 4).

- 14. Thereafter at yearly intervals, each SSA will be revised allowing for the extent to which the Operator has utilised the bandwidth allocated. This revision will take into account reporting by all Operators of their actual spectrum usage. The Operators will develop mutually agreeable methods for monitoring spectrum usage, for verification purposes, in time for consideration at the next SSA review meeting (3rd quarter 1998). The revision will also take into account any justified additional spectrum requirements of Operators for the next SSA period. The revision may result in recommendations to increase or reduce spectrum allocations of Operators. Criteria for the annual review process, additional to future projections and demonstrated spectrum use, will be developed in time for consideration at the next SSA meeting and during subsequent meeting.
- 15. In the event that the Operators are unable to conclude a SSA for a forthcoming period, the current SSA will remain valid. All Parties will then determine an appropriate course of action in the development of a new SSA.

V. PROVISIONS RELATING TO MILESTONE COMPLIANCE

16. An Operator, having been provisionally allocated spectrum under a SSA, can operate its GSO MSS network within the agreed spectrum allocation only after it has demonstrated compliance with milestones 1 to 6.

VI. PROVISIONS RELATING TO THE USE OF FREQUENCY ASSIGNMENTS UNDER SPECTRUM SHARING ARRANGEMENTS

- 17. The Parties will ensure that the use of frequency assignments is consistent with the ITU RR. Frequency assignments made in the SSA are not to be traded for profit among Operators.
- 18. Frequencies allocated to an Operator and not brought into service, or for which service has ceased with no imminent successor service, will be removed from the SSA and brought to the attention of all the Parties.

VII. SPARE SATELLITE NETWORKS AND REPLACEMENTS SATELLITES

19. The operation of in-orbit spare satellites will be permitted by the Parties with the understanding that the usage for these spare satellites is within the Operator's designated spectrum. Additional frequency spectrum, or protection from other satellite networks, will not be sought from the Operators operating within the current SSA.

VIII. INFORMING THE ITU OF THE AGREEMENT REACHED AT THE MULTILATERAL FREQUENCY CO-ORDINATION

20. The Notifying Administration will inform the ITU Radiocommunication Bureau that co-ordination of those satellite networks listed in Table B of Annex 1, which have satisfactorily completed milestones 1 to 4, has been reached. However, the

Notifying Administrations will ensure that the Operators use only the spectrum designated to each GSO MSS network as agreed in the current SSA.

IX. RESOLUTION OF UNACCEPTABLE INTERFERENCE

21. The Notifying Administrations will instruct satellite Operators to avoid situations which could potentially give rise to unacceptable interference. In the event that the satellite Operators are unable to resolve among themselves any cases of harmful interference.

X. CONFIRMATION AND EFFECTIVE DATE OF THE AGREEMENT OF THE MEMORANDUM OF UNDERSTANDING

- 22. Parties will affirm their acceptance within 60 days from the date of this MoU.
- 23. The effective date of this MoU is either:
 - i. the date on which all parties have confirmed their acceptance of this MoU; or
 - ii. 60 days from the date of this MoU, which ever is earlier.

XI. AMENDMENTS TO THE MEMORANDUM OF UNDERSTANDING

24. Any Party may request a meeting of the Parties to propose amendments to the MoU. Such a meeting will be held within three months of a written request, detailing the nature of the proposed amendments. The MoU will in any case be reviewed by the Parties every 5 years from the effective date.

XII. TERMINATION OF THE MEMORANDUM OF UNDERSTANDING

25. This MoU may be terminated at any time with the consent of the simple majority of the Parties whose Operators demonstrate compliance with milestones 1 to 4.

Amendment No.1

THIS AMENDMENT is made the 18th day of September 1998 **BETWEEN** the following Administrations:

The Administration of Australia (Australian Communications Authority), the Administration of Cyprus (the Ministry of Communications and Works), the Administration of the Kingdom of Saudi Arabia, the Administration of the Republic of Indonesia (Directorate General of Posts and Telecommunications), the Administration of Italy (Ministero delle Comunicazioni), the Administration of Japan (Ministry of Posts and Telecommunications) the Administration of the Russian Federation (The State Committee for Communications and Informatisation of the Russian Federation), the Administration of the Republic of Singapore (Telecommunication Authority of Singapore), the Administration of the

United Arab Emirates (Ministry of Communications), the Administration of the United Kingdom of Great Britain and Northern Ireland (the Radiocommunications Agency), the European Space Agency (ESA), and the International Mobile Satellite Organisation (Inmarsat), herein referred to as the "Parties".

WHEREAS

- (A) The Parties entered into a Memorandum of Understanding dated 14th December 1997 ("the MoU") relating to the frequency co-ordination of GSO Mobile-Satellite Service ("GSO MSS") networks in Regions 1 and 3 in accordance with the procedures of the International Telecommunication Union ("ITU").
- **(B)** The Parties wish to amend the MoU in accordance with the terms hereinafter stated.

NOW IT IS HEREBY AGREED as follows:

1. AMENDMENTS TO THE MoU

The Parties agree hereby to amend the MoU as follows

1.1 Paragraph 12

Amend by deletion of the text in its entirety and replace by the new Paragraph 12 as follows:

"12. The Operators will, on a yearly basis, and subject to the provisions of this MoU, enter into an Operators Agreement ("the Operators Agreement") to develop Current amd Master SSAs. Such Operators Agreement will, without prejudice to the provisions of the MoU, be deemed an independent and a standalone document. A current SSA under a particular year's Operators Agreement will form the basis for the following year's SSA."

1.2 Paragraph 13

Amend by deletion of the text of this Paragraph in its entirety.

1.3 Paragraph 14

Amend by deletion of Paragraph 14 in its entirety and replace by the new Paragraph 14 as follows:

- "14.1 Thereafter at yearly intervals Operators will exchange relevant information on the networks listed in Tables of Annex 1 and meet in the fourth quarter of each year to review and develop a new Operators Agreement for the next year taking the following into account:
 - i. progress with mileston compliance by networks included in the Master SSA
 - ii. the extent of Spectrum used by networks in the current year's SSA, validated by agreed monitoring methods; and
 - iii. justification of any additional spectrum requirements of networks

14.2 Unless by reason of *force majeure*, Operators who do not participate in the annual review of the current year referred to in 14.1 above will have their previously assigned spectrum removed from the Current SSA of the following year.

1.4 Paragraph 15.

Amend by deletion of Paragraph 15 in its entirety and replace by the new Paragraph 15 as follows:

"15. In the event that the Operators are unable to conclude an SSA under an Operators Agreement for a forthcoming period, the Current SSA will remain valid. The Parties and Operators will then determine an appropriate course of action regarding the development of a new SSA."

1.5 Paragraph 17

Amend by deletion of paragraph 17 in its entirety and replace by the new Paragraph 17 as follows:

"17. The Parties will ensure that the use of frequency assignements is consistent with the Parties' obligations under the ITU Radio Regulations. Frequency assignments made in the SSA should not be traded for profit amongst Operators. The policy of the Parties in relation to trading or transfer of frequency assignments made in the SSA should be aimed at limiting the potential for speculation and hoarding of frequency assignments. These provisions, however, do not preclude legitimate leasing of space segment capacity (but not spectrum) between two Operators providing that such a lease does not adversely impact on the Current SSA."

1.6 Paragraph 19

- i) Delete the first sentence of Paragraph 19 and replace by the following text.

 "19 If a Party permits the operation of in-orbit spare satellites by an Operator, that Party should ensure that the spectrum used for the spare satellites is only within that Operators assigned spectrum."
- ii) Add new Clause VII bis and Title as follows:

"VII bis ACCOMODATION OF NEW SATELLITES"

"19.1 Additional L-band GSO/MSS networks will be considered and equitably accommodated to the extent feasible, subject to the provisions of this MoU, and in particular Clause IV and milestone progress (annex 2) thereof. The Party responsible for the additional network will inform all other Parties of such additional network and request that the same be included in Table B of Annex 1. The accommodation of new L-band GSO/MSS networks would also be considered subject to the responsible Administration requesting to become a Party to the Current MoU, and compliance with milestones as specified by the MoU.

1.7 Paragraph 20

Amend Paragraph 20 as follows:

"20. The Notifying Administrations will inform the ITU Radiocommunication Bureau that those satellite networks listed in Tables of Annex 1, which have satisfactorily completed milestones 1 to 4 inclusive and have been assigned spectrum in the Current SSA, have completed co-ordination with each other. However, the Parties will ensure that their respective Operators use only the spectrum assigned to each GSO/MSS network as agreed in the Current SSA."

1.8 Paragraph 21.

Amend Paragraph 21 by addition after line 3 of the following text:

"...interference, the Parties will then deal with the matter in accordance with ITU procedures and should take account of the SSA."

2. SAVING PROVISION

- **2.1** Save the amendments made hereunder, all provisions of the MoU will remain valid and binding between the Parties to the MoU.
- **2.2** Parties hereof not signatories to the MoU hereby acknowledge that they are deemed hereunder to have signed, accepted and acceded to the MoU.
- **2.3** Administrations wishing to join after the date hereof the Multilateral Coordination process as established under the MoU, by signature and/or acceptance of the MoU will automatically be deemed to have accepted and acceded to this Amendment.

3. CONFIRMATION AND EFFECTIVE DATE OF THE AMENDMENT

- **3.1** The Parties will affirm their acceptance of the terms of the Amendment within 60 days from the date of signature hereof
- **3.2** The effective date of this Amendment is either:
- (a) the date on which all Parties have confirmed their acceptance of the Amendment; or
- **(b)** 60 days from the date of signature hereof whichever is earlier.