

Approved
Terms of Reference
for the
Informal Working Groups

**WRC-2003 ADVISORY COMMITTEE
INFORMAL WORKING GROUP 1 (IWG-1)**

TERMS OF REFERENCE

IWG-1 -- IMT-2000 and beyond; HAPS in IMT-2000 bands

Using the Charter for the WRC-03 Advisory Committee (Committee) as the basic document, the Terms of Reference of IWG-1 are to draft and justify for consideration by the Committee as a whole recommendations for U.S. proposals and positions related to:

- 1) WRC-03 Agenda Items 1.21, 1.22 and 1.33
 - 1.21 to consider progress of the ITU-R studies concerning the technical and regulatory requirements of terrestrial interactive multimedia applications, in accordance with Resolution **737 (WRC-2000)**, with a view to facilitating global harmonization;
 - 1.22 to consider progress of ITU-R studies concerning future deployment of IMT-2000 and systems beyond IMT-2000, in accordance with Resolution **228 (WRC-2000)**;
 - 1.33 to review and revise technical, operational and regulatory provisions, [including provisional limits in relation to the operation of high altitude platform stations within IMT-2000 in the bands referred to in No. **S5.388A/S5.BBB**, in response to Resolution **221 (WRC-2000)**;
- (2) any consequential changes to relevant parts of the Radio Regulations;

and
- (3) any related matters identified by the Designated Federal Officers.

Recommendations for U.S. proposals and positions related to the above shall be supported by narrative text and technical justification, including supporting studies. Any relevant papers and/or studies developed in IWG-1 should also be input to the National Committee process and to the National Telecommunication and Information Administration's Radio Conference Subcommittee for consideration in their processes and possible consideration on the ITU-R process.

WRC-2003 ADVISORY COMMITTEE

INFORMAL WORKING GROUP 2:
MOBILE-SATELLITE SERVICE INCLUDING GPS

TERMS OF REFERENCE

Using the Charter for the WRC-03 Advisory Committee (Committee) as the basic document, the Terms of Reference of IWG-2 are to draft and justify for consideration by the Committee as a Whole recommendations for U.S. proposals related to:

- (1) the consideration of the results of studies related to Resolution **114 (WRC-95)**, dealing with the use of the band 5 091-5 150 MHz by the fixed-satellite service (Earth-to-space) (limited to non-GSO MSS feeder links), and the review of allocations to the aeronautical radionavigation service and the fixed-satellite service in the band 5 091-5 150 MHz (Agenda Item 1.4);
- (2) the consideration of regulatory measures to protect feeder links (Earth-to-space) for the mobile-satellite service which operate in the band 5 150-5 250 MHz, taking into account the latest ITU-R Recommendations (for example, Recommendations ITU-R S.1426, ITU-R S.1427 and ITU-R M.1454) (Agenda Item 1.6);
- (3) the review of the results of studies concerning the radionavigation-satellite service in accordance with Resolutions **604 (WRC-2000)**, **605 (WRC-2000)** and **606 (WRC-2000)** (Agenda Item 1.15);
- (4) the consideration of allocations on a worldwide basis for feeder links in bands around 1.4 GHz to the non-GSO MSS with service links operating below 1 GHz, taking into account the results of ITU-R studies conducted in response to Resolution **127 (Rev.WRC-2000)**, provided that due recognition is given to the passive services, taking into account No. **S5.340** (Agenda Item 1.16);
- (5) the consideration of additional allocations on a worldwide basis for the non-GSO MSS with service links operating below 1 GHz, in accordance with Resolution **214 (Rev.WRC-2000)** (Agenda Item 1.20);
- (6) the consideration of additional allocations to the mobile-satellite service in the 1-3 GHz band, in accordance with Resolutions **226 (WRC-2000)** and **227 (WRC-2000)** (Agenda Item 1.31);
- (7) the consideration of the results of studies, and proposal of any regulatory

measures regarding the protection of passive services from unwanted emissions, in particular from space service transmissions (mobile-satellite service only), in response to *recommends* 5 and 6 of Recommendation **66 (Rev.WRC-2000)** (Agenda Item 1.8);

- (8) any consequential changes to relevant parts of the Radio Regulations; and
- (9) any related matters identified by the Designated Federal Officer.

Recommendations for U.S. proposals related to the above shall be supported by narrative text and technical justification, including supporting studies.

Any proposals involving changes to the ITU Radio Regulations shall be accompanied by specific proposals in the proper ITU format regarding modifications to the text of the Radio Regulations. The Federal Officer or Advisory Committee Chair may modify the terms of reference of this Group.

**WRC-03 ADVISORY COMMITTEE
INFORMAL WORKING GROUP-3 (IWG-3)**

Terms Of Reference for IWG-3 Fixed-Satellite and Broadcasting-Satellite Service Issues

Using the Amended Charter for the WRC-03 Advisory Committee as a basic document, the Terms of Reference of IWG-3 are to draft and justify, for consideration by the Committee as a whole, recommendations for U.S. preliminary views and U.S. proposals related to the Fixed-Satellite Service, Broadcasting-Satellite Service and Mobile-Satellite Service, in particular the following WRC-03 agenda items:

1.8 to consider issues related to unwanted emissions:

1.8.1 consideration of the results of studies regarding the boundary between spurious and out-of-band emissions, with a view to including the boundary in Appendix **S3**;

1.8.2 consideration of the results of studies, and proposal of any regulatory measures regarding the protection of passive services from unwanted emissions, in particular from space service transmissions, in response to *recommends* 5 and 6 of Recommendation **66 (Rev.WRC-2000)**;

NOTE: IWG-3 will only consider those aspects of WRC-03 Agenda Items 1.8.1 and 1.8.2 that apply to the FSS and BSS. (The MSS portion is being considered in IWG-2.)

1.11 to consider possible extension of the allocation to the mobile-satellite service (Earth-to-space) on a secondary basis in the band 14-14.5 GHz to permit operation of the aeronautical mobile-satellite service as stipulated in Resolution **216 (Rev.WRC-2000)**.

1.19 to consider regulatory provisions to avoid misapplication of the non-GSO FSS single-entry limits in Article **S22** based on the results of ITU-R studies carried out in accordance with Resolution **135 (WRC-2000)**.

1.27 to review, in accordance with Resolutions **540 (WRC-2000)** and **735 (WRC-2000)**, the ITU-R studies requested in those resolutions, and modify, as appropriate, the relevant regulatory procedures and associated sharing criteria contained in Appendices **S30** and **S30A** and in the associated provisions;

1.29 to consider the results of studies related to Resolutions **136 (WRC-2000)** and **78 (WRC-2000)** dealing with sharing between non-GSO and GSO systems;

1.34 to review the results of studies in response to Resolution **539 (WRC-2000)** concerning threshold values for non-GSO BSS (sound) in the band 2 630-2 655 MHz, and to take actions as required;

1.35 to consider the report of the Director of the Radiocommunication Bureau on the results of the analysis in accordance with Resolution **53 (Rev.WRC-2000)** and take appropriate action;

1.37 (8.2) to consider the regulatory and technical provisions for satellite networks using highly elliptical orbits;

1.39 (8.4) to examine the spectrum requirements in the fixed-satellite service bands below 17 GHz for telemetry, tracking and telecommand of fixed-satellite service networks operating with service links in the frequency bands above 17 GHz;

Applicable Recommendations and Resolutions

Recommendation 66 (Rev.WRC-2000): Studies of the maximum permitted levels of unwanted emissions

Resolution 216 (Rev.WRC-2000): Possible Broadening of the Secondary Allocation of the MSS (Earth-to-space) in the Band 14 – 14.5 GHz to Cover Aeronautical Applications

Resolution 135 (WRC-2000): Criteria and Process for the Resolution of Possible Cases of Misapplication of NGSO FSS Single-Entry Limits in Article S22.

Resolution 540 (WRC-2000): Application and Study for the Regulatory Procedures and Associated Sharing Criteria Contained in Appendices S30 and S30A and in the Associated Provisions of Articles S9 and S11.

Resolution 735 (WRC-2000): Sharing Procedures and Criteria between Receiving Earth Stations in the BSS and transmitted Earth Stations or Terrestrial Stations in Frequency bands Allocated to the BSS and FSS (Earth-to-space) or to Terrestrial Services.

Resolution 136 (WRC-2000): Frequency Sharing in the Range 37.5 – 50.2 GHz Between GSO FSS Networks and NGSO FSS Systems.

Resolution 78 (WRC-2000): Development of Procedures in Case the Operational or Additional Operational Limits in Article S22 are Exceeded.

Resolution 539 (WRC-2000): Use of the Band 2630 – 2655 MHz in Certain Region 3 countries by NGSO Satellite Systems in the BSS(S).

Resolution 53 (Rev.WRC-2000): Updating of the “Remarks” Columns in the Tables of Article 9A of Appendix S30A and Article 11 of Appendix S30 to the Radio Regulations.

**WRC-03 ADVISORY COMMITTEE
INFORMAL WORKING GROUP (IWG)**

TERMS OF REFERENCE

IWG-4

Fixed and Fixed-Satellite Service Matters - Other Matters

Using the Charter for the WRC-03 Advisory Committee as a basic document, the Terms of Reference of IWG-4 are to develop recommendations on all matters other than those considered by the other Advisory Committee Informal Working Groups, or other Ad Hoc Groups of the Committee that may be established. These recommendations are for consideration by the Committee as a whole, including recommendations for U.S. proposals and positions related to:

(1) consideration of allocations and regulatory aspects of Resolution 122(WRC-00) and 734 (WRC-00), "Use of the Bands 47.2-47.5 GHz and 47.9-48.2 GHz by High Altitude Platform Stations (HAPS) in the Fixed Service and by other Services and the Potential Use of Bands in the Range 18-32 GHz by HAPS in the Fixed Service" and "Feasibility of use by HAPS in the Fixed and Mobile Services in the Frequency Bands Above 3 GHz Allocated Exclusively for Terrestrial Radiocommunication;" **(A.I. 1.13)**

(2) consideration of a primary allocation to the fixed service in the band 17.3-17.7 GHz for Region 1, taking into account the primary allocations to various services in all three Regions; **(A.I. 1.18)**

(3) consideration of regulatory provisions and possible identification of spectrum for high density systems in the fixed-satellite service above 17.3 GHz; **(A.I. 1.25)**

(4) consideration of the provisions under which earth stations located on board vessels could operate in fixed-satellite service networks, in accordance with Resolution 82 (WRC-2000); **(A.I. 1.26)**

(5) consideration of technical and regulatory provisions concerning the band 37.5-43.5 GHz, in accordance with Resolutions 128 (WRC-2000) and 84 (WRC-2000); **(A.I. 1.32)**

Where appropriate, IWG-4 recommendations shall address the international Radio Regulations, their Appendices, Resolutions and Recommendations, including additions, modifications or suppressions that may be required. The IWG recommendations for U.S. proposals to WRC-03 shall be supported by narrative text indicating:

- the basis of the need for any changes that may be required including any rationale that may be useful to promoting and negotiating the recommendation; and

- the relationship or dependency upon preparatory work and/or recommendations of other domestic and international groups outside the terms of reference of this group.

Any relevant papers and/or studies developed in IWG-4 should also be input to the U.S. ITU-R process and to the National Telecommunications and Information Administration's Radio Conference Subcommittee for appropriate consideration.

March 27, 2001

WRC 2003 ADVISORY COMMITTEE

INFORMAL WORKING GROUP (IWG) – 5 5 GHZ, 13.75-14.0 GHZ AND MARITIME ISSUES

TERMS OF REFERENCE

Using the Charter for the WRC-03 Advisory Committee as the basic document, The Terms of Reference of IWG-5 are to develop preliminary views and recommendations and for consideration by the Committee as a whole. These recommendations and views for U.S. proposals and positions are related to:

(1) the following WRC- 03 agenda items:

1.5 to consider, in accordance with Resolution 736 (WRC 2000), regulatory provisions and spectrum requirements for new and additional allocations to the mobile, fixed, Earth exploration-satellite and space research services, and to review the status of the radiolocation service in the frequency range 5150 – 5725 MHz, with a view to upgrading it, taking into account the results of ITU-R studies;

1.9 to consider Appendix S13 and Resolution 331 (Rev. WRC-97) with a view to their deletion and if appropriate, to consider related changes to Chapter SVII and other provisions of the Radio Regulations, as necessary, taking into account the continued transition to and introduction of the Global Maritime Distress and Safety System (GMDSS);

1.10 to consider the results of studies, and take necessary actions, relating to:

1.10.1 exhaustion of the maritime mobile service identity numbering resource (Resolution 344 (WRC-97));

1.10.2 shore-to-ship distress communication priorities (Resolution 348 (WRC-97));

1.14 to consider measures to address harmful interference in the bands allocated to the maritime mobile and aeronautical mobile (R) services, taking into account Resolutions 207 (Rev. WRC-2000) and to review the frequency and channel arrangements in the maritime MF and HF bands concerning the use of new digital technology, also taking into account Resolution 347 (WRC-97);

1.17 to consider upgrading the allocation to the radiolocation service in the frequency range 2900 – 3100 MHz to primary;

1.24 to review the usage of the 13.75-14 GHz, in accordance with Resolution 733 (WRC- 2000), with a view to addressing sharing conditions;

1.28 to permit the use of the band 108-117.875 MHz for the transmission of radionavigation satellite differential correction signals by ICAO standard ground-based systems.

(2) any consequential changes to the Radio Regulations

(3) any matters identified by the Designated Federal Officers

Where appropriate, IWG-5 recommendations shall address the International Radio Regulations, their Appendices, Resolutions and Recommendations, including additions, modifications or suppressions that may be required. The IWG recommendations for U.S. proposals to WRC-03 shall be supported by narrative text indicating:

- the basis of the need for any changes that may be required including any rationale that may be useful to promoting and negotiating the recommendation; and
- the relationship or dependency upon preparatory work and/or recommendations of other domestic and international groups outside the terms of reference of this group.

Any relevant papers and/or studies developed in IWG-5 should be input to the WRC-03 Advisory Committee and copied to the National Telecommunication and Information Administration's Radio Conference Subcommittee.

**WRC-03 ADVISORY COMMITTEE
INFORMAL WORKING GROUP 6
(IWG-6)**

TERMS OF REFERENCE

TERMS OF REFERENCE

IWG-6 Public Protection and Other Issues

Using the Amended Charter for the WRC-99 Advisory Committee as a basic document, the Terms of Reference for IWG-6 are to develop recommendations on all matters concerning the WRC-03 Agenda Items assigned to it. These recommendations are for consideration by the Advisory Committee as a whole, including recommendations for U.S. proposals and positions on the following WRC-03 Agenda Items:

1.2 to review and take action, as required, on No. **S5.134** and related Resolutions **517 (Rev.WRC-97)** and **537 (WRC-97)**, and Recommendations **515 (Rev.WRC-97)**, **517 (HFBC-87)**, **519 (WARC-92)** and Appendix **S11**, in the light of the studies and actions set out therein, having particular regard to the advancement of new modulation techniques, including digital techniques, capable of providing an optimum balance between sound quality, bandwidth and circuit reliability in the use of the HF bands allocated to the broadcasting service; taking into account Resolution 730 (WRC-2000)

1.3 to consider identification of globally/regionally harmonized bands, to the extent practicable, for the implementation of future advanced solutions to meet the needs of public protection agencies, including those dealing with emergency situations and disaster relief, and to make regulatory provisions, as necessary, taking into account Resolution **645 (WRC-2000)**;

1.7 to consider issues concerning the amateur and amateur-satellite services:

1.7.1 possible revision of Article **S25**;

1.7.2 review of the provisions of Article **S19** concerning the formation of call signs in the amateur services in order to provide flexibility for administrations;

1.7.3 review of the terms and definitions of Article **S1** to the extent required as a consequence of changes made in Article **S25**;

1.12 to consider allocations and regulatory issues related to the space science services in accordance with Resolution **723 (WRC-2000)** and to review all Earth exploration-satellite service and space research service allocations between 35 and 38 GHz;

1.23 to consider realignment of the allocations to the amateur, amateur-satellite and broadcasting services around 7 MHz on a worldwide basis, taking into account Recommendation **718 (WARC-92)**;

1.36 to examine the adequacy of the frequency allocations for HF broadcasting from about 4 MHz to 10 MHz, taking into account the seasonal planning procedures adopted by WRC-97;

1.38 to consider provisions of up to 6 MHz of frequency spectrum to the Earth exploration-satellite service (active) in the frequency band 420-470 MHz, in accordance with Resolution **727 (Rev. WRC-2000)**

Where appropriate, IWG-6 recommendations shall address the International Radio Regulations, their Appendices, Resolutions and Recommendations, including additions, modifications or suppressions that may be required. IWG recommendations for U.S. proposals to WRC-03 shall be supported by narrative text indicating:

- the basis of the need for any changes that may be required including any rationale that may be useful to promoting and negotiating the recommendation; and
- the relationship or dependency upon preparatory work and/or recommendations of other domestic and international groups outside the terms of reference of this group.

Any relevant papers and/or studies developed in IWG-6 should be input to the Advisory Committee and copied to the National Telecommunication and Information Administration's Radio Conference Subcommittee.

**WRC-03 ADVISORY COMMITTEE
Informal Working Group 6**

WORK PROGRAM

IWG Public Protection and Other Issues

The Elements of the Work Program are:

1. The working group will review the agenda for WRC-03, in particular its agenda items 1.2, 1.3, 1.7, 1.7.1, 1.7.2, 1.7.3, 1.12, 1.23, 1.36, and 1.38 with a view to recommending to the Advisory Committee, relevant U.S. proposals for the 2003 World Radiocommunication Conference.
2. The working group will coordinate its work among the U.S. government agencies and U.S. private industry parties with interests in the recommendations being developed.
3. The working group will take into account the work underway in other domestic or international fora preparing for WRC-03, including ITU-R Sector Study Groups, Working Parties, Task Groups, Joint Working Parties, and the CPM; CITEL Permanent Coordinating Committees; CEPT; ICAO; IMO; and other established groups developing either proposals for, or supporting positions for the WRC-03.
4. The working group will closely coordinate with all other Informal Working Groups, Ad Hoc Groups, and the Committee as a Whole, to ensure no overlap of work and that all items on the established WRC-03 agenda are considered. All issues that have impact on regulatory/procedural matters shall be coordinated with IWG-7.
5. The working group, in collaboration with the Advisory Committee, will reassess its work program in the event any changes are made by the ITU Council to the WRC-03 agenda to ensure that all appropriate U.S. proposals for the 2003 conference are developed.
6. After U.S. proposals are drafted by the IWG, a range of positions for use in negotiating the proposals shall be developed. Recommendations for proposals and positions shall be supported and justified by narrative text, as appropriate.
7. A strategy for gaining international acceptance of U.S. proposals shall be developed.
8. As WRC-03 proposals or comments relevant to the IWG-6 work program are received or are made available from international organizations and countries, or groups of countries, the IWG shall discuss and develop U.S. positions on them for use in bilateral discussions or negotiations, as appropriate.

9. Reports shall be made to the Committee as scheduled and required.

10. IWG-6 shall make recommended changes, additions or deletions to IWG-7 concerning Resolution **801 (WRC-2000)** *Preliminary Agenda for the 2005/2006 World Radiocommunication Conference*.

WRC-03 ADVISORY COMMITTEE
INFORMAL WORKING GROUP 7 (IWG-7)

TERMS OF REFERENCE

IWG-7

Regulatory Issues and Future Agendas

Using the Charter of the WRC-03 Advisory Committee as a basic document, the Term of Reference of IWG-7 are to develop recommendations on all matters other than those considered by the other Advisory Committee Informal Working Groups, or other Ad Hoc Groups of the Committee that may be established. These recommendations are for consideration by the Committee as a whole, including recommendations for U.S. preliminary views, proposals and positions related to:

- 1) possible deletion of country footnotes or removal of the name of the United States from county footnotes in accordance with Resolution 26 (Rev. WRC-97) (A.I. 1.1);
- 2) possible changes to the procedures for the advance publications, coordination and notification of satellite networks in response to Resolution 86 (Minneapolis, 1998) (A.I. 1.30);
- 3) possible updates to references in the Radio Regulations to ITU-R Recommendations in accordance with principles contained in the Annex to Res. 27 (Rev. WRC-2000) (A.I. 2);
- 4) consequential changes and amendments to the Radio Regulations as may be necessitated by the decisions of the conference (A.I. 3);
- 5) review the Resolutions and Recommendations of the previous conferences with a view to their possible revision, replacement or abrogation in accordance with Resolution 95 (Rev/ WRC-2000) (A.I. 4);
- 6) review the reports of the Radiocommunication Assembly and Radiocommunication Bureau Director and make recommendation, if appropriate (A.I. 5);
- 7) identify items requiring urgent action by the Radiocommunication Study Groups in preparation for the next WRC (A.I. 6);
- 8) consider the Report of the Director of the Radiocommunication Bureau on the activities of Radiocommunication Sector since WRC-2000, including on any difficulties or inconsistencies encountered in the application of the Radio Regulations, and action in response to Resolution 80 (Rev. WRC-2000) (A.I. 7.1);
- 9) recommend items for inclusion in the agenda for the next WRC, and to give views on the preliminary agenda for the subsequent WRC and on possible agenda items for future

conference, taking into account Resolution 801 (WRC-2000) (A.I. 7.2); and

10) other regulatory issues arising out of preparation for WRC-03 agenda items, as necessary, and upon request of another Informal Working Group or Ad Hoc Committee of the Advisory Committee or from the Committee as a whole.

Where appropriate, IWG-7 recommendations shall address the international Radio Regulations, their Appendices, Resolutions and Recommendations, including additions, modifications or suppressions that may be required. The IWG recommendations for U.S proposals to WRC-03 shall be supported by narrative indicating:

- the basis of the need for any changes that may be required including any rationale that may be useful in promoting and negotiating the recommendation; and
- the relationship or dependency upon preparatory work and/or recommendations of other domestic and international groups outside the terms of reference of this group.

Any relevant papers and/or studies developed in IWG-7 should also be input to the U.S ITU-R process and to the National Telecommunications and Information Administration's Radio Conference Subcommittee for appropriate consideration.