Organización de Aviación Civil Internacional
Oficina para Norteamérica, Centroamérica y Caribe
Segunda Reunión del Grupo de Trabajo de Norteamérica, Centroamérica y Caribe (NACC/WG/2)
Ocho Ríos, Jamaica, 12 al 16 de mayo de 2008

Cuestión 3
del Orden del Día: Desarrollos CNS
3.7 Otros asuntos de comunicación

RESULTADOS DE LA CONFERENCIA MUNDIAL DE RADIOCOMUNICACIONES (2007) (CMR-2007) DE LA UIT Y POSTURA INICIAL DE LA OACI PARA LA CMR-2011

(Presentada por la Secretaría)

RESUMEN	
Esta nota de estudio presenta los resultados de la Conferencia Mundial de Radiocomunicaciones (2007) (CMR.2007) y las preocupaciones iniciales de la OACI respecto a la preparación para la próxima CMR UIT programada para el 2001.	
Referencias: • Consejo – Sesión 184 – C-WP/13183	
Objetivos estratégicos:	*Esta nota de estudio se relaciona con los Objetivos estratégicos A y D.*

1. Introducción

1.1 La Conferencia Mundial de Radiocomunicaciones (2007) (CMR-2007) de la UIT se llevó a cabo del 22 de octubre al 16 de noviembre en Ginebra, Suiza. 2800 delegados de 164 Estados Miembros de la UIT y 104 organizaciones internacionales participaron en el trabajo de la conferencia.

1.2 Durante la conferencia, tres reuniones de coordinación de aviación fueron organizadas por la Delegación de la OACI con la asistencia de aproximadamente 60 expertos en aviación. Las reuniones trataron todas las cuestiones relacionadas con la aviación, particularmente aquellas relacionadas con propuestas específicas que surgieron durante la conferencia. Durante dichas reuniones, el apoyo a la postura de la OACI fue coordinado de manera bilateral con individuos de administraciones de aviación, tomando en consideración los desarrollos durante la conferencia. La disponibilidad del espectro necesario de radio frecuencias continua siendo un pre-requisito de seguridad operacional en la aviación civil y la implantación efectiva de las comunicaciones, navegación y vigilancia/sistemas de gestión de tránsito aéreo (CNS/ATM). Sin embargo, considerando que la demanda de espectro para los usuarios que no son de aviación está creciendo constantemente, la aviación está enfrentando una competencia creciente para el espectro limitado disponible, particularmente de servicios comerciales de telecomunicaciones. Por lo tanto, es esencial que los requisitos de la aviación para el espectro de radio frecuencias sea vastamente apoyado por todos los Estados Contratantes de la OACI en todos los foros internacionales donde se trate el asunto de las adjudicaciones del espectro, con el fin de garantizar que todos los requisitos para los servicios vitales de seguridad operacional de la aviación sean debidamente presentados y entendidos.

1.3 Las políticas y prácticas de la OACI relacionadas con los asuntos del espectro de radio frecuencias fueron tratados por la Resolución de la Asamblea A36-25 (actualizando A32-13). La resolución A36-25 solicitó a los Estados Contratantes de la OACI a apoyar los requisitos de aviación para el espectro y instruye a la OACI a adjudicar recursos suficientes para permitir el aumento de la participación en las actividades de gestión del espectro.

1.4 La postura de la OACI para la CMR-2007, Ref. Circular a los Estados E 3/5-05/85 de fecha 12 de agosto de 2005, fue desarrollada en 2003/2004 por el Grupo de Expertos en Comunicaciones Aeronáuticas (ACP), revisada por la Comisión de Aeronavegación (167-1 y 167-2), y puesta para la consideración y comentarios de los Estados Contratantes de la OACI y las organizaciones internacionales y aprobada por el Consejo (175/14) el 14 de junio de 2005.

1.5 En la época en la que se estableció la postura de la OACI, se llevaban a cabo estudios en el Grupo de Expertos de Navegación (NSP), el Grupo de Expertos de Comunicaciones Aeronáuticas (ACP), en la UIT y en las organizaciones regionales de telecomunicaciones, en particular sobre la protección de interferencias en el sistema de aterrizaje por microondas (MLS), así como la valoración del espectro requerido para los sistemas futuros de comunicaciones. Los estudios de la OACI, finalizados para el final de 2006, necesitaban una actualización respecto a la postura de la OACI, la cual estaba siendo revisada por la Comisión de Aeronavegación (174-7) el 20 de febrero de 2007 y posteriormente aprobada por el Consejo (181/4) el 28 de mayo de 2007.

1.6 La Reunión del GREPECAS/13, celebrada en Santiago, Chile del 14 al 18 de noviembre de 2005, dio seguimiento a la preparación y apoyo por parte de los Estados de las Regiones CAR/SAM y las Organizaciones Internacionales para la postura de la OACI para la CMR-07; la Reunión también recordó la Conclusión del GREPECAS 12/33 – *Acciones regionales CAR/SAM para la preparación y apoyo a la postura de la OACI para la CMR-07*. Asimismo, el GREPECAS/13 aprobó la Conclusión 13/89 – *Apoyo de los Estados de las Regiones CAR/SAM a la postura de la OACI para la CMR-2007 de la UIT*, a través de la cual recomendó a las Administraciones de Aviación Civil de los Estados de las Regiones CAR/SAM, que aún no lo habían hecho, adoptaron las siguientes medidas para apoyar la mencionada postura de la OACI en las Reuniones de la Comisión Interamericana de Telecomunicaciones (CITEL) de la Organización de los Estados Americanos (OEA), así como en reuniones y otras actividades convocadas por la OACI, y así integrar delegaciones nacionales de dichas conferencias para apoyar la postura de la OACI para la CMR-07.

1.7 La postura actualizada de la OACI, descrita en la circular a los Estados Ref. E 3/5-07/49, de fecha 22 de junio de 2007, fue entregada a la CMR-07 de la UIT el 13 de junio de 2007.

2. Resultados de la CMR 2007 sobre las cuestiones del orden del día relacionadas con la aviación civil internacional

2.1 En el **Apéndice A** de esta nota de estudio, se muestra un resumen de los resultados principales de la CMR-07 para la aviación civil internacional.

2.2 En general, los resultados de la conferencia cumplieron con la postura de la OACI. Un elemento significativo en las actividades preparatorias de la OACI para esta conferencia fue la conciencia temprana y la participación de los Estados Contratantes respecto al desarrollo de la postura de la OACI. Los factores principales para este logro incluyeron:

a) el desarrollo temprano y la divulgación de la postura preliminar de la OACI por parte de la Secretaría y la Comisión de Aeronavegación, asistidos por el ACP y el NSP;

b) la participación activa por parte de los expertos de la OACI en la labor preparatoria para la UIT;

c) el incremento en la participación de los expertos de la OACI en las reuniones de las organizaciones regionales de telecomunicaciones (APT, CEPT, CITEL, ATU). La participación de las oficinas regionales, con la ayuda de la Sede cuando fue requerida, fue importante para el apoyo del desarrollo de propuestas por parte de las organizaciones regionales de telecomunicaciones para la conferencia, las cuales estaban alineadas con la postura de la OACI;

d) la organización de reuniones de los grupos de trabajo del ACP y los seminarios de radio frecuencias de la OACI en las regiones;

e) la implantación de la Resolución de la Asamblea A32-13; y

f) la participación activa de la Delegación de la OACI en la conferencia misma.

2.3 Es esencial tener un rápido inicio a las actividades de preparación de la OACI para la siguiente conferencia en 2011.

2.4 Los detalles de los resultados de la conferencia respecto a las cuestiones del orden del día relacionadas con la aviación y una revisión breve de los resultados de esta conferencia, se presentan de manera tabular en el **Apéndice B** a esta nota de estudio.

2.5 La siguiente conferencia mundial de radiocomunicaciones está programada para el 2011. Algunas de las preocupaciones de la postura inicial de la OACI para la CMR-2011 son:

a) las cuestiones del orden del día generales que pudieran afectar a la aviación civil:

- eliminación de los nombres de países de los pies de página;
- revisión de las Resoluciones/Recomendaciones en conferencias previas;
- orden del día preliminar para la próxima CMR, prevista para 2015.

b) Cuestiones del orden del día específicas que sean de interés importante para la aviación civil:

- 1.3 considerar los requisitos del espectro para apoyar sistemas de aeronaves sin tripulación (UAS);
- 1.4 basado en los resultados de la compartición de estudios, habrán más medidas normativas para facilitar: AM(R)S en las bandas de frecuencias 112-117.975 MHz, 960-1 164 MHz y 5 000- 5 030 MHz;
- 1.7 considerar en acceso y la disponibilidad del espectro a largo plazo para apoyar el AMS(R)S;
- 1.21 asignación principal para el RLS en la banda 15.4-15.7 GHz;
- 1.23 asignación de aproximadamente 15 kHz en partes de la banda 415-526.5 kHz para el servicio amateur (dicha asignación podría afectar el ARNS que opera en esta banda).

c) otros asuntos de interés para la aviación:

- 1.12 proteger los servicios principales en la banda 37-38 GHz de interferencia por parte del servicio móvil aeronáutico;
- introducción al software de radio definido y los sistemas cognitivos de radio;
- posibles asignaciones adicionales para el servicio de satélite móvil.

3. Acciones Sugeridas

3.1 Se invita a la Reunión a:

a) tomar nota de la información contenida en esta nota de estudio;

b) revisar y recomendar los resultados de la CMR-2007 descritos en los párrafos 2.1 al 2.4 y los Apéndices A y B;

c) tomar nota sobre los asuntos mencionados en el párrafo 2.5 como cuestiones iniciales para la postura de la OACI para la CMR-2011; y

d) proponer cualquier otra acción que se estime adecuada

.

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

APÉNDICE A

RESUMEN DE LOS RESULTADOS PRINCIPALES DE LA CMR-07 PARA LA AVIACIÓN CIVIL INTERNACIONAL

1. Protección de las señales del sistema mundial de navegación por satélite (GNSS) en la banda 1 559-1 610 MHz (sistema mundial de determinación de la posición [GPS], sistema mundial de navegación por satélite [GLONASS]) fue mejorado mediante la reducción del servicio fijo (FS) operando en esta banda en treinta y cuatro países a un estado secundario. Por consiguiente, la operación del FS en estos países tiene que proteger el GNSS. Hasta finales de 2009, esta banda estará asignada de manera principal en nueve países de África y el Medio Oriente. A pesar de que el uso de esta banda por parte del FS necesita finalizar a más tardar en el 2015, hasta el 2009 el servicio GNSS que opera en esta banda será protegido mundialmente. Además, la eliminación de la asignación de los servicios de radionavegación aeronáutica en Suecia (utilizados para los sistemas de radar) mejoraron aún más la protección del GNSS en Europa.

2. La conferencia acordó mejorar el servicio de radio localización (RLS) a un estado primario e introducir en el mismo estado, el servicio satelital de exploración de la tierra (EESS) (activo) y el servicio de investigación del espacio (SRS) (activo) en las bandas de 9 GHz a una asignación primaria. La conferencia acordó, después de un intenso debate, a proporcionar el servicio de radionavegación aeronáutica operando en estas bandas (radares basados en tierra y radares de clima de a bordo) bajo la protección de reglamentación necesaria, de acuerdo con la postura de la OACI.

3. Se acordó fijar las asignaciones al servicio (de ruta) móvil aeronáutico (AM(R)S) en las bandas 112-117.975 MHz, 960-1 164 MHz y 5 091-5 150 MHz (referirse al Apéndice A, párrafo 5). Esto satisface la postura de la OACI, la cual se basó en los requisitos de ancho de banda identificados en el Estudio de Comunicaciones Futuras que realizó el Grupo de Expertos de Comunicaciones Aeronáuticas, con la excepción de la banda de 5 GHz, donde podría necesitarse más ancho de banda. Las nuevas asignaciones AM(R)S están en bandas que también se han asignado al servicio de radionavegación aeronáutica (ARNS) y utilizados (o planean ser utilizados) por el VOR, DME, SSR, UAT y MLS. Las asignaciones están sujetas a no causar interferencia dañina, ni a tener el derecho de protección por parte de estaciones operando en el ARNS. Las asignaciones están limitadas a las operaciones de superficie aeroportuaria y son compartidas con asignaciones para la telemetría móvil aeronáutica (AMT) y con las transmisiones de seguridad aeronáutica (AS). AS es una aplicación que proporciona un enlace de ancho de banda amplio de una aeronave a tierra, por ejemplo, la transmisión de un video, en caso de una intervención ilícita.

4. Para satisfacer las necesidades de la telemetría móvil aeronáutica (AMT) para pruebas de vuelo, la conferencia acordó tener una asignación mundial en la banda 5 091-5 150 MHz (banda de extensión MLS). Un número de frecuencias de banda, que actualmente no son usados con fines de seguridad aeronáutica, en el rango de 4 y 6 GHz, así como la banda 5 091-5 150 MHz, fueron también asignados para AMT de manera regional o subregional.

5. La conferencia acordó eliminar la disposición que brindaba la precedencia al MLS sobre cualquier otro uso en la banda 5 091-5 150 MHz (banda de extensión MLS). La fecha después de la cual no se podrán realizar nuevas asignaciones al servicio fijo satelital (FSS) en la banda de extensión MLS fue extendida de 2012 a 2016.

Una revisión de la asignación al FSS en esta banda está ahora programada para la CMR-2015. La OACI apoyó dicha extensión considerado que se había eliminado la precedencia para el MLS sobre otros usuarios en esta banda. Las fechas de limitación para el FSS fueron introducidas en 1995 para proteger el uso de la banda 5 091-5 150 MHz para el MLS.

Sin embargo, los estudios recientes de la OACI han demostrado que no toda esta banda puede ser requerida para MLS. Como resultado de la eliminación de la precedencia para el MLS en esta banda, las limitaciones para el FSS podrían ser eliminadas en una conferencia futura. Esta extensión abarca las condiciones de compartición estable con el MLS y el AM(R)S en la banda.

6. Se exploró la asignación para AM(R)S en la banda 5 000-5 030 MHz y se identificaron cuestiones potenciales de compatibilidad con el servicio de radionavegación satelital (RNSS) (principalmente Galileo). Se acordó a invitar al UIT-R a estudiar esta banda a tiempo para la CMR-2011, con miras de tener una nueva asignación para el AM(R)S en esta banda durante dicha conferencia. La participación de la OACI en esta actividad es esencial para garantizar el ancho de banda necesario para el AM(R)S en esta frecuencia de banda.

Se desarrolló una recomendación sobre el uso de la aviación civil en las adjudicaciones de frecuencias de manera principal al servicio fijo satelital. Bajo esta recomendación, se reconoció que las redes VSAT que operan en el servicio fijo satelital también pueden ser utilizadas para aplicaciones de seguridad operacional aeronáutica. Se insta a las Administraciones, particularmente de los países en vías de desarrollo, a reconocer la importancia de las operaciones VSAT para la modernización de los sistemas de telecomunicaciones de aviación civil y alentar la implantación de los sistemas VSAT para apoyar los requisitos de comunicación aeronáutica. Se alienta a las administraciones de los países en vías de desarrollo a agilizar el proceso de autorización, en la medida de lo posible, para permitir las comunicaciones aeronáuticas utilizando tecnologías VSAT
Administrations in developing countries are encouraged, to the maximum extent possible, to expedite the authorization process to enable aeronautical communications using VSAT technology.

7. La conferencia acordó invitar al UIT-R a realizar, en tiempo para la consideración de la CMR-2011, los estudios técnicos, operacionales y normativos adecuados para garantizar la disponibilidad del espectro a largo plazo para el servicio móvil satelital (R) aeronáutico (AMS(R)S) incluyendo los requisitos existentes y futuros del espectro. Es esencial que la OACI participe en estos estudios para garantizar un resultado favorable para la aviación.

8. La conferencia acordó invitar al UIT-R a realizar, en tiempo para la consideración de la CMR-2011, los requisitos para el espectro y las acciones normativas posibles, incluyendo adjudicaciones adicionales, para apoyar las operaciones de los sistemas de aeronaves sin tripulación (UAS). Un esfuerzo de trabajo significativo por parte de la OACI podría identificarse para el apoyo de eta actividad.

– – – – – – – – – – – – – – – –

Debido a las limitaciones de recursos, el presente Apéndice está disponible únicamente en inglés

APPENDIX A

RESULTS OF THE CONFERENCE ON THE AGENDA ITEMS RELATED TO INTERNATIONAL CIVIL AVIATION

1. AGENDA ITEM 1.1: REQUESTS FROM ADMINISTRATIONS TO DELETE THEIR COUNTRY FOOTNOTES OR TO HAVE THEIR COUNTRY NAME DELETED FROM FOOTNOTES, IF NO LONGER REQUIRED, IN ACCORDANCE WITH RESOLUTION 26 (REV. WRC-97)

1.1 Under this agenda item, the ICAO Position supported the deletion of footnotes Nos. **5.181**, **5.197** and **5.259**. These footnotes were introduced in about twenty countries in 1987 in view of the global transition from ILS to MLS, which, at that time, was expected to be completed by 1998. They were intended to enable the introduction of the mobile service in the ILS bands as and when these would no longer be required for ILS. However, it has now become apparent that ILS will continue to be used by aviation for the foreseeable future, and therefore the existence of these footnotes is no longer justified. Most administrations have removed their name from these footnotes prior to this conference; however, the following Administrations are still listed in these footnotes:

5.181 Egypt, Israel and the Syrian Arab Republic (ILS-marker beacon).
5.197 Pakistan and the Syrian Arab Republic. (ILS-localizer)
5.259 Egypt, Israel and the Syrian Arab Republic (ILS-glide path)

Further efforts by ICAO are required to convince all the countries still listed to remove their name and allow for suppression of the footnotes, since they do not represent a realistic expectation for an introduction of the mobile service in these bands and the use of this allocation may cause harmful interference to ILS/VOR/GBAS.

1.2 Through Nos. **5.203, 5.203A** and **5.203B** the band 136-137 MHz was allocated in some countries to the fixed and mobile, except aeronautical mobile services, on a secondary basis until 1 January 2005. In addition, this band was also allocated to the meteorological satellite service until 1 January 2002 (No. **5.203** refers). The conference reviewed these provisions and agreed to their suppression for safety and efficiency reasons. The conference also deleted No. 5.198, through which the band 117.975-136 MHz was allocated to the aeronautical mobile satellite (R) service, as per ICAO policy statement (Re. the ICAO *Handbook on radio frequency spectrum requirements for civil aviation, including statement of approved ICAO policies* (Doc. 9718)). Furthermore, the conference removed No. 5.199 which was allocating the aeronautical emergency frequency 121.56 MHz to the mobile satellite service for the reception of emergency position radio beacons (emergency locator transmitters). This will not affect the current use of this frequency in the COSPAS/SARSAT system which is committed to receive ands process signals on this frequency until at least 2009.

1.3 The ICAO Position also supported the deletion of footnotes **5.362B**, **5.362C** and **5.363**, which allocate the GNSS band 1 559-1 610 MHz to the (terrestrial) fixed service in certain countries. The use by the fixed service constitutes a severe and unacceptable constraint on the safe and effective use of GNSS in some areas of the world, as coordination distances of up to 400 km between the stations of the fixed service and the aircraft would be required.

1.3.1 The conference agreed to a modification of No. **5.362B** such that the band 1 559-1 610 MHz is now allocated to the fixed service on a primary basis until 1 January 2010 in Algeria, Cameroon, Jordan, Libyan Arab Jamahiriya, Mali, Mauritania, Saudi Arabia, Syrian Arab Republic and Tunisia.

1.3.2 In Footnotes **5.362B** and **5.362C** there is a provision for a secondary allocation to the fixed service in the band 1 559-1 610 MHz. A large number or countries in Africa, Europe and parts of Asia are still listed under this provision. After 1 January 2015, this provision will no longer be valid.

1.3.3 In this band the radionavigation satellite service (RNSS) is operating (GNSS, GPS and GLONASS). Interference-free operation of GNSS would require coordination with the radio regulators and/or operators in the fixed service to ensure that operation of the fixed stations in the band 1 559-1 610 MHz ceases in areas where it can cause interference to GNSS. The secondary status of the fixed service until 1 January 2015 would require the fixed service to not cause harmful interference to, nor claim protection from, GNSS, and would give GNSS priority over the fixed servic**e**. After 2015, the frequency band 1 559-1 610 MHz will be available on an exclusive basis for GNSS.

1.3.4 The conference agreed to delete No. **5.363,** which authorized Sweden to use the band 1 590-1 626.5 MHz for the aeronautical radionavigation service (radar stations)**.** This measure improves the protection of GNSS signals in Europe.

1.4 The band 4 200-4 400 MHz is reserved for use by airborne radio altimeters, No. **5.439** allows the operation of the fixed service in this band on a secondary basis. Radio altimeters are a critical element in aircraft automatic landing systems and serve as a sensor in ground proximity warning systems. The ICAO Position asked for deletion of this footnote. Two countries, Iran (Islamic Republic of), and the Libyan Arab Jamahiriya remain in this footnote.

2. AGENDA ITEM 1.3: IN ACCORDANCE WITH RESOLUTION 747 (WRC-03) CONSIDER THE UPGRADING OF THE RADIOLOCATION SERVICE TO PRIMARY ALLOCATION STATUS IN THE BANDS 9 000-9 200 MHZ AND 9 300-9 500 MHZ AND EXTENDING BY UP TO 200 MHZ THE EXISTING PRIMARY ALLOCATIONS TO THE EARTH EXPLORATION-SATELLITE SERVICE (ACTIVE) AND THE SPACE RESEARCH SERVICE (ACTIVE) IN THE BAND 9 500-9 800 MHZ WITHOUT PLACING UNDUE CONSTRAINTS TO THE SERVICES TO WHICH THE BANDS ARE ALLOCATED

2.1 The ICAO Position on this agenda item was to support the primary allocations proposed for the radiolocation service (RLS), in the bands 9 000-9 200 MHz and 9 300-9 500 MHz and the Earth exploration satellite service (EESS) (active) and the space research service (SRS) (active) in the band 9 300-9 500 MHz, provided that adequate protection be given to the aeronautical radionavigation services (ARNS) operating in these bands. These bands are used by the (aeronautical) radionavigation service for ground based radar systems and airborne weather radar.

2.2 During the preparatory work in ITU-R, it was demonstrated that the proposed primary allocations to the RLS, EESS and SRS would not cause harmful interference to the ARNS. However, due to certain limitations in these studies, ICAO requested that a regulatory provision be introduced in the Radio Regulations securing protection to the ARNS from the RLS. After a long and difficult debate, the

conference agreed to a provision which gives protection to the aeronautical radar systems. This was satisfactory for aviation.

3. AGENDA ITEM 1.4: TO CONSIDER FREQUENCY RELATED MATTERS FOR THE FUTURE DEVELOPMENT OF IMT-2000 AND SYSTEMS BEYOND IMT-2000 TAKING INTO ACCOUNT THE RESULTS OF ITU-R STUDIES IN ACCORDANCE WITH RESOLUTION 228 (REV. WRC-03)

3.1 Proponents of IMT-2000 are seeking additional allocations for the future development of mobile communications and are especially looking at bands below 3 GHz.

3.2 In general, ICAO does not support the shared use of spectrum between aeronautical safety services (ARNS, AM(R)S and AMS(R)S) and other (non aeronautical) services, without relevant studies having been completed (either in ITU or in ICAO) that support shared use. All frequency bands used for aeronautical safety services are already heavily loaded or have already been forecast for full utilization and do not allow for sharing with non-aeronautical mobile services.

3.3 Under this agenda item, the conference did briefly consider the band 2 700-2 900 MHz, which is used for primary (medium range) radar systems, for IMT-2000 systems. This proposal was not agreed to. The overall result satisfies the ICAO Position.

4. AGENDA ITEM 1.5: TO CONSIDER SPECTRUM REQUIREMENTS AND POSSIBLE ADDITIONAL SPECTRUM ALLOCATIONS FOR AERONAUTICAL TELECOMMAND AND HIGH-BIT RATE AERONAUTICAL TELEMETRY, IN ACCORDANCE WITH RESOLUTION 230 (WRC-03)

4.1 The ICAO Position under this agenda item was as follows:

a) To support the allocation of suitable spectrum for non-safety related aeronautical telemetry and associated telecommand systems and applications, in the bands between 3-30 GHz. These allocations, to be made to the mobile or aeronautical mobile service, should, in principle, not be made in bands currently allocated to the aeronautical mobile (R) service (AM(R)S), the aeronautical radionavigation service (ARNS) or their satellite equivalents. If allocations are made to such bands, and in particular in the frequency band 5 091-5 150 MHz, regulatory priority shall be given to these aeronautical safety services.

b) No change to the current allocation in the band 5 030-5 091 MHz since this band is required to satisfy the requirements of the aeronautical radionavigation service (MLS).

c) To support the continued use and protection of frequency bands currently allocated and used for aeronautical telemetry applications.

4.2 A proposal for an allocation for aeronautical mobile telemetry (AMT) in the MLS core band (5 030-5 091 MHz) was introduced. This proposal was strongly opposed by ICAO. Most regional telecommunication organizations supported ICAO and eventually it was withdrawn.

4.3 A global allocation was agreed by the conference for aeronautical mobile telemetry (AMT) in the MLS extension band (5 091-5 150 MHz). Of concern to aviation is the fact that the WRC did not recognize the required protection level for MLS as established by ICAO. Also of concern is the fact that No. 5.444, which ensured precedence of MLS in this band has now been limited to the MLS core band (5 030-5 091 MHz). [(see also [5.1.3.1] below)].

4.4 A number of frequency bands in the 4 to 6 GHz range, which are currently not used for aeronautical safety purposes, were allocated by the WRC for AMT on a regional and sub-regional basis. In general, the new allocation for AMT satisfy the needs for spectrum for flight testing.

5. AGENDA ITEM 1.6: TO CONSIDER ALLOCATIONS FOR THE AERONAUTICAL MOBILE (R) SERVICE IN PARTS OF THE BANDS BETWEEN 108 MHZ TO 6 GHZ, IN ACCORDANCE WITH RESOLUTION 414 (WRC-03) AND TO STUDY CURRENT SATELLITE FREQUENCY ALLOCATIONS THAT WILL SUPPORT THE MODERNIZATION OF CIVIL AVIATION TELECOMMUNICATION SYSTEMS, TAKING INTO ACCOUNT RESOLUTION 415 (WRC-03)

5.1 Allocations for the aeronautical mobile (route) service (AM(R)S)

5.1.1 **112-117.975 MHz**. The ICAO Position indicates that this band should become available for air-ground communications (voice and data), in particular to extend the current usage of the band 117.975-137 MHz in congested areas (e.g. Europe).

5.1.1.1 The conference agreed to modify the (restricted to the transmission of navigational information) allocation to the AM(R)S which would now allow the introduction of air-ground communication links. This is in line with the ICAO Position. The conditions, under which the ICAO GBAS system operates in the 108-112 MHz band remain unchanged. However, in order to avoid compatibility problems with FM broadcasting, airborne transmissions in the band 108-112 MHz are no longer permitted. As a consequence, an amendment to one recommendation contained in the VDL Mode 4 SARPs will be required, but this will not impact any operational aspects of VDL Mode 4. The ITU-R is invited to study any compatibility issues that may arise between the new AM(R)S allocation and the FM broadcasting services in the 87-108 MHz band.

5.1.2 **960-1 164 MHz.** ICAO studies have identified the need for up to 60 MHz of usable bandwidth for the AM(R)S service in this band.

5.1.2.1 An allocation to the AM(R)S in the band 960-1 164 MHz was agreed to by the conference. This allocation is conditional to studies being successfully completed within the ITU-R to resolve potential compatibility issues with non-ICAO standardized ARNS systems which also operate in this band. An exception to this is the universal access transceiver (UAT) system, an ICAO standardized system for ADS-B, which can be used immediately within this allocation. All known compatibility issues between existing systems operating in this band have already been addressed in ICAO.

5.1.3 **5 000-5 150 MHz**. ICAO studies have identified that 60-100 MHz will be needed in this band for airport surface applications.

5.1.3.1 An allocation to the AM(R)S in the band 5 091-5 150 MHz (MLS extension band), limited to airport surface operations was agreed. This is a shared allocation with the aeronautical radionavigation service (MLS), fixed satellite service (FSS), AMT (see Agenda Item 1.5 above) and an Aeronautical Security (AS) application intended for the provision *radiocommunication used in response to unlawful interruption of aircraft operations*. AS, an application introduced and supported by EUROCONTROL, is intended to provide a wide-band link from an aircraft to the ground, i.e. a video feed, in case of an unlawful intervention. The precedence that was given to MLS in this band over other uses has been removed (see also [4.3] above). For the use of the band by the AM(R)S, AMT and AS, provisions to protect the fixed satellite service (FSS) (feederlink), which operates in the same band, were introduced.

5.1.3.2 A sunset date for assignments for the fixed satellite service (FSS) in the MLS extension band was extended from 2012 to 2016 (a date after which no new assignments should be made to the FSS service). ICAO supported this extension, in the light of the removed precedence for the MLS over other users in this band. A review of the allocation to the FSS in this band is now scheduled for WRC-2015, in particular with regard to the "sunset date". The date-limitations to the FSS were introduced in 1995 to protect the use of the band 5 091-5 150 MHz for MLS. However, ICAO has recently determined that not all of this band may be required for MLS. As a result of removing the precedence to the MLS in this band, the limitations to the FSS may be removed at a future conference (i.e. the allocation to the FSS may become permanent). This extension provides for stable sharing conditions with the MLS and AM(R)S in the band.

5.1.3.3 The band 5 091-5 150 MHz will not provide sufficient spectrum capacity to satisfy the requirement identified above, and therefore additional spectrum was identified in the ICAO Position for an allocation to the AM(R)S in the band 5 000-5 030 MHz. An allocation, initially supported by a large number of administrations was eventually not agreed to, because of the absence of compatibility studies with regard to the radionavigation-satellite service (RNSS). It was agreed however to study these compatibility issues within the ITU-R, in time for review at WRC-11, with a possible new allocation for the AM(R)S in mind.

5.2 VSAT networks operate under an allocation to the fixed satellite service (FSS) which in the ITU is not recognized as a safety service. A recommendation on the *Use by civil aviation of frequency allocations on a primary basis to the fixed-satellite service* was developed by the conference. In this recommendation it is recognized that VSAT networks operating in the fixed satellite service can also be used for aeronautical safety applications, especially in remote and rural areas which often lack a terrestrial communication infrastructure that meets the evolving requirements of modern civil aviation. Administrations, particularly in developing countries, are urged to recognize the importance of VSAT operations to the modernization of civil aviation telecommunications systems and to encourage the implementation of VSAT systems to support aeronautical communication requirements. Administrations in developing countries are encouraged, to the maximum extent possible, to expedite the authorization process to enable aeronautical communications using VSAT technology. ICAO is invited to continue its assistance to developing countries to improve their aeronautical telecommunications, including interoperability of VSAT networks, and provide guidance to developing countries on how they could best make use of VSAT technology for this purpose. The approval of this recommendation satisfies the ICAO position and was achieved through close and successful cooperation between ICAO and the African administrations.

6. AGENDA ITEM 1.13: TAKING INTO ACCOUNT RESOLUTIONS 729 (WRC-97), 351 (WRC-03) AND 544 (WRC-03) TO REVIEW THE ALLOCATIONS TO ALL SERVICES IN THE HF BANDS BETWEEN 4 AND 10 MHZ, EXCLUDING THOSE ALLOCATIONS TO SERVICES IN THE FREQUENCY RANGE 7 000-7 200 KHZ AND THOSE BANDS WHOSE ALLOTMENT PLANS ARE IN APPENDICES 25, 26 AND 27 AND WHOSE CHANNELING ARRANGEMENTS ARE IN APPENDIX 17, TAKING INTO ACCOUNT THE IMPACT OF NEW MODULATION TECHNIQUES, ADAPTIVE CONTROL TECHNIQUES AND SPECTRUM REQUIREMENTS FOR HF BROADCASTING

6.1 The ICAO Position for this agenda item was to ensure that new allocations and techniques considered for introduction in the bands between 4 and 10 MHz will not cause harmful interference in the aeronautical HF bands.

6.2 Under this agenda item, the conference developed criteria for the use of frequency adaptive systems and digital modulation techniques for broadcast services, while ensuring that no harmful interference would be caused by existing maritime and aeronautical mobile services. A future agenda item concerning the use of digital modulation techniques in the maritime mobile service was developed.

7. AGENDA ITEM 1.16: TO CONSIDER THE REGULATORY AND OPERATIONAL PROVISIONS FOR MARITIME MOBILE SERVICE IDENTITIES (MMSIS) FOR EQUIPMENT OTHER THAN SHIPBORNE MOBILE EQUIPMENT, TAKING INTO ACCOUNT RESOLUTIONS 344 (REV. WRC-03) AND 353 (WRC-03)

7.1 MMSIs are unique identifiers for individual stations and provide a rapid method of identification. Several ITU-R recommendations cover the assignment and use of these MMSIs for ship and land stations. A need had been identified to assign MMSIs for automatic identification systems (AIS) on search and rescue (SAR) aircraft in order to communicate efficiently in the maritime mobile service, when engaged in SAR operations. Modifications were made to Article 19 of the Radio Regulations, making it possible to allocate MMSIs to SAR aircraft. This satisfies the ICAO Position on this agenda item.

8. AGENDA ITEM 1.17: TO CONSIDER THE RESULTS OF ITU-R STUDIES ON COMPATIBILITY BETWEEN THE FIXED-SATELLITE SERVICE AND OTHER SERVICES AROUND 1.4 GHZ, IN ACCORDANCE WITH RESOLUTION 745 (WRC-03)

8.1 Under this agenda item, the conference suppressed two secondary allocations to the fixed satellite service. No new allocations were considered. This satisfies the ICAO Position.

9. AGENDA ITEM 1.20: TO CONSIDER THE RESULTS OF STUDIES AND PROPOSALS FOR REGULATORY MEASURES, IF APPROPRIATE, REGARDING THE EARTH EXPLORATION-SATELLITE SERVICE (PASSIVE) FROM UNWANTED EMISSIONS OF ACTIVE SERVICES IN ACCORDANCE WITH RESOLUTION 738 (WRC-03)

9.1 Under this agenda item, the conference reviewed the results of studies and proposals for regulatory measures regarding the protection of the Earth exploration-satellite service (EESS) receiving in the band 1 400-1 427 MHz from unwanted emissions of active services transmitting in adjacent frequency bands. Studies in the ITU-R have shown that primary radar systems currently operating in the band 1 215-1 400 MHz and conforming to relevant ITU-R recommendations will most likely not be able to meet the suggested power levels for unwanted emissions. WRC-07 therefore agreed to only recommend a maximum level of unwanted emission power of −29 dBW/27 MHz from radiolocation service stations operating in the 1 350-1 400 MHz band. It should be noted that primary radar systems used for civil aviation purposes are operating under the aeronautical radionavigation service allocation in the 1 300-1 350 MHz band and are therefore not affected by this decision.

10. AGENDA ITEM 1.21: TO CONSIDER THE RESULTS OF STUDIES REGARDING THE COMPATIBILITY BETWEEN THE RADIO ASTRONOMY SERVICE AND THE ACTIVE SPACE SERVICES IN ACCORDANCE WITH RESOLUTION 740 (REV. WRC-03), IN ORDER TO REVIEW AND UPDATE, IF APPROPRIATE, THE TABLES OF THRESHOLD LEVELS USED FOR CONSULTATION THAT APPEAR IN THE ANNEX TO RESOLUTION 739 (WRC-03)

10.1 The radio astronomy service uses frequencies in the band 1 610-1 613.8 MHz and is seeking protection from active services in the adjacent bands. Of concern to aviation is that the near adjacent band 1 559-1 610 MHz is used by the radionavigation satellite service for GNSS (GPS, GLONASS and the future Galileo system) and their operation should not be unduly constrained.

10.2 The conference developed a recommended limit of unwanted emissions from the GNSS service into the 1 610-1 613.8 MHz band, resolving that administrations take all reasonable steps to ensure that any satellite system being designed and constructed to operate in the GNSS band meet that limit. In case those systems cannot meet these limits, then the administrations which operate the affected radio astronomy stations shall be notified. The recommended limit is not expected to affect the currently operating and planned GNSS networks.

11. AGENDA ITEM 2: TO EXAMINE THE REVISED ITU-R RECOMMENDATIONS INCORPORATED BY REFERENCE IN THE RADIO REGULATIONS COMMUNICATED BY THE RADIOCOMMUNICATION ASSEMBLY, IN ACCORDANCE WITH RESOLUTION 28 (REV. WRC-03), AND TO DECIDE WHETHER OR NOT TO UPDATE THE CORRESPONDING REFERENCES IN THE RADIO REGULATIONS, IN ACCORDANCE WITH PRINCIPLES CONTAINED IN THE ANNEX TO RESOLUTION 27 (REV. WRC-03)

11.1 The ICAO Position on this agenda item was to make no change to current references in the Radio Regulations relevant to aeronautical services, as no new or amended ITU-R recommendations

referring to the aeronautical service have been identified. No such changes were made, although updated versions of relevant ITU-R recommendations are now included in the Radio Regulations.

11.2 This does not modify the status of the relevant material, and satisfies the ICAO Position.

12. AGENDA ITEM 4: IN ACCORDANCE WITH RESOLUTION 95 (REV. WRC-03), TO REVIEW THE RESOLUTIONS AND RECOMMENDATIONS OF PREVIOUS CONFERENCES WITH A VIEW OF POSSIBLE REVISION, REPLACEMENT OR ABROGATION

12.1 The following resolutions and recommendations were addressed in a manner different from the ICAO Position:

a) Resolution 18 relates to the procedure for identifying and announcing the position of ships and aircraft of States which are not party to an armed conflict. A minor update was made to this resolution, not affecting aviation.

b) Resolution 26 relates to Footnotes to the Table of Frequency Allocations in Article 5 of the RR. A reference on how new footnotes or modifications of footnotes to the RR may be proposed to a WRC, in case of corrections of obvious errors has been amended to point to the relevant provision of the latest revision of the General Rules of Conferences, Assemblies and meetings of the Union (Antalya, 2006). This change does not affect aviation.

c) Resolution 27 addresses the application of incorporation by reference in the RR. Minor updates were made to this resolution, mainly to clarify its application. This does not affect aviation.

d) Resolution 63 addresses the protection of radiocommunication services against interference caused by radiation from industrial, scientific and medical (ISM) equipment. Minor updates were made to this resolution, mainly to clarify its application. These updates do not affect aviation.

e) Resolution 95 addresses the general review of resolutions and recommendations of the world administrative radio conferences and the world radiocommunication conferences. An update was made to this resolution, inviting administrations to submit contributions relevant to this resolution to the ITU conference preparatory meeting (CPM). This update does not affect aviation.

f) Resolution 222 addresses the use of the 1.5/1.6 GHz band and long-term spectrum availability for AMS(R)S. This resolution was updated by the conference in line with the ICAO Position, calling for further studies to be conducted in time for WRC-11, to ensure long-term spectrum availability to the AMS(R)S. (See also Agenda Item 7.2 refers, paragraph 13.1 below).

g) Resolution 225 addresses the study of additional frequency bands for the satellite component of International Mobile Telecommunications (IMT). This resolution was modified to include the frequency bands 1 518-1 525 and 1 668-1 675 MHz, which are not used by aviation.

h) Resolution 339, Coordination of NAVTEX services, was amended slightly, mainly in the form of an updated reference. This does not affect aviation in any way.

i) Resolution 353, which dealt with maritime mobile service identities (MMSI) for equipment other than ship-borne equipment was suppressed in line with the amendments made under Agenda Item 1.16 (paragraph 7 above). This satisfies the ICAO Position.

j) Resolution 413 addresses the use of the band 108-117.975 MHz and has been amended in line with the outcome of Agenda Item 1.6 for this band. It invites the ITU-R to study any compatibility issues between the broadcasting and the aeronautical mobile (route) service in the band, and to develop new or revised ITU-R recommendations as appropriate. This is in line with the ICAO Position.

k) Resolution 608 addresses the use of the frequency band 1 215-1 300 MHz and provides protection to the radionavigation satellite service. The ICAO Position is to recommend this resolution for deletion once studies of the band are completed. This resolution is retained unchanged. This is not in disagreement with the ICAO Position.

l) Resolution 609 provides protection to the aeronautical radionavigation systems from the equivalent power flux-density produced by the radionavigation satellite service networks and systems in the 1 164-1 215 MHz bands. This resolution provides for equitable share of the band between the different GNSS providers and other users of the band. Minor modifications were made to references which do not affect any systems or services used by aviation.

m) Resolution 644 addresses telecommunication resources for disaster mitigation and relief operations. This resolution was modified, mainly to include a request that the ITU-R study the application of sensors and early warning systems as a means of disaster mitigation. This is in line with the ICAO Position.

n) Resolution 729 adaptive systems at MF/HF, was addressed under Agenda Item 1.13. This resolution is intended to provide protection to existing maritime and aviation services as well as broadcasting services from frequency agile systems. The resolution which had some minor modifications does still provide protection to those services. This is in line with the ICAO Position.

o) Resolution 951, calls for study to addresses options to improve the international spectrum regulatory framework. This resolution was expanded by the conference to include several potential options for a more flexible framework for the Radio Regulations. ICAO will need to monitor the continuation of this work closely, as it may ultimately affect the current protected status of aviation safety related allocations.

p) Recommendation 608 gives guidelines for consultation meetings established in Resolution 609. References in this recommendation were updated. The updated references do not affect aviation.

q) Recommendation 800 which provided the principles for establishing agendas for world radiocommunication conferences, was upgraded to a resolution. This is in line with the ICAO Position

13. AGENDA ITEM 7.2: TO RECOMMEND TO THE COUNCIL ITEMS FOR INCLUSION IN THE AGENDA FOR THE NEXT WRC, AND TO GIVE ITS VIEWS ON THE PRELIMINARY AGENDA FOR THE SUBSEQUENT CONFERENCE AND ON POSSIBLE AGENDA ITEMS FOR FUTURE CONFERENCES, TAKING INTO ACCOUNT RESOLUTION 802 (WRC-03)

13.1 In 1997, the exclusive allocations to the aeronautical, land and maritime satellite services in the L-band (1.5/1.6 GHz) were replaced by a generic type allocation to the mobile-satellite service, in spite of the serious reservations of the international civil aviation community on the compatibility between the aeronautical mobile satellite (route) service (AMS(R)S) with other mobile services. In 1997, and then further in 2000, a footnote was developed which stipulates priority and pre-emption by the AMS(R)S over other services in this band. In 2005, an ITU approved report concluded, inter alia, that "prioritization and intersystem real-time pre-emption" is not practical and, without significant advance in technology, is unlikely to be feasible for technical, operational and economic reasons. This means that the method approved by WRC-97 and WRC-2000 is insufficient to ensure long-term spectrum availability and protection to AMS(R)S communications in the L-band. During this conference, it was agreed to conduct, in time for consideration by WRC-11, the appropriate technical, operational and regulatory studies to ensure long-term spectrum availability for the aeronautical mobile-satellite (R) service (AMS(R)S). This includes the existing and future spectrum requirements. WRC-11 Agenda Item 1.7 refers (Resolution 222 (Rev. WRC-07)).

13.2 The conference agreed to include the following items of interest to aviation on the draft agenda for the WRC-11:

1.1 to consider and take appropriate action on requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, taking into account Resolution 26 (Rev.WRC-07);

1.3 to consider spectrum requirements and possible regulatory actions, including allocations, in order to support the safe operation of unmanned aircraft systems (UAS), based on the results of ITU-R studies, in accordance with Resolution [COM 6/8] (WRC-07);

1.4 to consider, based on the results of ITU-R studies, any further regulatory measures to facilitate introduction of new aeronautical mobile (R) service (AM(R)S) systems in the bands 112-117.975 MHz, 960-1 164 MHz and 5 000-5 030 MHz in accordance with Resolutions 413 (Rev. WRC-07), [COM 4/5] (WRC-07) and [COM 4/9] (WRC-07);

1.7 to consider the results of ITU-R studies in accordance with Resolution 222 (Rev. WRC-07) in order to ensure long-term spectrum availability and access to spectrum necessary to meet requirements for the aeronautical mobile-satellite (R) service, and to take appropriate action on this subject, while retaining unchanged

the generic allocation to the mobile-satellite service in the bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz;

1.12 to protect the primary services in the band 37-38 GHz from interference resulting from aeronautical mobile service operations, taking into account the results of ITU-R studies, in accordance with Resolution [COM 6/12] (WRC-07);

1.19 to consider regulatory measures and their relevance, in order to enable the introduction of software-defined radio and cognitive radio systems, based on the results of ITU-R studies, in accordance with Resolution [COM 6/18] (WRC-07);

1.21 to consider a primary allocation to the radiolocation service in the band 15.4-15.7 GHz, taking into account the results of ITU-R studies, in accordance with Resolution [COM 6/19] (WRC-07);

1.23 to consider allocations of about 15 kHz in parts of the band 415-526.5 kHz to the amateur service on a secondary basis, taking into account the need to protect existing services;

1.25 to consider possible additional allocations to the mobile-satellite service, in accordance with Resolution [COM 6/21] (WRC-07);

4 in accordance with Resolution 95 (Rev. WRC-07), to review the resolutions and recommendations of previous conferences with a view to their possible revision, replacement or abrogation;

7.2 to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, taking into account Resolution [COM 6/22] (WRC-07).

— — — — — — — —

APPENDIX B

OVERVIEW OF THE ITU WRC-07 RESULTS

Agenda Item No.	Agenda Item	ICAO Position	Results	Conclusion
1.1	Suppression of national footnotes.	Suppress 5.181, 5.197 and 5.259 (ILS bands).	The number of countries in those footnotes keeps decreasing. Only Egypt, Israel, Pakistan and the Syrian Arab Republic remain.	In line with the ICAO Position.
"	"	Suppress 5.203, 5.203A and 5.203B (136-137 MHz).	These footnotes have been deleted.	Satisfies the ICAO Position.
"	"	Suppress 5.362B, 5.362C and 5.363 (GNSS bands)	A number of countries have been removed from 5.362B and 5.362C. Secondary allocation for a few countries in 5.362B has been pushed back to 2010. A large number of countries still with a secondary allocation to the FS until 2015. 5.363 has been deleted.	In line with the ICAO Position.
"	"	Suppress 5.439 (radio altimeters).	5.439 provides for a secondary allocation to the FS. Two countries remain in this footnote: Iran (Islamic Republic of), and the Libyan Arab Jamahiriya.	In line with the ICAO Position.
1.3	Upgrading the RLS to primary status in the band 9 000-9 200 MHz and 9 300-9 500 MHz.	Include a footnote to protect the primary status of the RNS in these bands.	The RLS was upgraded to primary status, with the inclusion of appropriate footnotes to protect radars and their associated transponders.	Satisfies the ICAO Position.

Agenda Item No.	Agenda Item	ICAO Position	Results	Conclusion
1.4	Spectrum for IMT-2000.	No sharing of aeronautical frequencies with the mobile service.	No allocations were made for the IMT service in bands used by aviation.	Satisfies the ICAO Position.
1.5	Spectrum for non-safety related aeronautical mobile telemetry (AMT).	Support the allocation of suitable spectrum, while ensuring that priority is given to AM(R)S in bands shared between the two services. Ensure priority of MLS over all other services.	A shared allocation was made in the MLS extension band, while also reducing the protection for MLS in this band. Regional allocations for AMT were also made in non-aviation bands.	Partially satisfies the ICAO Position.
1.6	Consider allocations for the AM(R)S service in accordance to Resolution 414.	Support allocation for AM(R)S in the VHF and DME ARNS bands and in the MLS extension band.	Allocations were made for AM(R)S in 112-117.975 MHz, 960-1 164 MHz and 5 091-5 150 MHz. Appropriate provisions were developed to protect the ARNS service.	Satisfies the ICAO Position. More spectrum may be needed in the 5 GHz band.
"	Study current satellite frequency allocations that will support infrastructure in underdeveloped regions, in accordance with Resolution 415.	Support development of an ITU recommendation in the RR, recognizing that VSAT can be used for aeronautical safety applications.	An ITU recommendation was developed for inclusion in the RRs, which recognizes that VSAT networks can be used to carry aeronautical safety related traffic.	Satisfies the ICAO Position.
1.13	Review allocations in the HF bands between 4 and 10 MHz.	Ensure that new allocations and techniques in the HF bands will not cause harmful interference to aviation.	Protection to the existing aeronautical mobile allocations ensured.	Satisfies the ICAO Position.
1.16	Consider provisions for MMSIs for equipment other than ship borne.	Support measures improving the use of MMSIs onboard SAR aircraft.	MMSIs can be allocated to SAR aircraft.	Satisfies the ICAO Position.

Agenda Item No.	Agenda Item	ICAO Position	Results	Conclusion
1.17	Consider results of ITU-R studies on compatibility between FSS and other services in the 1.4 GHz band.	Use of the band around 1.4 GHz by the FSS should not be introduced in any of the aeronautical bands in this frequency range.	Secondary allocations to the FSS were suppressed. No new allocations were made.	Satisfies the ICAO Position.
1.20	Consider proposals for regulatory measures to protect the EESS (passive) from unwanted emissions of active services.	Protection of EESS in the 1.4 GHz band should not impose undue constraints on adjacent bands for aviation.	No constraints given to operation in the ARNS band, 1 300-1 350 MHz.	Satisfies the ICAO Position.
1.21	Compatibility between the radio astronomy service and the active space services.	Protection of radio astronomy in the band 1 610.6-1 613.8 MHz band should not impose undue constraints on adjacent bands for aviation.	A guiding limit for unwanted emissions was developed by the conference. This limit is not believed to affect current or foreseen GNSS networks.	In line with the ICAO Position.
2	Examine and update revised ITU-R recommendations incorporated by reference in the RR.	No change to the current references in the RR, to ITU-R recommendations related to aeronautical services.	Some ITU-R recommendations which reference aviation spectrum are to be included in Volume 4 of the RR. The referenced recommendations are not being modified.	Satisfies the ICAO Position.
4	Review resolutions/-recommendations of previous conferences.	Itemized list in ICAO position.	A number of resolutions and recommendations were updated in line with the ICAO Position.	Satisfies the ICAO Position.
7.2	Agenda for WRC-11 and 2015.	Support inclusion for WRC-11 addressing the MSS 1.5/1.6 GHz bands to ensure AMS(R)S availability and protection.	Agenda Item 1.7, WRC-11 refers. Many other items on the agenda for WRC-11, which affect civil aviation.	Satisfies the ICAO Position. Preparation for WRC-11 to start immediately.

— — — — — — — —