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ภาคผนวก

สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

UN Resolution 1962 (XVIII)

Declaration

of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space

December 13, 1963

UN Resolution 1962 (XVIII)

Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space

The General Assembly.

Inspired by the great prospects opening up before mankind as a result of man's entry into outer space,

Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes,

Belleving that the exploration and use of outer space should be carried on for the betterment of mankind and for the benefit of States irrespective of their degree of economic or scientific development,

Desiring to contribute to broad international co-operation in the scientific as well as in the legal aspects of exploration and use of outer space for peaceful purposes,

Believing that such co-operation will contribute to the development of mutual understanding and to the strengthening of friendly relations between nations and peoples,

Recalling its resolution 110 (11) of 3 November 1947, which condemned propaganda designed or likely to provoke or encourage any threat to the peace, breach of the peace, or act of aggression, and considering that the aforementioned resolution is applicable to outer space.

Taking into consideration its resolutions 1721 (XVI) of 20 December 1961 and 1802 (XVII) of 14 December 1962, adopted unanimously by the States Members of the United Nations,

Solemnly declares that in the exploration and use of outer space States should be guided by the following principles:

- 1. The exploration and use of outer space shall be carried on for the benefit and in the interests of all mankind.
- 2. Outer space and celestial bodies are free for exploration and use by all States on a basis of equality and in accordance with international law.
- 3. Outer space and celestial bodies are not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.
- 4. The activities of States in the exploration and use of outer space shall be carried on in accordance with international law, including the

Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.

- 5. States bear international responsibility for national activities in outer space, whether carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried on in conformity with the principles set forth in the present Declaration. The activities of non-governmental entities in outer space shall require authorization and continuing supervision by the State concerned. When activities are carried on in outer space by an international organization, responsibility for compliance with the principles set forth in this Declaration shall be borne by the international organization and by the States participating in it.
- 6. In the exploration and use of outer space, States shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in outer space with due regard for the corresponding interests of other States. If a State has reason to believe that an outer space activity or experiment planned by it or its nationals would cause potentially harmful interference with activities of other States in the peaceful exploration and use of outer space, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State which has reason to believe that an outer space activity or experiment planned by another State would cause potentially harmful interference with activities in the peaceful exploration and use of outer space may request consultation concerning the activity or experiment.
- 7. The State on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and any personnel thereon, while in outer space. Ownership of objects launched into outer space, and of their component parts, is not affected by their passage through outer space or by their return to the earth. Such objects or component parts found beyond the limits of the State of registry shall be returned to that State, which shall furnish identifying data upon request prior to return.
- 8. Each State which launches or procures the launching of an object into outer space, and each State from whose territory or facility an object is launched, is internationally liable for damage to a foreign State or to its natural or juridical persons by such object or its component parts on the earth, in air space, or in outer space.

9. States shall regard astronauts as envoys of mankind in outer space, and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of a foreign State or on the high seas. Astronauts who make such a landing shall be safely and promptly returned to the State of registry of their space vehicle.

1280th plenary meeting
13 December 1963



The Outer Space Treaty of 1967

สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

Treaty

on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies

The States Parties to this Treaty,

1

Inspired by the great prospects opening up before mankind as a result of man's entry into outer space,

Recognizing the common interest of all mankind in the progress of the

exploration and use of outer space for peaceful purposes,

Believing that the exploration and use of outer space should be carried on for the benefit of all peoples irrespective of the degree of their economic or scientific development,

Desiring to contribute to broad international co-operation in the scientific as well as the legal aspects of the exploration and use of outer

space for peaceful purposes,

Believing that such co-operation will contribute to the development of mutual understanding and to the strengthening of friendly relations

between States and peoples,

Recalling resolution 1962 (XVIII), entitled "Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space", which was adopted unanimously by the United Nations General Assembly on 13 December 1963,

Recalling resolution 1884 (XVIII), calling upon States to refrain from placing in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction or from installing such weapons on celestial bodies, which was adopted unanimously by the United Nations General Assembly on 17 October 1963,

Taking account of United Nations General Assembly resolution 110 (II) of 3 November 1947, which condemned propaganda designed or likely to provoke or encourage any threat to the peace, breach of the peace or act of aggression, and considering that the aforementioned resolution is applicable to outer space,

Convinced that a Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, will further the Purposes and Principles of the Charter of the United Nations,

Have agreed on the following:

The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind.

Outer space, including the moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies.

There shall be freedom of scientific investigation in outer space, including the moon and other celestial bodies, and States shall facilitate and encourage international co-operation in such investigation.

Article II

Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.

Article III

States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.

Article IV

States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, instal such weapons on celestial bodies, or station such weapons in outer space in any other manner.

The moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manœuvres on celestial bodies shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited.

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States Parties to the Treaty shall regard astronauts as envoys of mankind in outer space and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of another State Party or on the high seas. When astronauts make such a landing, they shall be safely and promptly returned to the State of registry of their space vehicle.

In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to the

astronauts of other States Parties.

States Parties to the Treaty shall immediately inform the other States Parties to the Treaty or the Secretary-General of the United Nations of any phenomena they discover in outer space, including the moon and other celestial bodies, which could constitute a danger to the life or health of astronauts.

Article VI

States Parties to the Treaty shall bear international responsibility for national activities in outer space, including the moon and other celestial bodies, whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty. The activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty. When activities are carried on in outer space, including the moon and other celestial bodies, by an international organization, responsibility for compliance with this Treaty shall be borne both by the international organization and by the States Parties to the Treaty participating in such organization.

Article VII

Each State Party to the Treaty that launches or procures the launching of an object into outer space, including the moon and other celestial bodies, and each State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts on the Earth, in air space or in outer space, including the moon and other celestial bodies.

Article VIII

A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body. Ownership of objects launched into outer space, including objects landed or constructed on a celestial body and of their component parts, is not affected by their presence in outer space or on a celestial body or by their return to the Earth. Such objects or component parts found beyond the limits of the State Party to the Treaty on whose registry they are carried shall be returned to that State Party, which shall, upon request, furnish identifying data prior to their return.

Article IX

In the exploration and use of outer space, including the moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance and shall conduct all. their activities in outer space, including the moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty. States Parties to the Treaty shall pursue studies of outer space, including the moon and other celestial bodies, and conduct exploration of them so as to avoid their harmful contamination and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter and, where necessary, shall adopt appropriate measures for this purpose. If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the moon and other celestial bodies, may request consultation concerning the activity or experiment.

Article X

In order to promote international co-operation in the exploration and use of outer space, including the moon and other celestial bodies, in

conformity with the purposes of this Treaty, the States Parties to the Treaty shall consider on a basis of equality any requests by other States Parties to the Treaty to be afforded an opportunity to observe the flight of space objects launched by those States.

The nature of such an opportunity for observation and the conditions under which it could be afforded shall be determined by agreement between the States concerned.

Article XI

In order to promote international co-operation in the peaceful exploration and use of outer space, States Parties to the Treaty conducting activities in outer space, including the moon and other celestial bodies, agree to inform the Secretary-General of the United Nations as well as the public and the international scientific community, to the greatest extent feasible and practicable, of the nature, conduct, locations and results of such activities. On receiving the said information, the Secretary-General of the United Nations should be prepared to disseminate it immediately and effectively.

Article XII

All stations, installations, equipment and space vehicles on the moon and other celestial bodies shall be open to representatives of other States Parties to the Treaty on a basis of reciprocity. Such representatives shall give reasonable advance notice of a projected visit, in order that appropriate consultations may be held and that maximum precautions may be taken to assure safety and to avoid interference with normal operations in the facility to be visited.

Article XIII

The provisions of this Treaty shall apply to the activities of States Parties to the Treaty in the exploration and use of outer space, including the moon and other celestial bodies, whether such activities are carried on by a single State Party to the Treaty or jointly with other States, including cases where they are carried on within the framework of international inter-governmental organizations.

Any practical questions arising in connexion with activities carried on by international inter-governmental organizations in the exploration and use of outer space, including the moon and other celestial bodies, shall be resolved by the States Parties to the Treaty either with the appropriate international organization or with one or more States members of that international organization, which are Parties to this Treaty.

Article XIV

1. This Treaty shall be open to all States for signature. Any State which does not sign this Treaty before its entry into force in accordance with paragraph 3 of this Article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United Kingdom of Great Britain and Northern Ireland, the Union of Soviet Socialist Republics and the United States of America, which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force upon the deposit of instruments of ratification by five Governments including the Governments designated as Depositary Governments under this Treaty.

4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification of and accession to this Treaty, the date of its entry into force and other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article XV

Any State Party to the Treaty may propose amendments to this Treaty. Amendments shall enter into force for each State Party to the Treaty accepting the amendments upon their acceptance by a majority of the States Parties to the Treaty and thereafter for each remaining State Party to the Treaty on the date of acceptance by it.

Article XVI

Any State Party to the Treaty may give notice of its withdrawal from the Treaty one year after its entry into force by written notification to the Depositary Governments. Such withdrawal shall take effect, one year from the date of receipt of this notification.

This Treaty, of which the English, Russian, French, Spanish and Chinese texts are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

In witness whereof the undersigned, duly authorised, have signed this Treaty.

Done in triplicate, at the cities of London, Moscow and Washington, the twenty-seventh day of January, one thousand nine hundred and sixty-seven.

The Bogota Declaration of 1976

สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

Declaration of the First Meeting of Equatorial Countries

The undersigned representatives of the States traversed by the Equator met in Bogotá, Republic of Colombia, from 29 November through 3 December, 1976 with the purpose of studying the geostationary orbit that corresponds to their national terrestrial, sea, and insular territory and is considered as a natural resource. After an exchange of information and having studied in detail the different technical, legal, and political aspects implied in the exercise of national sovereignty of States adjacent to the said orbit, have reached the following conclusions:

1. THE GEOSTATIONARY ORBIT AS A NATURAL RESOURCE

The geostationary orbit is a circular orbit on the Equatorial plane in which the period of sideral revolution of the satellite is equal to the period of sideral rotation of the Earth and the satellite moves in the same direction of the Earth's rotation. When a satellite describes this particular orbit, it is said to be geostationary; such a satellite appears to be stationary in the sky, when viewed from the Earth, and is fixed on the zenith of a given point of the Equator, whose longitude is by definition that of the satellite.

This orbit is located at an approximate distance of 35,871 km. over

the Earth's Equator.

Equatorial countries declare that the geostationary synchronous orbit is a physical fact linked to the reality of our planet because its existence depends exclusively on its relation to gravitational phenomena generated by the Earth, and that is why it must not be considered part of the outer space. Therefore, the segments of geostationary synchronous orbit are part of the territory over which Equatorial States exercise their national sovereignty. The geostationary orbit is a scarce natural resource, whose importance and value increase rapidly together with the development of space technology and with the growing need for communication; therefore, the Equatorial countries meeting in Bogota have decided to proclaim and defend on behalf of their peoples, the existence of their sovereignty over this natural resource. The geostationary orbit represents a unique facility that it alone can offer for telecommunication services and other uses which require geostationary satellites.

The frequencies and orbit of geostationary satellites are limited natural resources, fully accepted as such by current standards of the International Telecommunications Union. Technological advancement has caused a continuous increase in the number of satellites that use this orbit, which could result in a saturation in the near future.

The solutions proposed by the International Telecommunications Union and the relevant documents that attempt to achieve a better use of the geostationary orbit that shall prevent its imminent saturation, are at present impracticable and unfair and would considerably increase the exploitation costs of this resource especially for developing countries that do not have equal technological and financial resources as compared to industrialized countries, who enjoy an apparent monopoly in the exploitation and use of its geostationary synchronous orbit. In spite of the principle established by Article 33, sub-paragraph 2 of the International Telecommunications Convention, of 1973, that in the use of frequency bands for space radiocommunications, the members shall take into account that the frequencies and the orbit for geostationary satellites are limited natural resources that must be used efficiently and economically to allow the equitable access to this orbit and to its frequencies, we can see that both the geostationary orbit and the frequencies have been used in a way that does not allow the equitable access of the developing countries that do not have the technical and financial means that the great powers have. Therefore, it is imperative for the Equatorial countries to exercise their sovereignty over the corresponding segments of the geostationary orbit.

2. SOVEREIGNTY OF EQUATORIAL STATES OVER THE CORRESPONDING SEGMENTS OF THE GEOSTATIONARY ORBIT

In qualifying this orbit as a natural resource, Equatorial States reaffirm "the right of the peoples and of nations to permanent sovereignty over their wealth and natural resources that must be exercised in the interest of their national development and of the welfare of the people of the nation concerned", as it is set forth in Resolution 2692 (XXV) of the United Nations General Assembly entitled "permanent sovereignty over the natural resources of developing countries and expansion of internal accumulation sources for economic developments".

Furthermore, the charter on economic rights and duties of States solemnly adopted by the United Nations General Assembly through Resolution 3281 (XXIX), once more confirms the existence of a sovereign right of nations over their natural resources, in Article 2, sub-paragraph i, which reads:

"All states have and freely exercise full and permanent sovereignty, including possession, use and disposal of all their wealth, natural resources and economic activities."

Consequently, the above-mentioned provisions lead the Equatorial States to affirm that the synchronous geostationary orbit, being a natural resource, is under the sovereignty of the Equatorial States.

3. LEGAL STATUS OF THE GEOSTATIONARY ORBIT

Bearing in mind the existence of sovereign rights over segments of geostationary orbit, the Equatorial countries consider that the applicable legal consultations in this area must take into account the following:

(a) The sovereign rights put forward by the Equatorial countries are directed towards rendering tangible benefits to their respective people and for the universal community, which is completely different from the present reality when the orbit is used to the greater benefit of the most developed countries.

(b) The segments of the orbit corresponding to the open sea are beyond the national jurisdiction of States will be considered as common heritage of mankind. Consequently, the competent international agencies should regulate its use and exploitation for the benefit of mankind.

(c) The Equatorial States do not object to the free orbital transit of satellites approved and authorized by the International Telecommunications Convention, when these satellites pass through their outer space in their gravitational flight outside their geostationary orbit.

(d) The devices to be placed permanently on the segment of a geostationary orbit of an Equatorial State shall require previous and expressed authorization on the part of the concerned State, and the operation of the device should conform with the national law of that territorial country over which it is placed. It must be understood that the said authorization is different from the co-ordination requested in cases of interference among satellite systems, which are specified in the regulations for radiocommunications. The said authorization refers in very clear terms to the countries' right to allow the operation of fixed radiocommunications stations within their territory.

(e) Equatorial States do not condone the existing satellites or the position they occupy on their segments of the geostationary orbit nor does the existence of said satellites confer any rights of placement of satellites or use of the segment unless expressly authorized by the State exercising sovereignty over this segment.

The Treaty of 1967 on "The Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies", signed on 27 January, 1967, cannot be considered as a final answer to the problem of the exploration and use of outer space, even less when the international community is questioning all the terms of international law which were elaborated when the developing countries could not count on adequate scientific advice and were thus not able to observe and evaluate the omissions, contradictions and consequences of the proposals which were prepared with great ability by the industrialized powers for their own benefit.

There is no valid or satisfactory definition of outer space which may be advanced to support the argument that the geostationary orbit is included in the outer space. The legal affairs sub-commission which is dependent on the United Nations Commission on the Use of Outer Space for Peaceful Purposes, has been working for a long time on a definition of outer space, however, to date, there has been no agreement in this respect.

Therefore, it is imperative to elaborate a juridical definition of outer space, without which the implementation of the Treaty of 1967 is only a way to give recognition to the presence of the States that are already using the geostationary orbit. Under the name of a so-called non-national appropriation, what was actually developed was technological partition of the orbit, which is simply a national appropriation, and this must be denounced by the Equatorial countries. The experiences observed up to the present and the development foreseeable for the coming years bring to light the obvious omissions of the Treaty of 1967 which force the Equatorial States to claim the exclusion of the geostationary orbit.

The lack of definition of outer space in the Treaty of 1967, which has already been referred to, implies that Article II should not apply to geostationary orbit and therefore does not affect the right of the Equatorial States that have already ratified the Treaty.

5. DIPLOMATIC AND POLITICAL ACTION

While Article 2 of the aforementioned Treaty does not establish an express exception regarding the synchronous geostationary orbit, as an integral element of the territory of Equatorial States, the countries that have not ratified the Treaty should refrain from undertaking any

procedure that allows the enforcement of provisions whose juridical omission has already been denounced.

The representatives of the Equatorial countries attending the meeting in Bogotá, wish to clearly state their position regarding the declarations of Colombia and Ecuador in the United Nations, which affirm that they consider the geostationary orbit to be an integral part of their sovereign territory; this declaration is a historical background for the defense of the sovereign rights of the Equatorial countries. These countries will endeavour to make similar declarations in international agencies dealing with the same subject and to align their international policy in accordance with the principles elaborated in this document.

Signed in Bogotá 3 December 1976 by the Heads of Delegations.

Bresil, Colombia, Congo, Ecuador, Indonesia, Kenya, Uganda, Zaire



UNISPACE Report 1982

Vienna, August 9-21, 1982

UNISPACE Report 1982:

[...]

G. THE GEOSTATIONARY SATELLITE ORBIT

277. GSO is a unique natural resource of vital importance to a variety of space applications, including communications, meteorology, broadcasting, data relay from and tracking of orbital satellites, etc. It could also be used for such possible future applications as solar power satellites. Though not depletable, GSO is a limited natural resource. Therefore, as with any limited resource, its optimal utilization requires planning and/or arrangements.

278. Utilization of GSO cannot be considered in isolation: the associated issue of use of the radio frequency (RF) spectrum must be simultaneously looked at. The RF spectrum is also-like GSO-a limited (in practice) though non-depicting resource. While in theory it does extend indefinitely, practical constraints limit its present use to a comparatively small band. Hence, its optimal use also requires planning

and or arrangements.

279. It is in the light of this that the members of ITU have been making concerted efforts to evolve systems for planning and regulating the use of the GSO and the RF spectrum since 1963. It is noted that the forthcoming ITU Conferences in 1985 and 1987, which will continue this process in the light of technical progress and in the light of the broad considerations outlined here, will decide, in accordance with resolution 3 of WARC 1979, which space services and frequency bands should be

planned.

280. Recent years have seen the explosive growth in the use of GSO, especially for communication satellites. To the extent that this signifies increasing use of space technology for beneficial purposes, it is to be welcomed. However, while GSO is occupied largely by developed countries' satellites and international systems (ref. sect. III A), there are countries which have not yet placed satellites in GSO, and increasing concerns have been expressed that these positions may not be available when they desire to use them, and that assignments in certain frequency bands (e.g., 4 or 6 GHz) may become more difficult to obtain in future due to congestion. While there now seems to be general awareness of this concern, and certain regulations have been adopted, the present system of registration and co-ordination may need to be improved to guarantee, in practice, for all countries, equitable access to the geostationary satellite orbit and the frequency bands allocated to space services. In this regard, it may be noted that WARC 1979 resolution 2

states that "the registration with the IFRB of frequency assignments for space radio-communication services and their use should not provide any permanent priority for any individual country or groups of countries and should not create an obstacle to the establishment of space

systems by other countries".

281. Despite lack of agreement on defining the precise boundary between air space and outer space, it is accepted by most nations that GSO is a part of outer space and, as such, it is available for use by all States, in accordance with the Outer Space Treaty of 1967. However, the equatorial countries consider that the GSO constitutes a physical phenomenon related to the reality of our planet in that its existence depends exclusively on its relation to gravitational phenomena generated by the earth, and that for this reason it should not be included in the concept of outer space and its utilization should be regulated under a sui generis regime. The International Telecommunication Convention states that GSO and RF spectrum must be used efficiently and economically so that countries or groups of countries may have equitable access to both in conformity with the provisions of the Rudio Regulations according to their needs and the technical facilities at their disposal. Given the limited nature of the resource, efficiency of use is certainly important and any plan and/or other arrangement that is formulated must encourage greater efficiency. However, efficiency of GSO and RF spectrum usage should not be a barrier to attempts at technological self-reliance. A leading role in the promotion of more efficient use will no doubt be taken by countries with advanced space technology; and the positive efforts of the developed countries to increase efficiency should be supported and continued. It is desirable for all users of the geostationary orbit to keep in view the advantages of adopting, wherever practicable, newer technologies which could in practice facilitate more effective use of the geostationary orbit. The improvements in the utilization of GSO that would arise from the use of new technologies should permit all countries to have access to space technology at a level of sophistication appropriate to their needs, requirements and capabilities. It should be noted that there is already a positive trend toward the utilization of new technology, and this should be continued.

282. Efficiency of use cannot be an end in itself: it is only a means of ensuring all countries equitable access to this scarce resource. In particular, there are many developing countries which do not now have either the resources or the need to use GSO but are likely to do so in the future. Any planning method and/or arrangement that is evolved should recognize and accommodate the future needs of developing countries and should not result in unnecessarily hastening their plans to the detriment

of their financial and self-reliance interests.

283. GSO is getting increasingly crowded with objects that have outlived their utility. While the danger of collision or physical damage by these objects to active satellites is yet small, this is a problem that is likely to become more serious in future. Therefore, ITU should examine the feasibility of incorporating in its future regulations a stipulation that a satellite owner is responsible for removing its satellites from GSO when they are no longer usable to be able to have space satellites in the orbit.

In noting the phenomenal growth in the use of GSO-284. especially for communication satellites - and the consequent usage of RF spectrum, it may become necessary for each country or international organization to examine whether all the satellites it is operating are really required. Increasing numbers of satellites are being used for various purposes by different countries. To the extent that these systems use national resources, it is the concern of the country involved. However, these systems use increasing amounts of a limited resource that is for use by all States. It is therefore desirable that Member States, within the ITU, continue to evolve some criteria for the most equitable and efficient usage of GSO and the RF spectrum and to develop planning methods and/or arrangements that are based on the genuine needs, both present and future, identified by each country. Clearly, such a planning method should take into account the specific needs of the developing countries, as well as the special geographical situation of particular countries.

285. For certain purposes and locations, it may not be essential to use GSO. Since increasing concerns have been expressed regarding the congestion of GSO, countries should also examine whether for their needs they could use a satellite in elliptical orbit rather than in GSO. Similarly, the feasibility and over-all advantages of using elliptical orbits

for international communication merit re-examination.

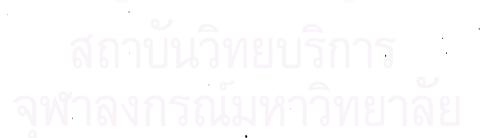
286. Lower launch costs and advances in other areas of space technology have now made it possible to conceive of a very large variety of possible systems including large space platforms in GSO. A single such platform could be designed to meet simultaneously the needs of a number of countries. However, it is not yet clear that such a concept will offer the flexibility required by the varying and special needs of these countries, lead to lower cost for each of them and help improve use of GSO and the RF spectrum. In order to demonstrate the possibility of this concept, it would be useful for those countries that are interested to evolve a broad design for such large platforms. In this context, it should be mentioned that improvements in the use of GSO could also be achieved by using both ground and satellite-based narrow-beam antennas. The planning method and/or arrangements developed by ITU

should be flexible enough to permit the introduction of new types of system taking into account the needs and requirements of all countries.

287. It needs to be noted that the development efforts undertaken by the technologically advanced nations have resulted in new techniques that contribute to more efficient use of GSO and of the RF spectrum. These efforts must be encouraged and continued, for success in this could effectively increase the capacity of GSO and thereby alleviate possible pressures on its use. New developments in the field of fibre-optic technology are also likely to contribute positively, by directing high-capacity traffic on transcontinental and transoceanic routes to fibre-optic systems.

288. In conclusion, considering the long-term implications of the growing activities in GSO, any solution on the use of GSO should be both equitable and flexible and take into consideration the economic.

technical and legal aspects.



Constitution of the International Telecommunication Union

CONSTITUTION OF THE INTERNATIONAL TELECOMMUNICATION UNION

Preamble

While fully recognizing the sovereign right of each State to regulate its telecommunication and having regard to the growing importance of telecommunication for the preservation of peace and the economic and social development of all States, the States Parties to this Constitution, as the basic instrument of the International Telecommunication Union, and to the Convention of the International Telecommunication Union (hereinafter referred to as "the Convention") which complements it, with the object of facilitating peaceful relations, international cooperation among peoples and economic and social development by means of efficient telecommunication services, have agreed as follows:

CHAPTER I

Basic Provisions

ARTICLE I

Purposes of the Union

- 2 1. The purposes of the Union are:
- 3 a) to maintain and extend international cooperation between all Members of the Union for the improvement and rational use of telecommunications of all kinds;
- 4 b) to promote and to offer technical assistance to developing countries in the field of telecommunications, and also to promote the mobilization of the material and financial resources needed for implementation;
- 5 c) to promote the development of technical facilities and their most efficient operation with a view to improving the efficiency of telecommunication services, increasing their usefulness and making them, so far as possible, generally available to the public;
- 6 d) to promote the extension of the benefits of the new telecommunication technologies to all the world's inhabitants;
- 7 e) to promote the use of telecommunication services with the objective of facilitating peaceful relations;
- 8 f) to harmonize the actions of Members in the attainment of those ends;
- 9 g) to promote, at the international level, the adoption of a broader approach to the issues of telecommunications in the global infor-

mation economy and society, by cooperating with other world and regional intergovernmental organizations and those non-governmental organizations concerned with telecommunications.

- 10 2. To this end, the Union shall in particular:
- 11 a) effect allocation of bands of the radio-frequency spectrum, the allotment of radio frequencies and registration of radio-frequency assignments and any associated orbital positions in the geostationarysatellite orbit in order to avoid harmful interference between radio stations of different countries:
- 12 h) coordinate efforts to eliminate harmful interference between radio stations of different countries and to improve the use made of the radio-frequency spectrum and of the geostationary-satellite orbit for radiocommunication services;
- facilitate the worldwide standardization of telecommunications, with a satisfactory quality of service;
- 14 d) foster international cooperation in the delivery of technical assistance to the developing countries and the creation, development and improvement of telecommunication equipment and networks in developing countries by every means at its disposal, including through its participation in the relevant programmes of the United Nations and the use of its own resources, as appropriate;
- coordinate efforts to harmonize the development of telecommunication facilities, notably those using space techniques, with a view to full advantage being taken of their possibilities;
- foster collaboration among its Members with a view to the establishment of rates at levels as low as possible consistent with an efficient service and taking into account the necessity for maintaining independent financial administration of telecommunication on a sound basis;

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- 17 g) promote the adoption of measures for ensuring the safety of life through the cooperation of telecommunication services;
- 18 h) undertake studies, make regulations, adopt resolutions, formulate recommendations and opinions, and collect and publish information concerning telecommunication matters;
- 19 i) promote, with international financial and development organizations, the establishment of preferential and favourable lines of credit to be used for the development of social projects aimed, infer alia, at extending telecommunication services to the most isolated areas in countries.

ARTICLE 2

Composition of the Union

- 20 The International Telecommunication Union shall, having regard to the principle of universality and the desirability of universal participation in the Union, be composed of:
- 21 a) any State which is a Member of the Union as a Party to any International Telecommunication Convention prior to the entry into force of this Constitution and the Convention:
- 22 b) any other State, a Member of the United Nations, which accedes to this Constitution and the Convention in accordance with Article 53 of this Constitution:
- 23 c) any other State, not a Member of the United Nations, which applies for membership of the Union and which, after having secured approval of such application by two-thirds of the Members of the Union, accedes to this Constitution and the Convention in accordance with Article 53 of this Constitution. If such application for membership is

made during the interval between two Plenipotentiary Conferences, the Secretary-General shall consult the Members of the Union; a Member shall be deemed to have abstained if it has not replied within four months after its opinion has been requested.

ARTICLE 3

Rights and Obligations of Members

- Members of the Union shall have the rights and shall be subject to the obligations provided for in this Constitution and the Convention.
- 25 2. Rights of Members in respect of their participation in the conferences, meetings and consultations of the Union are:
- 26 a) all Members shall be entitled to participate in conferences, shall be eligible for election to the Council and shall have the right to nominate candidates for election as officials of the Union or as members of the Radio Regulations Board:
- 27 b) subject to the provisions of Nos. 169 and 210 of this Constitution, each Member shall have one vote at all Plenipotentiary Conferences, all world conferences and all radiocommunication assemblies and study group meetings and, if it is a Member of the Council, all sessions of that Council. At regional conferences, only the Members of the region concerned shall have the right to vote;
- 28 c) subject to the provisions of Nos. 169 and 210 of this Constitution, each Member shall also have one vote in all consultations carried out by correspondence. In the case of consultations regarding regional conferences, only the Members of the region concerned shall have the right to vote.

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ARTICLE 4

Instruments of the Union

- 29 1. The instruments of the Union are:
 - this Constitution of the International Telecommunication Union.
 - the Convention of the International Telecommunication Union, and
 - the Administrative Regulations.
- This Constitution, the provisions of which are complemented by those
 of the Convention, is the basic instrument of the Union.
- 31 3. The provisions of both this Constitution and the Convention are further complemented by those of the Administrative Regulations, enumerated below, which regulate the use of telecommunications and shall be binding on all Members:
 - International Telecommunication Regulations,
 - Radio Regulations.
- 32 4. In the case of inconsistency between a provision of this Constitution and a provision of the Convention or of the Administrative Regulations, the Constitution shall prevail. In the case of inconsistency between a provision of the Convention and a provision of the Administrative Regulations, the Convention shall prevail.

ARTICLE 5

Definitions

- 33 Unless the context otherwise requires:
- 34 a) the terms used in this Constitution and defined in its Annex, which forms an integral part of this Constitution, shall have the meanings assigned to them in that Annex;
- 35 b) the terms other than those defined in the Annex to this Constitution used in the Convention and defined in the Annex thereto, which forms an integral part of the Convention, shall have the meanings assigned to them in that Annex;
- 36 c) other terms defined in the Administrative Regulations shall have the meanings therein assigned to them.

ARTICLE 6

Execution of the Instruments of the Union

- 37 1. The Members are bound to abide by the provisions of this Constitution, the Convention and the Administrative Regulations in all telecommunication offices and stations established or operated by them which engage in international services or which are capable of causing harmful interference to radio services of other countries, except in regard to services exempted from these obligations in accordance with the provisions of Article 48 of this Constitution.
- 38 2. The Members are also bound to take the necessary steps to impose the observance of the provisions of this Constitution, the Convention and the Administrative Regulations upon operating agencies authorized by them to establish and operate telecommunications and which engage in international services or which operate stations capable of causing harmful interference to the radio services of other countries.

Structure of the Union

- 39 The Union shall comprise;
- 40 a) the Plenipotentiary Conference, which is the supreme organ of the Union;
- 41 b) the Council, which acts on behalf of the Plenipotentiary Conference;
- 42 c) world conferences on international telecommunications:
- 43 d) the Radiocommunication Sector, including world and regional radiocommunication conferences, radiocommunication assemblies and the Radio Regulations Board;
- 44 e) the Telecommunication Standardization Sector, including world telecommunication standardization conferences:
- 45 f) the Telecommunication Development Sector, including world and regional telecommunication development conferences;
- 46 g) the General Secretariat.

ARTICLE

Plenipotentiary Conference

- 47 1. The Plenipotentiary Conference shall be composed of delegations representing Members. It shall be convened every four years.
- 48 2. The Plenipotentiary Conference shall:
- 49 a) determine the general policies for fulfilling the purposes of the Union prescribed in Article 1 of this Constitution;

- 50 b) after considering the reports by the Council on the activities of the Union since the previous Plenipotentiary Conference and on the recommended strategic policy and planning for the Union, adopt all decisions it considers appropriate;
- 51 c) establish the basis for the budget of the Union and determine, in the light of its decisions taken on the reports referred to in No. 50 above, a ceiling for the expenditure of the Union until the next Plenipotentiary Conference after considering all relevant aspects of the work of the Union in that period;
- 52 d) provide any general directives dealing with the staffing of the Union and, if necessary, fix the basic salaries, the salary scales and the system of allowances and pensions for all the officials of the Union;
- examine the accounts of the Union and finally approve them, if appropriate;
- 54 f) elect the Members of the Union which are to serve on the Council;
- 55 g) elect the Secretary-General, the Deputy Secretary-General and the Directors of the Bureaux of the Sectors as elected officials of the Union;
- 56 h) elect the members of the Radio Regulations Board;
- 57 i) consider and adopt, if appropriate, proposals for amendments to this Constitution and the Convention in accordance with the provisions of Article 55 of this Constitution and the relevant provisions of the Convention respectively;
- 58 /) conclude or revise, if necessary, agreements between the Union and other international organizations, examine any provisional agreements with such organizations concluded by the Council on behalf of the Union, and take such measures in connection therewith as it deems appropriate;
- 59 k) deal with such other telecommunication questions as may be necessary.

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ARTICLE 9

Principles Concerning Elections and Related Matters

- 1. The Plenipotentiary Conference, at any elections referred to in Nos. 54 to 56 of this Constitution, shall ensure that:
- the Members of the Council are elected with due regard to the need for equitable distribution of the seats on the Council among all regions of the world:
- the Secretary-General, the Deputy Secretary-General, the Directors of the Bureaux and the members of the Radio Regulations Board shall all he nationals of different Members, and at their election, due consideration should be given to equitable geographical distribution amongst the regions of the world; as far as the elected officials are concerned, due consideration should also be given to the principles embodied in No. 154 of this Constitution;
- 63 c) the members of the Radio Regulations Board shall be elected, in their individual capacity, from the candidates proposed by the Members of the Union; each Member may propose only one candidate who shall be one of its nationals.
- 64 2. The procedures for these elections shall be established by the Plenipotentiary Conference. Provisions relating to taking up duties, vacancy and re-eligibility are contained in the Convention.

ARTICLE 10

The Council

65 1. (1) The Council shall be composed of Members of the Union elected by the Plenipotentiary Conference in accordance with the provisions of No. 61 of this Constitution.

(2) Each Member of the Council shall appoint a person to serve on the Council who may be assisted by one or more advisers.

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- 67 2. The Council shall adopt its own Rules of Procedure.
- 68 3. In the interval between Plenipotentiary Conferences, the Council shall act, as governing body of the Union, on behalf of the Plenipotentiary Conference within the limits of the powers delegated to it by the latter.
- 69 4. (1) The Council shall take all steps to facilitate the implementation by the Members of the provisions of this Constitution, of the Convention, of the Administrative Regulations, of the decisions of the Plenipotentiary Conference, and, where appropriate, of the decisions of other conferences and nicetings of the Union, and perform any duties assigned to it by the Plenipotentiary Conference.
- (2) It shall consider broad telecommunication policy issues in 70 : keeping with the guidelines given by the Plenipotentiary Conference in order to ensure that the Union's policies and strategy fully respond to the constantly changing telecommunication environment.
- (3) It shall ensure the efficient coordination of the work of the Union 71 and exercise effective financial control over the General Secretariat and the
- (4) It shall contribute, in accordance with the purposes of the Union, 72 to the development of telecommunications in the developing countries by every means at its disposal, including through the participation of the Union in the appropriate programmes of the United Nations.

ARTICLE II

General Secretariat

1. (1) The General Secretariat shall be directed by a Secretary-General, assisted by one Deputy Secretary-General.

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- 74 (2) The Secretary-General, with the assistance of the Coordination Committee, shall prepare strategic policies and plans for the Union and shall coordinate its activities.
- 75 (3) The Secretary-General shall take all the actions required to ensure economic use of the Union's resources and shall be responsible to the Council for all the administrative and financial aspects of the Union's activities.
- 76 (4) The Secretary-General shall act as the legal representative of the Union.
- 77 2. The Deputy Secretary-General shall be responsible to the Secretary-General; he shall assist the Secretary-General in the performance of his duties and undertake such specific tasks as may be entrusted to him by the Secretary-General. He shall perform the duties of the Secretary-General in the absence of the latter.

CHAPTER II

· Radiocommunication Sector

ARTICLE 12

Functions and Structure

- 78 1. (1) The functions of the Radiocommunication Sector shall be to fulfil the purposes of the Union, as stated in Article 1 of this Constitution, relating to radiocommunication:
 - by ensuring the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including those using the geostationary-satellite orbit, subject to the provisions of Article 44 of this Constitution, and
 - by carrying out studies without limit of frequency range and adopting recommendations on radiocommunication matters.
- 79 (2) The precise responsibilities of the Radiocommunication Sector and the Telecommunication Standardization Sector shall be subject to continuing review, in close cooperation, with regard to matters of common interest to both Sectors, in accordance with the relevant provisions of the Convention. Close coordination shall be carried out between the Radio-communication, Telecommunication Standardization and Telecommunication Development Sectors.
- 80 2. The Radiocommunication Sector shall work through:
- 81 a) world and regional radiocommunication conferences:

- 82 h) the Radio Regulations Board;
- 83 c) radiocommunication assemblies, which shall be associated with world radiocommunication conferences:
- 84 d) radiocommunication study groups;
- 85 e) the Radiocommunication Bureau, headed by the elected Director.
- 86 3. The Radiocommunication Sector shall have as members:
- 87 a) of right, the administrations of all Members of the Union;
- 88 b) any entity or organization authorized in accordance with the relevant provisions of the Convention.

Radiocommunication Conferences and Radiocommunication Assemblies

- 89 1. A world radiocommunication conference may partially or, in exceptional cases, completely, revise the Radio Regulations and may deal with any question of a worldwide character within its competence and related to its agenda; its other duties are specified in the Convention.
- 90 2. World radiocommunication conferences shall normally be convened every two years; however, following the application of the relevant provisions of the Convention, such a conference need not be convened or an additional one may be convened.
- 91 3. Radiocommunication assemblies shall also normally be convened every two years, and be associated in place and time with world radiocommunication conferences so as to improve the efficiency and effectiveness of the Radiocommunication Sector. Radiocommunication assemblies shall provide the necessary technical bases for the work of the

world radiocommunication conferences and respond to all requests from world radiocommunication conferences. The duties of the radiocommunication assemblies are specified in the Convention.

92 4. The decisions of a world radiocommunication conference, of a radiocommunication assembly and of a regional radiocommunication conference shall in all circumstances be in conformity with this Constitution and the Convention. The decisions of a radiocommunication assembly or of a regional radiocommunication conference shall also in all circumstances be in conformity with the Radio Regulations. When adopting resolutions and decisions, the conferences shall take into account the foreseeable financial implications and should avoid adopting resolutions and decisions which might give rise to expenditure in excess of the upper limits on credits laid down by the Pleni-potentiary Conference.

ARTICLE 14

Radio Regulations Board

- 93 1. The Radio Regulations Board shall consist of elected members thoroughly qualified in the field of radiocommunications and possessing practical experience in the assignment and utilization of frequencies. Each member shall be familiar with the geographic, economic and demographic conditions within a particular area of the world. They shall perform their duties for the Union independently and on a part-time basis.
- '94 2. The duties of the Radio Regulations Board shall consist of:
- 95 a) the approval of Rules of Procedure, which include technical criteria, in accordance with the Radio Regulations and with any decision which may be taken by competent radiocommunication conferences. These Rules of Procedure shall be used by the Director and the Bureau in the

application of the Radio Regulations to register frequency assignments made by Members. These Rules shall be open to comment by administrations and, in case of continuing disagreement, the matter shall be submitted to a forthcoming world radiocommunication conference;

- 96 b) the consideration of any other matter that cannot be resolved through the application of the above Rules of Procedure;
- 97 c) the performance of any additional duties, concerned with the assignment and utilization of frequencies, as indicated in No. 78 of this Constitution, in accordance with the procedures provided for in the Radio Regulations, and as prescribed by a competent conference or by the Council with the consent of a majority of the Members of the Union, in preparation for, or in pursuance of the decisions of, such a conference.
- 98 3. (1) In the exercise of their Board duties, the members of the Radio Regulations Board shall serve, not as representing their respective Member States nor a region, but as custodians of an international public trust. In particular, each member of the Board shall refrain from intervening in decisions directly concerning the member's own administration.
- 99 (2) No member of the Board shall request or receive instructions relating to the exercise of his duties for the Union from any government or a member thereof, or from any public or private organization or person. Members shall refrain from taking any action or from participating in any decision which may be incompatible with their status defined in No. 98 above.
- (3) Each Member shall respect the exclusively international character of the duties of the members of the Board and refrain from attempting to influence them in the performance of their Board duties.
- 101 4. The working methods of the Radio Regulations Board are defined in the Convention.

ARTICLE 15

Radiocommunication Study Groups

102 The duties of the radiocommunication study groups are specified in the

ARTICLE 16

Radiocommunication Bureau

103 The functions of the Director of the Radiocommunication Bureau are specified in the Convention.

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CHAPTER III

Telecommunication Standardization Sector

ARTICLE 17

Functions and Structure

- 104 1. (1) The functions of the Telecommunication Standardization Sector shall be to fulfil the purposes of the Union relating to telecommunication standardization, as stated in Article 1 of this Constitution, by studying technical, operating and tariff questions and adopting recommendations on them with a view to standardizing telecommunications on a worldwide basis.
- 105 (2) The precise responsibilities of the Telecommunication Standardization and Radiocommunication Sectors shall be subject to continuing review, in close cooperation, with regard to matters of common interest to both Sectors, in accordance with the relevant provisions of the Convention. Close coordination shall be carried out between the Radiocommunication, Telecommunication Standardization and Telecommunication Development Sectors.
- 106 2. The Telecommunication Standardization Sector shall work through:
- 107 a) world telecommunication standardization conferences;
- 108 b) telecommunication standardization study groups;
- 109 c) the Telecommunication Standardization Bureau headed by the elected Director.

- 110 3. The Telecommunication Standardization Sector shall have as members:
- (111 a) of right, the administrations of all Members of the Union;
- 112 b) any entity or organization authorized in accordance with the relevant provisions of the Convention.

ARTICLE 18

World Telecommunication Standardization Conferences

- 113 1. The duties of world telecommunication standardization conferences are specified in the Convention.
- 114 2. World telecommunication standardization conferences shall be convened every four years; however, an additional conference may be held in accordance with the relevant provisions of the Convention.
- 115 3. Decisions of world telecommunication standardization conferences must in all circumstances be in conformity with this Constitution, the Convention and the Administrative Regulations. When adopting resolutions and decisions, the conferences shall take into account the foreseeable financial implications and should avoid adopting resolutions and decisions which might give rise to expenditure in excess of the upper limits on credits laid down by the Plenipotentiary Conference.

Telecommunication Standardization Study Groups

116 The duties of the telecommunication standardization study groups are specified in the Convention.

ARTICLE 20

Telecommunication Standardization Bureau

117 The functions of the Director of the Telecommunication Standardization Bureau are specified in the Convention.

CHAPTER IV

Telecommunication Development Sector

ARTICLE 21

Functions and Structure

- shall be to fulfil the purposes of the Union as stated in Article I of this Constitution and to discharge, within its specific sphere of competence, the Union's dual responsibility as a United Nations specialized agency and executing agency for implementing projects under the United Nations development system or other funding arrangements so as to facilitate and enhance telecommunications development by offering, organizing and coordinating technical cooperation and assistance activities.
- 119 (2) The activities of the Radiocommunication, Telecommunication Standardization and Telecommunication Development Sectors shall be the subject of close cooperation with regard to matters relating to development, in accordance with the relevant provisions of this Constitution.
- 120 2. Within the foregoing framework, the specific functions of the Telecommunication Development Sector shall be to:
- 121 a) raise the level of awareness of decision-makers concerning the important role of telecommunications in the national economic and social development programme, and provide information and advice on possible policy and structural options;
- 122 b) promote the development, expansion and operation of telecommunication networks and services, particularly in developing countries, taking into account the activities of other relevant badies, by reinforcing

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- capabilities for human resources development, planning, management, resource mobilization, and research and development;
- 123 c) enhance the growth of telecommunications through exoperation with regional telecommunications organizations and with global and regional development financing institutions, monitoring the status of projects included in its development programme to ensure that they are properly executed;
- 124 d) activate the mobilization of resources to provide assistance in the field of telecommunications to developing countries by promoting the establishment of preferential and favourable lines of credit, and cooperating with international and regional financial and development institutions;
- 125 e) promote and coordinate programmes to accelerate the transfer of appropriate technologies to the developing countries in the light of changes and developments in the networks of the developed countries;
- 126 f) encourage participation by industry in telecommunication development in developing countries, and offer advice on the choice and transfer of appropriate technology:
- 127 g) offer advice, carry out or sponsor studies, as necessary, on technical, economic, financial, managerial, regulatory and policy issues, including studies of specific projects in the field of telecommunications:
- 128 h) collaborate with the other Sectors, the General Secretariat and other concerned bodies in developing a general plan for international and regional telecommunication networks so as to facilitate the coordination of their development with a view to the provision of telecommunication services:
- 129 i) in carrying out the above functions, give special attention to the requirements of the least developed countries.

- 130 3. The Telecommunication Development Sector shall work through:
- 131 a) world and regional telecommunication development conferences:
- 132 h) telecommunication development study groups;
- 133 c) the Telecommunication Development Bureau headed by the elected Director.
- 134 4. The Telecommunication Development Sector shall have as members:
- 135 a) of right, the administrations of all Members of the Union;
- any entity or organization authorized in accordance with the relevant provisions of the Convention.

ARTICLE 22

Telecommunication Development Conferences

- 137 1. Telecommunication development conferences shall be a forum for the discussion and consideration of topics, projects and programmes relevant to telecommunication development and for the provision of direction and guidance to the Telecommunication Development Bureau.
- 138 2. Telecommunication development conferences shall comprise:
- i39 a) world telecommunication development conferences;
- 140 b) regional telecommunication development conferences.

- 141 3. There shall he, between two Plenipotentiary Conferences, one world telecommunication development conference and, subject to resources and priorities, regional telecommunication development conferences.
- 142 4. The telecommunication development conferences shall not produce Final Acts. Their conclusions shall take the form of resolutions, decisions, recommendations or reports. These conclusions must in all circumstances be in conformity with this Constitution, the Convention and the Administrative Regulations. When adopting resolutions and decisions, the conferences shall take into account the foreseeable financial implications and should avoid adopting resolutions and decisions which might give rise to expenditure in excess of the upper limits on credits laid down by the Plenipotentiary Conference.
- 143 5. The duties of telecommunication development conferences are specified in the Convention.

Telecommunication Development Study Groups

144 The duties of telecommunication development study groups are specified in the Convention.

ARTICLE 24

Telecommunication Development Bureau

145 The functions of the Director of the Telecommunication Development

Bureau are specified in the Convention.

CHAPTER V

Other Provisions Concerning the Functioning of the Union

ARTICLE 25

World Conferences on International Telecommunications

- 146 1. A world conference on international telecommunications may partially, or in exceptional cases, completely revise the International Telecommunication Regulations and may deal with any question of a worldwide character within its competence and related to its agenda.
- shall in all circumstances be in conformity with this Constitution and the Convention. When adopting resolutions and decisions, the conferences shall take into account the foresceable financial implications and should avoid adopting resolutions and decisions which might give rise to expenditure in excess of the upper limits on credits laid down by the Plenipotentiary Conference.

ARTICLE 26

Coordination Committee

148 1. The Coordination Committee shall consist of the Secretary-General, the Deputy Secretary-General and the Directors of the three Bureaux. It shall be presided over by the Secretary-General, and in his absence by the Deputy Secretary-General.

149 2. The Coordination Committee shall act as an internal management team which advises and gives the Secretary-General practical assistance on all administrative, financial, information system and technical cooperation matters which do not fall under the exclusive competence of a particular Sector or of the General Secretariat and on external relations and public information. In its considerations, the Committee shall keep fully in view the provisions of this Constitution, the Convention, the decisions of the Council and the interests of the Union as a whole.

ARTICLE 27

Elected Officials and Staff of the Union

- 150 1. (1) In the performance of their duties, neither the elected officials nor the staff of the Union shall seek or accept instructions from any government or from any other authority outside the Union. They shall refrain from acting in any way which is incompatible with their status as international officials.
- (2) Each Member shall respect the exclusively international character of the duties of these elected officials and of the staff of the Union, and refrain from trying to influence them in the performance of their work.
- (3) No elected official or any member of the staff of the Union shall participate in any manner or have any financial interest whatsoever in any enterprise concerned with telecommunications, except as part of their duties. However, the term «financial interest» is not to be construed as applying to the continuation of retirement benefits accruing in respect of previous employment or service.
- 153 (4) In order to ensure the efficient operation of the Union, any Member, a national of which has been elected Secretary-General, Deputy Secretary-General or Director of a Bureau shall refrain, as far as possible, from recalling that national between two Picnipotentiary Conferences.

154 2. The paramount consideration in the recruitment of staff and in the determination of the conditions of service shall be the necessity of securing for the Union the highest standards of efficiency, competence and integrity. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible.

ARTICLE 28

Finances of the Union

- 155 1. The expenses of the Union shall comprise the costs of:
- 156 a) the Council:
- 157 b) the General Secretariat and the Sectors of the Union;
- 158 c) Plenipotentiary Conferences and world conferences on international telecommunications.
- 159 2. The expenses of the Union shall be met from the contributions of its Members and of entities and organizations authorized to participate in the Union's activities in accordance with the relevant provisions of the Convention. Each Member and any such authorized entity or organization shall pay a sum proportional to the number of units in the class of contribution it has chosen in accordance with the relevant provisions of the Convention.
- 160 3. (1) Members shall be free to choose their class of contribution for defraying Union expenses.
- (2) This choice shall be made within six months following the end of a Plenipotentiary Conference in accordance with the scale of classes of contribution contained in the Convention.

- of classes of contribution in the Convention, the Secretary-General shall inform each Member of the date of the entry into force of the amendment. Each Member shall notify the Secretary-General, within six months of the date of this communication, of the class of contribution it has chosen in accordance with the amended scale in force.
- 163 (4) The class of contribution chosen by each Member, in accordance with No. 161 or No. 162 above, is applicable only as from 1 January following one year after the expiry of the six-month period referred to in Nos.
- 164 4. Members who have failed to make known their decision in the time specified respectively in Nos. 161 and 162 above shall retain the class of contribution previously chosen.
- 165 5. The class of contribution chosen by a Member can only be reduced in accordance with Nos. 161, 162 and 163 above. However, under exceptional circumstances such as natural disasters necessitating international aid programmes, the Council may authorize a reduction in the number of contributory units when so requested by a Member which has established that it can no longer maintain its contribution at the class originally chosen.
- 166 6. Likewise, Members may, subject to the approval of the Council, choose a class of contribution lower than the one selected under No. 161 above, if their relative contributory positions are, from the date fixed in No. 163 above for a new period of contribution, substantially worse than their previous positions.
- 167 7. Expenses incurred by the regional conferences referred to in No. 43 of this Constitution shall be borne in accordance with their unit classification by all the Members of the region concerned and, where appropriate, on the same hasis by any Members of other regions which have participated in such conferences.

- 168 B. Members, entities and organizations referred to in No. 159 above shall pay in advance their annual contributory shares, calculated on the basis of the bicnnial budget approved by the Council as well as of any adjustment adopted by the Council.
- 169 9. A Member which is in arrear in its payments to the Union shall lose its right to vote as defined in Nos. 27 and 28 of this Constitution for so long as the amount of its arrears equals or exceeds the amount of the contribution due from it for the preceding two years.
- 170 10. Specific provisions, which apply to the financial contributions by entities and organizations referred to in No. 159 above and by other international organizations, are contained in the Convention.

Languages

- 171 1. (1) The official and working languages of the Union shall be Arabic. Chinese, English, French, Russian and Spanish.
- 172 (2) In accordance with the relevant decisions of the Plenipotentiary Conference, these languages shall be used for drawing up and publishing documents and texts of the Union, in versions equivalent in form and content, as well as for reciprocal interpretation during conferences and meetings of the Union.
- 173 (3) In case of discrepancy or dispute, the Prench text shall prevail.
- 174 2. When all participants in a conference or in a meeting so agree, discussions may be conducted in fewer languages than those mentioned above.

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ARTICLE 30

Seat of the Union

175 The sent of the Union shall be at Geneva.

ARTICLE 31

Legal Capacity of the Union

176 The Union shall enjoy in the territory of each of its Members such legal capacity as may be necessary for the exercise of its functions and the fulfilment of its purposes.

ARTICLE 32

Rules of Procedure of Conferences and Other Meetings

- 177 1. For the organization of their work and the conduct of their discussions, conferences and meetings of the Union shall apply the Rules of Procedure in the Convention.
- 178 2. Conferences and the Council may adopt such rules as they consider to be essential in addition to those in the Rules of Procedure. Such additional rules must, however, be compatible with this Constitution and the Convention; those adopted by conferences shall be published as conference documents.

CHAPTER VI

General Provisions Relating to Telecommunications

ARTICLE 33

The Right of the Public to Use the International Telecommunication Service

179 Members recognize the right of the public to correspond by means of the international service of public correspondence. The services, the charges and the safeguards shall be the same for all users in each category of correspondence without any priority or preference.

ARTICLE 34

Stoppage of Telecommunications

- 180 1. Members reserve the right to stop the transmission of any private telegram which may appear dangerous to the security of the State or contrary to its laws, to public order or to decency, provided that they immediately notify the office of origin of the stoppage of any such telegram or any part thereof, except when such notification may appear dangerous to the security of the State.
- 181 2. Members also reserve the right to cut off any other private telecommunications which may appear dangerous to the security of the State or contrary to its laws, to public order or to decency.

Suspension of Services

182 Each Member reserves the right to suspend the international telecommunication service, either generally or only for certain relations and/or for certain kinds of correspondence, outgoing, incoming or in transit, provided that it immediately notifies such action to each of the other-Members through the medium of the Secretary-General.

ARTICLE 36

Responsibility

183 Members accept no responsibility towards users of the international telecommunication services, particularly as regards claims for damages.

ARTICLE 37

Secrecy of Telecommunications

- 184 1. Members agree to take all possible measures, compatible with the system of telecommunication used, with a view to ensuring the secreey of international correspondence.
- 185 2. Nevertheless, they reserve the right to communicate such correspondence to the competent authorities in order to ensure the application of their national laws or the execution of international conventions to which they are parties.

ARTICLE 38

Establishment, Operation and Protection of Telecommunication Clumnels and Installations

- 186 I. Members shall take such steps as may be necessary to ensure the establishment, under the best technical conditions, of the channels and installations necessary to carry on the rapid and uninterrupted exchange of international telecommunications.
- 187 2. So far as passible, these channels and installations must be operated by the methods and procedures which practical operating experience has shown to be the best. They must be maintained in proper operating condition and kept abreast of scientific and technical progress.
- 188 3. Members shall safeguard these channels and installations within their jurisdiction.
- 189 4. Unless other conditions are laid down by special arrangements, each Member shall take such steps as may be necessary to ensure maintenance of those sections of international telecommunication circuits within its control.

ARTICLE 39

Notification of Infringements

190 In order to facilitate the application of the provisions of Article 6 of this Constitution, Members undertake to inform one another of infringements of the provisions of this Constitution, the Convention and of the Administrative Regulations.

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Regulations, so far as concerns the harmful interference which their operation might cause to the radio services of other Members, and in general so far as concerns the technical harm which their operation might cause to the

operation of other telecommunication services of other Members.

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ARTICLE 40

Priority of Telecommunications Concerning Safety of Life

191 International telecommunication services must give absolute priority to all telecommunications concerning safety of life at sea, on land, in the air or in outer space, as well as to epidemiological telecommunications of exceptional urgency of the World Health Organization.

ARTICLE 41

Priority of Government Telecommunications

192 Subject to the provisions of Articles 40 and 46 of this Constitution, government telecommunications (see Annex to this Constitution, No. 1014) shall enjoy priority over other telecommunications to the extent practicable upon specific request by the originator.

ARTICLE 42

Special Arrangements

193 Members reserve for themselves, for the operating agencies recognized by them and for other agencies duly authorized to do so, the right to make special arrangements on telecommunication matters which do not concern Members in general. Such arrangements, however, shall not be in conflict with the terms of this Constitution, of the Convention or of the Administrative

ARTICLE 43

Regional Conferences, Arrangements and Organizations

194 Members reserve the right to convene regional conferences, to make regional arrangements and to form regional organizations, for the purpose of settling telecommunication questions which are susceptible of being treated on a regional basis. Such arrangements shall not be in conflict with either this Constitution or the Convention.

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CHAPTER VII

Special Provisions for Radio

ARTICLE 44

Use of the Radio-Frequency Spectrum and of the Genstationary-Satellite (3rbit

- 195 1. Members shall endeavour to limit the number of frequencies and the spectrum used to the minimum essential to provide in a satisfactory manner the necessary services. To that end, they shall endeavour to apply the latest technical advances as soon as possible.
- 196 2. In using Irequency bands for radio services, Members shall hear in mind that radio frequencies and the geostationary-satellite orbit are limited natural resources and that they must be used rationally, efficiently and economically, in conformity with the provisions of the Radio Regulations, so that countries or groups of countries may have equitable access to both, taking into account the special needs of the developing countries and the gengraphical situation of particular countries.

ARTICLE 45

Harmful Interference

197 1. All stations, whatever their purpose, must be established and operated in such a manner as not to cause harmful interference to the radio services or communications of other Members or of recognized operating agencies, or of other duly authorized operating agencies which carry on a radio service, and which operate in accordance with the provisions of the Radio Regulations.

- 198 2. Each Member undertakes to require the operating agencies which it recognizes and the other operating agencies duly authorized for this purpose to observe the provisions of No. 197 above.
- 199 3. Further, the Members recognize the necessity of taking all practicable steps to prevent the operation of electrical apparatus and installations of all kinds from causing harmful interference to the radio services or communications mentioned in No. 197 above.

ARTICLE 46

Distress Calls and Messages

200 Radio stations shall be obliged to accept, with absolute priority, distress calls and messages regardless of their origin, to reply in the same manner to such messages, and immediately to take such action in regard thereto as may be required.

ARTICLE 47

False or Deceptive Distress, Urgency, Safety or Identification Signals

201 Members agree to take the steps required to prevent the transmission or circulation of false or deceptive distress, urgency, safety or identification signals, and to collaborate in locating and identifying stations under their jurisdiction transmitting such signals.

CS/Art. 48

ARTICLE 48

Installations for National Defence Services

- 202 1. Members retain their entire freedom with regard to military radio installations.
- 203 2. Nevertheless, these installations must, so far as possible, observe statutory provisions relative to giving assistance in case of distress and to the measures to be taken to prevent harmful interference, and the provisions of the Administrative Regulations concerning the types of emission and the frequencies to be used, according to the nature of the service performed by such installations.
- 204 3. Moreover, when these installations take part in the service of public correspondence or other services governed by the Administrative Regulations, they must, in general, comply with the regulatory provisions for the conduct of such services.

CHAPTER VIII

Relations With the United Nations, Other International Organizations and Non-Member States

ARTICLE 49

Relations With the United Nations

205 The relationship between the United Nations and the International Telecommunication Union is defined in the Agreement concluded between these two organizations.

ARTICLE 50

Relations With Other International Organizations

206 In furtherance of complete international coordination on matters affecting telecommunication, the Union shall cooperate with international organizations having related interests and activities.

Relations With Non-Member States

207 Each Member reserves to itself and to the recognized operating agencies the right to fix the conditions on which it admits telecommunications exchanged with a State which is not a Member of the Union. If a telecommunication originating in the territory of such a State is accepted by a Member, it must be transmitted and, in so far as it follows the telecommunication channels of a Member, the obligatory provisions of this Constitution, of the Convention and of the Administrative Regulations and the usual charges shall apply to it.

CHAPTER IX

Final Provisions

ARTICLE 52

Ratification, Acceptance or Approval

- 208 1. This Constitution and the Convention shall be simultaneously ratified, accepted or approved by any signatory Member, in accordance with its constitutional rules, in one single instrument. This instrument shall be deposited, in as short a time as possible, with the Secretary-General. The Secretary-General shall notify the Members of each deposit of any such instrument.
- 209 2. (1) During a period of two years from the date of entry into force of this Constitution and the Convention, a signatory Member, even though it may not have deposited an instrument of ratification, acceptance or approval, in accordance with No. 208 above, shall enjoy the rights conferred on Members of the Union in Nos. 25 to 28 of this Constitution.
- (2) From the end of a period of two years from the date of entry into force of this Constitution and the Convention, a signatory Member which has not deposited an instrument of ratification, acceptance or approval, in accordance with No. 208 above, shall no longer be entitled to vote at any conference of the Union, at any session of the Council, at any meeting of any of the Sectors of the Union, or during consultation by correspondence conducted in accordance with the provisions of this Constitution and of the Convention until it has so deposited such an Instrument. Its rights, other than voting rights, shall not be affected.
- 211 3. After the entry into force of this Constitution and the Convention in accordance with Article 58 of this Constitution, an instrument of ratification, acceptance or approval, shall become effective on the date of its deposit with the Secretary-General.

Accession

- 212 1. A Member which is not a signatory to this Constitution and the Convention, or, subject to the provisions of Article 2 of this Constitution, any other State referred to in that Article may needed to this Constitution and the Convention at any time. Such accession shall be made simultaneously in the form of one single instrument covering both this Constitution and the Convention.
- 213 2. The instrument of accession shall be deposited with the Secretary-General, who shall notify the Members of each deposit of any such instrument when it is received and shall forward to each of them a certified copy thereof.
- 214 3. After the entry into force of this Constitution and the Convention in accordance with Article 58 of this Constitution, an instrument of accession shall become effective on the date of its deposit with the Secretary-General, unless otherwise specified therein.

ARTICLE 54

Administrative Regulations

- 215 1. The Administrative Regulations, as specified in Article 4 of this Constitution, are binding international instruments and shall be subject to the provisions of this Constitution and the Convention.
- 216 2. Ratification, acceptance or approval of this Constitution and the Convention, or accession to these instruments, in accordance with Articles 52 and 53 of this Constitution, shall also constitute consent to be bound by the Administrative Regulations adopted by competent world conferences prior to the date of signature of this Constitution and the Convention. Such consent is

- subject to any reservation made at the time of signature of the Administrative Regulations or revisions thereof to the extent that the reservation is maintained at the time of deposit of the instrument of ratification, acceptance, approval or accession.
- 217 3. Revisions of the Administrative Regulations, either partial or complete, adopted after the aforementioned date shall, to the extent permitted by their national law, apply provisionally in respect of all Members which have signed such revisions. Such provisional application shall be effective from the date or dates specified therein, and shall be subject to such reservations as may have been made at the time of signature of such revisions.
- 218 4. Such provisional application shall continue until:
- the Member notifies the Secretary-General of its consent to be bound by any such revision and indicates, if appropriate, the extent to which it maintains any reservation made in respect of that revision at the time of signature of that revision; or
- 220 b) sixty days after receipt by the Secretary-General of the Member's notification informing him that it does not consent to be bound by any such revision.
- 221 5. If no notification under Nos. 219 or 220 above has been received by the Secretary-General from any Member which has signed any such revision, prior to the expiry of a period of thirty-six months from the date or dates specified therein for the commencement of provisional application, that Member shall be deemed to have consented to be bound by that revision, subject to any reservation it may have made in respect of that revision at the time of signature of that revision.
- 222 6. Any Member of the Union which has not signed any such revision of the Administrative Regulations, either partial or complete, adopted after the date stipulated in No. 216 above, shall endeavour to notify the Secretary-General promptly of its consent to be bound by it. If no such notification has been received by the Secretary-General from such a Member before the expiry of the period stipulated in No. 221 above, that Member shall be deemed to have consented to be bound by that revision.
- 223 7. The Secretary-General shall inform Members promptly of any notification received pursuant to this Article.

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CSVArt, 58

235 3. The Optional Protocol on the Compulsory Settlement of Disputes Relating to this Constitution, to the Convention, and to the Administrative Regulations shall be applicable as between Members parties to that Protocol.

ARTICLE 57

Denunciation of this Constitution and the Convention

- 236 1. Each Member which has ratified, accepted, approved or acceded to this Constitution and the Convention shall have the right to denounce them. In such a case, this Constitution and the Convention shall be denounced simultaneously in one single instrument, by a notification addressed to the Secretary-General. Upon receipt of such notification, the Secretary-General shall advise the other Members thereof.
- 237 2. Such denunciation shall take effect at the expiration of a period of one year from the date of receipt of its notification by the Secretary-General.

ARTICLE 58

Entry into Force and Related Matters

- 238 1. This Constitution and the Convention shall enter into force on 1 July 1994 between Members having deposited before that date their instrument of ratification, acceptance, approval or accession.
- 239 2. Upon the date of entry into force specified in No. 238 above, this Constitution and the Convention shall, as between Parties thereto, abrogate and replace the International Telecommunication Convention (Nairobi, 1982).

- 240 3. In accordance with the provisions of Article 102 of the Charter of the United Nations, the Secretary-General of the Union shall register this Constitution and the Convention with the Secretariat of the United Nations.
- 241 4. The original of this Constitution and the Convention drawn up in the Arabic, Chinese, English, French, Russian and Spanish languages shall remain deposited in the archives of the Union. The Secretary-General shall forward, in the languages requested, a certified true copy to each of the signatory Members.
- 242 5. In the event of any discrepancy among the various language versions of this Constitution and the Convention, the French text shall prevail.

IN WITNESS WHEREOF the undersigned Plenipotentiaries have signed the original of this Constitution of the International Telecommunication Union and the original of the Convention of the International Telecommunication Union,

Done at Geneva, on 22 December 1992

Convention of the International Telecommunication Union

CONVENTION OF THE INTERNATIONAL TELECOMMUNICATION UNION

CHAPTER I

Functioning of the Union

SECTION I

ARTICLE (

Plenipotentiary Conference

- I i. (1) The Plenipotentiary Conference shall be convened in accordance with the relevant provisions of Article 8 of the Constitution of the International Telecommunication Union (hereinafter referred to as "the Constitution").
- 2 (2) If practicable, the precise place and the exact dates of a Pienipotentiary Conference shall be set by the preceding Plenipotentiary Conference; failing this, they shall be fixed by the Council with the concurrence of the majority of the Members of the Union.
- 3 2. (1) The precise place and the exact dates of the next Plenipotentiary Conference, or either one of these, may be changed:
- 4' a) when at least one-quarter of the Members of the Union have individually proposed a change to the Secretary-General; or
- 5 b) on a proposal of the Council.
- 6 (2) Any such change shall require the concurrence of a majority of the Members of the Union.

Elections and Related Matters

The Council

- 7 1. Except in the case of vacancies arising in the circumstances described in Nos. 10 to 12 below, the Members of the Union elected to the Council shall hold office until the date on which a new Council is elected. They shall be eligible for re-election.
- 8 2. (1) If, between two Plenipotentiary Conferences, a seat becomes vacant on the Council, it shall pass by right to the Member of the Union from the same region as the Member whose seat is vacated, which had obtained at the previous election the largest number of votes among those not elected.
- (2) When for any reason a vacant seat cannot be filled according to the procedure of No. 8 above, the Chairman of the Council shall invite the other Members of the region to seek election within one month of such an invitation being issued. At the end of this period, the Chairman of the Council shall invite Members of the Union to elect a new Member. The election shall be carried out by secret hallot by correspondence. The same majority as indicated above will be required. The new Member shall hold office until the election of the new Council by the next competent Plenipotentiary Conference.
- 10 3. A seat on the Council shall be considered vacant:
- 11 a) when a Council Member does not have a representative in attendance at two consecutive ordinary sessions of the Council;
- 12 b) when a Member of the Union resigns its membership of the Council.

Elected officials

- 13 1. The Secretary-General, the Deputy Secretary-General and the Directors of the Bureaux shall take up their duties on the dates determined by the Plenipotentiary Conference at the time of their election. They shall normally remain in office until dates determined by the following Plenipotentiary Conference, and they shall be eligible for re-election once only.
- 14 2. If the post of Secretary-General falls vacant, the Deputy Secretary-General shall succeed to it and shall remain in office until a date determined by the following Plenipotentiary Conference. When under these conditions the Deputy Secretary-General succeeds to the office of the Secretary-General, the post of Deputy Secretary-General shall be considered to fall vacant on that same date and the provisions of No. 15 below shall be applied.
- 15 3. If the post of Deputy Secretary-General falls vacant more than 180 days prior to the date set for the convening of the next Plenipotentiary Conference, the Council shall appoint a successor for the balance of the term.
- 16 4. If the posts of the Secretary-General and the Deputy Secretary-General fall vacant simultaneously, the Director who has been longest in office shall discharge the duties of Secretary-General for a period not exceeding 90 days. The Council shall appoint a Secretary-General and, if the vacancies occur more than 180 days prior to the date set for the convening of the next Ptenipotentiary Conference, a Deputy Secretary-General. An official thus appointed by the Council shall serve for the balance of the term for which his predecessor was elected.
- 17 5. If the post of a Director becomes unexpectedly vacant, the Secretary-General shall take the necessary steps to ensure that the duties of that Director are carried out until the Council shall appoint a new Director at its next ordinary session following the occurrence of such a vacancy. A Director so appointed shall serve until the date fixed by the next Plenipotentiary Conference.

CV/Art. 2

- Subject to the relevant provisions of Article 27 of the Constitution, the Council shall provide for the filling of any vacancy in the post of Secretary-General or Deputy Secretary-General in the situation described in the relevant provisions of the present Article at an ordinary session, if held within 90 days after a vacancy occurs, or at a session convened by the Chairman within the periods specified in those provisions.
- 19 7. Any period of service in the post of an elected official pursuant to an appointment under Nos. 14 to 18 above shall not affect eligibility for election or re-election to such a post.

Members of the Radio Regulations Board

- 20 1, The members of the Radio Regulations Board shall take up their duties on the dates determined by the Plenipotentiary Conference at the time of their election. They shall remain in office until dates determined by the following Plenipotentiary Conference, and shall be eligible for re-election once only.
- 21 2. If, in the interval between two Plenipotentiary Conferences, a member of the Board resigns or is no longer in a position to perform his duties, the Secretary-General, in consultation with the Director of the Radiocomnunication Bureau, shall invite the Members of the Union of the region concerned to propose candidates for the election of a replacement at the next session of the Council. However, if the vacancy occurs more than 90 days before a session of the Council or after the session of the Council preceding the next Plenipotentiary Conference, the Member of the Union concerned shall designate, as soon as possible and within 90 days, another national as a replacement who will remain in office until the new member elected by the Council takes office or until the new members of the Board elected by the next Menipotentiary Conference take office, as appropriate. The replacement shall be eligible for election by the Council or by the Plenipotentiary Conference, as appropriate.

22 3. A member of the Radio Regulations Board is considered no longer in a position to perform his duties after repeated consecutive absences from the Board meetings. The Secretary-General shall, after consultation with the Board's Chairman as well as the member of the Board and the Member of the Union concerned, declare existence of a vacancy in the Board and shall proceed as stipulated in No. 21 above.

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ARTICLE 3

Other Conferences

- 23 1. In conformity with the relevant provisions of the Constitution, the following world conferences of the Union shall normally be convened within the period between two Plenipotentiary Conferences:
- two world radiocommunication conferences:
- one world telecommunication standardization conference;
- one world telecommunication development conference;
- two radiocommunication assemblies, associated in place and time with world radiocommunication conferences.
- Exceptionally, within the period between Plenipotentiary Conferences:
- the second world radiocommunication conference may be cancelled together with its associated radiocommunication assembly; alternatively, either one may be cancelled even if the other is held:
- an additional telecommunication standardization conference may be convened.
- These actions shall be taken:
- by a decision of a Plenipotentiary Conference;

- on the recommendation of the previous world conference of the Sector concerned, if approved by the Council;
- 34 c) at the request of at least one-quarter of the Members of the Union, which shall individually address their requests to the Secretary-General; or
- 35 d) on a proposal of the Council.
- 36 4. A regional radiocommunication conference shall be convened;
- 37 a) by a decision of a Plenipotentiary Conference;
- 38 b) on the recommendation of a previous world or regional radiocommunication conference if approved by the Council;
- 39 c) at the request of at least one-quarter of the Members belonging to the region concerned, which shall individually address their requests to the Secretary-General; or
- 40 d) on a proposal of the Council.
- 41 5. (1) The precise place and the exact dates of a world or regional conference or radiocommunication assembly may be fixed by a Plenipotentiary Conference.
- 42 (2) In the absence of such a decision, the Council shall determine the precise place and the exact dates of a world conference or radiocommunication assembly with the concurrence of a majority of the Members of the Union, and of a regional conference with the concurrence of a majority of the Members of the Union belonging to the region concerned; in both cases the provisions of No. 47 below shall apply.
- 43 6. (1) The precise place and the exact dates of a conference or assembly may be changed:
- 44 a) at the request of at least one-quarter of the Members of the Union in the case of a world conference or assembly, or of at least one-quarter of the Members of the Union belonging to the region concerned in the case of a regional conference. Their requests shall be addressed individually to the Secretary-General, who shall transmit them to the Council for approval; or
- 45 b) on a proposal of the Council.

- 46 (2) In the cases specified in Nos. 44 and 45 above, the changes proposed shall not be finally adopted until accepted by a majority of the Members of the Union, in the case of a world conference or assembly, or by a majority of the Members of the Union belonging to the region concerned, in the case of a regional conference, subject to the provisions of No. 47 below.
- 47 7. In the consultations referred to in Nos. 42, 46, 118, 123, 138, 302, 304, 305, 307 and 312 of this Convention, Members of the Union who have not replied within the time limits specified by the Council shall be regarded as not participating in the consultations, and in consequence shall not be taken into account in computing the majority. If the number of replies does not exceed one-half of the Members consulted, a further consultation shall take place, the results of which shall be decisive regardless of the number of votes cast.
- 48 8. (1) World conferences on international telecommunications shall be held upon decision by the Plenipotentiary Conference.
- 49 (2) The provisions for the convening of, the adoption of the agenda of, and the participation in a world radiocommunication conference shall, as appropriate, equally apply to world conferences on international telecommunications.

SECTION 2

ARTICLE 4

The Council

- The Council is composed of forty-three Members of the Union elected by the Plenipotentiary Conference.
- 51 2. (1) The Council shall hold an ordinary session annually at the seat of the Union.

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- 52 (2) During this session it may decide to hold, exceptionally, an additional session.
- 53 (3) Between ordinary sessions, it may be convened, as a general rule at the seat of the Union, by the Chairman at the request of a majority of its Members, or on the initiative of the Chairman under the conditions provided for in No. 18 of this Convention.
- 54 3. The Council shall take decisions only in session. Exceptionally, the Council in session may agree that any specific issue shall be decided by correspondence.
- 55 4. At the beginning of each ordinary session, the Council shall elect its own Chairman and Vice-Chairman from among the representatives of its Members, taking into account the principle of rotation between the regions. They shall serve until the opening of the next ordinary session and shall not be eligible for re-election. The Vice-Chairman shall serve as Chairman in the absence of the latter.
- 56 5. The person appointed to serve on the Council by a Member of the Council shall, so far as possible, be an official serving in, or directly responsible to, or for, their telecommunication administration and qualified in the field of telecommunication services.
- 57 6. Only the travelling, subsistence and insurance expenses incurred by the representative of each Member of the Council in his capacity at Council sessions shall be borne by the Union.
- 58. 7. The representative of each Member of the Council shall have the right to attend, as an observer, all meetings of the Sectors of the Union.
- 59 8. The Secretary-General shall not as Secretary of the Council.
- 60 9. The Secretary-General, the Deputy Secretary-General and the Directors of the Bureaux may participate as of right in the deliberations of the Council, but without taking part in the voting. Nevertheless, the Council may hold meetings confined to the representatives of its own Members.

- 61 10. The Council shall consider each year the report prepared by the Secretary-General on the recommended strategic policy and planning for the Union in keeping with the guidelines given by the Plenipotentiary Conference and shall take appropriate action.
- 62 11. The Council shall, in the interval between two Plenipotentiary Conferences, supervise the overall management and administration of the Union; it shall in particular:
- 63 (1) approve and revise the Staff Regulations and the Financial Regulations of the Union and any other regulations as it may consider necessary, taking account of current practice of the United Nations and of the specialized agencies applying the common system of pay, allowances and pensions;
- 64 (2) adjust as necessary:
- 65 a) the basic salary scales for staff in the professional and higher categories, excluding the salaries for posts filled by election, to accord with any changes in the basic salary scales adopted by the United Nations for the corresponding common system categories;
- 66 b) the basic salary scales for staff in the general services categories to accord with changes in the rates applied by the United Nations and the specialized agencies at the seat of the Union;
- 67 c) the post adjustment for professional and higher categories, including posts filled by election, in accordance with decisions of the United Nations for application at the seat of the Union;
- 68 d) the allowances for all staff of the Union, in accordance with any changes adopted in the United Nations common system;
- 69 (3) take decisions to ensure equitable geographical distribution of the staff of the Union and monitor the implementation of such decisions;

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- (4) decide on proposals for major organizational changes within the General Secretariat and the Bureaux of the Sectors of the Union consistent with the Constitution and this Convention, submitted to it by the Secretary-General following their consideration by the Coordination Committee;
- 71 (5) examine and decide on plans concerning Union posts and staff and human resources development programmes covering several years, and give guidelines for the staffing of the Union, including on staffing levels and structures, taking into account the guidelines given by the Plenipotentiary Conference and the relevant provisions of Article 27 of the Constitution;
- 72 (6) adjust, as necessary, the contributions payable by the Union and its staff to the United Nations Joint Staff Pension Fund, in accordance with the Fund's rules and regulations, as well as the cost of living allowances to be granted to beneficiaries of the Union Staff Superannuation and Benevolent Funds on the basis of the practice followed by the Fund;
- 73 (7) review and approve the biennial budget of the Union, and consider the budget forecast for the two-year period following that budget, taking account of the decisions of the Plenipotentiary Conference in relation to No. 50 of the Constitution and of the limits for expenditures set by that Conference in accordance with No. 51 of the Constitution; it shall ensure the strictest possible economy but be mindful of the obligation upon the Union to achieve satisfactory results as expeditiously as possible. In so doing, the Council shall take into account the views of the Coordination Committee as contained in the report by the Secretary-General mentioned in No. 86 and the financial operating report mentioned in No. 101 of this Convention;
- 74 (8) arrange for the annual audit of the accounts of the Union prepared by the Secretary-General and approve them, if appropriate, for submission to the next Plenipotentiary Conference;
- 75 (9) arrange for the convening of the conferences of the Union and provide, with the consent of a majority of the Members of the Union in the case of a world conference, or of a majority of the Members of the Union belonging to the region concerned in the case of a regional conference,

appropriate directives to the General Secretariat and the Sectors of the Union with regard to their technical and other assistance in the preparation for and organization of conferences;

- 76 (10) take decisions in relation to No. 28 of this Convention;
- 77 (11) decide upon the implementation of any decisions which have been taken by conferences and which have financial implications;
- 78 (12) to the extent permitted by the Constitution, this Convention and the Administrative Regulations, take any other action deemed necessary for the proper functioning of the Union;
- 79 (13) take any necessary steps, with the agreement of a majority of the Members of the Union, provisionally to resolve questions not covered by the Constitution, this Convention, the Administrative Regulations and their annexes and which cannot await the next competent conference for settlement;
- organizations referred to in Articles 49 and 50 of the Constitution and to this end, conclude, on behalf of the Union, provisional agreements with the international organizations referred to in Article 50 of the Constitution, and with the United Nations in application of the Agreement between the United Nations and the International Telecommunication Union; these provisional agreements shall be submitted to the next Plenipotentiary Conference in accordance with the relevant provision of Article 8 of the Constitution;
- 81 (15) send to Members of the Union, as soon as possible after each of its sessions, summary records on the activities of the Council and other documents deemed useful;
- (16) submit to the Plenipotentiary Conference a report on the activities of the Union since the previous Plenipotentiary Conference and any appropriate recommendations.

SECTION 3

ARTICLE 5

General Secretariat

- 83 1. The Secretary-General shall:
- 84 a) he responsible for the overall management of the Union's resources; he may delegate the management of part of these resources to the Deputy Secretary-General and the Directors of the Bureaux, in consultation as necessary with the Coordination Committee;
- 85 b) coordinate the activities of the General Secretariat and the Sectors of the Union, taking into account the views of the Coordination Committee, with a view to assuring the most effective and economical use of the resources of the Union;
- 86 c) after consultation with the Coordination Committee and taking into account its views, prepare and submit to the Council an annual report indicating changes in the telecommunication environment and containing recommended action relating to the Union's future policies and strategy, as stipulated in No. 61 of this Convention, together with their financial implications;
- 87. d) organize the work of the General Secretariat and appoint the staff of that Secretariat in accordance with the directives of the Plenipotentiary Conference and the rules established by the Council;
- 88 c) undertake administrative arrangements for the Bureaux of the Sectors of the Union and appoint their staff on the basis of the choice and proposals of the Director of the Bureau concerned, although the final decision for appointment or dismissal shall rest with the Secretary-General;

- 89 f) report to the Council any decisions taken by the United Nations and the specialized agencies which affect common system conditions of service, allowances and pensions;
- 90 g) ensure the application of any regulations adopted by the Council;
- 91 h) provide legal advice to the Union;
- 92 1) supervise, for administrative management purposes, the staff of the Union with a view to assuring the most effective use of personnel and the application of the common system conditions of employment for the staff of the Union. The staff appointed to assist directly the Directors of the Bureaux shall be under the administrative control of the Secretary-General and shall work under the direct orders of the Directors concerned but in accordance with administrative guidelines given by the Council;
- 93 j) in the interest of the Union as a whole and in consultation with the Directors of the Bureaux concerned, temporarily reassign staff members from their appointed position as necessary to meet fluctuating work requirements at headquarters;
- 94 k) make, in agreement with the Director of the Bureau concerned, the necessary administrative and financial arrangements for the conferences and meetings of each Sector;
- 95 1) taking into account the responsibilities of the Sectors, undertake appropriate accretariat work preparatory to and following conferences of the Union;
- 96 m) prepare recommendations for the first meeting of the Heads of delegations referred to in No. 342 of this Convention, taking into account the results of any regional consultation;
- 97 n) provide, where appropriate in cooperation with the inviting government, the secretariat of conferences of the Union, and provide the facilities and services for meetings of the Union, in collaboration, as appropriate, with the Director concerned, drawing from the Union's staff as he deems necessary in accordance with No. 93 above. The Secretary-General may also, when so requested, provide the secretariat of other telecommunication meetings on a contractual basis;

- 98 o) take necessary action for the timely publication and distribution of service documents, information bulletins, and other documents and records prepared by the General Secretariat and the Sectors, communicated to the Union or whose publication is requested by conferences or the Council; the list of documents to be published shall be maintained by the Council, following consultation with the conference concerned, with respect to service documents and other documents whose publication is requested by conferences;
- 99 p) publish periodically, with the help of information put at his disposal or which be may collect, including that which he may obtain from other international organizations, a journal of general information and documentation concerning telecommunication;
- after consultation with the Coordination Committee and making all possible economies, prepare and submit to the Council a biennial draft budget covering the expenditures of the Union within the limits laid down by the Plenipotentiary Conference. This draft shall consist of a consolidated budget, including cost-based budgets for the three Sectors, prepared in accordance with the budget guidelines issued by the Secretary-General, and comprising two versions. One version shall be for zero growth of the contributory unit, the other for a growth less than or equal to any limit fixed by the Plenipotentiary Conference, after any drawing on the Reserve Account. The budget resolution, after approval by the Council, shall be sent for information to all Members of the Union;
- 101 r) with the assistance of the Coordination Committee, prepare an annual financial operating report in accordance with the Financial Regulations and submit it to the Council. A recapitulative financial operating report and accounts shall be prepared and submitted to the next Plenipotentiary Conference for examination and final approval;
- in the assistance of the Coordination Committee, prepare an annual report on the activities of the Union which, after approval by the Council, shall be sent to all Members;

- 103 i) perform all other secretarial functions of the Union;
- 104 u) perform any other functions entrusted to him by the Council.
- 105 2. The Secretary-General or the Deputy Secretary-General may participate, in a consultative capacity, in conferences of the Union; the Secretary-General or his representative may participate in a consultative capacity in all other meetings of the Union.

SECTION 4

ARTICLE 6

Coordination Committee

- 106 1. (1) The Coordination Committee shall assist and advise the Secretary-General on all matters mentioned under the relevant provisions of Article 26 of the Constitution and the relevant Articles of this Convention.
- 107 (2) The Committee shall be responsible for ensuring coordination with all the international organizations mentioned in Articles 49 and 50 of the Constitution as regards representation of the Union at conferences of such organizations.
- (3) The Committee shall examine the progress of the work of the Union and assist the Secretary-General in the preparation of the report referred to in No. 86 of this Convention for submission to the Council.
- 109 2. The Committee shall endeavour to reach conclusions unanimously. In the absence of the support of the majority in the Committee, its Chairman may in exceptional circumstances take decisions, on his own responsibility, provided he judges that the decision of the matters in question is urgent and cannot await the next session of the Council. In such circumstances he shall

report promptly in writing on such majters to the Members of the Council, setting forth his reasons for such action together with any other written views submitted by other members of the Committee. If in such circumstances the matters are not urgent, but nevertheless important, they shall be submitted for consideration by the next session of the Council.

- 110 3. The Chairman shall convene the Committee at least once a month; the Committee may also be convened when necessary at the request of two of its members.
- 111 4. A report shall be made of the proceedings of the Coordination Committee and will be made available on request to Members of the Council.

SECTION 5

Radiocommunication Sector

ARTICLE 7

World Radiocommunication Conference

- 112 1. In accordance with No. 90 of the Constitution, a world radiocommunication conference shall be convened to consider specific radiocommunication matters. A world radiocommunication conference shall deal with those items which are included in its agenda adopted in accordance with the relevant provisions of this Article.
- 113 2. (1) The agenda of a world radiocommunication conference may include:
- 114 a) the partial or, exceptionally, complete revision of the Radio Regulations referred to in Article 4 of the Constitution;
- any other question of a worldwide character within the competence of the conference;

- an item concerning instructions to the Radio Regulations Board and the Radiocommunication Bureau regarding their activities, and a review of those activities;
- 117 d) the adoption of questions to be studied by the radiocommunication assembly, as well as matters that the assembly shall consider in relation to future radiocommunication conferences.
- 118 (2) The general scope of this agenda should be established four years in advance, and the final agenda shall be established by the Council preferably two years before the conference, with the concurrence of a majority of the Members of the Union, subject to the provisions of No. 47 of this Convention.
- (3) This agenda shall include any question which a Plenipotentiary Conference has directed to be placed on the agenda.
- 120 3. (1) This agenda may be changed:
- 121 a) at the request of at least one-quarter of the Members of the Union. Such requests shall be addressed individually to the Secretary-General, who shall transmit them to the Council for approval; or
- 122 b) on a proposal of the Council.
- (2) The proposed changes to the agenda of a world radiocommunication conference shall not be finally adopted until accepted by a majority of the Members of the Union, subject to the provisions of No. 47 of this Convention.
- 124 4. The conference shall also:
- 125 (1) consider and approve the report of the Director of the Bureau on the activities of the Sector since the last conference;
- (2) recommend to the Council items for inclusion in the agenda of a future conference and give its views on such agendas for at least a four-year cycle of radiocommunication conferences, together with an estimate of the financial implications;
- 127 (3) include, in its decisions, instructions or requests, as appropriate, to the Secretary-General and the Sectors of the Union.

128 5. The Chairman and Vice-Chairmen of the radiocommunication assembly, or of relevant study groups, may participate in the associated world radiocommunication conference.

ARTICLE 8

Radiocommunication Assembly

- 129 1. A radiocommunication assembly shall deal with and issue, as appropriate, recommendations on questions adopted pursuant to its own procedures or referred to it by the Plenipotentiary Conference, any other conference, the Council or the Radio Regulations Board.
- 130 2. With regard to No. 129 above, the radiocommunication assembly shall:
- 131 (1) consider the reports of study groups prepared in accordance with No. 157 of this Convention and approve, modify or reject the draft recommendations contained in those reports;
- (2) bearing in mind the need to keep the demands on the resources of the Union to a minimum, approve the programme of work arising from the review of existing questions and new questions and determine the priority, urgency, estimated financial implications and time-scale for the completion of their study;
- 133 (3) decide, in the light of the approved programme of work derived from No. 132 above, on the need to maintain, terminate or establish study groups, and allocate to each of them the questions to be studied;

- 134 (4) group questions of interest to the developing countries as far as possible, in order to facilitate their participation in the study, of those questions;
- (5) give advice on matters within its competence in response to requests from a world radiocommunication conference;
- (6) report to the associated world radiocommunication conference on the progress in matters that may be included in the agenda of future radiocommunication conferences.
- 137 3. A radiocommunication assembly shall be presided over by a person designated by the government of the country in which the meeting is held or, in the case of a meeting held at the seat of the Union, by a person elected by the assembly itself. The Chairman shall be assisted by Vice-Chairmen elected by the assembly.

ARTICLE 9

Regional Radiocommunication Conferences

only for specific radiocommunication questions of a regional nature, including instructions to the Radio Regulations Board and the Radiocommunication Bureau regarding their activities in respect of the region concerned, provided such instructions do not conflict with the interests of other regions. Only items included in its agenda may be discussed by such a conference. The provisions contained in Nos. 118 to 123 of this Convention shall apply to a regional radiocommunication conference, but only with regard to the Members of the region concerned.

Radio Regulations Board

- 139 1. The Board is composed of nine members elected by the Pfenipotentiary Conference.
- 140 2. In addition to the duties specified in Article 14 of the Constitution, the Board shall also consider reports from the Director of the Radiocummunication Bureau on investigations of harmful interference carried out at the request of one or more of the interested administrations, and formulate recommendations with respect thereto.
- 141 3. The members of the Board have a duty to participate, in an advisory capacity, in radiocommunication conferences and radiocommunication assemblies. The Chairman and Vice-Chairman of the Board, or their nominated representatives, have a duty to participate, in an advisory capacity, in Plenipotentiary Conferences. In all of these cases, the members having these duties shall not participate in these conferences as members of their national delegations.
- 142 4. Only the travelling, subsistence and insurance expenses incurred by the members of the Board in the exercise of their duties for the Union shall be borne by the Union.
- 143 5. The working methods of the Board shall be as follows:
- (1) The members of the Board shall elect from their own members a Chairman and a Vice-Chairman for a period of one year. Thereafter the Vice-Chairman shall succeed the Chairman each year and a new Vice-Chairman shall be elected. In the absence of the Chairman and Vice-Chairman, the Board shall elect a temporary Chairman for the occasion from among its members.
- 145 (2) The Board shall normally hold up to four meetings a year, generally at the seat of the Union, at which at least two-thirds of its members shall be present, and may carry out its duties using modern means of communication.

- 146 (3) The Board shall endeavour to reach its decisions unanimously. If it falls in that endeavour, a decision shall be valid only if at least two-thirds of the members of the Board vote in favour thereof. Each member of the Board shall have one vote; voting by proxy is not allowed.
- 147 (4) The Board may make such internal arrangements as it considers necessary in conformity with the provisions of the Constitution, this Convention and the Radio Regulations. Such arrangements shall be published as part of the Board's Rules of Procedure.

AR'TICLE 11

Radiocommunication Study Groups

- 148 1. Radiocommunication study groups are set up by a radiocommunication assembly.
- 149 2. (1) The radiocommunication study groups shall study questions and prepare draft recommendations on the matters referred to them in accordance with the provisions in Article 7 of this Convention. Those draft recommendations shall be submitted for approval to a radiocommunication assembly or, hetween two such assemblies, by correspondence to administrations in accordance with procedures adopted by the assembly. Recommendations approved in either manner shall have equal status.
- (2) The study of the above questions shall, subject to No. 158 below, focus on the following:
- 151 a) use of the radio-frequency spectrum in terrestrial and space radiocommunication (and of the geostationary-satellite orbit);
- 152 b) characteristics and performance of radio systems;

- 153 c) operation of radio stations;
- 154 d) radiocommunication aspects of distress and safety matters.
- 155 (3) These studies shall not generally address economic questions, but when they involve comparing technical alternatives, economic factors may be taken into consideration.
- 156 3. The radiocommunication study groups shall also carry out preparatory studies of the technical, operational and procedural matters to be considered by world and regional radiocommunication conferences and elaborate reports thereon in accordance with a programme of work adopted in this respect by a radiocommunication assembly or following instructions by the Council.
- 157 4. Each study group shall prepare for the radiocommunication assembly a report indicating the progress of work, the recommendations adopted in accordance with the consultation procedure contained in No. 149 above and any draft new or revised recommendations for consideration by the assembly.
- 158 5. Taking into account No. 79 of the Constitution, the tasks enumerated in Nos. 151 to 154 above and in No. 193 of this Convention in relation to the Telecommunication Standardization Sector shall be kept under continuing review by the Radiocommunication Sector and the Telecommunication Standardization Sector with a view to reaching common agreement on changes in the distribution of matters under study. The two Sectors shall cooperate closely and adopt procedures to conduct such a review and reach agreements in a timely and effective manner. If agreement is not reached, the matter may be submitted through the Council to the Plenipotentiary Conference for decision.
- 159 6. In the performance of their studies, the radiocommunication study groups shall pay due attention to the study of questions and to the formulation of recommendations directly connected with the establishment, development and improvement of telecommunications in developing countries at both the regional and international levels. They shall conduct their work giving due

consideration to the work of national, regional and other international organizations concerned with radiocommunication and cooperate with them, keeping in mind the need for the Union to maintain its pre-eminent position in the field of telecommunications.

160 7. For the purpose of facilitating the review of activities in the Radio-communication Sector, measures should be taken to foster cooperation and coordination with other organizations concerned with radiocommunication and with the Telecommunication Standardization Sector and the Telecommunication Development Sector. A radiocommunication assembly shall determine the specific duties, conditions of participation and rules of procedure for these measures.

ARTICLE 12

Radiocommunication Bureau

- 161 1. The Director of the Radiocommunication Bureau shall organize and coordinate the work of the Radiocommunication Sector. The duties of the Bureau are supplemented by those specified in provisions of the Radio Regulations.
- 162 2. The Director shall, in particular,
- 163 (1) in relation to radiocommunication conferences:
- 164 a) coordinate the preparatory work of the study groups and the Bureau, communicate to Members the results of this preparatory work, collect their comments and submit a consolidated report to the conference which may include proposals of a regulatory nature;
- (a) participate as of right, but in an advisory capacity, in the deliberations of the radiocommunication assembly and of the radiocommunication study groups. The Director shall make all necessary preparations for radiocommunication conferences and meetings of the Radiocommunication Sector in consultation with the General Secretariat in

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accordance with No. 94 of this Convention and, as appropriate, with the other Sectors of the Union, and with due regard for the directives of the Council in carrying out these preparations;

- 7 166 c) provide assistance to the developing countries in their preparations for radiocommunication conferences.
 - 167 (2) in relation to the Radio Regulations Dourd:
 - 168 a) prepare and submit draft Rules of Procedure for approval by the Radio Regulations Board; they shall include, inter atia, calculation methods and data required for the application of the provisions of the Radio Regulations;
 - 169 b) distribute to all Members of the Union the Rules of Procedure of the Board and collect comments thereon received from administrations;
 - 170 c) process information received from administrations in application of the relevant provisions of the Radio Regulations and regional agreements and prepare it, as appropriate, in a form suitable for publication;
 - 171 d) apply the Rules of Procedure approved by the Board, prepare and publish findings based on those Rules, and submit to the Board any review of a finding which is requested by an administration and which cannot be resolved by the use of those Rules of Procedure;
- in accordance with the relevant provisions of the Radio Regulations, effect an orderly recording and registration of frequency assignments and, where appropriate, the associated orbital characteristics, and keep up to date the Master International Prequency Register; review entries in that Register with a view to amending or eliminating, as appropriate, those which do not reflect actual frequency usage, in agreement with the administration concerned;

- assist in the resolution of cases of harmful interference, at the request of one or more of the interested administrations, and where necessary, make investigations and prepare, for consideration by the Board, a report including draft recommendations to the administrations concerned;
- 174 g) act as executive secretary to the Board;
- 175 (3) coordinate the work of the radiocommunication study groups and be responsible for the organization of that work;
- 176 (4) also undertake the following:
- 177 a) carry out studies to furnish advice to Members with a view to the operation of the maximum practicable number of radio channels in those portions of the spectrum where harmful interference may occur, and with a view to the equitable, effective and economical use of the geostationary-satellite orbit, taking into account the needs of Members requiring assistance, the specific needs of developing countries, as well as the special geographical situation of particular countries;
- 178 b) exchange with members data in machine-readable and other forms, prepare and keep up to date any documents and databases of the Radiocommunication Sector, and arrange, with the Secretary-General, as appropriate, for their publication in the working languages of the Union in accordance with No. 172 of the Constitution;
- 179 c) maintain such essential records as may be required;
- arbmit to the world radiocommunication conference a report on the activities of the Radiocommunication Sector since the last conference; if a world radiocommunication conference is not planned, such a report covering the two-year period since the last conference shall be submitted to the Council and to the Members of the Union;
- prepare a cost-based budget estimate for the requirements of the Radiocommunication Sector and transmit it to the Secretary-General for consideration by the Coordination Committee and inclusion in the Union's budget.

182 3. The Director shall choose the technical and administrative personnel of the Bureau within the framework of the budget as approved by the Council. The appointment of the technical and administrative personnel is made by the Secretary-General in agreement with the Director. The final decision for appointment or dismissal rests with the Secretary-General.

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183 4. The Director shall provide technical support, as necessary, to the Telecommunication Development Sector within the framework of the Constitution and this Convention.

SECTION 6

Telecommunication Standardization Sector

ARTICLE 13

World Telecommunication Standardization Conference

- 184 1. In accordance with No. 104 of the Constitution, a world standardization conference shall be convened to consider specific matters related to telecommunication standardization.
- 185 2. The questions to be studied by a world telecommunication standardization conference, on which recommendations shall be issued, shall be those adopted pursuant to its own procedures or referred to it by the Plenipotentiary Conference, any other conference, or the Council.

- 186 3. In accordance with No. 104 of the Constitution, the conference shall:
- 187 a) consider the reports of study groups prepared in accordance with No. 194 of this Convention and approve, modify or reject draft recommendations contained in those reports;
- (b) bearing in mind the need to keep the demands on the resources of the Union to a minimum, approve the programme of work arising from the review of existing questions and new questions and determine the priority, urgency, estimated financial implications and time-scale for the completion of their study;
- 189 c) decide, in the light of the approved programme of work derived from No. 188 above, on the need to maintain, terminate or establish study groups and allocate to each of them the questions to be studied;
- 190 d) group, as far as practicable, questions of interest to the developing countries to facilitate their participation in these studies;
- 191 e) consider and approve the report of the Director on the activities of the Sector since the last conference.

ARTICLE 14

Telecommunication Standardization Study Groups

92 1. (1) Telecommunication standardization study groups shall study questions and prepare draft recommendations on the matters referred to them in accordance with the provisions of Article 13 of this Convention. Those drafts shall be submitted for approval to a world telecommunication standardization conference or, between two such conferences, by correspondence to administrations in accordance with procedures adopted by the conference. Recommendations approved in either manner shall have equal status.

- 193 (2) The study groups shall, subject to No. 195 below, study technical, operating and tariff questions and prepare recommendations on them with a view to standardizing telecommunications on a worldwide basis, including recommendations on interconnection of radio systems in public telecommunication networks and on the performance required for these interconnections. Technical or operating questions specifically related to radiocommunication as enumerated in Nos. 151 to 154 of this Convention shall be within the purview of the Radiocommunication Sector.
- (3) Each study group shall prepare for the telecommunication standardization conference a report indicating the progress of work, the recommendations adopted in accordance with the consultation procedure contained in No. 192 above, and any draft new or revised recommendations for consideration by the conference.
- 195 2. Taking into account No. 105 of the Constitution, the tasks enumerated in No. 193 above and those enumerated in Nos. 151 to 154 of this Convention in relation to the Radiocommunication Sector shall be kept under continuing review by the Telecommunication Standardization Sector and the Radiocommunication Sector with a view to reaching common agreement on changes in the distribution of matters under study. The two Sectors shall cooperate closely and adopt procedures to conduct such a review and reach agreements in a timely and effective manner. If agreement is not reached, the matter may be submitted through the Council to the Plenipotentiary Conference for decision.
- 196 3. In the performance of their studies, the telecommunication standardization study groups shall pay due attention to the study of questions and to the formulation of recommendations directly connected with the establishment, development and improvement of telecommunications in developing countries at both the regional and international levels. They shall conduct their work giving due consideration to the work of national, regional and other international standardization organizations, and cooperate with them, keeping in mind the need for the Union to maintain its pre-eminent position in the field of worldwide standardization for telecommunications.

197 4. For the purpose of facilitating the review of activities in the Telecommunication Standardization Sector, measures should be taken to foster
cooperation and coordination with other organizations concerned with
telecommunication standardization and with the Radiocommunication Sector
and the Telecommunication Development Sector. A world telecommunication
standardization conference shall determine the specific duties, conditions of
participation and roles of procedure for these measures.

ARTICLE 15

Telecommunication Standardization Bureau

- 198 1. The Director of the Telecommunication Standardization Bureau shall organize and coordinate the work of the Telecommunication Standardization Sector.
- 199 2. The Director shall, in particular:
- 200 a) update annually the work programme approved by the workl telecommunication standardization conference, in consultation with the Chairmen of the telecommunication standardization study groups;
- participate, as of right, but in an advisory capacity, in the deliberations of the world telecommunication standardization conferences and of the telecommunication standardization study groups. The Director shall make all necessary preparations for conferences and meetings of the Telecommunication Standardization Sector in consultation with the General Secretariat in accordance with No. 94 of this Convention and, as appropriate, with the other Sectors of the Union, and with due regard for the directives of the Council concerning these preparations:

- 202 c) process information received from administrations in application of the relevant provisions of the International Telecommunication Regulations or decisions of the world telecommunication standardization conference and prepare it, where appropriate, in a suitable form for publication;
- 203 'd) exchange with members data in machine-readable and other forms, prepare and, as necessary, keep up to date any documents and databases of the Telecommunication Standardization Sector, and arrange with the Secretary-General, where appropriate, for their publication in the working languages of the Union in accordance with No. 172 of the Constitution;
- 204 e) submit to the world telecommunication standardization conference a report on the activities of the Sector since the last conference; he shall also submit to the Council and to the Members of the Union such a report covering the two-year period since the last conference, unless a second conference is convened;
- 205 f) prepare a cost-based budget estimate for the requirements of the Telecommunication Standardization Sector and transmit it to the Secretary-General for consideration by the Coordination Committee and inclusion in the Union's budget.
- 206 3. The Director shall choose the technical and administrative personnel of the Telecommunication Standardization Bureau within the framework of the budget as approved by the Council. The appointment of the technical and administrative personnel is made by the Secretary-General in agreement with the Director. The final decision on appointment or dismissal rests with the Secretary-General.
- 207 4. The Director shall provide technical support, as necessary, to the Telecommunication Development Sector within the framework of the . Constitution and this Convention.

SECTION 7

Telecommunication Development Sector

ARTICLE 16

Telecommunication Development Conferences

- 208 1. In accordance with No. 118 of the Constitution, the duties of the telecommunication development conferences shall be as follows:
- 209 a) world telecommunication development conferences shall establish work programmes and guidelines for defining telecommunication development questions and priorities and shall provide direction and guidance for the work programme of the Telecommunication Development Sector. They may set up study groups, as necessary;
- 210 b) regional telecommunication development conferences may give advice to the Telecommunication Development Bureau concerning the specific telecommunication requirements and characteristics of the region concerned, and may also submit recommendations to world telecommunication development conferences;
- 211 c) the telecommunication development conferences should fix the objectives and strategies for the balanced worldwide and regional development of telecommunications, giving particular consideration to the expansion and modernization of the networks and services of the developing countries as well as the mobilization of the resources required for this purpose. They shall serve as a forum for the study of policy, organizational, operational, regulatory, technical and financial questions and related aspects, including the identification and implementation of new sources of funding;

world and regional telecommunication development conferences, within their respective sphere of competence, shall consider reports submitted to them and evaluate the activities of the Sector; they may also consider telecommunication development aspects related to the activities of the other Sectors of the Union.

The draft agenda of telecommunication development conferences shall chared by the Director of the Telecommunication Development Bureau is submitted by the Secretary-General to the Council for approval with sucurrence of a majority of the Members of the Union in the case of a I conference, or of a majority of the Members of the Union belonging to rigion concerned in the case of a regional conference, subject to the sions of No. 47 of this Convention.

ARTICLE 17

Telecommunication Development Study Groups

Telecommunication development study groups shall deal with specific immunication questions of general interest to developing countries, ing the matters enumerated in No. 211 above. Such study groups shall ited in number and created for a limited period of time, subject to the bility of resources, shall have specific terms of reference on questions atters of priority to developing countries and shall be task-oriented.

Taking into account No. 119 of the Constitution, the Radiocomntion, Telecommunication Standardization and Telecommunication openent Sectors shall keep the matters under study under continuing with a view to reaching agreement on the distribution of work, and duplication of effort and improving coordination. The Sectors shall procedures to conduct such reviews and reach such agreement in a and effective manner.

ARTICLE 18

Telecommunication Development Bureau and Advisory Board

- 216 1. The Director of the Telecommunication Development Bureau shall organize and coordinate the work of the Telecommunication Development Sector.
- 217 2. The Director shall, in particular:
- participate as of right, but in an advisory capacity, in the deliberations of the telecommunication development conferences and of the telecommunication development study groups. The Director shall make all necessary preparations for conferences and meetings of the Telecommunication Development Sector in consultation with the General Secretariat in accordance with No. 94 of this Convention and, as appropriate, with the other Sectors of the Union, and with due regard for the directives of the Council in carrying out these preparations;
- 219 b) process information received from administrations in application of the relevant resolutions and decisions of the Plenipotentiary Conference and telecommunication development conferences and prepare it, where appropriate, in a suitable form for publication;
- 220 c) exchange with members data in machine-readable and other forms, prepare and, as necessary, keep up to date any documents and databases of the Telecommunication Development Sector, and arrange with the Secretary-General, as appropriate, for their publication in the working languages of the Union in accordance with No. 172 of the Constitution;
- 221 d) assemble and prepare for publication, in cooperation with the General Secretariat and the other Sectors of the Union, both technical and administrative information that might be especially useful to developing countries in order to help them to improve their

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telecommunication networks. Their attention shall also be drawn to the possibilities offered by the international programmes under the auspices of the United Nations;

- 222 e) submit to the world telecommunication development conference a report on the activities of the Sector since the last conference; the Director shall also submit to the Council and to the Members of the Union such a report covering the two-year period since the last conference;
- 223 f) prepare a cost-based budget estimate for the requirements of the Telecommunication Development Sector and transmit it to the Secretary-General for consideration by the Coordination Committee and inclusion in the Union's budget.
- 224. 3. The Director shall work collegially with the other elected officials in order to ensure that the Union's catalytic role in stimulating telecommunication development is strengthened and shall make the necessary arrangements with the Director of the Bureau concerned for the convening of information meetings on the activities of the Sector concerned.
- 225 4. At the request of the Members concerned, the Director, with the assistance of the Directors of the other Bureaux and, where appropriate, the Secretary-General, shall study and offer advice concerning their national telecommunication problems; where a comparison of technical alternatives is involved, economic factors may be taken into consideration.
- 226 5. The Director shall choose the technical and administrative personnel of the Telecommunication Development Bureau within the framework of the budget as approved by the Council. The appointment of the personnel is made by the Secretary-General in agreement with the Director. The final decision for appointment or dismissal rests with the Secretary-General.
- 227 6. A Telecommunication Development Advisory Board shall be established and the members of the Board shall be appointed by the Director in consultation with the Secretary-General. The Board shall be composed of persons with a wide and equitable cross-section of interests and expertise in

telecommunication development and shall elect its chairman from among its members. The Board shall advise the Director, who shall participate in its meetings, on priorities and strategies in the Union's telecommunication development activities; it shall, inter alia, recommend steps to foster cooperation and coordination with other organizations interested in telecommunication development.

SECTION 8

Provisions Common to the Three Sectors

ARTICLE 19

Participation of Entities and Organizations Other than Administrations in the Union's Activities

- 228 1. The Secretary-General and the Directors of the Bureaux shall encourage the enhanced participation in the activities of the Union of the following entities and organizations:
- 229 a) recognized operating agencies, scientific or industrial organizations and financial or development institutions which are approved by the Member concerned;
- 230 b) other entities dealing with telecommunication matters which are approved by the Member concerned;
- 231 c) regional and other international telecommunication, standardization, financial or development organizations.
- 232 2. The Directors of the Bureaux shall maintain close working relations with those entities and organizations which are authorized to participate in the activities of one or more of the Sectors of the Union.

- 233 3. Any request from an entity listed in No. 229 above to participate in the work of a Sector, in accordance with the relevant provisions of the Constitution and this Convention, approved by the Member concerned shall be forwarded by the latter to the Secretary-General.
- 234 4. Any request from an entity referred to in No. 230 above submitted by the Member concerned shall be handled in conformity with a procedure established by the Council. Such a request shall be reviewed by the Council with respect to its conformity with the above procedure.
- 235 5. Any request from any entity or organization listed in No. 231 above (other than those referred to in Nos. 260 and 261 of this Convention) to participate in the work of a Sector shall be sent to the Secretary-General and acted upon in accordance with procedures established by the Conneil.
- 236 6. Any request from an organization referred to in Nos. 260 to 262 of this Convention to participate in the work of a Sector shall be sent to the Secretary-General, and the organization concerned shall be included in the lists referred to in No. 237 below.
- 237 7. The Secretary-General shall compile and maintain lists of all entities and organizations referred to in Nos. 229 to 231 and Nos. 260 to 262 of this Convention that are authorized to participate in the work of each Sector and shall, at appropriate intervals, publish and distribute these lists to all Members and to the Director of the Bureau concerned. That Director shall advise such entities and organizations of the action taken on their requests.
- 238 8. Entitles and organizations contained in the lists referred to in No. 237 above are also referred to as "members" of the Sectors of the Union; the conditions of their participation in the Sectors are specified in this Article, in Article 33 and in other relevant provisions of this Convention. The provisions of Article 3 of the Constitution do not apply to them.

- 239 9. A recognized operating agency may act on behalf of the Member which has recognized it, provided that Member informs the Director of the Bureau concerned that it is authorized to do so.
- 240 10. Any entity or organization authorized to take part in the work of a Sector has the right to denounce such participation by notifying the Secretary-General. Such participation may also be denounced, where appropriate, by the Member concerned. Such denunciation shall take effect at the end of one year from the date when notification is received by the Secretary-General.
- 241 11. The Secretary-General shall delete from the list of entities and organizations any entity or organization that is no longer authorized to participate in the work of a Sector, in accordance with criteria and procedures determined by the Council.

Conduct of Business of Study Groups

- 242 1. The radiocommunication assembly, the world telecommunication standardization conference and the world telecommunication development conference shall appoint a Chairman and normally one Vice-Chairman of each study group. In appointing Chairmen and Vice-Chairmen, particular consideration shall be given to the requirements of competence and equitable geographical distribution, and to the need to promote more efficient participation by the developing countries.
- 243 2. If the workload of any study group requires, the assembly or conference shall appoint such additional Vice-Chairmen as it deems necessary, normally not more than two in total.

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- 244 3. If, in the interval between two assemblies or conferences of the Sector concerned, a study group Chairman is unable to carry out his duties and only one Vice-Chairman has been appointed, then that Vice-Chairman shall take the Chairman's place. In the case of a study group for which more than one Vice-Chairman has been appointed, the study group at its next meeting shall elect a new Chairman from among those Vice-Chairmen and, if necessary, a new Vice-Chairman from among the members of the study group. It shall likewise elect a new Vice-Chairman if one of the Vice-Chairmen is unable to carry out his duties during that period.
- 245 4. Study groups shall conduct their work as far as possible by correspondence, using modern means of communication.
- 246 5. The Director of the Bureau of each Sector, on the basis of the decisions of the competent conference or assembly, after consultation with the Secretary-General and coordination as required by the Constitution and Convention, shall draw up the general plan of study group meetings.
- 247 6. Study groups may initiate action for obtaining approval from Members for recommendations completed between two assemblies or conferences. The procedures to be applied for obtaining such approval shall be those approved by the competent assembly or conference. Recommendations so approved shall have the same status as ones approved by the conference itself.
- 7. Where necessary, joint working parties may be established for the study of questions requiring the participation of experts from several study groups.
- 249 8. The Director of the relevant Bureau shall send the final reports of the study groups to the administrations, organizations and entities participating in the Sector. Such reports shall include a list of the recommendations approved in conformity with No. 247 above. These reports shall be sent as soon as possible and, in any event, in time for them to be received at least one month before the date of the next session of the conference concerned.

ARTICLE 21

Recommendations from One Conference to Another

- 250 1. Any conference may submit to another conference of the Union recommendations within its field of competence.
- 251 2. Such recommendations shall be sent to the Secretary-General in good time for assembly, coordination and communication, as faid down in No. 320 of this Convention.

ARTICLE 22

Relations Between Sectors and With International Organizations

- 252 1. The Directors of the Bureaux may agree, after appropriate consultation and coordination as required by the Constitution, the Convention and the decisions of the competent conferences or assemblies, to organize joint meetings of study groups of two or three Sectors, in order to study and prepare draft recommendations on questions of common interest. Such draft recommendations shall be submitted to the competent conferences or assemblies of the Sectors concerned.
- 253 2. Conferences or meetings of a Sector may be attended in an advisory capacity by the Secretary-General, the Deputy Secretary-General, the Directors of the Burcaux of the other Sectors, or their representatives, and members of the Radio Regulations Board. If necessary, they may invite, in an advisory capacity, representatives of the General Secretariat or of any other Sector which has not considered it necessary to be represented.
- 254 3. When a Sector is invited to participate in a meeting of an international organization, its Director is authorized to make arrangements for its representation in an advisory capacity, taking into account the provisions of No. 107 of this Convention.

CHAPTER II

General Provisions Regarding Conferences

ARTICLE 23

Invitation and Admission to Pienipotentiary Conferences when There is an Inviting Government

- 255 1. The precise place and the exact dates of the Conference shall be fixed in accordance with the provisions of Article 1 of this Convention, following consultations with the inviting government.
- 256 2. (1) One year before the date of opening of the Conference, the inviting government shall send an invitation to the government of each Member of the Union.
- 257 (2) These invitations may be sent directly or through the Secretary-General or through another government.
- 258 3. The Secretary-General shall invite the following organizations to send observers:
- 259 a) the United Nations;
- 260 b) regional telecommunication organizations mentioned in Article 43 of the Constitution;
- 261 c) intergovernmental organizations operating satellite systems;
- 262 d) the specialized agencies of the United Nations and the International Atomic Energy Agency.

- 263 4. (1) The replies of the Members must reach the inviting government at least one month before the date of opening of the Conference and should include whenever possible full information on the composition of the delegation.
- 264 (2) These replies may be sent directly to the inviting government or through the Secretary-General or through another government.
- 265 (3) The replies of the organizations and agencies referred to in Nos. 259 to 262 above must reach the Secretary-General one month before the opening date of the Conference.
- 266 5. The General Secretariat and the three Bureaux of the Union shall be represented at the Conference in an advisory enpacity.
- 267 6. The following shall be admitted to Plenipotentiary Conferences:
- 268 a) delegations;
- 269 b) observers of organizations and agencies invited in accordance with Nos. 259 to 262 above.

ARTICLE 24

Invitation and Admission to Radiocommunication Conferences when There is an Inviting Government

- 270 1. The precise place and exact dates of the conference shall be fixed in accordance with the provisions of Article 3 of this Convention, following consultations with the inviting government.
- 271. 2. (1) The provisions of Nos. 256 to 265 of this Convention shall apply to radiocommunication conferences.
- 272 (2) Members of the Union should inform the recognized operating agencies of the invitation they have received to participate in a radiocomnumication conference.

- 273 ·3. (1) The inviting government, in agreement with or on a proposal by the Council, may notify the international organizations other than those referred to in Nos. 259 to 262 of this Convention which may be interested in sending observers to participate in the conference in an advisory capacity.
- 274 (2) The interested international organizations referred to in No. 273 above shall send an application for admission to the inviting government within a period of two months from the date of notification.
- 275 (3) The inviting government shall assemble the requests and the conference itself shall decide whether the organizations concerned are to be admitted.
- 276 4. The following shall be admitted to radiocommunication conferences:
- 277 a) delegations:
- 278 b) Observers of organizations and agencies referred to in Nos. 259 to 262 of this Convention;
- 279 c) observers of international organizations admitted in accordance with Nos. 273 to 275 above;
- observers representing recognized operating agencies authorized in accordance with Article 19 of this Convention to participate in the radiocommunication study groups and duly authorized by the Member concerned;
- 281 e) in an advisory capacity, the elected officials, when the conference is discussing matters coming within their competence, and the members of the Radio Regulations Board;
- 282 f). observers of Members of the Union participating in a non-voting capacity in a regional radiocommunication conference of a region other than that to which the said Members belong.

Invitation and Admission to Radiocommunication Assemblies and to Telecommunication Standardization and Telecommunication Development Conferences when There is an Inviting Government

- 283 1. The precise place and exact dates of each assembly or conference shall be fixed in accordance with the provisions of Article 3 of this Convention, following consultations with the inviting government.
- 284 2. One year before the date of the opening of the assembly or conference, the Secretary-General, after consultation with the Director of the Bureau concerned, shall send an invitation to:
- 285 a) the administration of each Member of the Union;
- 286 b) the entities or organizations authorized in accordance with Article 19 of this Convention to participate in the activities of the Sector concerned;
- 287 c) regional telecommunication organizations mentioned in Article 43 of the Constitution;
- 288 d) intergovernmental organizations operating satellite systems;
- 289 ε) any other regional organization or other international organization dealing with matters of interest to the assembly or conference.
- 290 3. The Secretary-General shall also invite the following organizations or agencies to send observers:
- 291 a) the United Nations;
- 292 b) the specialized agencies of the United Nations and the International Atomic Energy Agency.

- 293 4. The replies must reach the Secretary-General at least one month before the date of opening of the assembly or conference and should, whenever possible, include full information on the composition of the delegation or representation.
- 294 5. The General Secretariat and the elected officials of the Union shall be represented at the assembly or conference in an advisory capacity.
- 295 6. The following shall be admitted to the assembly or conference:
- 296 a) delegations;
- 297 b) observers of organizations and agencies invited in accordance with Nos. 287 to 289 and 291 and 292 above;
- 298 c) representatives of entities or organizations referred to in No. 286

Procedure for Convening or Cancelling World Conferences or Radiocommunication Assemblies at the Request of Members of the Union or on a Proposal of the Council

- 299 1. The procedures to be applied for convening a second world telecommunication standardization conference in the interval between successive Plenipotentiary Conferences and fixing its precise place and exact dates or for cancelling the second world radiocommunication conference or the second radiocommunication assembly are set forth in the following provisions.
- 300 2. (1) Any Member of the Union wishing to have a second world telecommunication standardization conference convened shall so inform the Secretary-General, indicating the proposed place and dates of the conference.

- 301 (2) On receipt of similar requests from at least one-quarter of the Members, the Secretary-General shall inform immediately all Members thereof by the most appropriate means of telecommunication, asking them to indicate, within six weeks, whether or not they agree to the proposal.
- 302 (3) If a majority of the Members, determined in accordance with No. 47 of this Convention, agree to the proposal as a whole, that is to say, if they accept the proposed place and dates, the Secretary-General shall so inform immediately all Members by the most appropriate means of telecommunication.
- 303 (4) If the proposal accepted is for a conference elsewhere than at the seat of the Union, the Secretary-General, with the assent of the government concerned, shall take the necessary steps to convene the conference.
- 304 (5) If the proposal as a whole (place and dates) is not accepted by the majority of the Members determined in accordance with No. 47 of this Convention, the Secretary-General shall inform the Members of the Union of the replies received, requesting them to give a final reply on the point or points under dispute within six weeks of receipt.
- 305 (6) Such points shall be regarded as adopted when they have been approved by a majority of the Members, determined in accordance with No. 47 of this Convention.
- 306 3. (1) Any Member of the Union wishing to have a second world radiocommunication conference or a second radiocommunication assembly cancelled, shall so inform the Secretary-General. On receipt of similar requests from at least one-quarter of the Members, the Secretary-General shall inform immediately all Members thereof by the most appropriate means of telecommunication, asking them to indicate, within six weeks, whether or not they agree to the proposal.

- 307 (2) If a majority of the Members, determined in accordance with No. 47 of this Convention, agrees to the proposal, the Secretary-General shall so inform immediately all Members by the most appropriate means of telecommunication and the conference or assembly shall be cancelled.
- 308 4. The procedures indicated in Nos. 301 to 307 above, with the exception of No. 306, shall also be applicable when the proposal to convene a second world telecommunication standardization conference or to cancel a second world radiocommunication conference or a second radiocommunication assembly is initiated by the Council.
- 309 5. Any Member of the Union wishing to have a world conference on international telecommunications convened shall propose it to the Plenipotentiary Conference; the agenda, precise place and exact dates of such a conference shall be determined in accordance with the provisions of Article 3 of this Convention.

Procedure for Convening Regional Conferences at the Request of Members of the Union or on a Proposal of the Council

310 In the case of a regional conference, the procedure described in Nos. 300 to 305 of this Convention shall be applicable only to the Members of the region concerned. If the conference is to be convened on the initiative of the Members of the region, it will suffice for the Secretary-General to receive concordant requests from a quarter of the total number of Members in that region. The procedure described in Nos. 301 to 305 of this Convention shall also be applicable when the proposal to convene such a conference is initiated by the Council.

ARTICLE 28

Provisions for Conferences Meeting when There is no Inviting Government

311 When a conference is to be held without an inviting government, the provisions of Articles 23, 24 and 25 of this Convention shall apply. The Secretary-General shall take the necessary steps to convene and organize it at the seat of the Union, after agreement with the Government of the Swiss Confederation.

ARTICLE 29

Change in the Place or Dates of a Conference

- 312 i. The provisions of Articles 26 and 27 of this Convention for convening a conference shall apply, by analogy, when a change in the precise place and/or exact dates of a conference is requested by Members of the Union or is proposed by the Council. However, such changes shall only be made if a majority of the Members concerned, determined in accordance with No. 47 of this Convention, have pronounced in favour.
- 313 2. It shall be the responsibility of any Member proposing a change in the precise place of exact dates of a conference to obtain for its proposal the support of the requisite number of other Members.
- 314 3. Where the issue arises, the Secretary-General shall indicate, in the communication referred to in No. 301 of this Convention, the probable financial consequences of a change in the place or dates, as, for example, when there has been an outlay of expenditure in preparing for the conference at the place initially chosen.

Time-Limits and Conditions for Submission of Proposals and Reports to Conferences

- 315 1. The provisions of this Article shall apply to the Plenipotentiary Conference, world and regional radiocommunication conferences and world conferences on international telecommunications.
- 316 2. Immediately after the invitations have been despatched, the Secretary-General shall ask Members to send him, at least four months before the start of the conference, their proposals for the work of the conference.
- 317 3. All proposals the adoption of which will involve amendment of the text of the Constitution or this Convention or revision of the Administrative Regulations must carry references identifying by their marginal numbers those parts of the text which will require such amendment or revision. The reasons for the proposal must be given, as briefly as possible, in each case.
- 318 4. Each proposal received from a Member of the Union shall be annotated by the Secretary-General to indicate its origin by means of the symbol established by the Union for that Member. Where a proposal is made jointly by more than one Member the proposal shall, to the extent practicable, be annotated with the symbol of each Member.
- 319 5. The Secretary-General shall communicate the proposals to all Members as they are received.
- 320 6. The Secretary-General shall assemble and coordinate the proposals received from Members and shall communicate them to Members as they are received, but in any case at least two months before the opening of the conference: Elected officials and staff members of the Union, as well as those observers and representatives that may attend conferences in accordance with the relevant provisions of this Convention, shall not be entitled to submit proposals.

- 321 7. The Secretary-General shall also assemble reports received from Members, the Council and the Sectors of the Union and recommendations by conferences and shall communicate them to Members, along with any reports by the Secretary-General, at least four months before the opening of the conference.
- 322 8. Proposals received after the time-limit specified in No. 316 above shall be communicated to all Members by the Secretary-General as soon as practicable.
- 323 9. The provisions of the present Article shall apply without prejudice to the amendment provisions contained in Article 55 of the Constitution and in Article 42 of this Convention.

ARTICLE 31

Credentials for Conferences

- 324 1. The delegation sent by a Member of the Union to a Plenipotentiary Conference, a radiocommunication conference or a world conference on international telecommunications shall be duly accredited in accordance with Nos. 325 to 331 below.
- 325 2. (1) Accreditation of delegations to Plenipotentiary Conferences shall be by means of instruments signed by the Head of State, by the Head of Government or by the Minister for Poreign Affairs.
- 326 (2) Accreditation of delegations to the other conferences referred to in No. 324 above shall be by means of instruments signed by the Head of State, by the Head of Government, by the Minister for Foreign Affairs or by the Minister responsible for questions dealt with during the conference.
- 327 (3) Subject to confirmation prior to the signature of the Final Acts, by one of the authorities mentioned in Nos. 325 or 326 above, a delegation may be provisionally accredited by the Head of the diplomatic mission of the Member concerned to the host government. In the case of a conference held in

the Swiss Confederation, a delegation may also be provisionally accredited by the Head of the permanent delegation of the Member concerned to the United Nations Office at Geneva.

- 328 3. Credentials shall be accepted if they are signed by one of the competent authorities mentioned in Nos. 325 to 327 above, and fulfil one of the following criteria:
- 329 they confer full powers on the delegation;
- 330 they authorize the delegation to represent its government, without restrictions;
- 331 they give the delegation, or certain members thereof, the right to sign the Final Acts.
- 332 4. (1) A delegation whose credentials are found to be in order by the Plenary Meeting shall be entitled to exercise the right to vote of the Member concerned, subject to the provisions of Nos. 169 and 210 of the Constitution, and to sign the Final Acts.
- 333 (2) A delegation whose credentials are found not to be in order by the Plenary Meeting shall not be entitled to exercise the right to vote or to sign the Final Acts until the situation has been rectified.
- 334 5. Credentials shall be deposited with the secretariat of the conference as early as possible. The Committee referred to in No. 361 of this Convention shall be entrusted with the verification thereof and shall report on its conclusions to the Plenary Meeting within the time specified by the latter. Pending the decision of the Plenary Meeting thereon, any delegation shall be entitled to participate in the conference and to exercise the right to vote of the Member concerned.
- 335 6. As a general rule, Members of the Union should endeavour to send their own delegations to conferences of the Union. However, if a Member is unable, for exceptional reasons, to send its own delegation, it may give the delegation of another Member powers to vote and sign on its behalf. Such powers must be conveyed by means of an instrument signed by one of the authorities mentioned in Nos. 325 or 326 above.

- 336 7. A delegation with the right to vote may give to another delegation with the right to vote a mandate to exercise its vote at one or more meetings at which it is unable to be present. In such a case it shall, in good time, notify the Chairman of the conference in writing.
- 337 8. A delegation may not exercise more than one proxy vote.
- 338 9. Credentiais and transfers of powers sent by telegram shall not be accepted. Nevertheless, replies sent by telegram to requests by the Chairman or the secretariat of the conference for clarification of credentials shall be accepted.
- 339 10. A Member or an authorized entity or organization intending to send a delegation or representatives to a telecommunication standardization conference, a telecommunication development conference or a radiocommunication assembly shall so inform the Director of the Bureau of the Sector concerned, indicating the names and functions of the members of the delegation or of the representatives.

CHAPTER III

Rules of Procedure

ARTICUE 32

Rules of Procedure of Conferences and Other Meetings

340 The Rules of Procedure shall apply without prejudice to the amendment provisions contained in Article 55 of the Constitution and in Article 42 of this Convention.

1. Order of Scating

341 At meetings of the conference, delegations shall be seated in the alphabetical order of the French names of the Members represented.

2. Inauguration of the Conference

- 342 1. (1) The inaugural meeting of the conference shall be preceded by a meeting of the Heads of delegation in the course of which it shall prepare the agenda for the first Plenary Meeting and make proposals for the organization, chairmanships and vice-chairmanships of the conference and its committees, taking into account the principles of rotation, geographical distribution, the necessary competence and the provisions of No. 346 below.
- 343 (2) The Chairman of the meeting of Ileads of delegation shall be appointed in accordance with the provisions of Nos. 344 and 345 below.
- 344 2. (1) The conference shall be opened by a person appointed by the inviting government.
- 345 (2) When there is no inviting government, it shall be opened by the oldest Head of delegation.

- 346 3. (!) The Chairman of the conference shall be elected at the first Plenary Meeting; generally he shall be a person nominated by the inviting government.
- 347 (2) If there is no inviting government, the Chairman shall be chosen, taking into account the proposals made by the Heads of delegation at the meeting described in No. 342 above.
- 348 4. The first Plenary Meeting shall also:
- 349 a) elect the Vice-Chairmen of the conference;
- 350 b) set up the conference committees and elect their respective Chairmen and Vice-Chairmen;
- 351 c) designate the conference secretariat, in accordance with No. 97 of this Convention; the secretariat may be reinforced, in case of need, by staff provided by the administration of the inviting government.

3. Powers of the Chairman of the Conference

- 352 1. The Chairman, in addition to the other prerogatives conferred upon him under these Rules of Procedure, shall open and close the meetings of the Plenary Meeting, direct the deliberations, ensure that the Rules of Procedure are applied, give the floor to speakers, put questions to the vote, and announce the decisions adopted.
- 353 2. He shall have the general direction of all the work of the conference, and shall ensure that order is maintained at Plenary Meetings. He shall give his ruling on motions of order and points of order and, in particular, he shall be empowered to propose that discussion on a question be postponed or closed, or that a meeting be suspended or adjourned. He may also decide to postpone the convening of a Plenary Meeting should be consider it necessary.
- 354 3. It shall be the duty of the Chairman to protect the right of each delegation to express its opinion freely and fully on the point at issue.
- 355 4. He shall ensure that discussion is limited to the point at issue, and he may interrupt any speaker who departs therefrom and request him to confine his remarks to the subject under discussion.

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4. Setting up of Committees

- 356 1. The Plenary Meeting may set up committees to consider matters referred to the conference. These committees may in turn set up sub-committees. Committees and sub-committees may set up working groups.
- 357 2. Sub-committees and working groups shall be set up when necessary.
- 358 3: Subject to the provisions of Nos. 356 and 357 above, the following committees shall be set up:

4.1 Steering Committee

- 359 a) This Committee shall normally be composed of the Chairman of the conference or meeting, who shall be its Chairman, the Vice-Chairman of the conference and the Chairman and Vice-Chairman of committees;
- 360 b) The Steering Committee shall coordinate all matters connected with the smooth execution of work and shall plan the order and number of meetings, avoiding overlapping wherever possible in view of the limited number of members of some delegations.

4.2 Credentials Committee

361 A Plenipotentiary Conference, a radiocommunication conference or a world conference on international telecommunications shall appoint a Credentials Committee, the mandate of which shall be to verify the credentials of delegations to these conferences. This Committee shall report on its conclusions to the Plenary Meeting within the time specified by the latter.

4.3 Editorial Committee

362 a) The texts prepared in the various committees, which shall be worded as far as possible in their definitive form by these committees, taking account of the views expressed, shall be submitted to an Editorial

- Committee charged with perfecting their form without altering the sense and, where appropriate, with combining them with those parts of former texts which have not been altered.
- 363 b) The texts shall be submitted by the Editorial Committee to the Plenary Meeting, which shall approve them, or refer them back to the appropriate committee for further examination.

4.4 Budget Control Committee

- 364 a) At the opening of each conference, the Plenary Meeting shall appoint a Budget Control Committee to determine the organization and the facilities available to the delegates, and to examine and approve the accounts for expenditure incurred throughout the duration of the conference. In addition to the members of delegations who wish to participate, this Committee shall include a representative of the Secretary-General, of the Director of the Bureau concerned, and, where there is an inviting government, a representative of that government.
- 365 b) Before the budget approved by the Council for the conference is exhausted, the Budget Control Committee, in collaboration with the secretariat of the conference, shall present an interim statement of the expenditure to the Plenary Meeting. The Plenary Meeting shall take this statement into account in considering whether the progress made is sufficient to justify a prolongation of the conference after the date when the approved budget will be exhausted.
- 366 c) At the end of each conference, the Budget Control Committee shall present a report to the Plenary Meeting showing, as accurately as possible, the estimated total expenditure of the conference, as well as an estimate of the costs that may be entailed by the execution of the decisions taken by such conference.
- 367 d) After consideration and approval by the Plenary Meeting, this report, together with the observations of the Plenary Meeting, shall be transmitted to the Secretary-General for submission to the Council at its next ordinary session.

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7. Summons to Meetings

372 Plenary Meetings and meetings of committees, sub-committees and working groups shall be announced in good time in the meeting place of the conference.

8. Proposals Presented Before the Opening of the Conference

373 Proposals presented before the opening of the conference shall be allocated by the Plenary Meeting to the appropriate committees set up in accordance with Section 4 of these Rules of Procedure. Nevertheless, the Plenary Meeting itself shall be entitled to deal with any proposal.

9. Proposals or Amendments Presented During the Conference

- 374 1. Proposals or amendments presented after the opening of the conference shall be delivered to the Chairman of the conference, to the Chairman of the appropriate committee or to the secretariat of the conference for publication and distribution as conference documents.
- 375 2. No written proposal or amendment may be presented unless signed by the Head of the delegation concerned or by his deputy.
- 376 3. The Chairman of the conference or of a committee, a sub-committee or a working group may at any time submit proposals likely to accelerate the debates.
- 377 4. Every proposal or amendment shall give, in precise and exact terms, the text to be considered.
- 378 5. (1) The Chairman of the conference or the Chairman of the appropriate committee, sub-committee or working group shall decide in each case whether a proposal or amendment submitted during a meeting shall be made orally or presented in writing for publication and distribution in accordance with No. 374 above.

5. Composition of Committees

5.1 Plenipotentiary Conferences

- 368 Committees shall be composed of the delegates of Members and the observers referred to in No. 269 of this Convention who have so requested or who have been designated by the Plenary Meeting.
 - 5.2 Radiocommunication Conferences and World Conferences on International Telecommunications
- 369 Committees shall be composed of the delegates of Members and the observers and representatives referred to in Nos. 278, 279 and 280 of this Convention who have so requested or who have been designated by the Plenary Meeting.
 - 5.3 Radiocommunication Assemblies, Telecommunication Standardization Conferences and Telecommunication Development Conferences
- 370 In addition to delegates of Members and observers referred to in Nos. 259 to 262 of this Convention, the radiocommunication assemblies and the commuttees of the telecommunication standardization and telecommunication development conferences may be attended by representatives of any entity or organization included in the relevant list referred to in No. 237 of this Convention.

6. Chairmen and Vice-Chairmen of Sub-Committees

371 The Chairman of each committee shall propose to his committee the choice of the Chairmen and Vice-Chairmen of the sub-committees which may be set up.

12.2 Order of debates

- . 386 (1) Persons desiring to speak must first obtain the consent of the Chairman. As a general rule, they shall begin by announcing in what capacity they speak.
- 387 (2) Any person speaking must express himself slowly and distinctly, separating his words and pausing as necessary in order that everybody may understand his meaning.

12.3 Motions of order and points of order

- 388 (1) During debates, any delegation may, when it thinks fit, submit a motion of order or raise a point of order, which shall at once be settled by the Chairman in accordance with these Rules of Procedure. Any delegation may appeal against the Chairman's ruling, which shall however stand unless a majority of the delegations present and voting are against it.
- 389 (2) A delegation submitting a motion of order shall not, during its speech, discuss the substance of the matter in question.

12.4 Priority of motions of order and points of order

- 390 The motions and points of order mentioned in No. 388 of this Convention shall be dealt with in the following order:
- any point of order regarding the application of these Rules of Procedure, including voting procedures;
- 392 b) suspension of a meeting:
- 393 c) adjournment of a meeting:
- 394 d) postponement of debate on the matter under discussion;
- 395 c) closure of debate on the matter under discussion:
- 396 f) any other motions of order or points of order that may be submitted, in which case it shall be for the Chairman to decide the relative order in which they shall be considered.

- 379 (2) In general, the texts of all major proposals to be put to the vote shall be distributed in good time in the working languages of the conference, in order that they may be studied before discussion.
- 380 (3) In addition, the Chairman of the conference, on receiving proposals or amendments referred to in No. 374 above, shall refer them to the appropriate committee or to the Plenary Meeting as the case may be.
- 381 6. Any authorized person may read, or may ask to have read, at a Plenary Meeting any proposal or amendment submitted by him during the conference, and he shall be allowed to explain his reasons therefor.

10. Conditions Required for Discussion of or Decision or Vote on any Proposal or Amendment

- 382 1. No proposal or amendment may be discussed unless it is supported by at least one other delegation when it comes to be considered,
- 383 2. Each proposal or amendment duly supported shall be submitted for discussion and thereafter for decision, if necessary by a vote.

11. Proposals or Amendments Passed Over or Postponed

384 When a proposal or an amendment has been passed over or when its examination has been postponed, the delegation sponsoring it shall be responsible for seeing that it is considered later.

12. Rules for Debates in Plenary Meetings

12.1 Quorum

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385 For a valid vote to be taken at a Plenary Meeting, more than half of the delegations accredited to the conference and having the right to vote must be present or represented at the meeting.

12.5 Motion for suspension or adjournment of a meeting

397 During the discussion of a question, a delegation may move that the meeting be suspended or adjourned, giving reasons for its proposal. If the proposal is seconded, the floor shall be given to two speakers to oppose the suspension or adjournment and solely for that purpose, after which the motion shall be put to the vote.

12.6 Motion for postponement of debate

398 During discussion of any question, a delegation may move that the dehate be postponed for a stated period. Once such a proposal has been made, any discussion thereon shall be limited to no more than three speakers not counting the person submitting the proposal, one for the motion and two against, after which the motion shall be put to the vote.

12.7 Motion for closure of debate

399 A delegation may at any time move that discussions on the point at issue be closed. In such cases the floor shall be given to not more than two speakers opposing the motion, after which the motion shall be put to the vote. If the motion succeeds, the Chairman will immediately call for a vote on the point at issue.

12.8 Limitation of speeches

- 400 (i) The Plenary Meeting may, if necessary, decide how many speeches any one delegation may make on any particular point, and how long they may last.
- 401 (2) However, as regards questions of procedure, the Chairman shall limit the time allowed for a speech to a maximum of five minutes.
- 402 (3) When a speaker has exceeded the time allowed, the Chairman shall notify the Meeting and request the speaker to conclude his remarks briefly.

12.9 Clasing the list of speakers

- 403 (1) During the debate, the Chairman may rule that the list of speakers wishing to take the floor be read. He shall add the names of other delegations which indicate that they wish to speak and he may then, with the assent of the Meeting, rule that the list be closed. Nevertheless, as an exceptional measure, the Chairman may rule, if he thinks fit, that a reply may be made to any previous statement, even after the list of speakers has been closed.
- 404 (2) The list of speakers having been exhausted, the Chairman shall declare discussion on the matter closed.

12.10 Questions of competence

Any question of competence that may arise shall be settled before a vote is taken on the substance of the matter under discussion.

12.11 Withdrawal and resubmission of a motion

406 The author of a motion may withdraw it before it is put to a vote. Any motion, whether amended or not, which has been withdrawn from debate may be resubmitted or taken up by the author of the amendment or by another delegation.

13. Right to Vote

- 407 1. At all meetings of the conference, the delegation of a Member of the Union duly accredited by that Member to take part in the work of the conference shall be entitled to one vote in accordance with Article 3 of the Constitution.
- 408 2. The delegation of a Member of the Union shall exercise the right to vote under the conditions described in Article 31 of this Convention.
- 409 3. When a Member is not represented by an administration at a radio-communication assembly, a world telecommunication standardization conference or a telecommunication development conference, the representatives of

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the recognized operating agencies of the Member concerned shall, as a whole, and regardless of their number, be entitled to a single vote, subject to the provisions of No. 239 of this Convention. The provisions of Nos. 335 to 338 of this Convention concerning the transfer of powers shall apply to the above conferences.

14. Voting

14.1 Definition of a majority

- 410 (I) 'A majority shall consist of more than half the delegations present and voting.
- 411 (2) In computing a majority, delegations abstaining shall not be taken into account.
- 412 (3) In case of a tie, a proposal or amendment shall be considered rejected.
- 413 (4) For the purpose of these Rules of Procedure, a "delegation present and voting" shall be a delegation voting for or against a proposal.

14.2 Non-participation in voting

Delegations which are present but do not take part in a particular vote or expressly state they do not wish to take part shall not be considered as absent, for the purpose of determining a quorum as defined in No. 385 of this Convention, nor as abstaining for the purpose of applying the provisions of No. 416 below.

14.3 Special majority

415 In cases concerning the admission of new Members of the Union, the majority described in Article 2 of the Constitution shall apply.

14.4 Abstentions of more than fifty per cent

416 When the number of abstentions exceeds half the number of votés east (for, against, abstentions), consideration of the nutter under discussion shall be postponed to a later meeting, at which time abstentions shall not be taken into account.

14.5 Voting procedures

- 417 (1) The voting procedures are as follows:
- 418 a) by a show of hands as a general rule unless a roll call under b) or secret ballot under c) has been requested;
- 419 b) by a roll call in the alphabetical order of the French names of the Members present and entitled to vote:
- if at least two delegations, present and entitled to vote, so request hefore the beginning of the vote and if a secret hallot under c) has not been requested, or
- if the procedure under a) shows no clear majority;
- 422 c) by a secret ballot, if at least five of the delegations present and entitled to vote so request before the beginning of the vote.
- 423 (2) The Chairman shall, before commencing a vote, observe any request as to the manner in which the voting shall be conducted, and then shall formally announce the voting procedure to be applied and the issue to be submitted to the vote. He shall then declare the beginning of the vote. When the vote has been taken, he shall announce the results.
- 424 (3) In the case of a secret ballot, the secretariat shall at once take steps to ensure the secreey of the vote.
- 425 (4) Voting may be conducted by an electronic system if a suitable system is available and if the conference so decides.

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14.6 Prohibition of interruptions once the wate has begun

No delegation may interrupt once a vote has begun, unless to raise a point of order in connection with the way in which the vote is being taken. The point of order cannot include any proposal entailing a change in the vote that is being taken or a change in the substance of the question put to the vote. Voting shall begin with the Chairman's announcement that the voting has begun and shall end with the Chairman's announcement of its results.

14.7 Reasons for votes

The Chairman shall authorize any delegations which so request to give the reasons for their vote, after the vote has been taken.

14.8 Voting on parts of a proposal

- (1) When the author of a proposal so requests, or when the meeting 428 thinks fit, or when the Chairman, with the approval of the author, so proposes, that proposal shall be sub-divided and its various sections put to the vote separately. The parts of the proposal which have been adopted shall then be put to the vote as a whole.
- (2) If all the sections of a proposal are rejected the proposal shall be 429 regarded as rejected as a whole.

14.9 Order of voting on concurrent proposals

- (1) When there are two or more proposals on any one matter, they shall be put to the vote in the order in which they were presented, unless the meeting decides to the contrary.
- (2) After each vote, the meeting shall decide whether or not the 431 following proposal shall be voted on.

14.10 Amendments

(1) Any proposal for modification consisting only of a deletion from 432 an addition to, or a change in, a part of the original proposal shall be considered an amendment.

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- 433 (2) Any amendment to a proposal accepted by the delegation submitting the proposal shall at once be embodied in the original proposal.
- (3) No proposal for modification shall be regarded as an amendment 434 if the meeting considers it to be incompatible with the original proposal.

14.11 Voting on amendments

- 435 (1) When an amendment to a proposal is submitted, a vote shall first be taken on the amendment.
- 436 (2) When two or more amendments to a proposal are submitted, the amendment furthest from the original text shall be put to the vote first; if this amendment does not obtain the support of the majority, of the remaining amendments, that furthest from the proposal shall then be put to the vote and the same procedure shall be followed until a subsequent amendment gains the support of the majority; if all the amendments submitted have been considered and none has gained a majority, the unamended proposal shall be put to the Volc.
- . 437 (3) If one or more amendments are adopted, the proposal thus amended shall then be put to the vote.

14.12. Repetition of a vote

(1) In the committees, sub-committees or working groups of a conference or a meeting, a proposal, a part of a proposal or an amendment which has already been decided by a vote within one of the committees, subcommittees or working groups may not be put to the vote again within the same committee, sub-committee or working group. This shall apply irrespective of the voting procedure chosen.

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17. Minutes of Plenary Meetings

- 447 1. The minutes of Plenary Meetings shall be drawn up by the secretariat of the conference, which shall ensure that they are distributed to delegations as early as possible, and in any event not later than five working days after each meeting.
- 448 2. After the minutes have been distributed, delegations may submit in writing to the secretarial of the conference any corrections they consider to be justified; this shall be done in the shortest possible time. This shall not prevent them from presenting amendments orally during the meeting at which the minutes are approved.
- 449 3. (1) As a general rule, the minutes shall contain only proposals and conclusions, together with the principal arguments on which they are based, presented in terms as concise as possible.
- 450 (2) However, any delegation shall have the right to require the insertion in the minutes, either summarized or in full, of any statement it has made during the dehates. In this case, the delegation should, as a general rule, announce this at the beginning of its statement in order to facilitate the work of the reporters and must itself hand in the text to the secretariat of the conference within two hours after the end of the meeting.
- 451 4. The right accorded in No. 450 above regarding the insertion of statements in the minutes shall in all cases he used with discretion.

18. Summary Records and Reports of Committees and Sub-Committees

- 452 1. (1) Summary records of the debates of meetings of committees or sub-committees shall be drawn up, meeting by meeting, by the secretariat of the conference, which shall ensure that they are distributed to delegations not later than five working days after each meeting. The records shall bring out the essential points of the discussion, and the various opinions of which note ought to be taken, together with any proposals or conclusions resulting from the debates as a whole.
- 453 (2) Nevertheless, any delegation shall be entitled to invoke No. 450 above.

- 439 (2) In the Pienary Meetings a proposal, a part of a proposal or an amendment shall not be put to the vote again unless:
- 440 a) the majority of the Members entitled to vote so request, and

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441 b) the request for a repetition of the vote is made at least one full day after the vote has been taken.

15. Rules for Debates and Voting Procedures in Committees and Sub-Committees

- 442 1. The Chairmen of all committees and sub-committees shall have powers similar to those conferred by Section 3 of the present Rules of Procedure on the Chairman of the conference.
- 443 2. The provisions of Section 12 of the present Rules of Procedure for the conduct of debates in the Pienary Meeting shall also apply to the discussions in committees and sub-committees, except in the matter of the quorum.
- 444 3. The provisions of Section 14 of the present Rules of Procedure shall also apply to votes taken in committees and sub-committees.

16. Reservations

- 445 1. As a general rule, any delegation whose views are not shared by the remaining delegations shall endeavour, as far as possible, to conform to the opinion of the majority.
- 446 2. However, if any decision appears to a delegation to be such as to prevent its government from consenting to be bound by amendments to the Constitution or this Convention or by the revision of the Administrative Regulations, this delegation may make reservations, final or provisional, regarding that decision; any such reservations may be made by a delegation on behalf of a Member which is not participating in the conference and which has given that delegation proxy powers to sign the Final Acts in accordance with the provisions of Article 31 of this Convention.

461 2. The final numbering of the chapters, articles and paragraphs shall normally be entrusted to the Editorial Committee after their adoption at the first reading but may, by a decision of the Plenary Meeting, be entrusted to the Secretary-General.

21. Final Approval

462 The texts of the Final Acts of a Plenipotentiary Conference, a radio-communication conference or a world conference on international tele-communications shall be considered final when they have been approved at the second reading in Plenary Meeting.

22. Signature

463 The texts of the Final Acts approved by the conferences referred to in No. 462 above shall be submitted for signature, in the alphabetical order of the Members' names in French, to the delegates provided with the powers defined in Article 31 of this Convention.

23. Relations with the Press and the Public

- 464 1. Official releases to the press about the work of the conference shall be issued only as authorized by the Chairman of the conference.
- 465 2. The press and the public may, to the extent practicable, he present at the conference in accordance with the guidelines approved by the meeting of Ileads of delegations referred to in No. 342 above and with the practical arrangements made by the Secretary-General. The presence of the press and the public shall in no way disturb the normal conduct of the work of the meeting.
- 466 3. Other meetings of the Union shall not be open to the press and the public, unless the meeting in question decides otherwise.

- (3) The right accorded in No. 453 above shall in all circumstances be used with discretion.
- 455 2. Committees and sub-committees may prepare any interim reports they deem necessary and, if circumstances warrant, they may submit, at the end of their work, a final report recapitulating in concise terms the proposals and conclusions resulting from the studies entrusted to them.

19. Approval of Minutes, Summary Records and Reports

- 456 1. (1) As a general rule, at the beginning of each Plenary Meeting, or meeting of a committee, or sub-committee, the Chairman shall impuire whether there are any comments on the minutes of the previous meeting, or, in the case of committees or sub-committees, on the summary record of the previous meeting. These documents shall be considered approved if no amendments have been handed in to the secretariat and no objection is made orally. Otherwise, the appropriate amendments shall be made in the minutes or summary record as the case may be.
- 457 (2) Any interim or final report must be approved by the committee or sub-committee concerned.
- 458 2. (1) The minutes of the last Plenary Meetings shall be examined and approved by the Chairman.
- 459 (2) The summary records of the last meetings of each committee or sub-committee shall be examined and approved by the Chairman of the committee or sub-committee.

20. Numbering

460 1. The numbers of the chapters, articles and paragraphs of the texts subjected to revision shall be preserved until the first reading in Plenary Meeting. The passages added shall bear provisionally the number of the last preceding paragraph in the original text, with the addition of "A", "B", etc.

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24. Franking Privileges

467 During the conference, members of delegations, representatives of Members of the Council, members of the Radio Regulations Board, senior officials of the General Secretariat and of the Sectors of the Union attending the conference and the staff of the Secretariat of the Union seconded to the conference shall be entitled to postal, telegram, telephone and telex franking privileges to the extent arranged by the host government in agreement with the other governments and recognized operating agencies concerned.

CHAPTER IV

- 141 --

Other Provisions

ARTICLE 33

Finances

468 1. (1) The scale from which each Member shall choose its class of contribution, in conformity with the relevant provisions of Article 28 of the Constitution, shall be as follows:

40 unit class	4 unit class
35 unit class	3 unit class
30 unit class	2 unit class
28 unit class	1 1/2 unit class
25 unit class	
23 unit class	1 unit class
20 unit class	1/2 unit class
	1/4 unit class
18 unit class	1/8 unit class*
15 unit class	1/16 unit class*
13 unit class	(*For the least developed
10 unit class	countries as listed by the
K ani(class	United Nations and other
5 unit class .	
	Members as determined by
	the Council.)

- 469 (2) In addition to the classes of contribution listed in No. 468 above, any Member may choose a number of contributory units over 40.
- 470 (3) The Secretary-General shall communicate the decision of each Member as to the class of contribution chosen by it to all the Members of the Union.

- 471 (4) Members may at any time choose a class of contribution higher than the one already adopted by them.
- 472 2. (1) Every new Member shall, in respect of the year of its accession, pay a contribution calculated as from the first day of the month of accession.
- 473 (2) Should the Constitution and this Convention be denounced by a Member, its contribution shall be paid up to the last day of the month in which such denunciation takes effect.
- 474 3. The amounts due shall bear interest from the beginning of each financial year of the Union at 3% (three per cent) per annum during the first six mouths, and at 6% (six per cent) per annum from the beginning of the seventh month.
- 475 4. The following provisions shall apply to contributions by the organizations referred to in Nos. 259 to 262 and to entities authorized to participate in the Union's activities in accordance with the provisions of Article 19 of this Convention.
- 476 5. The organizations referred to in Nos. 259 to 262 of this Convention and other organizations of an international character which participate in a Plenipotentiary Conference, in a Sector of the Union or in a world conference on international telecommunications shall share in defraying the expenses of the conference or the Sector in accordance with Nos. 479 to 481 below, as appropriate, unless they have been exempted by Council, subject to reciprocity.
- 477 6. Any entity or organization appearing in the lists mentioned in No. 237 of this Convention shall share in defraying the expenses of the Sector in accordance with Nos. 479 and 480 below.
- 478 7. Any entity or organization appearing in the lists mentioned in No. 237 of this Convention which participates in a radiocommunication conference, a world conference on international telecommunications or a conference or assembly of a Sector of which it is not a member, shall share in defraying the expenses of the conference or assembly in accordance with Nos. 479 and 481 below.

- 479 8. The contributions mentioned in Nos. 476, 477 and 478 shall be based on the free choice of a class of contribution from the scale given in No. 468 above, with the exception of the 1/4, 1/8 and 1/16 unit classes reserved for Members of the Union (the latter exception does not apply to the Telecommunication Development Sector); the Secretary-General shall be informed of the class chosen; any entity or organization concerned may at any time choose a class of contribution higher than the one already adopted by it.
- 480 9. The amount of the contribution per unit payable towards the expenses of each Sector concerned shall be set at 1/5 of the contributory unit of the Members of the Union. These contributions shall be considered as Union income. They shall bear interest in accordance with the provisions of No. 474 above.
- 481 10. The amount of the contribution per unit payable towards the expenses of a conference or assembly shall be set by dividing the total amount of the budget of the conference or assembly in question by the total number of units contributed by Members as their share of Union expenses. The contributions shall be considered as Union income. They shall bear interest from the sixtieth day following the day on which accounts are sent out, at the rates fixed in No. 474 above:
- 482 11. Reduction in the number of contributory units shall be possible only in accordance with the principles stipulated in the relevant provisions of Article 28 of the Constitution.
- 483 12. In the case of denunciation of participation in the work of a Sector or of termination of such participation (see No. 240 of this Convention), the contribution shall be paid up to the last day of the month in which such denunciation or termination takes effect.
- 484 13. The sale price of publications shall be determined by the Secretary-General, hearing in mind that the cost of reproduction and distribution should, in general, be covered by the sale of the publications.
- 485 14. The Union shall maintain a reserve account in order to provide working capital to meet essential expenditures and to maintain sufficient eash reserves to avoid resorting to loans as far as possible. The amount of the

reserve account shall be fixed annually by the Council on the basis of expected requirements. At the end of each biennial budgetary period all budget credits which have not been expended or encumbered will be placed in the reserve account. Other details of this account are described in the Financial Regulations.

- 486 15. (1) The Secretary-General may, in agreement with the Coordination Committee, accept voluntary contributions in cash or kind, provided that the conditions attached to such voluntary contributions are consistent, as appropriate, with the purposes and programmes of the Union and with the programmes adopted by a conference and in conformity with the Financial Regulations, which shall contain special provisions for the acceptance and use of such voluntary contributions.
- 487 (2) Such voluntary contributions shall be reported by the Secretary-General to the Council in the financial operating report as well as in a summary indicating for each case the origin, proposed use and action taken with respect to each voluntary contribution.

ARTICLE 34

Financial Responsibilities of Conferences

- 188 1. Before adopting proposals or taking decisions with financial implications, the conferences of the Union shall take account of all the Union's budgetary provisions with a view to ensuring that they will not result in expenses beyond the credits which the Council is empowered to authorize.
- 189 2. No decision of a conference shall be put into effect if it will result in a direct or indirect increase in expenses beyond the credits that the Council is empowered to authorize.

ARTICLE 35

Languages

- 490 1. (1) At conferences and meetings of the Union, languages other than those mentioned in the relevant provisions of Article 29 of the Constitution may be used:
- 491 a) if an application is made to the Secretary-General or to the Director of the Bureau concerned to provide for the use of an additional language or languages, oral or written, provided that the additional cost so incurred shall be borne by those Members which have made or supported the application;
- 492 b) if any delegation itself makes arrangements at its own expense for oral translation from its own language into any one of the languages referred to in the relevant provision of Article 29 of the Constitution.
- 493 (2) In the case provided for in No. 491 above, the Secretary-General or the Director of the Bureau concerned shall comply to the extent practicable with the application, having first obtained from the Members concerned an undertaking that the cost incurred will be duly repaid by them to the Union.
- 494 (3) In the case provided for in No. 492 above, the delegation concerned may, furthermore, if it wishes, arrange at its own expense for oral translation into its own language from one of the languages referred to in the relevant provision of Article 29 of the Constitution.
- 495 2. Any of the documents referred to in the relevant provisions of Article 29 of the Constitution may be published in languages other than those there specified, provided that the Members requesting such publication undertake to defray the whole of the cost of translation and publication involved.

CHAPTER V

Various Provisions Related to the Operation of Telecommunication Services

ARTICLE 36

Charges and Free Services

496 The provisions regarding charges for telecommunications and the various cases in which free services are accorded are set forth in the Administrative Regulations.

ARTICLE 37

Rendering and Settlement of Accounts

- 497 1. The settlement of international accounts shall be regarded as current transactions and shall be effected in accordance with the current international obligations of the Members concerned in those cases where their governments have concluded arrangements on this subject. Where no such arrangements have been concluded, and in the absence of special agreements made under Article 42 of the Constitution, these settlements shall be effected in accordance with the Administrative Regulations.
- 498 2. Administrations of Members and recognized operating agencies which operate international telecommunication services shall come to an agreement with regard to the amount of their debits and credits.
- 499 3. The statement of accounts with respect to debits and credits referred to in No. 498 above shall be drawn up in accordance with the provisions of the Administrative Regulations, unless special arrangements have been concluded between the parties concerned.

ARTICLE 38

Monetary Unit

- 500 In the absence of special arrangements concluded between Members, the monetary unit to be used in the composition of accounting rates for international telecommunication services and in the establishment of international accounts shall be:
 - either the monetary unit of the International Monetary Fund
 - or the gold franc,

both as defined in the Administrative Regulations. The provisions for application are contained in Appendix 1 to the International Telecommunication Regulations.

ARTICLE 39

Intercommunication

- 501 1. Stations performing radiocommunication in the mobile service shall be bound, within the limits of their normal employment, to exchange radiocommunications reciprocally without distinction as to the radio system adopted by them.
- 502 2. Nevertheless, in order not to impede scientific progress, the provisions of No. 501 above shall not prevent the use of a radio system incapable of communicating with other systems, provided that such incapacity is due to the specific nature of such system and is not the result of devices adopted solely with the object of preventing intercommunication.
- 503 3. Notwithstanding the provisions of No. 501 above, a station may be assigned to a restricted international service of telecommunication, determined by the purpose of such service, or by other circumstances independent of the system used.

ARTICLE 40

Secret Language

- Government telegrams and service telegrams may be expressed in secret language in all relations.
- 505 2. Private telegrams in secret language may be admitted between all Members with the exception of those which have previously notified, through the Secretary-General, that they do not admit this language for that category of correspondence.
- 506 3. Members which do not admit private telegrams in secret language originating in or destined for their own territory must let them paks in transit, except in the case of suspension of service provided for in Article 35 of the Constitution.

CHAPTER VI

Arbitration and Amendment

ARTICLE 41

Arbitration: Procedure

(see Article 56 of the Constitution)

- 507 1. The party which appeals to arbitration shall initiate the arbitration procedure by transmitting to the other party to the dispute a notice of the submission of the dispute to arbitration.
- 508 2. The parties shall decide by agreement whether the arbitration is to be entrusted to individuals, administrations or governments. If within one month after notice of submission of the dispute to arbitration, the parties have been unable to agree upon this point, the arbitration shall be entrusted to governments.
- 509 3. If arbitration is to be entrusted to individuals, the arbitrators must neither be nationals of a State party to the dispute, nor have their domicile in the States parties to the dispute, nor be employed in their service.
- 510 4. If arbitration is to be entrusted to governments, or to administrations thereof, these must be chosen from among the Members which are not involved in the dispute, but which are parties to the agreement, the application of which caused the dispute.
- 511 5. Within three months from the date of receipt of the notification of the submission of the dispute to arbitration, each of the two parties to the dispute shall appoint an arbitrator.
- 512 6. If more than two parties are involved in the dispute, an arbitrator shall be appointed in accordance with the procedure set forth in Nos. 510 and 511 above, by each of the two groups of parties having a common position in the dispute.

- 513 7. The two arbitrators thus appointed shall choose a third arbitrator who, if the first two arbitrators are individuals and not governments or administrations, must fulfil the conditions indicated in No. 509 above, and in addition must not be of the same nationality as either of the other two urbitrators. Failing an agreement between the two arbitrators as to the choice of a third arbitrator, each of these two arbitrators shall nominate a third arbitrator who is in no way concerned in the dispute. The Secretary-General shall then draw lots in order to select the third arbitrator.
- 514 8. The parties to the dispute may agree to have their dispute settled by a single arbitrator appointed by agreement; or alternatively, each party may nominate an arbitrator, and request the Secretary-General to draw lots to decide which of the persons so nominated is to act as the single arbitrator.
- 515 9. The arbitrator or arbitrators shall be free to decide upon the venue and the rules of procedure to be applied to the arbitration.
- 516 10. The decision of the single arbitrator shall be final and binding upon the parties to the dispute. If the arbitration is entrusted to more than one arbitrator, the decision made by the majority vote of the arbitrators shall be final and binding upon the parties.
- 517 (1) Each party shall bear the expense it has incurred in the investigation and presentation of the arbitration. The costs of arbitration other than those incurred by the parties themselves shall be divided equally between the parties to the dispute.
- 518—12. The Union shall furnish all information relating to the dispute which the arbitrator or arbitrators may need. If the parties to the dispute so agree, the decision of the arbitrator or arbitrators shall be communicated to the Secretary-General for future reference purposes.

ARTICLE 42

Provisions for Amending this Convention

- Convention. Any such proposal shall, in order to ensure its timely transmission to, and consideration by, all the Members of the Union, reach the Secretary-General not later than eight months prior to the opening date fixed for the Plenipotentiary Conference. The Secretary-General shall, as soon as possible, but not later than six months prior to the latter date, forward any such proposal to all the Members of the Union.
- 520 2. Any proposed modification to any amendment submitted in accordance with No. 519 above may, however, be submitted at any time by a Member of the Union or by its delegation at the Plenipotentiary Conference.
- 521 3. The quorum required at any Plenary Meeting of the Plenipotentiary Conference for consideration of any proposal for amending this Convention or modification thereto shall consist of more than one half of the delegations accredited to the Plenipotentiary Conference.
- 522 4. To be adopted, any proposed modification to a proposed amendment as well as the proposal as a whole, whether or not modified, shall be approved, at a Plenary Meeting, by more than half of the delegations accredited to the Plenipotentiary Conference which have the right to vote.
- 523 5. Unless specified otherwise in the preceding paragraphs of the present Article, which shall prevail, the general provisions regarding conferences and the Rules of Procedures of conferences and other meetings as contained in this Convention shall apply.
- 524 6. Any amendments to this Convention adopted by a Plenipotentiary Conference shall, as a whole and in the form of one single amending instrument, enter into force at a date fixed by the Conference between

Members having deposited before that date their instrument of ratification, acceptance or approval of, or accession to, both this Convention and the amending instrument. Ratification, acceptance or approval of, or accession to, only a part of such an amending instrument shall be excluded.

- 525 7. Notwithstanding No. 524 above, the Plenipotentiary Conference may decide that an amendment to this Convention is necessary for the proper implementation of an amendment to the Constitution. In that case, the amendment to this Convention shall not enter into force prior to the entry into force of the amendment to the Constitution.
- 526 8. The Secretary-General shall notify all Members of the deposit of each instrument of ratification, acceptance, approval or accession.
- 527 9. After entry into force of any such amending instrument, ratification, acceptance, approval or accession in accordance with Articles 52 and 53 of the Constitution shall apply to this Convention as amended.
- 528 10. After the entry into force of any such amending instrument, the Secretary-General shall register it with the Secretariat of the United Nations, in accordance with the provisions of Article 102 of the Charter of the United Nations. No. 241 of the Constitution shall also apply to any such amending instrument.

ANNEX

Definition of Certain Terms Used in this Convention and the Administrative Regulations of the International Telecommunication Union

For the purpose of the above instruments of the Union, the following terms shall have the meanings defined below:

1001 Expert: A person sent by either:

- a) the Government or the administration of his country, or
- b) an entity or an organization authorized in accordance with Article 19 of this Convention, or
- c) an international organization

to participate in tasks of the Union relevant to his area of professional competence.

1002 Observer: A person sent by:

- the United Nations, a specialized agency of the United Nations, the International Atomic Energy Agency, a regional telecommunication organization, or an intergovernmental organization operating satellite systems, to participate, in an advisory capacity, in a Plenipotentiary Conference, a conference or a meeting of a Sector,
- an international organization to participate, in an advisory capacity, in a conference or a meeting of a Sector, or
- the government of a Member of the Union to participate in a non-voting capacity in a regional conference,

in accordance with the relevant provisions of this Convention.

1003 Mobile Service: A radiocommunication service between mobile and land stations, or between mobile stations.

Radio Regulations
1994

CHAPTER IV

Coordination, Notification and Registration of Frequencies. International Frequency Registration Board

ARTICLE 10

International Frequency Registration Board

Section I. Functions of the Board

990	§ 1. tional F tion.	The constitution and the essential duties of the Interna- requency Registration Board are defined in the Conven-
991	§ 2.	The functions of the Board shall include:
992		a) the processing of frequency assignment notices, including information about any associated orbital locations of geostationary satellites, received from administrations for recording in the Master International Frequency Register:
993	9	b) the processing of information received from administrations in application of the advance publication, coordination and other procedures of the Radio Regulations and the Final Acts of administrative radio conferences; and the provision of assistance to administrations in these matters, at their request;
994		c) the processing and coordination of seasonal sched- ules of high frequency broadcasting with a view to accommodating requirements of all administrations

995

d) the compilation, for publication in suitable form and at appropriate intervals by the Secretary-General, of frequency lists reflecting the data recorded in the Master International Frequency Register, as well as other material relating to the assignment and use of frequencies:

996

e) the review of entries in the Master International Frequency Register with a view to amending or eliminating, as appropriate, those which do not reflect actual frequency usage, in agreement with the administrations which notified the assignments concerned:

997

 the study, on a long-term basis, of the usage of the radio frequency spectrum, with a view to making recommendations for its more effective use;

998

the investigation, at the request of one or more of the interested administrations, of harmful interference and the formulation of recommendations with respect thereto;

999

 the provision of assistance to administrations in the field of radio spectrum utilization, in particular to those administrations in need of special assistance, and the recommendation to administrations, where appropriate, of adjustments in their frequency assignments in order to obtain a better use of the radio spectrum;

1000

the collection of such results of monitoring observations as administrations and organizations may be able to supply, and the making of arrangements, through the Secretary-General, for their publication in suitable form:

the development of Technical Standards 1 in 1001 accordance with Nos. 1454 and 1582 and of Rules of Procedure 1 for internal use by the Board in the exercise of its functions; the formulation and reference to the CCIR of all 1002 general technical questions arising from the Board's examination of frequency assignments; the technical assistance in the preparation for and 1003 organisation of radio conferences in consultation, as appropriate, with the other permanent organs of the Union, and with due regard for the pertinent directives of the Administrative Council in accordance with the Convention; m) the participation in an advisory capacity, upon 1004 invitation by the organizations or countries concerned, in conferences and meetings where questions relating to the assignment and utilization of frequencies are discussed; the provision of assistance to administrations, at 1005 their request, in the training of senior staff in the fields of spectrum management and utilization, particularly for those countries in special need; the discharge of such other functions as are speci-1006 fied in the Radio Regulations and in the Final Acts of administrative radio conferences. The specialized secretariat of the IFRB shall work under 1007 the immediate direction of the Board to enable it to discharge its prescribed duties and functions.

<sup>1001.1

1</sup> The Technical Standards and the Rules of Procedure of the IFRB shall be distributed to all Members of the Union and shall be open to comment from any administration. In the event of there being a disagreement which remains unresolved, the procedure to be followed is given in Resolution 35.

Section 11. Methods of Work of the Board

- 1008 § 4. 'The Board shall meet as frequently as necessary to deal expeditiously with its work and, normally, at least once a week.
- 1009 § 5. (1) In accordance with the Convention, the members of the Board shall elect from among their number a Chairman and a Vice-Chairman, each to hold office for a term of one year. Thereafter, the Vice-Chairman shall succeed annually to the Chairmanship and a new Vice-Chairman shall be elected.
- 1010 (2) In the unavoidable absence of the Chairman and Vice-Chairman, the Board shall elect a temporary Chairman for the occasion from among its members.
- 1011 § 6. (1) Each member of the Board, including the Chairman, shall have one vote. Voting by proxy or by correspondence is not allowed.
- 1012 (2) The minutes shall indicate whether a decision was unanimous or by a majority.
- (3) A quorum of the Board shall be one-half of the number of members of the Board. If, however, the verdict of such a quorum on a question coming before it is not unanimous, the question shall be referred for decision at a later meeting at which at least two-thirds of the total number of members of the Board are present. If these calculations result in a fraction, the fraction shall be rounded up to a whole number.
- 1014 (4) The Board shall endeavour to reach its decisions by unanimous agreement. If the Board fails in that endeavour, it shall thereafter decide the problem on the basis of a two-thirds majority vote of the members present and voting for or against.
- 1015 § 7. For its own guidance and for the efficient performance of its functions the Board may make such internal arrangements as it may consider necessary in accordance with the Convention and the Radio Regulations.

1016 § 8. The documents of the Board, which shall comprise a complete record of its official actions and minutes of its meetings, shall be maintained by the Board in the working languages of the Union as defined in the Convention; for this purpose, as well as for the meetings of the Board, the necessary linguistic personnel, and such other facilities as may be required, shall be provided by the Secretary-General. A copy of all documents of the Board shall be available for public inspection at the offices of the Board.

1017

to NOT allocated.

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สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

ARTICLE 11

WARC-92

Coordination of Frequency Assignments to Stations in a Space Radiocommunication Service Except Stations in the Broadcasting-Satellite Service and to Appropriate Terrestrial Stations 1, 2, 3, 5

Section I. Procedures for the Advance Publication of Information on Planned Satellite Networks 4

A.11.1 O+6-88 bro

¹ For the coordination of frequency assignments to stations in the broadcasting-satellite service and other services in the frequency bands 11.7 - 12.2 GHz (in Region 3), 11.7 - 12.5 GHz (in Region 1) and 12.2 - 12.7 GHz (in Region 2) as well as the coordination of frequency assignments to feeder-link stations utilizing the fixed-satellite service (Earth-to-space) in the frequency band 17.3 - 17.8 GHz (in Region 2) and in the frequency bands 14.5 - 14.8 GHz and 17.3 - 18.1 GHz in Regions 1 and 3 and the other services in these bands, see also Article 15 and Article 15A respectively.

A.11.2 Orb-88 These procedures may be applicable for earth stations of the earth exploration-satellite service, space research service, space operation service and radiodetermination-satellite service intended to be used while in motion or during halts at unspecified points.

A.11.3 0d-88 ³ For the application of the provisions of this Article with respect to stations in a space radiocommunication service using frequency bands covered by the fixed-satellite service Allotment Plan, see also Appendix 30B and Resolution 107 (Orb-88).

A.11.4 Orb-88 ⁴ These procedures may be applicable to stations on board satellite launching vehicles.

A.11.5 WARC-92 ⁵ See Resolution 46 (WARC-92).

1041 Publication of Information

1042 § 1. (1) An administration (or one acting on behalf of a group of named administrations) which intends to bring into use a satellite network within a satellite system shall, prior to the coordination procedure described in No. 1060 where applicable, send to the International Frequency Registration Board, not earlier than six years and preferably not later than two years before the date of bringing into service of each satellite network, the information listed in Appendix 4.

1043
(2) Amendments to the information sent in accordance with
the provisions of No. 1042 shall also be sent to the Board as soon
as they become available. Modifications which are of such a nature
as to significantly change the character of the network may require
recommencing the advance publication procedure.

1044 (3) If the information is found to be incomplete, the Board Orb-88 shall immediately seek from the administration concerned any clarification and information not provided.

On receipt of the complete information sent under Nos. 1042 and 1043, the Board shall publish it in a special section of its weekly circular within three months and shall also, when the weekly circular contains such information, so advise all administrations by circular telegram. The circular telegram shall indicate the frequency bands to be used and, in the case of a geostationary satellite, the orbital location of the space station. When the Board is not in a position to comply with the time limit referred to above, it shall periodically so inform the administrations, giving the reasons therefor.

1042.1 1 For the use of frequency bands which are not covered by the fixed-satellite service Allotment Plan. See also Resolution 108 (Orb-88).

1042.2 Oni-81 2 Sec also No. 1550.

1045 SUP Оф-88

1046 Comments on Published Information

1047 § 2. If, after studying the information published under No. 1044, any administration is of the opinion that interference which may be unacceptable may be caused to assignments of its existing or planned satellite networks, it shall, within four months after the date of the weekly circular containing the complete information listed in Appendix 4, send the administration concerned its comments on the particulars of the interference to its existing or planned satellite systems. A copy of these comments shall also be sent to the Board. If no such comments are received from an administration within the period mentioned above, it may be assumed that the administration has no basic objections to the planned satellite network(s) of that system on which details have been published.

1047A
Orb-88
An administration sending information under No. 1042
and No. 1043 may request the assistance of the Board in determining, with the aid of Appendix 29, if its planned network could affect or be affected by other satellite networks for which complete Appendix 4 information has been received by the Board.

1047B
An administration receiving information published under No. 1044 may request the assistance of the Board in identifying with the aid of Appendix 29, whether its existing or planned networks for which complete Appendix 4 information has been sent to the Board could affect or be affected by the planned network.

1048 Resolution of Difficulties

1049 § 3. (1) An administration receiving comments sent in accordance with No. 1047 and administrations sending such comments shall endeavour to resolve any difficulties that may arise and shall provide any additional information that may be available.

1050

(2) In case of difficulties arising when any planned satellite network of a system is intended to use the geostationary-satellite orbit:

1051 Orb-88 a) the administration responsible for the planned network shall first explore all possible means of meeting its requirements, taking into account the characteristics of the geostationary-satellite networks of other systems, and without considering the possibility of adjustment to networks of other administrations. If no such means can be found, the administration concerned may then request other administrations, either bilaterally or multilaterally, or in exceptional circumstances through the convening of multilateral meetings similar to that provided for in No. 1085C, to mutually help resolve these difficulties.

1052

b) an administration receiving a request under No. 1051 shall, in consultation with the requesting administration, explore all possible means of meeting the requirements of the requesting administration, for example, by relocating one or more of its own geostationary space stations involved, or by changing the emissions, frequency usage (including changes in frequency bands) or other technical or operational characteristics;

1053 Orb-88 c) if, after following the procedure described in Nos. 1051 and 1052, there are unresolved difficulties, the administrations concerned shall together make every possible effort to resolve these difficulties by means of mutually acceptable adjustments, for example, to geostationary space station locations and to other characteristics of the networks involved in order to provide for the normal operation of both the planned and existing networks.

1054
(3) In their attempts to resolve the difficulties mentioned above, administrations may seek the Board's assistance which may consist of:

1054A a) evaluating the levels of interference; Orb-88

1054B b) defining, with the agreement of the administrations concerned, the method and criteria to be used;

1054C c) making arrangements to facilitate discussions as mutually agreed by the administrations concerned.

In seeking the assistance of the Board, the administration(s) concerned shall send the details of the comments which have given rise to the difficulties and make any suggestions that it (they) may consider useful.

1055 Results of Advance Publication

1056 § 4. An administration on behalf of which details of planned satellite networks have been published in accordance with the provisions of Nos. 1042 to 1044 shall, after the period of four months specified in No. 1047, inform the Board whether or not comments provided for in No. 1047 have been received and of the progress made in resolving any difficulties. Additional information on the progress made in resolving any remaining difficulties shall be sent to the Board at intervals not exceeding six months prior to the commencement of coordination or the sending of the notices to the Board. The Board shall publish this information in the special section of its weekly circular referred to in No. 1044 and shall also, when the weekly circular contains such information, so inform all administrations by circular telegram.

1056A Orb-88 When, upon expiry of a period of six years plus the extension provided for in No. 1550 after the date of the publication of the special section referred to in No. 1044, the administration responsible for the network has not submitted the Appendix 3 information for coordination under No. 1060 or for notification under No. 1488, as appropriate, the information published under No. 1044 shall be cancelled after the administration concerned had been informed.

1057 Commencement of Coordination or Notification Procedures

1058 Orb-88 SUP

1058А Оњ-88

§ 5 (1) When communicating to the Board the information referred to in No. 1042, an administration may, at the same time or at a later time, communicate:

1058B

a) the information required for the network coordination of a frequency assignment to a station pertaining to a geostationary-satellite network in accordance with the provisions of No. 1074, including the copy of the request for coordination sent to any other administration; this information will be treated in accordance with the provisions of Section II of this Article; or

1058C Orb-88 the information required for notification of a frequency assignment to a station of a geostationary-satellite network when coordination for that assignment is not required; or

1058D Orb-88 the information required for notification of a frequency assignment to a station of a non-geostationary-satellite network.

1058E Orb-88 The coordination or notification information, as the case may be, shall be considered as having been received by the Board not earlier than six months after the date of receipt of the information referred to in No. 1042.

Orb-88

Section II. Coordination of Frequency Assignments to a Space Station on a Geostationary Satellite or an Earth Station Communicating with Such a Space Station using Frequency Bands other than Those Covered by the Fixed-Satellite Service Allotment Plan in Relation to Stations of Other Geostationary-Satellite Networks.

1059 Requirement for Coordination

1060 Orb-88 § 6. (1) Before an administration (or one acting on behalf of one or more named administrations) notifies to the Board or brings into use any frequency assignment to a space station on a geostationary satellite or to an earth station that is to communicate with a space station on a geostationary satellite, it shall, except in the cases described in Nos. 1066 to 1071, effect coordination of the assignment with any other administration whose assignment, for a space station on a geostationary satellite or for an earth station that communicates with a space station on a geostationary satellite, might be affected.

1060A Orb-88 Coordination under No. 1060 may be effected for a satellite network using the information relating to the space station, including its service area, and the parameters of one or more typical earth stations which may be located in all or part of the space station service area.

1060.1 O+-88

In cases where the application of Article 14 is required with respect to one or more assignments of a network, the agreement obtained in application of Article 14 in relation to an assignment of another satellite network to which Nos. 1061 to 1065 apply shall be deemed to constitute successful application of the procedure of Section II of this Article.

^{*} See also Section IB of Article 6 of Appendix 30B.

1060B Orb-88 If a frequency assignment is brought into use before the commencement of the coordination procedure of No. 1060, when this coordination is required, the operation in advance of the receipt by the Board of the Appendix 3 information shall in no way afford any priority of the date.

1061 Orb-88 (2) Frequency assignments to be taken into account in the application of No. 1060 are those in the same frequency band as the planned assignment, pertaining to the same service or to another service to which the band is allocated with equal rights or a higher category of allocation (see Nos. 420-425 and 435), and which are:

1062 Ољ-88 a) in conformity with No. 1503; and

1063

b) either recorded in the Master Register, or coordinated under the provisions of this Section; or

1064 Orb-88 c) included in the coordination procedure with effect from the date of receipt by the Board, in accordance with No. 1074, of the relevant information as specified in Appendix 3; or

1065 Оф-88 already notified to the Board without any coordination in those cases where Nos. 1066 to 1071 apply.

1066

(3) No coordination under No. 1060 is required:

1066A Orb-88 a) when an administration proposes to notify or bring into use, within the service area of a satellite network, a typical earth station or an earth station which would not cause or suffer interference of a level greater than the typical earth station;

1064.1 On-88

See No. 1058E concerning the date to be considered as the date of receipt by the Board of the information relating to the coordination of a satellite network or a notification of a frequency assignment.

1067 Orb-88 b) when the use of a new frequency assignment will cause, to any service of another administration, an increase in the noise temperature of any space station receiver or earth station receiver, or an increase in the equivalent satellite link noise temperature, as appropriate, calculated in accordance with the method given in Appendix 29, which does not exceed the threshold value defined therein:

1068 Orb-88 c) when the interference resulting from a modification to a frequency assignment which has previously been coordinated will not exceed that value agreed during coordination;

1069 Orb-88 d) when an administration proposes to notify or bring into use a new earth station which would not cause or suffer interference of a level greater than that which would be caused by an earth station belonging to the same satellite network and whose characteristics have been published in accordance with No. 1078, or notified to the Board without coordination in those cases where coordination was not required;

1070 Orb-88 e) when, for a new frequency assignment to a receiving station, the notifying administration states that it accepts the interference resulting from the frequency assignments referred to in Nos. 1061 to 1065.

1071 Orb-88 f) between earth stations using frequency assignments in the same direction (either Earth-to-space or space-to-Earth).

1072 Coordination Data

1073 § 7. (1) For the purpose of effecting coordination, the administration requesting coordination shall send to any other administration concerned under No. 1060 all the information listed in Appendix 3 required for coordination including the characteristics

of one or more typical earth stations and the respective areas in which they may be located. The request concerning coordination of a network may specify all or some of the frequency assignments expected to be used by the stations of the satellite network.

1074 Оф-88 (2) The administration requesting coordination shall at the same time send to the Board a copy of the request for coordination, with all the information listed in Appendix 3 required for coordination and the name(s) of the administration(s) with which coordination is sought. The Board shall immediately acknowledge the receipt of this information.

1074А Ось-88 (3) An administration believing that the provisions of Nos. 1066 to 1071 apply to its planned assignments may send to the Board the relevant information listed in Appendix 3, either under No. 1074 for publication or in accordance with Nos. 1488 to 1491.

1075 Orb-88 § 8. (1) On the receipt of the complete information referred to in No. 1074, the Board shall:

1076 Orb-88 a) immediately examine this information with respect to its conformity with No. 1503 and, as soon as possible, send a telegram to all administrations indicating the identity of the satellite network, its findings with respect to No. 1503 and the date of receipt 1 of the information; this date shall be considered as the date from which the assignment will be taken into account for coordination;

1077

examine the information received with a view to identifying those administrations whose services might be affected, in accordance with No. 1060, and inform the administrations concerned by telegram;

1076.1 On-#1

¹ See No. 1058E concerning the date to be considered as the date of receipt by the Board of the information relating to the coordination of a satellite network or a notification of a frequency assignment.

1078 Orb-88

- c) publish in the special section of its weekly circular referred to in No. 1044, within three months, the information received under No. 1074 and the result of the examination under Nos. 1076 and 1077. When the weekly circular contains such information, the Board shall so inform all administrations by circular telegram. When the Board is not in a position to comply with the time limit referred to above, it shall periodically so inform the administrations giving the reasons therefor.
- 1078A (2) If the information is found to be incomplete, the Board Orb-88 shall immediately seek from the administration concerned any clarification and information not provided.
- 1079 Requests for Inclusion in the Coordination Procedure
- 1080 § 9. An administration believing that it should have been included in the coordination procedure under No. 1060 shall have the right to request that it be brought into the coordination procedure. Such a request shall be sent to the administration initiating the coordination procedure, with a copy to the Board, as soon as possible.
- 1081 Acknowledgement of Receipt of Coordination Data
- 1082 § 10. An administration with which coordination is sought under No. 1060 shall acknowledge receipt of the coordination data immediately by telegram. If no acknowledgement is received within thirty days after the date of the weekly circular publishing the information under No. 1078, the administration seeking coordination shall dispatch a telegram requesting acknowledgement, to which the receiving administration shall reply within a further period of fifteen days.

1083 Examination of Coordination Data and Agreement Between Administrations

1084 Orb-88 § 11. (1) On receipt of the coordination data, an administration shall promptly examine the matter with regard to interference which would be caused to the frequency assignments of its network in respect of which coordination is sought under No. 1060 or caused by these assignments. In so doing, it shall have regard to the proposed date of bringing into use of the assignment for which coordination was requested. It shall then, within four months from the date of the relevant weekly circular, notify the administration requesting coordination of its agreement. If, however, the administration with which coordination is sought does not agree, it shall, within the same period, send to the administration seeking coordination the technical details upon which its disagreement is based, including those relevant characteristics contained in Appendix 3 which have not previously been notified to the Board, and make such suggestions as it is able to offer with a view to a satisfactory solution of the problem. A copy of these comments shall also be sent to the Board.

1085 Огь-88 (2) Either the administration seeking coordination of an administration with which coordination is sought may request additional information which it may require to assess the interference to assignments of the network concerned.

1084.1

In the absence of specific provisions relating to the evaluation of the interference, the calculation methods and the criteria should be based on relevant CCIR Recommendations agreed by the administrations concerned either as a result of Resolution 703 or otherwise. In the event of disagreement on a CCIR Recommendation or in the absence of such Recommendations, the methods and criteria shall be agreed between the administrations concerned. Such agreements shall be concluded without prejudice to other administrations.

1085A Orb-88

- (3) Affected administrations as well as the administration seeking coordination shall make all possible mutual efforts to overcome the difficulties, in a manner acceptable to the parties concerned.
- 1085В Огь-88
- (4) All administrations may use correspondence, any appropriate means of telecommunication, or bilateral or multilateral meetings, as necessary, to effect coordination with any other administration. The results thereof shall be communicated to the Board in accordance with No. 1087.

1085C Orb-88 (5) In exceptional cases the multilateral coordination among the administrations concerned, of networks in the fixed-satellite service, may take the form of a Multilateral Planning Meeting (MPM) in accordance with resolves 1 to 7 of Resolution 110 (Orb-88) and shall apply to the following frequency bands:

3 700 - 4 200 MHz 5 850 - 6 425 MHz 10.95 - 11.20 GHz 11.45 - 11.70 GHz 11.70 - 12.20 GHz in Region 2 ¹ 12.50 - 12.75 GHz in Region 1 and Region 3 ^{1, 2} 14.00 - 14.50 GHz

1085D Оф-88 (6) Towards this end, the administration seeking coordination may initiate action to convene a Multilateral Planning Meeting (MPM) to resolve mutually the difficulties and effect the coordination of the satellite network.

1085C.1 In these bands this provision shall apply between networks of the fixed-satellite service only.

1685C.2

When a fixed-satellite service network is to be operated in the frequency band 12.5 - 12.75 GHz as well as under No. 845 in the frequency band 12.2 - 12.5 GHz, this provision may apply for coordination of the network.

1086 Results of Coordination

1087 Orb-88 § 12. (1) An administration which has initiated a coordination procedure under the provisions of Nos. 1060 to 1074 shall communicate to the Board, on expiry of the period of four months following the date of the relevant weekly circular mentioned in No. 1078, the names of the administrations with which an agreement has been reached. It shall also inform the Board of the progress made in effecting coordination with the other administrations or of any difficulties. Such a communication shall be made to the Board every six months after the above-mentioned period. The Board shall publish this information in the special section of its weekly circular referred to in No. 1044.

1087A Orb-88

(2) An administration which initiated the coordination, as well as any administration with which coordination is sought, shall communicate to the Board any modifications to the published characteristics of their respective networks that were required to reach agreement on the coordination. The Board shall publish this information in accordance with No. 1078, indicating that these modifications resulted from the joint effort of the administrations concerned to reach agreement on coordination and for this reason they should be given special consideration.

1087B Orb-88 (3) When the coordination process takes the form of a Multilateral Planning Meeting (MPM), in accordance with resolves 1 to 7 of Resolution 110 (Orb-88), the administration which sought the coordination of its satellite network shall communicate to the Board the names of administrations with which coordination has been completed and an agreement reached, as well as the names of administrations with which coordination has not been completed.

1087C Orb-88 (4) Each administration participating in a Multilateral Planning Meeting (MPM) shall communicate to the Board any changes agreed upon in the published characteristics of frequency assignments of its satellite networks considered by the Multilateral Planning Meeting (MPM).

1087D Orb-88 (5) The Board shall publish the information specified in Nos. 1087B and 1087C above in the special section of its weekly circular referred to in No. 1044 and shall also, when the weekly circular contains such information, so inform all administrations by circular telegram.

1088 Requests to the IFRB for Assistance in Effecting Coordination

1089 § 13. (1) An administration seeking coordination may request the Board to endeavour to effect coordination in those cases where:

1090

a) an administration with which coordination is sought under No. 1060 fails to acknowledge receipt, under No. 1082, within forty-five days after the date of the weekly circular publishing the information relating to the request for coordination;

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 an administration has acknowledged receipt under No. 1082, but fails to give a decision within four months from the date of the relevant weekly circular;

1091A Orb-88 c) a bilateral or multilateral meeting, or a Multilateral Planning Meeting (MPM) is required to achieve coordination and the administration concerned experiences difficulties in making arrangements for it:

1092 Orb-88 d) there is disagreement between the administration seeking coordination and an administration with which coordination is sought as to the acceptable interference; or

1093 Orb-88 e) coordination is not possible for any other reason.

1094 Orb-88 (2) In so doing, the administration shall provide the necessary information to enable the Board to endeavour to effect such coordination.

1095 Action to Be Taken by the IFRB

- 1096 § 14. (1) Where the Board receives a request under No. 1090, it shall forthwith send a telegram to the administration concerned requesting immediate acknowledgement.
- 1097 (2) Where the Board receives an acknowledgement following its action under No. 1096, or where the Board receives a request under No. 1091, it shall forthwith send a telegram to the administration concerned requesting an early decision in the matter.
- 1098

 (3) Where the Board receives a request under No. 1093, it shall endeavour to effect coordination in accordance with the provisions of No. 1060. The Board shall also act in accordance with Nos. 1075 to 1078. Where the Board receives no acknowledgement to its request for coordination within the periods specified in No. 1082 it shall act in accordance with No. 1096.
- 1098A

 (4) Where the Board receives a request under No. 1091A, it shall take appropriate steps to facilitate the holding of such meetings when all administrations concerned agree and shall also provide requested assistance that may help in achieving coordination.

1099 Опъ-88 (5) Where necessary, as part of the procedure under Nos. 1089 to 1094, the Board shall assess the interference. In any case, the Board shall inform the administrations concerned of the results obtained.

1100 Опъ-88 (6) The Board may request additional information which it may require to assess the interference to assignments of the network concerned.

1101 Orb-88 (7) Where an administration fails to reply within thirty days of dispatch of the Board's telegram requesting acknowledgement sent under No. 1096, or fails to give a decision in the matter within thirty days of dispatch of the Board's telegram of request under No. 1097, or fails to reply to the Board's requests made in application of No. 1098A, it shall be deemed that the administration with which coordination was sought has undertaken:

1102 Огь-88 a) that no complaint will be made in respect of any harmful interference affecting the services rendered by its space radiocommunication stations which may be caused by the use of the assignment to a station of the satellite network for which coordination was requested;

1103 Orb-88 b) that its space radiocommunication stations will not cause harmful interference to the satellite network assignment for which coordination was requested.

1104 and 1105 SUP

Оф-88

Section III. Coordination of Frequency Assignments to an Earth Station Operating in a Geostationary or Non-Geostationary Satellite Network in Relation to Terrestrial Stations

1106 Requirement for Coordination

1107 Mob-87 § 16. (1) Before an administration notifies to the Board or brings into use any frequency assignment to an earth station ², whether for transmitting or receiving, in a particular band allocated with equal rights to space and terrestrial radiocommunication services in the frequency spectrum above 1 GHz, it shall, except in the cases described in Nos. 1108 to 1111, effect coordination of the assignment with each administration whose territory lies wholly or partly within the coordination area ¹ of the planned earth station. The request for coordination concerning an earth station may specify all or some of the frequency assignments of the associated space station, but thereafter each assignment shall be dealt with individually.

1107.1

Appendix 28, which shall be used for the calculation of the coordination area, contains criteria relating only to coordination between earth stations and stations in the fixed or mobile services. The criteria relating to other terrestrial radiocommunication services should be based on relevant CCIR Recommendations agreed by the administrations concerned either as a result of Resolution 703 or otherwise.

In the event of disagreement on a CCIR Recommendation or in the absence of such Recommendations, the methods and criteria shall be agreed between the administrations concerned. Such agreements shall be concluded without prejudice to other administrations.

1107.2 Mab-87 ² For the application of this procedure to earth stations in the radiodetermination-satellite service Appendix 28, paragraph 7 shall be applied using a uniform coordination distance in the bands 1 610 - 1 626.5 MHz, 2 483.5 - 2 500 MHz and 2 500 - 2 516.5 MHz of 400 km, corresponding to an airborne radiodetermination satellite service (RDSS) earth station. In cases where the RDSS system is limited to ground based earth stations, the IFRB shall use a coordination distance of 100 km.

- 1108 (2) No coordination under No. 1107 is required when an administration proposes:
- 1109

 a) to bring into use an earth station the coordination area of which does not include any of the territory of any other country;
- 1110 b) to change the characteristics of an existing assignment in such a way as not to increase the interference to or from the terrestrial radiocommunication stations of other administrations;
- 1111 to operate a mobile earth station. However, if the coordination area associated with the operation of such a mobile earth station, in a frequency band referred to in No. 1107, includes any of the territory of another country, the operation of such a station shall be subject to agreement on coordination between the administrations concerned. This agreement shall apply to the characteristics of the mobile earth station(s), or to the characteristics of a typical mobile earth station, and shall apply to a specified service area. Unless otherwise stipulated in the agreement, it shall apply to any mobile earth stations in the specified service area provided that interference caused by them shall not be greater than that caused by a typical earth station for which the technical characteristics appear in the notice and have been or are being submitted in accordance with No. 1494.

1111A

d) to bring into use a new frequency assignment to a receiving earth station and the notifying administration states that it accepts the interference resulting from existing and future terrestrial station assignments. In such case, administrations responsible for the terrestrial stations are not required to apply the provisions of Section IV of this Article.

1112 Coordination Data

I113 § 17. For the purpose of effecting coordination, the administration requesting coordination shall send to each administration concerned under. No. 1107 a copy of diagrams drawn to an appropriate scale indicating for both transmission and reception the location of the earth station and its associate coordination areas, or the coordination area related to the service area in which it is intended to operate the mobile earth station, and the data on which the diagrams are based, including all pertinent information concerning the proposed frequency assignment as listed in Appendix 3, and an indication of the approximate date on which it is planned to begin operations. A copy of this information with the date of dispatch of the request for coordination shall also be sent for the information of the Board.

1114 Acknowledgement of Receipt of Coordination Data

1115 § 18. An administration with which coordination is sought under No. 1107 shall acknowledge receipt of the coordination data immediately by telegram. If no acknowledgement is received within thirty days of dispatch of the coordination data, the administration seeking coordination shall dispatch a telegram requesting acknowledgement, to which the receiving administration shall reply within a further period of fifteen days.

- 1116 Examination of Coordination Data and Agreement Between Administrations
- 1117 § 19. (1) On receipt of the coordination data an administration shall, having regard to the proposed date of bringing into use of the assignment for which coordination was requested, promptly examine the matter with regard to both:

1118 Orb-88 a) interference which would affect the service rendered by its terrestrial radiocommunication stations operating in accordance with the Convention and these Regulations, or to be so operated prior to the planned date of bringing the earth station assignment into service, or within the next three years, whichever is the longer; and

1119

- b) interference which would be caused to reception at the earth station by the service rendered by its terrestrial radiocommunication stations operating in accordance with the Convention and these Regulations, or to be so operated prior to the planned date of bringing the earth station assignment into service, or within the next three years, whichever is the longer.
- 1120 (2) The periods referred to in Nos. 1118 and 1119 may be extended by agreement between the administrations concerned in order to take planned terrestrial networks into account.
- 1121 (3) The administration with which coordination is sought shall, within four months from dispatch of the coordination data:

1122

a) notify the administration requesting coordination of its agreement with a copy to the Board, indicating, where appropriate, the part of the allocated frequency band containing the coordinated frequency assignments; or

1118.1

1 In the absence of specific provisions relating to the evaluation of the interference, the calculation methods and the criteria should be based on relevant CCIR Recommendations agreed by the administrations concerned either as result of Resolution 703 or otherwise. In the event of disagreement on a CCIR Recommendation or in the absence of such Recommendations, the methods and criteria shall be agreed between the administrations concerned. Such agreements shall be concluded without prejudice to other administrations.

1123

- b) send to that administration a request for inclusion in coordination of the terrestrial radiocommunication stations mentioned in Nos. 1118 and 1119; or
- 1124
- c) notify that administration of its disagreement.
- 1125
 (4) In the cases mentioned in Nos. 1123 and 1124, the administration with which coordination is sought shall send to the administration requesting coordination a copy of a diagram drawn to an appropriate scale indicating the location of those terrestrial radiocommunication stations which are or will be within the coordination area of the earth transmitting or receiving station, as appropriate, together with all other relevant basic characteristics and make such suggestions as it may be able to offer with a view to

a satisfactory solution of the problem.

- 1126
 (5) When the administration with which coordination is sought sends to the administration seeking coordination the information required in the case of No. 1124, a copy thereof shall also be sent to the Board. The Board shall consider as notifications in accordance with Section I of Article 12 only that information relating to existing terrestrial radiocommunication stations or to those to be brought into use within the next three months.
- (6) When an agreement on coordination is reached, as a consequence of Nos. 1121 to 1125, the administration responsible for the terrestrial stations may send to the Board the information concerning those terrestrial stations covered by the agreement which are intended to be notified in accordance with Section I of Article 12. The Board shall consider as notifications in accordance with that Section only that information relating to existing terrestrial radiocommunication stations or to those to be brought into use within the next three years.

information which it may require to assess the interference to the services concerned. 1129 Requests to the IFRB for Assistance in Effecting Coordination 1130 § 20. (1) An administration seeking coordination may request the Board to endeavour to effect coordination in those cases where: 1131 an administration with which coordination is sought under No. 1107 fails to acknowledge receipt, under No. 1115, within forty-five days of dispatch of the coordination data: 1132 an administration has acknowledged receipt under No. 1115, but fails to give a decision within four months from dispatch of the coordination data under No. 1113; there is disagreement between the administration 1133 seeking coordination and an administration with which coordination is sought as to the acceptable interference; or 1134 coordination between administrations is not possible for any other reason. 1135 (2) In so doing, the administration shall furnish the necessary information to enable the Board to endeavour to effect such coordination.

(7) The administration seeking coordination or an adminis-

tration with which coordination is sought may request additional

1136 Action to Be Taken by the IFRB

1128

§ 21. (1) Where the Board receives a request under No. 1131, it shall forthwith send a telegram to the administration concerned requesting immediate acknowledgement.

- 1138

 (2) Where the Board receives an acknowledgement following its action under No. 1137, or where the Board receives a request under No. 1132, it shall forthwith send a telegram to the administration concerned requesting an early decision in the matter.
- 1139
 (3) Where the Board receives a request under No. 1134, it shall endeavour to effect coordination in accordance with the provisions of No. 1107. Where the Board receives no acknowledgement to its request for coordination within the periods specified in No. 1115 it shall act in accordance with No. 1137.
- 1140
 (4) Where necessary, as part of the procedure under Nos. 1130 to 1135, the Board shall assess the interference. In any case, the Board shall inform the administrations concerned of the results obtained.
- 1141 (5) The Board may request additional information which it may require to assess the interference to the services concerned.
- of dispatch of the Board's telegram requesting an acknowledgement sent under No. 1137, or fails to give a decision in the matter within thirty days of dispatch of the Board's telegram of request under No. 1138, it shall be deemed that the administration with which coordination was sought has undertaken:
- 1143

 a) that no complaint will be made in respect of any harmful interference affecting the services rendered by its terrestrial stations which may be caused by the use of the assignment for which coordination was requested;
- that its terrestrial stations will not cause harmful interference to the frequency assignment for which coordination was requested.

1145 and 1146 SUP

Section IV. Coordination of Frequency Assignments to a Terrestrial Station for Transmission in Relation to an Earth Station

1147 Requirement for Coordination

1148 § 23. (1) Before an administration notifies to the Board, or brings into use any frequency assignment to a terrestrial station within the coordination area 1 of an earth station, in a band above 1 GHz allocated with equal rights to terrestrial radiocommunication services and space radiocommunication services (space-to-Earth), excepting the broadcasting-satellite service, it shall, except in cases described in Nos. 1155 to 1158, effect coordination of the proposed assignment with the administration responsible for the earth station with respect of the frequency assignments which are:

1149	a)	in conformity with No. 1503; and
1150	b)	either coordinated under No. 1107; or
1151	c)	to be taken into account for coordination with effect from the date of communication of the information referred to in No. 1107; or
1152	d)	recorded in the Master Register with a favourable finding with respect to No. 1505; or
1153	e)	recorded in the Master Register with an unfavourable finding with respect to No. 1505 and a favourable finding with respect to No. 1509; or

1148.1

Appendix 28, which shall be used for the calculation of the coordination area, contains criteria relating only to coordination between earth stations and stations in the fixed or mobile services. The criteria relating to other terrestrial radiocommunication services should be based on relevant CCIR Recommendations agreed by the administrations concerned either as a result of Resolution 703 or otherwise.

In the event of disagreement on a CCIR Recommendation or in the absence of such Recommendations, the methods and criteria shall be agreed between the administrations concerned. Such agreements shall be conducted without prejudice to other administrations.

RR11-26

1154

- recorded in the Master Register with an unfavourable finding with respect to Nos. 1505 and 1509, the notifying administration having stated that it has accepted the interference resulting from the existing terrestrial stations located within the coordination area of the earth station on the date of its recording.
- 1155 (2) No coordination under Nos. 1148 to 1154 is required when an administration proposes:
- 1156

 a) to bring into use a terrestrial station which is located, in relation to an earth station, outside the coordination area;
- 1157

 b) to change the characteristics of an existing assignment in such a way as not to increase the interference to the earth stations of other administrations;
- to bring into use a terrestrial station within the coordination area of an earth station, provided that the proposed terrestrial station assignment is outside any part of a frequency band coordinated under No. 1122 for reception by that earth station.

1159 Coordination Data

1160 § 24. For the purpose of effecting coordination, the administration requesting coordination shall send to any other administration concerned under Nos. 1148 to 1154, by the fastest possible means, a copy of a diagram drawn to an appropriate scale indicating the location of the terrestrial station and all other pertinent details of the proposed frequency assignment, and the approximate date on which it is planned to bring the station into use. The request for coordination may specify all or some of the frequency assignments expected to be used within the next three years by stations of a terrestrial network wholly or partly within the coordination area of the earth station. This period may be extended by agreement between the administrations concerned. Thereafter each assignment shall be dealt with individually.

- 1161 Acknowledgement of Receipt of Coordination Data
- 1162 § 25. An administration with which coordination is sought under Nos. 1148 to 1154 shall acknowledge receipt of the coordination data immediately by telegram. If no acknowledgement is received within thirty days of dispatch, the administration seeking coordination may dispatch a telegram requesting acknowledgement of receipt of the coordination data, to which the receiving administration shall reply within a further period of fifteen days.
- 1163 Examination of Coordination Data and Agreement Between Administrations
- 1164 § 26. (1) On receipt of the coordination data, the administration with which coordination is sought shall promptly examine the matter with regard to interference which would affect the services rendered by its earth stations covered by Nos. 1148 to 1154, which are operating, or are to be operated, within the next three years.
- 1165 (2) In so doing, the administration may take into account any frequency assignment communicated to it for use more than three years in advance.
- 1166 (3) The administration with which coordination is sought shall, within an overall period of four months 2 from dispatch of the coordination data, either notify the administration requesting coordination of its agreement to the proposed assignment or, if this is not possible, indicate the reasons for its objection and make such suggestions as it may be able to offer with a view to a satisfactory solution of the problem.
- 1 The calculation methods and the criteria to be employed in evaluating the interference should be based on relevant CCIR Recommendations agreed by the administrations concerned either as a result of Resolution 703 or otherwise. In the event of disagreement on a CCIR Recommendation or in the absence of such Recommendations, the methods and criteria shall be agreed between the administrations concerned. Such agreements shall be concluded without prejudice to other administrations.
- 1166.1 This period may be extended with the agreement of the administration which requested the coordination.

1167 § 27. Either the administration seeking coordination or the Orb-88 administration with which coordination is sought may request additional information which it may require to assess the interference to assignments of the network concerned.

- 1168 Requests to the IFRB for Assistance in Effecting Coordination
- 1169 § 28. (1) An administration seeking coordination may request the Board to endeavour to effect coordination in those cases where:
- 1170

 a) an administration with which coordination is sought under Nos. 1148 to 1154 fails to acknowledge receipt under No. 1162 within thirty days of dispatch of the coordination data;
- b) an administration has acknowledged receipt under
 No. 1162 but fails to give a decision within four
 months of dispatch of the coordination data;
- there is disagreement between the administration seeking coordination and an administration with which coordination is sought as to the acceptable interference; or
- 1173 d) coordination between administrations is not possible for any other reason.
- 1174 (2) In so doing, the administration shall furnish the necessary information to enable the Board to endeavour to effect such coordination.
- 1175 Action to Be Taken by the IFRB
- 1176 § 29. (1) Where the Board receives a request under No. 1170, it shall forthwith send a telegram to the administration concerned requesting immediate acknowledgement.

- [177] (2) Where the Board receives an acknowledgement following its action under No. 1176, or where the Board receives a request under No. 1171, it shall forthwith send a telegram to the administration concerned requesting an early decision in the matter.
- 1178
 (3) Where the Board receives a request under No. 1173, it shall endeavour to effect coordination in accordance with the provisions of Nos. 1148 to 1154. Where the Board receives no acknowledgement of its request for coordination within the period specified in No. 1162, it shall act in accordance with No. 1176.
- 1179 (4) Where necessary, as part of the procedure under Nos. 1169 to 1174, the Board shall assess the interference. In any case, the Board shall inform the administrations concerned of the results obtained.
- 1180 (5) The Board may request additional information which it may require to assess the interference to the services concerned.
- of dispatch of the Board's telegram sent under No. 1176 requesting an acknowledgement, or fails to give a decision in the matter within two months of dispatch of the Board's telegram of request sent under No. 1177, it shall be deemed that the administration with which coordination was sought has undertaken that no complaint will be made in respect of any harmful interference which may be caused by the terrestrial station being coordinated to the service rendered by its earth station.
- 1182 Notification of Frequency Assignments in the Event of Continuing Disagreement
- § 30. In the event of continuing disagreement between an administration seeking to effect coordination and one with which coordination has been sought, the administration seeking coordination shall, except in the cases where the assistance of the Board has been requested, defer the submission of its notice concerning the proposed assignment by six months from the date of the request for coordination, taking into consideration the provisions of Nos. 1230 and 1496.

Section V. Special Assistance by the IFRB

1184	§ 31. (1) If it is requested by an administration, particularly by an administration of a country in need of special assistance, the Board, using such means at its disposal as are appropriate in the circumstances, shall render the following assistance:	
1185	a)	computation of the increases in noise temperatures in accordance with No. 1066;
1186	<i>b)</i>	preparation of diagrams showing the coordination areas as in No. 1113;
1187	c)	any other assistance of a technical nature for completion of the procedures in this Article.
1188	(2) In making a request to the Board under Nos. 1184 to 1187, the administration shall furnish the Board with the necessary	

Orb-88 Multilateral Planning Meeting (MPM), the Board, using such means at its disposal as are appropriate in the circumstances, shall render technical assistance for the completion of the procedures of Section II of this Article. In making such a request this administration shall furnish the Board with all necessary information.

1190 to NOT allocated. 1213

information.

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ARTICLE 12

WARC-92 Notification and Recording in the Master International Frequency Register of Frequency Assignments to Terrestrial Radiocommunication Stations 2, 3, 4, 5

- A.12.1 I The expression frequency assignment, wherever it appears in this Article, shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinafter called the Master Register).
- A.12.2

 Programme A.12.2

 Programme A.12.2

 Prequency Register of frequency assignments to radio astronomy and space radiocommunication stations, see Article 13.
- A.12.3
 Orb-85
 Tor the notification and recording of frequency assignments to terrestrial stations in the frequency bands 11.7 12.2 GHz (in Region 3), 12.2 12.7 GHz (in Region 2) and 11.7 12.5 GHz (in Region 1), so far as their relationship to the broadcasting-satellite service in these bands is concerned, see also Article 15.
- A.12.4
 Orb-88
 Or

A.12.5 WARC-92 5 See Resolution 46 (WARC-92).

Section I. Notification of Frequency Assignments

- 1214 § 1. (1) Any frequency assignment to a fixed, land, broadcasting, radionavigation land, radiolocation land or a standard frequency and time signal station, or to a ground-based station in the meteorological aids service, shall be notified to the International Frequency Registration Board:
- 1214.1

 In the case where a frequency is used by numerous stations under the jurisdiction of the same administration, see Appendix I (Section F, II, Column 5a, paragraphs 3 and 4).
- 1214.2 ² With respect to assignments to broadcasting stations in the bands allocated exclusively to the broadcasting service between 5 950 kHz and i 26 100 kHz, see Article 17.
- a) if the use of the frequency concerned is capable of causing harmful interference to any service of another administration³; or
- 3 The attention of administrations is specifically drawn to the application of the provisions of Nos. 1215 and 1217 in those cases where they make a frequency assignment to a terrestrial station, located within the coordination area of an earth station (see Nos. 1148 to 1154), in a band which terrestrial radiocommunication services share with equal rights with space radiocommunication services in the frequency spectrum above I GHz.
- b) if the frequency is to be used for international radio-
- 1217 c) if it is desired to obtain international recognition of the use of the frequency⁴.
- 1217.1

 4 The attention of administrations is specifically drawn to the application of the provisions of Nos. 1215 and 1217 in those cases where they make a frequency assignment to a terrestrial station, located within the coordination area of an earth station (see Nos. 1148 to 1154), in a band which terrestrial radiocommunication services share with equal rights with space radiocommunication services in the frequency spectrum above 1 GHz.

1218

(2) Similar notice! shall be given when an administration desires to request the assistance of the Board in selecting a frequency assignment to a station of the fixed service in any of the bands allocated exclusively, or on a shared basis, to that service between 3 000 kHz and 27 500 kHz, or when an administration wishes to use for the same type of station a predetermined frequency assignment; in the latter case, the administration shall indicate the reasons on which the request is based together with the possible modifications which could be made to the characteristics of its assignment, and the Board will take account of this information when searching for a satisfactory solution. For this purpose an individual notice shall be drawn up as specified in Section D of Appendix 1. It is recommended that the notifying administration should provide the additional information called for in that Appendix, together with such further information as it may consider appropriate. The procedure to be followed is given in Nos. 1275 to 1304.

1218.1

See Resolution 103.

1219

(3) Similar notice shall be given for any frequency to be used for the reception of mobile stations by a particular land station in each case where one or more of the conditions specified in Nos. 1214 to 1217 are applicable.

1220

(4) Specific frequencies listed in the Preface to the International Frequency List which are prescribed by these Regulations for common use by stations of a given service (for example, international distress frequencies 500 kHz and 2182 kHz, frequencies of ship radiotelegraph stations operating in their exclusive high frequency bands, etc.), shall not be notified to the Board.

1221

§ 2. (1) For any notification under Nos. 1214 to 1217 or 1219 an individual notice for each frequency assignment shall be drawn up as prescribed in Sections A or B of Appendix 1, which specify the basic characteristics to be furnished, according to the case. It is

recommended that the notifying administration should also supply the additional information called for in that Appendix, together with such further information as it may consider appropriate.

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- (2) Notices concerning assignments to stations of the fixed service in the bands allocated to that service between 3 000 kHz and 27 500 kHz that are submitted under Nos. 1214 to 1217 or 1218 shall also indicate the class of operation of the assignment, with the use of the following symbols:
- Symbol A assignment for regular operational use which is not provided by another satisfactory means of telecommunication; or
- Symbol B assignment for use as a standby to some other means of telecommunication; or
- Symbol C assignment for occasional use on a reserve basis and not requiring internationally recognized protection from harmful interference.

1223

(3) When stations of the same service, such as the land mobile service, use a band of frequencies above 28 000 kHz in a specific area or areas, an individual notice should be drawn up, as prescribed in Section C of Appendix I, which specifies the basic characteristics to be furnished, for each frequency on which there are assignments within the band; however, the particulars should relate only to a typical station. This does not apply:

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a) to broadcasting stations:

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b) to other terrestrial stations to which the provisions of Sub-Section IIE of this Article apply:

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c) to other stations of the fixed or mobile service which
operate in the frequency bands listed in Table II of Appendix 28 with equivalent isotropically radiated power
exceeding the corresponding values listed in the table;

1227

- d) to the terrestrial stations in the frequency bands listed in Nos. 2509, 2510 and 2511.
- 1228 § 3. (1) Whenever practicable, each notice under Nos. 1214 to 1217, 1219 or 1223 to 1227 should reach the Board before the date on which the assignment is brought into use. It must reach the Board not earlier than three months before the date on which it is to be brought into use, but in any case not later than thirty days after the date it is actually brought into use.
- 1229 (2) A notice under No. 1218 must reach the Board not earlier than one year before the date on which the requested frequency is to be brought into use.
- 1230
 (3) A notice concerning a frequency assignment to one of the terrestrial stations mentioned in Sub-Section IIE of this Article must reach the Board not earlier than three years and not later than three months before the date on which the assignment is to be brought into use.
- (4) Except for cases covered by Nos. 1218 and 1229 any frequency assignment the notice of which reaches the Board more than thirty days after the notified date of bringing into use, or in the case of a terrestrial station mentioned in Sub-Section IIE of this Article, any frequency assignment the notice of which reaches the Board less than three months before it is brought into use, shall, where it is to be recorded, bear a remark in the Master Register to indicate that it is not in conformity with No. 1228 or 1230. However, such a remark will not be made in the Master Register against an assignment to a terrestrial station which has not been notified under Nos. 1214 to 1217 but which is required to be notified after its entry into use as a result of coordination for or notification of an earth station assignment.

- 1232 § 4. Whatever the means of communication, including telegraph, by which a notice is sent to the Board, it shall be considered complete if it contains at least those appropriate basic characteristics specified in Appendix I.
- 1233 § 5. When a service or regional agreement has been concluded, the Board shall be informed of the details of this agreement.

Section II. Procedure for the Examination of Notices and the Recording of Frequency Assignments in the Master Register

- § 6. Any notice submitted under Nos. 1214 to 1217, 1219 or 1223 to 1227 which does not contain at least those basic characteristics specified in Appendix 1 shall be returned by the Board, by airmail, to the notifying administration with the reasons therefor, unless the information not provided is immediately forthcoming in response to an enquiry of the Board. The Board shall advise the administration by telegram when a notice is returned under this provision.
- § 7. On receipt of a complete notice, the Board shall include the particulars thereof, with the date of receipt, in a weekly circular to be published within a period of forty days after receipt of the notice and sent by airmail to all administrations. When the Board is not in a position to comply with this time-limit, it shall, as soon as possible, so inform the administrations concerned giving the reasons therefor.
- 1236 § 8. The circular shall contain the full particulars of all such notices received since the publication of the previous circular and shall constitute the acknowledgement to each notifying administration of the receipt of the complete notice.

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- 1237 § 9. For the purpose of Nos. 1235 and 1236, notices submitted under No. 1218 in the form of a request for assistance of the Board shall be grouped together and specially identified.
- 1238 § 10. Complete notices shall be considered by the Board in the order of their receipt; however, notices submitted under No. 1218 shall be treated immediately on receipt. The Board may not postpone the formulation of a finding unless it lacks sufficient data to render a decision in connection therewith; moreover, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board, until it has reached a finding with respect to such an earlier notice.

Sub-Section IIA. Procedure to Be Followed in Cases Not Covered by Sub-Sections IIB to IIE of this Article

- § 11. (1) Except for notices referred to in No. 1218, which are dealt with in Nos. 1275 to 1304, the Board shall examine each notice with respect to:
- 1240

 a) its conformity with the Convention, the Table of Frequency Allocations and the other provisions of the Radio Regulations with the exception of those provisions relating to the probability of harmful interference which are the subject of Nos. 1241 and 1242;
- 1241 b) the probability of harmful interference to the service rendered by a station for which a frequency assignment already recorded in the Master Register:
 - 1) bears a date in Column 2a (see No. 1416); or

2) is in conformity with the provisions of No. 1240 and bears a date in Column 2b (see No. 1417), but has not, in fact, caused harmful interference to any frequency assignment with a date in Column 2a or to any assignment in conformity with No. 1240 with an earlier date in Column 2b;

1242

- c) the probability of harmful interference to the service rendered by a station for which a frequency assignment already recorded in the Master Register:
 - is in conformity with the provisions of No. 1240 and was recorded in the Master Register with a date in Column 2d as a result of a favourable finding with respect to No. 1242; or
 - 2) is in conformity with the provisions of No. 1240 and was recorded in the Master Register with a date in Column 2d after an unfavourable finding with respect to No. 1242, but has not, in fact, caused harmful interference to any frequency assignment previously recorded in the Master Register and which is in conformity with No. 1240.
- 1243

 (2) In conducting the examination under No. 1241 or 1242, the Board shall apply protection criteria for class of operation A higher than for class of operation B¹. The Board shall disregard the probability of interference to frequency assignments of class of operation C.
- 1243.1 The different protection criteria to be applied by the Board for classes of operation A and B shall be published in the Technical Standards of the Board (see No. 1001).
- 1244 (3) When the notice relates to a frequency above 28 000 kHz, the Board shall only make the examination specified in No. 1242 at the request of an administration directly concerned or

affected when coordination has not been possible between the administrations involved.

- 1245

 (4) Where appropriate, the Board shall also examine the notice with respect to its conformity with a regional or service agreement. The procedure to be followed in connection with frequency assignments made pursuant to such an agreement shall be as specified in Nos. 1240 and 1241 or 1242 except that the Board shall not consider the question of the probability of harmful interference among the parties to such agreement. Similarly, the Board shall not consider the probability of harmful interference to the assignments of any administration with which coordination has been effected.
- § 12. Depending upon the findings of the Board subsequent to the examination prescribed in Nos. 1240 and 1241 or 1242, and the result of the action undertaken by the Board pursuant to Nos. 1275 to 1278 and 1279, further action shall be as follows:
- § 13. (1) Finding Favourable with Respect to No. 1240 in Cases Where the Provisions of No. 1241 or 1242 Are Not Applicable (see No. 1244).
- 1248

 (2) The assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt of the notice by the Board.
- 1249 § 14. (1) Finding Favourable with Respect to Nos. 1240 and 1241 or 1242.
- 1250
 (2) The assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt of the notice by the Board.
- 1251 (3) However, should the examination show that the probability of harmful interference for certain hours, seasons, or periods

of solar activity is slightly greater than is considered desirable, a remark shall be included in the Master Register to show that there exists a slight probability of harmful interference and hence precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master Register.

- 1252 § 15. (1) Finding Favourable with Respect to No. 1240 but Unfavourable with Respect to No. 1241 or 1242.
- (2) The notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board is able to offer with a view to a satisfactory solution of the problem in respect of those administrations it has identified.
- (3) Should the notifying administration resubmit the notice with modifications which result, after re-examination, in a favourable finding by the Board with respect to No. 1241 or 1242, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.
- (4) The notifying administration may resubmit the notice either unchanged, or with modifications which decrease the probability of harmful interference. In cases where there are no modifications or the modifications do not permit the application of No. 1254 and the Board's finding remains unchanged, should the notifying administration insist on reconsideration of its notice and state that it has brought its assignment into use, the Board shall:
- publish the information contained in the notice received under No. 1255 in the weekly circular indicating all the administrations which are likely to be affected;

b) simultaneously send a telegram to each of the admin-1257 istrations referred to in No. 1256 advising them of the notice and requesting them to inform the Board: 1) if the recorded assignment is still in use and, if so, 1258 whether it is being used with the notified basic characteristics; 2) of any harmful interference that occurs within a 1259 period of two months from the date of publication of the weekly circular referred to in No. 1256; c) take appropriate action in conformity with Nos. 1964 to 1260 1966, if the assignment which is the basis of the unfavourable finding had been submitted under No. 1218; d) record the assignment in the Master Register if, on 1261 expiry of the period referred to in No. 1259, the Board has received no information that harmful interference has occurred; the date to be entered in the appropriate part of Column 2 according to the relevant provision of Section III of this Article shall be the date of receipt by the Board of the original notice; e) immediately return the notice to the notifying adminis-1262 tration informing it of the reported interference and shall make such suggestions as it is able to offer for the elimination of the interference, if the Board receives information that harmful interference has occurred during the two months mentioned in No. 1259. (5) If the Board receives information that harmful inter-1263 ference has occurred after the recording of an assignment under the provisions of No. 1261, the Board shall investigate the matter and,

where appropriate, shall enter a special remark against such an assignment to show that it will not be taken into account when acting

on any later notice.

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(6) If, as a result of the information received under Nos. 1257 to 1259, the Board is able to reach a favourable finding with respect to No. 1241 or 1242 with regard to any assignment recorded under the provisions of Nos. 1255 and 1261, the appropriate changes shall be made in respect of the entry of that assignment in the Master Register. If the finding remains unfavourable, the Board shall enter suitable remarks in the Master Register for the entry or entries concerned which describe the situation as found by the Board.

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(7) Should the notifying administration resubmit the notice with modifications which increase the probability of harmful interference, and should the Board's finding remain unchanged, the resubmitted notice shall be treated under No. 1253.

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§ 16. (1) Finding Unfavourable with Respect to No. 1240 in Cases Where the Provisions of No. 1241 or 1242 Are Not Applicable (see No. 1244).

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(2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 342 of these Regulations, the assignment shall be recorded in the Master Register subject to the provisions of No. 1419 or 1420. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the notice.

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(3) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 342 of these Regulations, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board is able to offer with a view to the satisfactory solution of the problem.

- 1269 § 17. (1) Finding Unfavourable with Respect to No. 1240 in Coses Where the Provisions of No. 1241 or 1242 Are Applicable.
- 1270

 (2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 342 of these Regulations, it shall be examined immediately with respect to No. 1241 or 1242, and the provisions of No. 1271 or 1272 shall be applied, as appropriate.
- 1271
 (3) If the finding is favourable with respect to No. 1241 or 1242, the assignment shall be recorded in the Master Register subject to the provisions of No. 1419. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section III of this Article shall be the date of receipt by the Board of the notice.
- or 1242, the notice shall be returned immediately by airmail to the notifying administration. Should the administration insist on reconsideration of the notice, the frequency assignment shall be recorded, for information only, with an appropriate remark referring to No. 1419.
- 1273

 (5) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 342 of these Regulations, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board is able to offer with a view to a satisfactory solution of the problem.
- 1274 § 18. Procedure to Be Followed in Respect of Notices under No. 1218.
- 1275 (1) In the case of a notice under No. 1218 relating to the selection of a frequency assignment for regular operational use (class

of operation A), the Board shall, as quickly as possible, select an appropriate frequency which shall:

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a) be capable of providing the service required;

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b) be in conformity with Nos. 1240 and 1241 or 1242 as appropriate to ensure a favourable finding:

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c) be free from harmful interference from any assignment recorded in the Master Register which is itself in conformity with No. 1240.

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(2) In the case of a notice submitted under No. 1218 relating to a predetermined frequency, the notifying administration may request the Board, in addition to the examination under Nos. 1240 and 1241 or 1242, to examine the notice to assess the probability of harmful interference to the assignment from assignments recorded in the Master Register. The Board shall advise the notifying administration of the results of the examination and where necessary shall make suggestions to avoid any possible harmful interference to the assignment.

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(3) In the case of difficulty in applying the provisions of Nos. 1275 to 1278 and 1279, the procedure given below shall be followed:

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 a) the Board shall first seek access to one of the least loaded parts of an appropriate band, without considering the possibility of adjustment to any existing recorded assignment;

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 b) if necessary the Board shall consult the administration having sent a notice under No. 1218 as to the possibility of modifying the characteristics of the required assignment;

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c) should action under Nos. 1281 and 1282 fail, and should the requesting administration find the selected frequency

acceptable, the Board shall consider whether the required assignment could be found by suppressing or downgrading an existing recorded assignment. The enquiries to be made in such an event are those described in Section VII of this Article;

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 d) should action under No. 1283 fail, the Board shall then seek alternative means of finding the required assignment in such a way as to involve the minimum necessary modification of the characteristics of any existing recorded assignment;

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e) for the purposes of the action envisaged under No. 1284 the Board shall concentrate its enquiries upon the older recorded assignments for which the Board believes there to be satisfactory alternative means of telecommunications:

1286

the Board, having identified in such a case the minimum modification to the characteristics of an existing recorded assignment that would be needed to accommodate a new assignment requested under No. 1218, shall invoke the relevant provisions of the Convention and shall seek the assistance of the appropriate administration to agree to make, at the appropriate stage, that modification to its recorded assignment;

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g) should action under No. 1286 fail, the Board shall bring to the attention of the administration concerned the fact that in such a case there is then an obligation to reduce the assigned bandwidth, if operationally feasible, or to move the assigned frequency by an amount not exceeding the assigned bandwidth of the recorded frequency assignment, on the condition that no harmful interference is caused to adjacent frequency assignments;

1288 h) the administration concerned shall then either: 1289 1) give its agreement to effect the necessary modification to its existing recorded assignment together with the date upon which this will be effected; or 2) give any reasons why such a modification cannot be 1290 made: 1291 i) in the event of such a case remaining unresolved within three months of the request for an assignment being made under No. 1218, the Board shall publish a report on the matter for the information of all Members of the Union: 1292 j) the Board shall, when appropriate during this procedure, consult the administration requesting an assignment under No. 1218 as to the acceptability of the selected frequency; 1293 k) if, in application of this paragraph, an administration agrees to a change in the basic characteristics of its frequency assignment, that change shall be recorded in the Master Register without change in the original date or dates. (4) Administrations are urged to afford all possible assist-

(4) Administrations are urged to afford all possible assistance through their monitoring stations to help the Board in the successful discharge of its duties under this sub-section.

1295 § 19. (1) Result of the Action of the Board under Nos. 1275 to 1278 Relating to a Request for Assistance under No. 1218.

1296 (2) Having selected a frequency under Nos. 1275 to 1278 the Board shall forthwith submit the selected frequency by telegram for the approval of the notifying administration, and shall make a provisional entry in the Master Register in accordance with No. 1311.

สถาบนวิทยบริการ ชาลงกรณ์มหาวิทยา The date of receipt of the request to the Board under No. 1218 shall be entered in the appropriate part of Column 2.

- 1297
 (3) The notifying administration, on receipt of the telegram mentioned in No. 1296, shall promptly examine the matter and in the event of non-acceptance of the selected frequency shall notify the Board thereof and shall give its reasons for such rejection.
- 1298

 (4) In the circumstances mentioned in No. 1297, the Board shall cancel that entry and inform the administration concerned accordingly. In such a case, if the notifying administration so requests, the Board shall make a further attempt to select an acceptable frequency but the request shall be regarded as a new notice under No. 1218.
- (5) The notifying administration, on accepting a frequency selected by the Board, shall, as soon as possible, inform the Board thereof.
- 1300 (6) If the Board receives no reply within two months to its telegram, sent under No. 1296, seeking approval for the selected frequency, the provisional entry shall be cancelled and the Board shall inform the other administrations accordingly.
- 1301 § 20. (1) Result of the Action of the Board under No. 1280 Relating to a Request for Assistance under No. 1218.
- 1302 (2) Having selected a frequency under No. 1280, and if the necessary modifications to the previously recorded assignment are accepted in accordance with No. 1289, the Board shall treat the selected assignment in accordance with No. 1295.
- (3) Having selected a frequency under No. 1280, if the necessary modification to this previously recorded assignment cannot be made as the result of acting under No. 1290 and if the selected frequency is still acceptable to the requesting administration, the Board shall make an entry in the Master Register in the name of the

requesting administration. The date of receipt of the request sent to the Board under No. 1218 shall be entered in the appropriate part of Column 2.

- (4) Any harmful interference which results from the simultaneous use of both assignments shall be the subject of consultations between the administrations concerned.
- 1305 § 21. (1) Change in the Basic Characteristics of Assignments
 Already Recorded in the Master Register.
- 1306

 (2) A notice of a change in the basic characteristics of an assignment already recorded, as specified in Appendix 1 (except those entered in Columns 2c, 3, 4a and 11 of the Master Register), shall be examined by the Board according to Nos. 1240 and 1241, 1242 or 1244, as appropriate, and the provisions of Nos. 1247 to 1273 inclusive applied. Where the change should be recorded, the assignment shall be amended according to the notice.
- (3) However, in the case of a change in the basic characteristics of an assignment (except a change of the assigned frequency which exceeds half of the frequency band originally assigned, as defined in No. 141) which is in conformity with No. 1240, should the Board reach a favourable finding with respect to No. 1241 or 1242, or find that the change does not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original date in the appropriate part of Column 2. In addition, the date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.
- assignment may be extended on request of the notifying administration by three months. In the case where the administration states that, due to exceptional circumstances, it needs a further extension of

this period, such extension may be provided but it shall in no case exceed six months from the original projected date of bringing into use.

- 1309 § 22. In applying the provisions of the whole of Sub-Sections IIA to IIC, any resubmitted notice which is received by the Board more than six months after the date of its return by the Board shall be considered as a new notice.
- 1310 § 23. (1) Recording of Frequency Assignments Notified Before Being Brought into Use.
- 1311 (2) If a frequency assignment notified in advance of bringing into use has received favourable findings by the Board with respect to Nos. 1240 and 1241 or 1242, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.
- 1312 (3) Within thirty days (see No. 1228) after the date of bringing into use, either as originally notified or as modified in application of No. 1308, the notifying administration shall confirm that the frequency assignment has been brought into use. When the Board is informed that the assignment has been brought into use, the special symbol shall be deleted from the Remarks Column.
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 (4) If the Board does not receive this confirmation within the period referred to in No. 1312, the entry concerned shall be cancelled. The Board shall consult the administration concerned before taking such action.
- 1314 (5) The provisions of Nos. 1311 to 1313 do not apply to frequency assignments which are in conformity with the Allotment Plans appearing in Appendices 25, 26 and 27 Aer2 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

(5) Any notice which makes reference to No. 1719 shall be 1321 recorded provisionally in the Master Register, if the finding with Mob-83 respect to No. 1317 is favourable. In this case the Board shall review the recording after the notifying administration has applied the

procedure of Article 16.

1322 to 1325 SUP Mob-83

1326 (1) Examination of Notices Concerning Frequencies Used Mob-87 for Reception by Coast Radiotelephone Stations in the Bands Allocated Exclusively to the Maritime Mobile Service Between 4000 kHz and 27500 kHz for Ship Radiotelephone Stations (see Nos. 1219 and 1239).

1327 (2) The Board shall examine each notice covered by No. 1326:

1328 a) with respect to the provisions of No. 1240 and in parti-Mob-83 cular those of Appendix 16 and Nos. 4371 and 4374;

> b) in order to determine whether the notified assignment corresponds to a frequency associated, according to Appendix 16, with a frequency allotted to the notifying administration in the Allotment Plan contained in Appendix 25 to these Regulations.

1330 (3) Any frequency assignment for reception by a coast radiotelephone station for which the finding is favourable with respect to Nos. 1328 and 1329 shall be recorded in the Master Register. The date to be entered in Column 2a shall be that determined according to the relevant provisions of Section III of this Article.

1331 (4) Any frequency assignment for reception by a coast radiotelephone station for which the finding is unfavourable with respect to No. 1328 shall be examined with respect to Nos. 1267

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and 1268. The date to be entered in Column 2b shall be that determined according to the relevant provisions of Section III of this Article.

(5) Any notice which has received a favourable finding 1332 with respect to No. 1328 but an unfavourable finding with respect to Mob-87

No. 1329 shall be returned to the notifying administration unless the administration has initiated the procedure of Article 16 in accordance

with No. 1719.

(6) Any notice which makes reference to No. 1719 shall be 1332A recorded provisionally in the Master Register, if the finding with Mob-87 respect to No. 1328 is favourable. In this case the Board shall review the recording after the notifying administration has applied the procedure of Article 16.

> Sub-Section 11C. Procedure to Be Followed for Aeronautical Stations Operating in the Bands Allocated Exclusively to the Aeronautical Mobile Services Between 2 850 kHz and 22 000 kHz

(1) Examination of Notices Concerning Frequency Assign-1333 § 26. ments to Aeronautical Stations in the Aeronautical Mobile (R) Service in the Bands Allocated Exclusively to that Service Between 2850 kHz and 22 000 kHz (see No. 1239).

(2) The Board shall examine each notice covered by 1334 No. 1333 to determine whether:

a) the notice is in conformity with the provisions of 1335

No. 1240;

1336 Mob-87 b) the frequency corresponds to one of the frequencies specified in Column 1 of the Allotment Plan for the aeronautical mobile (R) service contained in Appendix 27 Aer2 (Part II, Section II, Article 2), or the assignment is the result of a permitted change of class of emission and the necessary bandwidth of the new emission is within the channelling arrangement provided for in Appendix 27 Aer2;

- c) the limitations of use set forth in Column 3 of the Plan 1337 have been appropriately observed;
 - d) the notice is in conformity with the technical principles
- 1338 of the Plan set forth in Appendix 27 Aer2; Mob-87
 - e) the area of use is within the boundaries of the Areas as set forth in Column 2 of the Plan.
- (3) A notice which is not in conformity with the provisions 1340 of No. 1335 shall be examined with respect to Nos. 1267 and 1268. The date to be entered in Column 2b shall be determined in accordance with the relevant provisions of Section III of this Article.
- (4) In the case of a notice in conformity with the provisions 1341 of Nos. 1335, 1336 and 1338, but not with those of Nos. 1337 or Mob-87 1339, the Board shall examine whether the protection specified in Appendix 27 Aer2 (Part I, Section IIA, paragraph 5) is afforded to the allotments in the Plan and to assignments already recorded in the Master Register with a favourable finding with respect to this present provision. In doing so, the Board shall assume that the frequency will be used in accordance with the "Sharing conditions between areas" specified in Appendix 27 Aer2 (Part I, Section IIB, paragraph 4).
- (5) Except for cases where No. 1268 applies, all frequency 1342 assignments referred to in No. 1333 shall be recorded in the Master Register according to the findings reached by the Board. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section III of this Article.
- (1) Examination of Notices Concerning Frequency Assign-1343 ments to Aeronautical Stations in the Aeronautical Mobile (OR) Service in the Bands Allocated Exclusively to that Service Between 3025 kHz and 18030 kHz (see No. 1239).

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Mob-83

1344 (2) The Board shall examine each notice covered by No. 1343 to determine whether:

1344A WARC-92 a) the notice is in conformity with the provisions of No. 1240 and those contained in Part II of Appendix 26;

1345 WARC-92 b) the assignment is in conformity with an allotment contained in Part III of Appendix 26;

1346 to 1348 SUP WARC-92

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(3) A notice which is not in conformity with the provisions of No. 1344A shall be examined with respect to Nos. 1267 and 1268. The date to be entered in Column 2b shall be determined in accordance with the relevant provisions of Section III of this Article.

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(4) Any frequency assignment for which the finding is favourable with respect to Nos. 1344A and 1345 shall be recorded in the Master Register. The date to be entered in Column 2a shall be determined in accordance with the relevant provisions of Section III of this Article.

1348C (5) A notice which is in conformity with the provisions of WARC-92 No. 1344A, but not with those of No. 1345, shall be examined with respect to the allotments in Part III of Appendix 26. In so doing, the Board shall apply the technical criteria specified in Part IV of Appendix 26. The date to be entered in Column 2a or 2b shall be determined in accordance with the relevant provisions of Section III of this Article.

1349 WARC-92 SUP

Sub-Section IID. Procedure to Be Followed for Broadcasting Stations
Operating in the Bands Allocated Exclusively to the Broadcasting
Service Between 5 950 kHz and 26 100 kHz

1350 § 28. Frequency assignments to broadcasting stations in the bands allocated exclusively to the broadcasting service between 5 950 kHz and 26 100 kHz shall be dealt with in accordance with the provisions of Article 17.

Sub-Section IIE. Procedure to Be Followed in Cases Where Terrestrial Stations Are in the Same Frequency Band as an Existing Earth Station or One for Which Coordination Has Been Effected or Initiated and Are Within its Coordination Area

1351 § 29. The Board shall examine each notice:

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a) with respect to its conformity with the Convention, the Table of Frequency Allocations and the other provisions of the Radio Regulations with the exception of those provisions relating to the coordination procedure and the probability of harmful interference which are the subject of Nos. 1353 and 1354;

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b) with respect to its conformity with the provisions of Nos.

1148 to 1154 relating to coordination of the use of the frequency assignment with the other administrations concerned:

c) where appropriate, with respect to the probability of harmful interference to the service rendered by an earth receiving station for which a frequency assignment already recorded in the Master Register is in conformity with the provisions of No. 1503 and if the corresponding frequency assignment to the space transmitting station has not, in fact, caused harmful interference to any frequency assignment in conformity with No. 1240 or 1352, as appropriate, previously recorded in the Master Register.

- § 30. Depending on the findings of the Board subsequent to the examination prescribed in Nos. 1352, 1353 and 1354, further action shall be as follows:
- 1356 § 31. (1) Finding Unfavourable with Respect to No. 1352.
- 1357

 (2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 342, and the finding is favourable with respect to No. 1353 or 1354, as appropriate, the assignment shall be recorded in the Master Register subject to the provisions of No. 1420. The date of receipt by the Board of the notice shall be entered in Column 2d.
- or 1354, as appropriate, the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding. Should the notifying administration insist on reconsideration of the notice, the assignment shall be recorded in the Master Register with the understanding that the provisions of No. 1420 shall be applied. The date of receipt by the Board of the original notice shall be entered in Column 2d.
- 1359

 (4) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 342, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board is able to offer with a view to a satisfactory solution of the problem.
- (5) If the notifying administration resubmits the notice with a specific reference to the fact that the station will be operated in accordance with the provisions of No. 342, it shall be treated as a new notice.

1361 § 32. (1) Finding Favourable with Respect to No. 1352.

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(2) Where the Board finds that the coordination procedure mentioned in No. 1353 has been successfully completed with all administrations whose earth stations may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

(3) Where the Board finds that the coordination procedure mentioned in No. 1353 has not been applied, and:

 a) if the notifying administration requests the Board to effect the required coordination, the Board shall take the appropriate action; if the Board's efforts toward securing agreement are successful, it shall so inform the administrations concerned and shall treat the notice in accordance with No. 1362;

b) if the Board's efforts toward securing agreement in application of Nos. 1364 or 1169 to 1174 are unsuccessful, or if, when notifying the assignment, the administration states that it has been unsuccessful and does not request the Board to effect the required coordination, the Board shall examine the notice with respect to the provisions of No. 1354. At the same time, the Board shall so inform the administrations concerned;

c) if the notifying administration does not request the Board to effect the required coordination, the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this action and with such suggestions as the Board is able to offer with a view to a satisfactory solution of the problem.

(4) Where the notifying administration resubmits the notice and the Board finds that the coordination procedure mentioned in No. 1353 has been successfully completed with all administrations whose earth stations may be affected, the assignment shall be

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recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

- 1368 (5) Where the notifying administration resubmits the notice with a request that the Board effect the required coordination, it shall be treated in accordance with the provisions of Nos. 1363, 1364 or 1365. However, in any subsequent recording of the assignment in the Master Register, the date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.
- 1369 § 33. (1) Finding Favourable with Respect to Nos. 1352 and 1354.
- 1370 (2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.
- § 34.. (1) Finding Favourable with Respect to No. 1352 but 1371 Unfavourable with Respect to No. 1354.
- 1372 (2) The notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board is able to offer with a view to a satisfactory solution of the problem.
- 1373 (3) Should the notifying administration resubmit the notice with modifications which result, after re-examination, in a favourable finding by the Board with respect to No. 1354, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.
- 1374 (4) Should the notifying administration resubmit the notice, either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of No. 1373 to be applied, and should that administration

insist on reconsideration of the notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register. However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least four months, counting from the date when both are in service, without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.

provisional entry for that assignment in the Master Register when it is unable to inform the Board about the interference mentioned in No. 1374 because the assignment liable to suffer interference has not yet been brought into service. The Board shall then enter that assignment with a special symbol in the Remarks Column to indicate

its provisional character.

1376 § 35. (1) Changes in the Basic Characteristics of Assignments Already Recorded in the Master Register.

assignment notified under No. 1221 and already recorded, as specified in Appendix 1, Section A or B (except those entered in Columns 2c. 3 and 4a of the Master Register), or a notice under No. 1221 concerning an assignment already recorded under Nos. 1223 to 1227 (Appendix 1, Section C), shall be examined by the Board according to Nos. 1352 and 1353 and, where appropriate, No. 1354, and the provisions of Nos. 1356 to 1374 inclusive applied. Where the change should be recorded, the original assignment shall be amended according to the notice.

(3) However, in the case of a change in the basic characteristics of an assignment which is in conformity with No. 1352, should the Board reach a favourable finding with respect to No. 1353,

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and, where its provisions are applicable, with respect to No. 1354, or find that the change does not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original date in Column 2d. In addition, the date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.

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(4) The projected date of bringing into use of a frequency assignment may be extended on request of the notifying administration by three months. In the case where the administration states that, due to exceptional circumstances, it needs a further extension of this period, such extension may be provided but it shall in no case exceed six months from the original projected date of bringing into use.

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§ 36. In applying the provisions of this sub-section, any resubmitted notice which is received by the Board more than two years after the date of its return by the Board shall be considered as a new notice.

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§ 37. (1) Recording of Frequency Assignments Notified Before Being Brought into Use.

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(2) If a frequency assignment notified in advance of bringing into use has received a favourable finding by the Board with respect to Nos. 1352 and 1353 and, where appropriate, with respect to No. 1354, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.

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(3) Within thirty days after the date of bringing into use, either as originally notified (see No. 1230) or as modified in application of No. 1379, the notifying administration shall confirm that the frequency assignment has been brought into use. When the Board is informed that the assignment has been brought into use, the special symbol shall be deleted from the Remarks Column.

- 1384 (4) If the Board does not receive this confirmation within the period referred to in No. 1383, the entry concerned shall be cancelled. The Board shall consult the administration concerned before taking such action.
- 1385 (5) If, on the expiry of the period specified in No. 1374, the Board is informed that there has been no complaint of harmful interference, it shall delete the symbol entered in application of No. 1375.

Section III. Recording of Dates and Findings in the Master Register

- 1386 § 38. In any case where a frequency assignment is recorded in the Master Register, the finding reached by the Board shall be indicated by a symbol in the appropriate column. In addition, the reasons for reaching an unfavourable finding shall be inserted in the Remarks Column.
- § 39. The procedure for recording dates in the appropriate part of Column 2 of the Master Register which shall be applied according to the frequency bands and services concerned is described in the following Nos. 1388 to 1413 for frequency assignments referred to in Sub-Sections IIA to IIC.

1388 § 40. (1) Frequency Bands: Mob-87

9 - 2850 kHz

3 155 - 3 400 kHz

3 500 - 3 900 kHz in Region 1

3 500 - 4 000 kHz in Region 2

3 500 - 3 950 kHz in Region 3

4 221 - 4 351 kHz

6332.5 - 6501 kHz

8 438 - 8 707 kHz

12 658.5 - 13 077 kHz

16 904.5 - 17 242 kHz

19 705 - 19 755 kHz

22 445.5 - 22 696 kHz

26 122.5 - 26 145 kHz

- 1389

 (2) For any assignment to which the provisions of Nos. 1250, 1251 or 1254 apply, the relevant date shall be entered in Column 2a of the Master Register; however, for class of operation B assignments to stations of the fixed service, the relevant date shall be entered in Column 2b.
- 1390 (3) For any assignment to which the provisions of Nos. 1255, 1265, 1267, 1271 or 1272 apply, the relevant date shall be entered in Column 2b of the Master Register.
- 1391 § 41. (1) Frequency Bands Allocated Exclusively to the Maritime Mob-87 Mobile Service Between 4 000 kHz and 27 500 kHz for Coast Radiotelephone Stations.
- 1392 (2) If the finding is favourable with respect to Nos. 1317 Mob-87 and 1318, the date of 1 July 1989 shall be entered in Column 2a.
- 1393 (3) For all other cases referred to in No. 1315, the date of Mob-87 receipt of the notice by the Board shall be entered in Column 2b.
- (4) For assignments to stations other than radiotelephone coast stations, the relevant date shall be entered in Column 2b (see Nos. 1271 and 1272).
- 1395 § 42. (1) Frequency Bands Allocated Exclusively to the Maritime Mob-87 Mobile Service Between 4000 kHz and 27500 kHz for Ship Radio-telephone Stations.
- 1396 (2) If the finding is favourable with respect to Nos. 1328 Mob-87 and 1329, the date of I July 1989 shall be entered in Column 2a.
- 1397 (3) In all other cases covered by No. 1326, the date of receipt of the notice by the Board shall be entered in Column 2b.

- (4) For assignments other than assignments of frequencies for reception by radiotelephone coast stations, the relevant date shall be entered in Column 2b (see Nos. 1271 and 1272).
- 1399 § 43. (1) Frequency Bands Allocated Exclusively to the Maritime Mobile Service Between 4000 kHz and 27500 kHz for Radiotelegraph Ship Stations (see No. 1220).
- 1400 (2) For assignments to stations other than radiotelegraph ship stations, the relevant date shall be entered in Column 2b (see Nos. 1271 and 1272).
- 1401 § 44. (1) Frequency Bands Allocated Exclusively to the Aeronautical Mobile (R) Service Between 2850 kHz and 22000 kHz.
- 1402 (2) If the finding is favourable with respect to Nos. 1336 to 1339, the date of 5 March 1978 shall be entered in Column 2a.
- (3) If the finding is favourable with respect to No. 1341, the date of 5 March 1978 shall be entered in Column 2b.
- 1404 (4) In all other cases covered by No. 1333, the date of 6 March 1978 shall be entered in Column 2b by the Board.
- 1405 (5) For assignments to stations other than aeronautical stations in the aeronautical mobile (R) service, the relevant date shall be entered in Column 2b (see Nos. 1271 and 1272).
- 1406 § 45. (1) Frequency Bands Allocated Exclusively to the Aeronautical Mobile (OR) Service Between 3 025 kHz and 18 030 kHz.
- 1407 (2) If the finding is favourable with respect to Nos. 1344A warc-92 and 1345, the date of 15 December 1992 shall be entered in Column 2a.
- 1408 (3) If the finding is favourable with respect to No. 1348C, WARC-92 the date of 15 December 1992 shall be entered in Column 2a.

1409 WARC-92 SUP

- 1410 (4) In all other cases covered by No. 1343, the date of WARC-92 16 December 1992 shall be entered in Column 2b.
- 1411 (5) For assignments to stations other than aeronautical ward-92 stations in the aeronautical mobile (OR) service, the relevant date shall be entered in Column 2b (see Nos. 1271 and 1272).
- 1412 § 46. (1) Frequency Bands Between 3950 kHz (4000 kHz in Region 2) and 28 000 kHz Other than Those Allocated Exclusively to the Aeronautical Mobile Service, Maritime Mobile Service, Broadcasting Service or Amateur Service, and Frequency Bands above 28 000 kHz.
- 1413 (2) For any frequency assignment which is to be recorded under the provisions of Section II of this Article, the relevant date shall be entered in Column 2d of the Master Register.
- 1414 § 47. Date to Be Entered in Column 2c.
- The date to be entered in Column 2c shall be the date of bringing into use notified by the administration concerned (see Nos. 1228 to 1231).

Section IV. Categories of Frequency Assignments

1416 § 48. (1) Any frequency assignment which bears a date in Column 2a of the Master Register shall have the right to international protection from harmful interference; so shall class of operation A assignments to stations of the fixed service in the appropriate bands between 3000 kHz and 27500 kHz recorded with a date in Column 2d as a result of a favourable finding with respect to Nos. 1240 and 1242, in particular those resulting from the application of No. 1218.

- (2) Any frequency assignment which bears a date in Column 2b is recorded in the Master Register in order that administrations may take into account the fact that the frequency assignment concerned is in use. This recording shall not give the right to international protection to the frequency assignment concerned, except as provided for in No. 1241, sub-paragraph 2).
- 1418 (3) For frequency assignments having dates in two parts of Column 2, the date in Column 2c is given for information only.
- (4) If harmful interference to the reception of any station whose assignment is in accordance with No. 1240 or 1352 is actually caused by the use of a frequency assignment which is not in conformity with No. 1240 or 1352, the station using the latter frequency assignment shall, on receipt of advice thereof, immediately eliminate this harmful interference.
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 (5) If harmful interference to the reception of any station whose assignment is in accordance with No. 1503 is actually caused by the use of a frequency assignment which is not in conformity with No. 1240 or 1352, the station using the latter frequency assignment shall, on receipt of advice thereof, immediately eliminate this harmful interference.

Section V. Review of Findings

- 1421 § 49. (1) The review of a finding by the Board may be under
 - a) at the request of the notifying administration;
 - b) at the request of any other administration interested in the question, but only on the grounds of actual harmful interference;

- c) on the initiative of the Board itself when it considers this is justified.
- 1422 (2) The Board, in the light of all the data at its disposal, shall review the matter, taking into account No. 1240 or 1352 and Nos. 1241, 1242, 1353 or 1354, as appropriate, and shall render an appropriate finding, informing the notifying administration prior either to the publication of its finding or to any recording action.
- § 50. If a review of an unfavourable finding has been requested by the notifying administration on the grounds of special assistance to meet an urgent and essential need, in a case where harmful interference has been experienced, the Board shall consult immediately the administrations concerned and shall make such suggestions as will facilitate the operation of the assignment of the administration which asked for special assistance; such amendments as result from this consultation shall be made to the Master Register.
- 1424 § 51. (1) After actual use for a reasonable period of an assignment which has been entered in the Master Register on the insistence of the notifying administration, following an unfavourable finding with respect to Nos. 1241, 1242 or 1354, as appropriate, this administration may request the Board to review the finding. Thereupon the Board shall review the matter, first having consulted the administrations concerned.
- 1425 (2) If the finding of the Board is then favourable, it shall enter in the Master Register the changes that are required so that the entry shall appear in the future as if the original finding had been favourable.
- 1426 (3) If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry.
- 1427 § 52. (1) In the event of a deletion or modification of any recorded frequency assignment which had been the cause of an unfavourable finding and had led a later assignment to be recorded

under No. 1255, the Board shall review, and, where appropriate, modify that unfavourable finding with respect to No. 1241 or 1242.

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(2) To provide a basis for the review of an entry in the Master Register made in accordance with No. 1255, the Board shall, when examining the relevant notice, determine the date on which the review is to be made. If by that date no complaint of harmful interference has been received by the administration concerned, the Board shall automatically reverse the original unfavourable finding with respect to No. 1241 or 1242.

Section VI. Maintenance of the Master Register

- 1429 § 53. Modification, Cancellation and Review of Entries in the Master Register.
- 1430 § 54. In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying administration shall inform the Board within three months of such discontinuance, whereupon the entry shall be removed from the Master Register.
- § 55. Whenever it appears to the Board from the information available that a recorded assignment has not been brought into regular operation in accordance with the notified basic characteristics, or is not being used in accordance with those basic characteristics, the Board shall consult the notifying administration and, subject to its agreement, shall either cancel or suitably modify the entry.
- § 56. If, in connection with an enquiry by the Board under No. 1264 or 1431, the notifying administration has failed to supply the Board within three months with the necessary or pertinent information, the Board shall disregard the assignment concerned when acting on any later notice, until such time as it has been informed that

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the assignment is being used as notified, or until it has received the information required. The Board shall make suitable entries in the Remarks Column of the Master Register to indicate the situation, and in particular the period when the assignment was not taken into account by the Board.

- 1433 § 57. (1) Periodic Examination of the Master Register.
- 1434 (2) The Board shall institute a long-term programme of periodic reviews of each section of the Master Register with the aim of improving and maintaining its accuracy.
- the Board shall send to each administration, for revision and return, a national extract of the Master Register relating to the particular section under review. The Board shall at the same time draw the attention of administrations to any assignment to a station in the fixed service in frequency bands between 3 000 kHz and 27 500 kHz for which other means of telecommunication are believed to be available.
- (4) Administrations shall, having regard to the need to improve and maintain the accuracy of the Master Register, cooperate in these periodic reviews by notifying the deletion of any unused assignment and, where appropriate, the modification of other entries.
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 (5) The Board shall include in its annual report to administrations a section relating to the work done under the provisions of the present paragraph 57, the results achieved, and the programme for the following year.

Section VII. Studies and Recommendations

1438 § 58. (1) If it is requested by any administration, particularly by an administration of a country in need of special assistance, the Board, using such means at its disposal as are appropriate in the

circumstances, shall conduct a study of the following problems of frequency utilization:

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a) in cases arising under No. 1252 as to a possible alternative frequency assignment to avoid probable harmful interference;

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 in cases where a need arises for additional frequency assignments within a specified portion of the radio spectrum;

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 c) in cases where, due to harmful interference, two or more frequencies of the same order of magnitude are being used alternately to maintain communication on a circuit requiring only one frequency of that order;

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d) in cases of alleged contravention or non-observance of these Regulations, or of harmful interference.

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(2) The Board shall thereupon prepare and forward to the administrations concerned a report containing its finding and recommendations for the solution of the problem.

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(3) On receiving the Board's recommendations for the solution of the problem, an administration shall promptly acknowledge the receipt by telegram and shall subsequently indicate the action it intends to take. In cases when the Board's suggestions or recommendations are unacceptable to the administrations concerned, further efforts should be made by the Board to find an acceptable solution to the problem.

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§ 59. If the Board finds, in particular following a request from an administration of a country in need of special assistance, that a change in the basic characteristics, including a change of frequency within a specific frequency range, of one or more assignments in conformity with the provisions of No. 1240 will:

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a) accommodate a new assignment; or

- b) facilitate the solution of a problem of harmful interference; or
- 1448 c) otherwise facilitate the more effective use of a particular portion of the radio spectrum; and
- if such change is acceptable to the administration or administrations concerned, the change in basic characteristics shall be recorded in the Master Register without change in the original date or dates.
- § 60. In a case where, as a result of a study, the Board submits to one or more administrations suggestions or recommendations for the solution of a problem, and where no answer has been received from one or more of these administrations within a period of thirty days, the Board shall consider that the suggestions or recommendations concerned are unacceptable to the administrations which did not answer. If it was the requesting administration which failed to answer within this period, the Board shall close the study.

Section VIII. Miscellaneous Provisions

- 1451 § 61. The provisions of Sections V, VI (except No. 1430) and VII

 Mob-87 of this Article shall not be applied to frequency assignments which

 are in conformity with the Allotment Plans contained in Appendices 25, 26 and 27 Aer2 to these Regulations.
- 1452 § 62. (1) If it is requested by any administration, particularly by an administration of a country in need of special assistance, the Board using such means at its disposal as are appropriate in the circumstances, shall render the following assistance:
 - a) verification of the diagram showing the coordination area referred to in No. 1113;
 - b) computation of the interference, as referred to in Nos. 1164 to 1166;

- c) any other assistance of a technical nature for completion of the procedures in this Article.
- 1453 (2) In making a request to the Board under No. 1452, the administration shall furnish the Board with the necessary information.
- § 63. The Technical Standards of the Board shall be based on the relevant provisions of these Regulations and the Appendices thereto, the decisions of administrative conferences of the Union, as appropriate, the Recommendations of the CCIR, the state of the radio art and the development of new transmission techniques, account being taken of exceptional propagation conditions which may prevail in certain regions (for example, particularly pronounced ducting).
- § 64. (1) The Board shall inform all administrations of its findings and reasons therefor, together with all changes made to the Master Register, through its weekly circular. Such information shall be published within forty-five days of the date of publication of the complete notice in the weekly circular referred to in No. 1235. When the Board is not in a position to comply with the time-limit referred to above it shall, as soon as possible, so inform the administration concerned giving the reasons therefor.
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 (2) The weekly circular of the IFRB shall be published in the working languages of the Union as defined in the Convention. In carrying out the various procedures stipulated in the Radio Regulations, the Board shall use the weekly circular as a means of communicating with administrations to the maximum extent practicable.
- 1457 § 65. The Board shall inform administrations, at appropriate intervals, of the cases of special assistance which were studied under Nos. 1423 and 1438 to 1450 inclusive of these Regulations.

1458 § 66. In case a Member avails itself of the provisions of Article 50 of the Convention, the Board shall, on request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disputes.

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ARTICLE 13

WARC-92

Notification and Recording in the Master International Frequency Register of Frequency Assignments 1 to Radio Astronomy and Space Radiocommunication Stations Except Stations in the Broadcusting-Satellite Service 2, 3, 4, 5

Section I. Notification of Frequency Assignments

- (1) Any frequency assignment to be used for transmission 1488 § 1. or reception by an earth or space station shall be notified to the Board:
- a) if the use of the frequency concerned is capable of 1489 causing harmful interference to any service of another administration; or
- 1 The expression frequency assignment, wherever it appears in A.13.1 this Article, shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinaster called Master Register).
- ² For the notification and recording of frequency assignments to A.13.2 stations in the broadcasting-satellite service and other services in the 014-88 frequency bands 11.7 - 12.2 GHz (in Region 3), 11.7 - 12.5 GHz (in Region 1) and 12.2 - 12.7 GHz (in Region 2), as well as the notification and recording of frequency assignments to feeder-link stations in the fixedsatellite service (Earth-to-space) in the frequency bands 14.5 - 14.8 GHz in Region 1 (see No. 863) and in Region 3, 17.3 - 18.1 GHz in Regions 1 and 3, and 17.3 - 17.8 GHz in Region 2 and other services in these bands, see also Article 15 and Article 15A respectively.
- These procedures may be applicable for earth stations of the A.13.3 earth exploration-satellike service, space research service, space operation 04-48 service and radiodetermination-satellite service intended to be used while in motion or during halts at unspecified points.
- 4 For the application of the provisions of this Article with respect to stations in a space radiocommunication service using frequency bands Orb-88 covered by the fixed-satellite service Allotment Plan, see also Appendix 30B.

⁵ See Resolution 46 (WARC-92). WARC-91

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 if the frequency is to be use for international radiocommunications; or

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if it is desired to obtain international recognition of the use of the frequency.

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(2) Any frequency or frequency band we used for reception by a particular radio astronomy station may be notified if it is desired that such data should be included in the seaster Register.

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(3) When the Board receives from cost administration a notice containing a modification or deletion of a space station assignment already recorded in the Master Register on behalf of a group of administrations, it shall be assumed in the absence of information to the contrary, that the notice of modification or deletion is submitted on behalf of all the agministrations which were associated with the original notification.

1493A Orb-88 (4) A notice submitted in accordance with Nos. 1488 to 1491 and relating to a frequency assignment to a space station for transmission or reception may indicate the characteristics of one or more associated typical earth stations with the area in which they are intended to be operated.

1494 Orb-88 (5) A notice submitted in accordance with Nos. 1488 to 1491 and relating to a frequency assignment to earth stations in a satellite system shall include the technical characteristics either of each earth station, with its location, or of a typical earth station, with an indication of the area within which such typical earth stations are to be operated.

1494A Orb-88 Except for mobile earth stations, individual notification of an earth station is required when:

1494B Orb-88 a) the coordination area calculated in accordance with the method given in Appendix 28 overlaps the territory of another administration in which the frequency band is allocated with equal rights to the terrestrial services; 1494C Ort-88

- the characteristics of the earth station are such that the interference caused or suffered is greater than for any typical earth station coordinated under No. 1060 for the relevant location.
- For any notification under Nos. 1488 to 1492 or 1494, a **§** 2. notice for each frequency assignment shall be drawn up as 1495 prescribed in Appendix 3, the various sections of which specify the basic characteristics to be furnished according to the case. It is recommended that the notifying administration should also supply the additional data called for in Section A of that Appendix, together with such further data as it may consider appropriate.
- §. 3. (1) For a frequency assignment to an earth or space station, 1496 each notice shall be submitted in order to reach the Board not earlier than three years before the date on which the assignment is to be brought into use. The notice shall reach the Board in any case not later than three months before this date, except in the case of assignments in the space research service in bands allocated exclusively to this service or in shared bands in which this service is the sole primary service. In the case of such an assignment in the space research service, the notice should, whenever practicable, reach the Board before the date on which the assignment is brought into use, but it shall in any case reach the Board not later than thirty days after the date it is actually brought into use.
- (2) Any frequency assignment to an earth or space station, 1497 the notice of which reaches the Board after the applicable period specified in No. 1496, shall, where it is to be recorded, bear a mark in the Master Register to indicate that it is not in conformity with No. 1496.

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¹ The notifying administration shall take this limit into account when deciding, where appropriate, to initiate the coordination procedure(s).

Section II. Procedure for the Examination of Notices and the Recording of Frequency Assignments in the Master Register

- 1498 § 4. Any notice which does not contain at least those basic characteristics specified in Appendix 3 shall be returned by the Board, by airmail, to the notifying administration with the reasons therefor, unless the information not provided is immediately forthcoming in response to an enquiry from the Board. The Board shall advise the administration by telegram when a notice is returned under this provision.
- 1499 § 5. On receipt of a complete notice, the Board shall include the particulars thereof, including diagrams, with the date of receipt, in the weekly circular referred to in No. 1235 to be published within a period of forty days after receipt of the notice. When the Board is not in a position to comply with this time-limit, it shall, as soon as possible, so inform the administrations concerned giving the reasons therefor.
- 1500 § 6. The circular shall contain the full particulars of all such notices received by the Board since the publication of the previous circular and shall constitute the acknowledgement to each notifying administration of the receipt of the complete notice.
- 1501 § 7. Complete notices shall be considered by the Board in the order of their receipt, taking into account the time-limit referred to in No. 1583. The Board shall not postpone the formulation of a finding unless it lacks sufficient data to render a decision in connection therewith; moreover, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board until it has reached a finding with respect to such earlier notice.

1502	§ 8.	The Board	Board shall examine each notice:		
1503 Orb-88		the Ta provisi except proced	ble of Frequency ons of the Ra ion of those re ures and the pro which are the su	formity with the y Allocations 1 a adio Regulation elating to the obability of harm abject of the fo	nd the other is, with the coordination interfer-
1504		relatin freque tions	g to the coord ncy assignment concerned, vis-à tations in case	nformity with the lination of the with the other vis space radic s where the p 071 are applicab	use of the administra- communica- rovisions of
1505		relatin freque tions o cation	g to the coord ney assignment concerned, vis-à-	nformity with the dination of the with the other vis terrestrial races where the period of the perio	use of the -administra- -diocommuni
1506		ence, not be shall t for tra	with respect to the probability of harmful interference, when the coordination under No. 1060 has not been successfully effected; this examination shall take into account the frequency assignments for transmission or reception already recorded in the Master Register:		
1507			application of 1543; or	of Nos. 1526,	1531, 1534
					•

^{1503.1} Conformity with the Table of Frequency Allocations implies
Oness the successful application of Article 14, when necessary.

² The examination of such a notice with respect to any other frequency assignment published under No. 1078 but not yet notified shall be deferred until both assignments have been notified; the Board shall then examine them in the order of their publication under No. 1078.

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 in application of No. 1544, if that frequency assignment has not in fact caused harmful interference to any other previously recorded frequency assignment which is in conformity with No. 1503;

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with respect to the probability of harmful interference, when the coordination under No. 1107 has not been successfully effected; this examination shall take into account the frequency assignments for transmission or reception already recorded in the Master Register:

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in application of No. 1248; or

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2) in application of Nos. 1362, 1367, 1370 or 1373; or

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in application of No. 1374 if that assignment has not in fact caused harmful interference to any other previously recorded frequency assignment which is in conformity with No. 1503.

1513 § 9. When, following an examination of a notice with respect to Nos. 1506 to 1508, the Board reaches an unfavourable finding based upon the probability of harmful interference to a recorded assignment for a space station which the Board has reason to believe may not be in regular use, for example, as a consequence of No. 1569, the Board shall forthwith consult the administration responsible for the registered assignment. If it is established, after such consultation and on the basis of the information available, that the recorded assignment has not been in use for two years, it shall not be taken into account for the purposes of the examination in progress or any other further

examination under Nos. 1546 to 1548 conducted before the date on which the assignment is brought back into use. Before the assignment is brought back into use, it shall be subject to further coordination in accordance with the provisions of No. 1060 or further examination by the Board with respect to Nos. 1506 to 1508, as appropriate. The date on which the assignment is brought back into use shall then be entered in the Master Register.

- \$ 10. Depending upon the findings of the Board subsequent to the examination prescribed in Nos. 1503, 1504, 1505, 1506 to 1508 and 1509 to 1512, as appropriate, further action shall be as follows:
- 1515 § 11. (1) Finding Favourable with Respect to No. 1503 in Cases Where the Provisions of Nos. 1504 and 1505 Are Not Applicable (space station on board a non-geostationary satellite).
- 1516 (2) The assignment shall be recorded in the Master Register.

 The date of receipt by the Board of the notice shall be entered in Column 2d.
- 1517 § 12. (1) Finding Unfavourable with Respect to No. 1503.
- 1518

 (2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 342, the assignment shall be recorded in the Master Register on the understanding that the provisions of No. 1560 shall be applied, as appropriate. The date of receipt by the Board of the notice shall be entered in Column 2d.
- (3) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 342, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding together with such suggestions as the Board is able to offer with a view to a satisfactory solution of the problem.

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- § 14. (1) Finding Favourable with Respect to No. 1503 in Cases 1525 Where the Provisions of No. 1504 or 1505 Are Applicable.
- (2) Where the Board finds that the coordination procedures 1526 mentioned in No. 1504 or 1505 have been successfully completed with all administrations whose space or terrestrial radiocommunication stations may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.
- 1527 (3) Where the Board finds that either of the coordination procedures mentioned in Nos. 1504 and 1505 has not been applied and:
- 1528 if the notifying administration requests the Board to effect the coordination, the Board shall take appropriate action; if the Board's efforts toward securing agreement are successful, it shall so inform the administrations concerned and shall treat the notice in accordance with No. 1526;
- if the Board's efforts toward securing agreement in Orb-88 application of No. 1528 or Nos. 1089 to 1094 or Nos. 1130 to 1135 are unsuccessful, the Board shall examine the notice with respect to the provisions of Nos. 1506 to 1508 and Nos. 1509 to 1512, as appropriate. At the same time, the Board shall so inform the administrations concerned;
- 1530 if the notifying administration does not request the Board to effect the required coordination, the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this action together with such suggestions as the Board is able to offer with a view to a satisfactory solution of the problem.
- 1530A (4) Where the notifying administration states that it has been unsuccessful in the application of the coordination pro-Orb-88 cedures mentioned in Nos. 1504 and 1505, the Board shall examine the notice with respect to the provisions of Nos. 1506 to 1508 and Nos. 1509 to 1512, as appropriate. At the same time, the Board shall so inform the administrations concerned.

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- (5) Where the notifying administration resubmits the notice and the Board finds that the coordination procedures mentioned in Nos. 1504 and 1505 have been successfully completed with all administrations whose space or terrestrial radiocommunication stations may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.
- Orb-88 with a request that the Board effect the required coordination under No. 1060 or 1107, it shall be treated in accordance with the provisions of Nos. 1527 and either 1528 or 1529. However, in any subsequent recording of the assignment, the date of receipt by the Board of the resubmitted notice shall be entered in the Remarks
 - 1533 § 15. (1) Finding Favourable with Respect to Nos. 1503, 1506 to 1508, and 1509 to 1512 as Appropriate.
 - 1534 (2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.
 - (3) However, should the examination show that the interference and the percentage of time during which it is likely to occur have values slightly greater than those used for assessing the probability of harmful interference (extreme propagation conditions, abnormal atmospheric humidity, etc.), a remark shall be included in the Master Register to show that there may be a slight risk of harmful interference and hence additional precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master Register.

- 1536
 (4) In addition to the examination of a frequency assignment to an earth station under Nos. 1509 to 1512, if there is continuing disagreement, the Board shall examine that frequency assignment with respect to the probability of harmful interference caused to, or caused by, those terrestrial stations for which assignments have been communicated to the Board in application of No. 1126 and are to be brought into use in the next three years.
- 1537 (5) Following the examination under No. 1536, the Board shall, where appropriate:
- 1538 a) inform the administrations concerned of any unfavourable findings;
- 1539 b) enter a remark indicating such an unfavourable finding against the assignment to the earth station recorded in the Master Register;
- 1540 c) record the assignments to terrestrial stations in the Master Register with a remark indicating any unfavourable finding; the date of receipt of the information communicated under No. 1126 shall be entered in Column 2d.
- 1541 § 16. (1) Finding Favourable with Respect to No. 1503 but Unfavourable with Respect to Nos. 1506 to 1508 or 1509 to 1512, as Appropriate.
- 1542 (2) The notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding together with such suggestions as the Board is able to offer with a view to a satisfactory solution of the problem.
- (3) Should the notifying administration resubmit the notice with modifications which result, after re-examination, in a favourable finding by the Board with respect to Nos. 1506 to 1508 or 1509 to 1512, as appropriate, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.

- (4) Should the notifying administration resubmit the notice, 1544 either unchanged, or with modifications which decrease the probability of hurmful interference, but not sufficiently to permit the provisions of No. 1543 to be applied, and should that administration insist upon reconsideration of the notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register. However, this entry shall be made only if the Board is informed that the new assignment has been in use together with the frequency assignment to the station which was the basis for the unfavourable finding for at least four months without any complaint of harmful interference having been received, provided that the earlier assignment has been brought into use within the additional period mentioned in No. 1550. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.
- 1545 § 17. (1) Notices Relating to Radio Astronomy Stations.
- (2) A notice relating to a radio astronomy station shall be examined by the Board with respect to No. 1503 only. Whatever the finding, the assignment shall be recorded in the Master Register with a date in Column 2c. The date of receipt by the Board of the notice shall be recorded in the Remarks Column.
- 1547 § 18. (1) Change in the Basic Characteristics of Assignments Already Recorded in the Master Register.
- 1548

 (2) A notice of a change in the basic characteristics of an assignment already recorded, as specified in Appendix 3 (except the name of the station or the name of the locality in which it is situated or the date of bringing into use), shall be examined by the Board according to No. 1503, and, where appropriate, Nos. 1504, 1505, 1506 to 1508 and 1509 to 1512, and the provisions of Nos. 1515 to 1546 inclusive shall apply. Where the change should be recorded, the recorded assignment shall be amended according to the notice.

- (3) However, in the case of a change in the characteristics of an assignment which is in conformity with No. 1503, should the Board reach a favourable finding with respect to Nos. 1504, 1505, 1506 to 1508 and 1509 to 1512, where appropriate, or find that the changes do not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original date in Column 2d. The date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.
- 1550
 (4) The notified date of bringing into use of the first assignment of a satellite network shall not be later than six years following the date of publication of the special section of the weekly circular referred to in No. 1044. This notified date of bringing into use will be extended at the request of the notifying administration by no more than three years.
- 1551 § 19. In applying the provisions of this Section, any resubmitted notice which is received by the Board more than two years after the date of its return by the Board shall be considered as a new notice.
- 1552 § 20. (1) Recording of Frequency Assignments Notified Before Being Brought into Use.
- 1553

 (2) If a frequency assignment notified in advance of bringing into use has received a favourable finding by the Board with respect to No. 1503 and, where appropriate, Nos. 1504, 1505, 1506 to 1508 and 1509 to 1512, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.
- 1554 (3) Within thirty days after the date of bringing into use, either as originally notified or as modified in application of No. 1550, the notifying administration shall confirm that the frequency assignment has been brought into use. When the Board is informed that the assignment has been brought into use, the special symbol shall be deleted from the Remarks Column.

(4) If the Board does not receive this confirmation within the period referred to in No. 1554, the entry concerned shall be cancelled. The Board shall consult the administration concerned before taking such action.

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(5) In the circumstances described in No. 1544, and as long as an assignment which received an unfavourable finding cannot be resubmitted with a statement relating to operation without interference, the notifying administration may ask the Board to enter the assignment provisionally in the Master Register, in which event a special symbol to denote the provisional nature of the entry shall be entered in the Remarks Column. The Board shall delete this symbol when it receives from the notifying administration, at the end of the period in No. 1544, the information relating to the absence of complaint of harmful interference.

Section III. Recording of Findings in the Master Register

1557 § 21. In any case where a frequency assignment is recorded in the Master Register, the finding reached by the Board shall be indicated by a symbol in the appropriate column. In addition, a remark indicating the reasons for any unfavourable finding shall be inserted in the Remarks Column.

Section IV. Categories of Frequency Assignments

- 1558 § 22. (1) The date in Column 2c shall be the date of putting into use notified by the administration concerned. It is given for information only.
- (2) If harmful interference is actually caused to the reception of any space radiocommunication station whose frequency assignment has been recorded in the Master Register as a result of a favourable finding with respect to Nos. 1503, 1504, 1505, 1506 to 1508 and 1509 to 1512, as appropriate, by the use of a frequency assignment to a space radiocommunication station subsequently recorded in the Master Register in accordance with the provisions of No. 1544, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

(3) If harmful interference to the reception of any station whose assignment is in accordance with Nos. 1240, 1352 or 1503, as appropriate, is actually caused by the use of a frequency assignment which is not in conformity with No. 1503, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

Section V. Review of Findings

§ 23. (1) The review of a finding by the Board may be undertaken:

a) at the request of the notifying administration;

a) at the request of the body of the sample of at the request of any other administration interested in the question, but only on the grounds of actual harmful interference;

on the initiative of the Board itself when it considers this is justified.

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(2) The Board, in the light of all the data at its disposal, shall review the matter, taking into account No. 1503 and, where appropriate, Nos. 1504, 1505, 1506 to 1508 and 1509 to 1512, and shall render an appropriate finding, informing the notifying administration prior either to the publication of its finding or to any recording action.

1566 § 24. (1) After actual use for a reasonable period of an assignment which has been entered in the Master Register on the insistence of the notifying administration, following an unfavourable finding with respect to Nos. 1506 to 1508 or 1509 to 1512, this administration may request the Board to review the finding. Thereupon, the Board shall review the matter, having first consulted the administrations concerned.

(2) If the finding of the Board is then favourable it shall enter in the Master Register the changes that are required so that the entry shall appear in the future as if the original finding had been favourable.

(3) If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry.

Section VI. Modification, Cancellation and Review of Entries in the Master Register

- 1569 § 25. The Board shall, at intervals not exceeding two years, request confirmation from the notifying administration that its assignment has been and will continue to be in regular use in accordance with its recorded characteristics.
- \$ 26. (1) Where the use of a recorded assignment to a space station is suspended for a period of eighteen months, the notifying administration shall, within this eighteen-month period, inform the Board of the date on which such use was suspended and of the date on which the assignment is to be brought back into regular use.
- 1571
 (2) Whenever it appears to the Board, whether or not as a result of action under No. 1570, that a recorded assignment to a space station has not been in regular use for more than eighteen months, the Board shall inquire of the notifying administration as to when the assignment is to be brought back into regular use.
- 1572

 (3) If no reply is received within six months of action by the Board under No. 1571, or if the reply does not confirm that the assignment to a space station is to be brought back into regular use within this six-month limit, a mark shall be applied against the entry in the Master Register. Thereafter, the assignment shall be treated in accordance with No. 1513 as one which has been established as having been out of regular use for two years.
- 1573 § 27. In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying administration shall inform the Board within three months of such discontinuance, whereupon the entry shall be removed from the Master Register.

- 1574 § 28. Whenever it appears to the Board from the information available that a recorded assignment has not been brought into regular operation in accordance with the notified basic characteristics, or is not being used in accordance with those basic characteristics, the Board shall consult the notifying administration and, subject to its agreement, shall either cancel, or suitably modify, or retain the basic characteristics of the entry.
- 1575 § 29. If, in connection with an inquiry by the Board under No. 1574, the notifying administration has failed to supply the Board within three months from the date of the enquiry with the necessary or pertinent information, the Board shall make suitable entries in the Remarks Column of the Master Register to indicate the situation.

Section VII. Studies and Recommendations

- 1576 § 30. (1) If it is requested by any administration, the Board, using such means at its disposal as are appropriate in the circumstances, shall conduct a study of cases of alleged contravention or non-observance of these Regulations, or of harmful interference.
- 1577 (2) The Board shall thereupon prepare and forward to the administrations concerned a report containing its findings and recommendations for the solution of the problem.
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 (3) On receiving the Board's recommendations for the solution of the problem, an administration shall promptly acknowledge the receipt by telegram and shall subsequently indicate the action it intends to take. In cases when the Board's suggestions or recommendations are unacceptable to the administrations concerned, further efforts should be made by the Board to find an acceptable solution to the problem.

\$31. In a case where, as a result of a study, the Board submits to one or more administrations suggestions or recommendations for the solution of a problem, and where no answer has been received from one or more of these administrations within a period of four months, the Board shall consider that the suggestions or recommendations concerned are unacceptable to the administrations which did not answer. If it was the requesting administration which failed to answer within this period, the Board shall close the study.

Section VIII. Miscellaneous Provisions

- 1580 § 32. (1) If it is requested by any administration, particularly by an administration of a country in need of special assistance, the Board, using such means at its disposal as are appropriate in the circumstances, shall render any assistance of a technical nature in the application of the provisions of this Article.
- 1581 (2) In making a request to the Board under No. 1580, the administration shall furnish the Board with the necessary information.
- 1582 § 33. The Technical Standards of the Board shall be based on the relevant provisions of these Regulations and the Appendices thereto, the decisions of administrative conferences of the Union, as appropriate, the Recommendations of the CCIR, the state of the radio art and the development of new transmission techniques, account being taken of exceptional propagation conditions which may prevail in certain regions (for example, particularly pronounced ducting).
- 1583 § 34. The Board shall inform all administrations of its findings and reasons therefor, together with all changes made to the Master Register, through its weekly circular. Such information shall be published within forty-five days of the date of publication

of the complete notice in the weekly circular referred to in No. 1235. When the Board is not in a position to comply with the time-limit referred to above it shall, as soon as possible, so inform the administration concerned giving the reasons therefor.

1584 § 35. In case a Member avails itself of the provisions of Article 50 of the Convention, the Board shall, on request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disputes.

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ARTICLE 14

Supplementary Procedure to Be Applied in Cases Where a Footnote in the Table of Frequency Allocations Requires an Agreement with an Administration

- 1610 § 1. (1) Before an administration notifies to the Board a frequency assignment in accordance with any footnote in the Table of Frequency Allocations which makes reference to this Article, it shall obtain the agreement of any other administration whose services may be affected. In the case of a footnote concerning a space radiocommunication service, this procedure may be initiated before or at the same time as the application of the provisions of Article 11.
- (2) The administration seeking such an agreement shall, sufficiently early before the planned date of putting the assignment into service, send to the Board:

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- a) for terrestrial radiocommunication services, the basic characteristics of the planned assignment listed in the appropriate section of Appendix 1;
- 1613

 b) for space radiocommunication services, the characteristics of the planned assignment listed in Appendix 4, or Appendix 3 when the latter are available 1.
- 1614 (3) The administration seeking agreement may, when sending its information to the Board, also identify those other administrations that are believed to have services which may be affected.
- 1613.1

 1 The information in Appendix 3 or 4 submitted to the Board under Article 11 may also be used for the purpose of this procedure. When the Appendix 4 information is submitted for an assignment to a geostationary-satellite network, the administration seeking agreement under this Article shall also submit the information required for the application of Appendix 29.

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- 1633
 (4) In order to enable the procedure to be completed in Mob-87 good time before notification under No. 1214, the administrations should communicate the above information not later than six months before the proposed date of bringing the assignment into use.
- 1634 § 2. In cases where the Board finds that a basic characteristic or any of the additional characteristics is missing, it shall return the request by airmail, stating the reason, unless the information not provided is immediately forthcoming in response to an enquiry of the Board.
- 1635 § 3. The Board shall examine the proposed use with respect to assignments to stations of other services to which the band 517.5-518.5 kHz is allocated, notified under No. 1214 at an earlier date, and shall identify the administrations whose assignments are likely to be affected.
- 1636 § 4. The Board shall, within 45 days of the receipt of the Mob-87 complete information, publish it in a special section of its weekly circular indicating any coordination already effected and the names of administrations identified in application of No. 1635. The Board shall communicate a copy of this publication to the International Maritime Organization (IMO), the International Hydrographic Organization (IHO), and the World Meteorological Organization (WMO), requesting them to communicate to the administrations concerned, with a copy to the Board, any information which may assist in reaching agreement on coordination.
- 1637 § 5. On expiry of a period of four months from the date of Mob-87 publication of the information in the special section, the administration responsible for the assignment should notify it to the Board in accordance with No. 1214, indicating the names of administrations with which agreement has been reached and those which have signified their disagreement.

1619A
Orb-88
Orb-88
(4) When an administration intends to bring into use a frequency assignment to a space radiocommunication station, the agreement of an administration having an existing or planned space radiocommunication station may be required with respect to the assignments of this administration:

1619B Orb-88

- a) which are recorded in the Master Register, in conformity with No. 1503; or
- 1619C Orb-88
- b) which are notified to the Board;
- 1619D Orb-88
- c) for which information under No. 1042 has been received by the Board; or
- 1619E Orb-88
- d) for which the procedure of this Article has been initiated.
- 1620 § 4. The administration requesting agreement under Nos. 1611 to 1613 and the administration responding under No. 1617 shall together 2 make every possible effort to resolve the problem before the date of bringing into use of the planned assignment.
- 1621 § 5. Either administration may request from the other additional information which may be required to resolve the problem. A copy of such a request and of any information given in response shall be sent to the Board.

1619D.1

1 The administration having such an assignment is requested to communicate as soon as possible the Appendix 3 information or, in the case of a geostationary-satellite network, any information in addition to that communicated in accordance with Appendix 4 which is necessary for the application of Appendix 29.

1620.1

In the absence of appropriate CCIR Recommendations or IFRB Technical Standards, the technical criteria to be used in such a case shall be agreed between the administrations concerned.

- 1622 § 6. Either administration may request the assistance of the Board in an attempt to resolve the problem.
- 1623 § 7. Following resolution of the problem, the administration which sought agreement shall inform the Board to that effect.
- 1624 § 8. An administration having sought agreement under Nos. 1611 to 1613 and having received no response under No. 1617 from any administration shall inform the Board thereof and shall then be regarded as having successfully completed the procedure of this Article.
- 1625 § 9. An administration having sought agreement under Nos. 1611 to 1613, having received one or more responses under No. 1617 and having informed the Board under No. 1623 of the resolution of the problem, shall be regarded as having obtained agreement in accordance with the relevant footnote in the Table of Frequency Allocations.
- 1626 § 10. The Board, following receipt of advice under No. 1624 or 1625 as to the completion of this procedure, shall publish this information in the appropriate special section of the weekly circular.
- 1627 § 11. An administration seeking agreement or an administration with which agreement is sought or any other administration whose services might be affected may request the assistance of the Board in applying any of the steps of this procedure, particularly in:
- 1628 a) identifying administrations whose services might be
- 1629 b) evaluating the levels of interference;
- 1630 c) defining, with the agreement of the administrations concerned, the technical criteria to be used 1.

^{1630.1} In the absence of appropriate CCIR Recommendations or IFRB Technical Standards, the technical criteria to be used in such a case shall be agreed between the administrations concerned.

1638 § 6. Upon receipt of the notice, the Board shall request those Mon-87 administrations named in the special section which have not communicated their agreement or disagreement with respect to the proposed use to signify within a period of 30 days their decision on the matter.

1639 § 7. An administration which does not reply to the Board's request made under No. 1638 or fails to signify a decision on the matter shall be deemed to have undertaken:

1640 Mob-87 a) that no complaint will be made in respect of any harmful interference which may be caused to its stations by the proposed use;

1641 Mob-87 b) that its stations will not cause harmful interference to the proposed use.

1642 § 8. When examining the proposed use in accordance with Mob-87 Article 12, the Board shall apply the provisions of No. 1245, except with respect to those assignments for which the administration responsible has signified its disagreement with respect to the proposed use.

1643 § 9. The Board shall examine the notified assignments in accordance with No. 1241 on the basis of its technical standards and shall record them in accordance with the pertinent provisions of Article 12. The recording shall contain symbols reflecting the result of the application of this procedure.

1644 § 10. The Board shall, at appropriate intervals, update and Mob-87 publish the data referred to in No. 1637 in a special list in an appropriate format.

1645 to

NOT allocated.

1655

ARTICLE 15

Orb-85

Coordination, Notification and Recording of Frequency
Assignments to Stations of the Broadcasting-Satellite Service
in the Frequency Bands 11.7 - 12.2 GHz (in Region 3),
12.2 - 12.7 GHz (in Region 2) and 11.7 - 12.5 GHz (in
Region 1) and to the Other Services to Which these
Bands Are Allocated, so far as their Relationship
to the Broadcasting-Satellite Service in

these Bands Is Concerned

1656 Orb-85 The provisions and associated Plans for the broad-casting-satellite service in the frequency bands 11.7 - 12.5 GHz (in Region 1), 12.2 - 12.7 GHz (in Region 2) and 11.7 - 12.2 GHz (in Region 3), as contained in Appendix 30 (Orb-85) to the Radio Regulations, shall apply to the assignment and use of frequencies by stations of the broadcasting-satellite service in these bands and to the stations of other services to which these bands are allocated so far as their relationship to the broadcasting-satellite service in these bands is concerned. For the broadcasting-satellite service in Region 2, Resolution 42 (Orb-85) is also applicable.

1657.

to

NOT allocated.

1667

ARTICLE 15A

Orb-88

Coordination, Notification and Recording of Frequency
Assignments to Stations in the Fixed-Satellite Service
(Earth-to-Space) in the Frequency Bands 14.5 - 14.8 GHz
(in Regions 1 and 3), 17.3 - 18.1 GHz (in Regions 1 and 3)
and 17.3 - 17.8 GHz (in Region 2) Providing Feeder Links
for the Broadcasting-Satellite Service and also to Stations
of Other Services to Which these Bands are Allocated, so far as their
Relationship to the Fixed-Satellite Service (Earth-to-Space)
in these Bands Is Concerned

1668 Orb-88 The provisions and associated Plans for feeder links associated with the broadcasting-satellite service, utilizing the fixed-satellite service (Earth-to-space) in the frequency bands 14.5-14.8 GHz (in Regions 1 and 3), 17.3-18.1 GHz (in Regions 1 and 3) and 17.3-17.8 GHz (in Region 2), as contained in Appendix 30A (Orb-88), shall apply to the assignment and use by feeder links of frequencies in this band and to stations of other services to which these bands are allocated so far as the relation-ship of these other services to the fixed-satellite service (Earth-to-space) in these bands is concerned. For feeder links in the fixed-satellite service for the broadcasting-satellite service in Region 2, Resolution 42 (Rev. Orb-88) is also applicable.

1669

to NO

1681

NOT allocated.

Resolution No. 2

สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

RESOLUTION No. 2

Relating to the Equitable Use, by All Countries, with Equal Rights, of the Geostationary-Satellite Orbit and of Frequency Bands for Space Radiocommunication Services

The World Administrative Radio Conference, Geneva, 1979,

considering .

that all countries have equal rights in the use of both the radio frequencies allocated to various space radiocommunication services and the geostationary-satellite orbit for these services;

taking into account

that the radio frequency spectrum and the geostationary-satellite orbit are limited natural resources and should be most effectively and economically used;

having in mind

that the use of the allocated frequency bands and fixed positions in the geostationary-satellite orbit by individual countries or groups of countries can start at various dates depending on the requirements and readiness of technical facilities of countries;

¹ Replaces Resolution No. Spa2 - 1 of the World Administrative Radio Conference for Space Telecommunications, Geneva, 1971.

resolves

- 1. that the registration with the IFRB of frequency assignments for space radiocommunication services and their use should not provide any permanent priority for any individual country or groups of countries and should not create an obstacle to the establishment of space systems by other countries;
- 2. that, accordingly, a country or a group of countries having registered with the IFRB frequencies for their space radiocommunication services should take all practicable measures to realize the possibility of the use of new space systems by other countries or groups of countries so desiring;
- 3. that the provisions contained in paragraphs 1 and 2 of this Resolution should be taken into account by the administrations and the permanent organs of the Union.



Resolution No. 4

สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

RESOLUTION No. 4 (Rev.Orb-88)

Period of Validity of Frequency Assignments to Space Stations Using the Geostationary-Satellite Orbit 1

The World Administrative Radio Conference on the Use of the Geostationary-Satellite Orbit and the Planning of Space Services Utilizing It (Second Session – Geneva, 1988),

considering

- a) that rational and efficient use must be made of the frequency spectrum and the geostationary-satellite orbit and that account should be taken of the provisions of Resolution 2 of the World Administrative Radio Conference, Geneva, 1979, relating to the use by all countries, with equal rights, of frequency bands for space radiocommunication services;
- b) that limiting the period of validity of frequency assignments to space stations using the geostationary-satellite orbit is a concept which could promote the attainment of these objectives;
- c) that amortizing the considerable investments made in connection with the development of space radiocommunications is a particularly heavy burden for all administrations and that these investments should be spread over a predetermined period;
- d) that efforts should be made to encourage administrations in a position to do so to develop techniques designed to improve the utilization of the frequency spectrum and the geostationary-satellite orbit with a view to increasing the total radiocommunication facilities available to the world community;

This Resolution does not apply to the frequency bands covered by the Allotment Plan as contained in Appendix 30B.

- e) that it would be advantageous to introduce an experimental procedure to gain experience from application of the new concept of notifying the period of validity of an assignment in space radiocommunication, but that it is not desirable to impose on administrations a statutory period identical in all cases but that on the contrary administrations should be left to propose the period of validity themselves in the light of their requirements and of the common interest;
- f) that the present Conference has reviewed this Resolution and decided that more time is required in its application before it can be properly assessed;

resolves

- 1. that, until this Resolution is reviewed by the next competent world administrative radio conference, frequency assignments to space radiocommunication stations located on the geostationary orbit shall be dealt with as follows:
 - 1.1 a frequency assignment to a space station ¹ on a geostationary satellite shall be deemed definitively discontinued after the expiry of the period of operation shown on the assignment notice, reckoned from the date on which the assignment was brought into service. This period shall be limited to that for which the satellite network was designed. The Board shall then invite the notifying administration to take steps to cancel the assignment. If the Board receives no reply within three months following the expiry of the period of operation, it shall insert a symbol in the Remarks Column of the Master Register to indicate that the assignment is not in conformity with this Resolution;

¹ The expression "space station" may apply to more than one satellite provided that only one satellite is in operation at any particular moment and that the stations installed on board successive satellites have identical basic characteristics.

1.2 if a notifying administration which wishes to extend the period of operation originally shown on the assignment notice of a frequency assignment of an existing space station informs the Board accordingly more than three years before the expiry of the period in question and if all other basic characteristics of that assignment remain unchanged, the Board shall amend as requested the period of operation originally recorded in the Master Register and publish that information in a special section of the weekly circular:

1.3 if, at least three years before the expiry of the period of operation recorded in the Master Register of a frequency assignment to an existing space station, an administration initiates the coordination procedure specified in No. 1060 to bring into service a new space station using the same assigned frequency and the same orbital position but with different technical characteristics, and if the Board finds after the notification that the new assignment conforms with the provisions of No. 1503 and does not increase, in relation to the preceding assignment, the probability of interference to the detriment of a frequency assignment recorded in the Master Register or involved in the coordination procedure, the new assignment shall be given a favourable finding and shall be entered in the Master Register;

1.4 a notifying administration which wishes to modify a basic characteristic of a frequency assignment of a space station ¹ recorded in the Master Register shall initiate, in any case other than those covered by paragraphs 1.2 and 1.3, the appropriate modification procedure in accordance with the provisions of Nos. 1547 to 1551;

2. that, for the application of the provisions of paragraph 1.1 above, the information concerning the period of validity of frequency assignments to space stations shall be notified in addition to that contained in Appendices 3 and 4 to the Radio Regulations:

¹ The expression "space station" may apply to more than one satellite provided that only one satellite is in operation at any particular moment and that the stations installed on board successive satellites have identical basic characteristics.

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3. that the application of this Resolution shall not prejudge in any way the decisions of future administrative radio conferences;

invites the next competent world administrative radio conference

to take cognizance of the results of the application of this Resolution and take action, as appropriate;

instructs the Secretary-General

to bring this Resolution to the attention of the Administrative Council.

Appendix 29

สถาบันวิทยบริการ จฬาลงกรณ์มหาวิทยาลัย

APPENDIX 29 Orb-88

Method of Calculation for Determining if Coordination is Required Between Geostationary-Satellite Networks Sharing the Same Frequency Bands

1. Introduction

The method of calculation for determining if coordination is required under provision No. 1060 is based on the concept that the noise temperature of a system subject to interference increases as the level of the interfering emission increases. It can, therefore, be applied irrespective of the modulation characteristics of these satellite networks, and of the precise frequencies used.

In this method, the apparent increase in the equivalent satellite link noise temperature resulting from an interfering emission of a given system is calculated (see § 2 below) and the ratio of this increase to the equivalent satellite link noise temperature, expressed as a percentage, is compared to a threshold value (see § 3 below).

 Calculation of the apparent increase in equivalent noise temperature of the satellite link subject to an interfering emission

Two possible cases are considered:

- Case 1: wanted and interfering networks share one or more frequency bands, each in the same direction of transmission;
- Case II: wanted and interfering networks share one or more frequency bands, each in opposite directions of transmission (bidirectional use).

These two cases cover all relative satellite positions from closely-spaced to near-antipodal positions.

2.1 Parameters

Let A be a satellite link of network R associated with satellite S and A' be a satellite link of network R' associated with satellite S'. The symbols relating to satellite link A' bear primes, those relating to satellite link A do not bear primes.

The parameters are defined as follows (for satellite link A):

- T: the equivalent satellite link noise temperature, referred to the output of the receiving antenna of the earth station (K);
- the receiving system noise temperature of the space station, referred to the output of the receiving antenna of the space station (K);
- the receiving system noise temperature of the earth station, referred to the output of the receiving antenna of the earth station (K);
- ΔT: apparent increase in the receiving system noise temperature of the satellite S, caused by an interfering emission, referred to the output of the receiving antenna of this satellite (K);
- ΔT_e : apparent increase in the receiving system noise temperature of the earth station e_R , caused by an interfering emission, referred to the output of the receiving antenna of this station (K);
- p₂: maximum power density per Hz delivered to the antenna of satellite S (averaged over the worst 4 kHz band for a carrier frequency below 15 GHz or over the worst 1 MHz band above 15 GHz) (W/Hz);
- g₃(η): transmitting antenna gain of satellite S in the direction η (numerical power ratio);

- η_A: direction, from satellite S, of the receiving earth station e_R of satellite link A;
- η_e.: direction, from satellite S, of the receiving earth station e'_R of satellite link A';

Note: The product p_s $g_s(\eta_{e^s})$ is the maximum e.i.r.p. per Hz of satellite S in the direction of the receiving earth station e'_R of satellite link A'.

- η_s : direction, from satellite S, of satellite S';
- p_c: maximum power density per Hz delivered to the antenna of the transmitting earth station e_T (averaged over the worst 4 kHz band for a carrier frequency below 15 GHz or over the worst 1 MHz band above 15 GHz) (W/Hz);
- g₂(δ): receiving antenna gain of satellite S in the direction δ (numerical power ratio):
- δ_A : direction, from satellite S, of the transmitting earth station e_T of satellite link A;
- δ_e : direction, from satellite S, of the transmitting earth station e'_T of satellite link A';
- δ,: direction, from satellite S, of satellite S';
- θ_t: topocentric angular separation in degrees between the two satellites ¹, taking the longitudinal station-keeping tolerances into account:

Note: Only the topocentric angle θ_1 should be used in dealing with Case I.

Annex I.

θ_g: geocentric angular separation in degrees between the two satellites, taking the longitudinal station-keeping tolerances into account;

Note: Only the geocentric angle θ_g should be used in dealing with Case II.

- $g_1(\theta_r)$: transmitting antenna gain of the earth station e_T in the direction of satellite S' (numerical power ratio);
- g₄(θ₁): receiving antenna gain of the earth station e_R in the direction of satellite S' (numerical power ratio):
- k: Boltzmann's constant (1.38 \times 10⁻²³ J/K);
- I_d: free-space transmission loss ¹ on the down-link (numerical power ratio), evaluated from satellite S to the receiving earth station e_R for satellite link A;

Note: The free-space transmission loss on any down-link evaluated from the satellites S or S' to the receiving earth stations e_R or e'_R is considered to be equal to I_d .

 l_{μ} : free-space transmission loss ton the up-link (numerical power ratio), evaluated from the earth station e_T , to satellite S for satellite link A;

Note: The free-space loss on any up-link evaluated from the earth stations e_T or e'_T to the satellite S or S' is considered to be equal to l_u .

I_x: free-space transmission loss ¹ on the inter-satellite link (numerical power ratio), evaluated from satellite S' to satellite S:

Annex II.

y: transmission gain of a specific satellite link subject to interference evaluated from the output of the receiving antenna of satellite S to the output of the receiving antenna of the earth station e_R (numerical power ratio, usually less than 1).

2.2 General method

In the following equations, the frequency to be used for the calculation of l_d , l_u , and l_z is the average frequency of the band common to both networks in the direction considered. If, in a given direction, there is no overlap of the assigned frequency bands of the two networks, the corresponding value $(\Delta T_z \text{ or } \Delta T_c)$ is taken to be equal to zero. For cases where the Appendix 3 data have not been published, the assigned frequency band for that network shall be considered as being the frequency range as provided for in Appendix 4.

2.2.1 Case I - Wanted and interfering networks sharing the same frequency band in the same direction of transmission

The gains $g_i(\theta_i)$ and $g_4(\theta_i)$ are those of the earth stations concerned. When neither measured data nor a relevant CCIR Recommendation accepted by the administrations concerned are available the radiation patterns set out in Annex III should be used.

2.2.1.1 Simple frequency-changing transponder on board the satellite

The parameters ΔT_s and ΔT_s are given by the following equations:

$$\Delta T_{s} = \frac{p_{c}' g_{1}'(\theta_{r}) g_{2}(\delta_{c}\cdot)}{k l_{u}}$$
 (1)

$$\Delta T_c = \frac{p_s' g_3' (\eta_c) g_4 (\theta_t)}{k l_d}$$
 (2)

The symbol ΔT will be used to denote the apparent increase in the equivalent noise temperature for the entire satellite link referred to the output of the receiving antenna of the receiving earth station e_R due to the interfering emission from link A'.

This increase is the result of the interfering emissions entering at both the satellite and the earth station receiver of link A and can accordingly be expressed as:

$$\Delta T = \gamma \Delta T_s + \Delta T_c \tag{3}$$

Hence,

$$\Delta T = \gamma \frac{p_e' g_1'(\theta_i) g_2(\delta_{e'})}{kl_u} + \frac{p_x' g_1'(\eta_e) g_4(\theta_i)}{kl_d}$$
(4)

An example calculation for the application of the method of this Appendix in Case I is given in Annex IV.

In the same way, the increase $\Delta T'$ in the equivalent noise temperature for the entire satellite link, referred to the output of the receiving antenna of the receiving earth station e'_R , under the effect of the interference caused by satellite link A, is given by the following equations:

$$\Delta T'_{s'} = \frac{p_e \, g_1 \left(\theta_i\right) \, g'_2 \left(\delta_e\right)}{k l_u} \tag{5}$$

$$\Delta T_{e'} = \frac{p_s g_3(\eta_{e'}) g_4'(\theta_t)}{kl_d}$$
 (6)

$$\Delta T' = \gamma' \frac{p_e \, g_1 \, (\theta_t) \, g_2' \, (\delta_e)}{k l_u} + \frac{p_s \, g_3 \, (\eta_e) \, g_4' \, (\theta_t)}{k l_d} \tag{7}$$

2.2.1.2 Cases requiring independent treatment of the up-link and the down-link

If there is a change of modulation in the satellite or if the transmission originates on board the satellite, then the apparent increase in the noise temperature must be related to the total receiving system noise temperature of the specific link being examined (the space station or the earth station, whichever is applicable). In this case, the equivalent noise temperature of the entire satellite link and the transmission gain are not used and equations (1) and (2) above are used separately as required (see § 3.2).

2.2.2 Case II — Wanted and interfering networks sharing the same frequency band in opposite directions of transmission (bidirectional use)

The calculation method below only applies to interfering emissions between satellites.

Interference between earth stations using the same frequency band in opposite directions of transmission (bidirectional use) is to be dealt with by coordination procedures analogous to those used for coordination between earth and terrestrial stations.

All the equations relating to Case II shall use the geocentric angle $\theta_{\rm r}$.

2.2.2.1 Simple frequency-changing transponder on board the satellite

The noise temperature increase ΔT , referred to the output of the receiving antenna of the satellite of link A is given by:

$$\Delta T_{i} = \frac{p_{i}' g_{3}'(\eta_{i}) g_{2}(\delta_{i})}{kL}$$
 (8)

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The apparent increase in equivalent link noise temperature is then given by:

$$\Delta T = \gamma \Delta T_s \tag{9}$$

The increase $\Delta T'$ in the equivalent noise temperature of the link A' caused by interfering emissions from the satellite associated with the link A is given by:

$$\Delta T = \gamma' \Delta T'_{z} = \frac{\gamma' p_{z} g_{3} (\eta_{x'}) g'_{2} (\delta_{x})}{k l_{z}}$$
 (10)

2.2.2.2 Cases requiring independent treatment of the up-link and down-link

In this case equation (8) is used directly with T_i to obtain the percentage increase. The increase $\Delta T'_i$ in the noise temperature of link A' caused by interfering emissions from the satellite associated with link A is obtained in a similar manner.

2.2.3 Consideration of polarization isolation

The polarization isolation factor described in this paragraph shall be considered only if the administration responsible for each network has consented to such a course and has notified its polarization or published it for coordination under No. 1060. In this case, the apparent increase in the equivalent satellite link noise temperature shall be determined by the following expressions:

Case I
$$\Delta T = \frac{\gamma \Delta T_s}{\gamma_w} + \frac{\Delta T_c}{\gamma_d}$$
Case II
$$\Delta T = \frac{\gamma \Delta T_s}{\gamma_d}$$

where the values of ΔT_s and ΔT_s are those given in § 2.2.1 and § 2.2.2 and the values of the factors of polarization isolation Y_a , Y_d and Y_{ss} are those given in the table below.

Polarization		Factor of polarization isolation (numerical ratio)	
network R	getwork R'	Y Y	
LHC	RHC	4	
LHC	L	1.4	
RHC	L ///	1.4	
LHC	LHC	1	
RHC	RHC	1	
L	L	1.	

where: I.HC = left-hand circular (anti-clockwise)
RHC = right-hand circular (clockwise)

L = linear

2.3 Determination of the satellite links to be considered in calculating the increase in equivalent satellite link noise temperature (Case I only)

The greatest increase in equivalent satellite link noise temperature caused to any link of another satellite network, existing or planned, by interfering emissions of the proposed satellite network must be determined.

The most unfavourably sited transmitting earth station of the interfering satellite network should be determined for each satellite receiving antenna of the network subject to interference by superimposing the "Earth-to-space" service areas of the interfering network on the space station receiving antenna gain contours plotted on a map of the Earth's surface. The most unfavourably sited transmitting earth station is the one in the direction of which the satellite receiving antenna gain of the network subject to interference is the greatest.

The most unfavourably sited receiving earth station of the network subject to interference should be determined in an analogous manner for each "space-to-Earth" service area of that network. The most unfavourably sited receiving earth station is the one in the direction of which the satellite transmitting antenna gain of the interfering network is the greatest.

2.4 Use of information furnished under Appendix 4

When an administration elects to use information furnished under Appendix 4 with the calculation procedures of § 2.2.1.1 and § 2.2.2.1 in order to formulate comments to the advance publication of a new network, the calculations need to be made for both sets of values of γ and T furnished. The greater of the two values of $\Delta T/T$ resulting from these calculations is the one to be used.

- Comparison between calculated percentage increase in noise temperature and the threshold value
- 3.1 Simple frequency-changing transponder on board the satellite

The calculated values of the $\frac{\Delta T}{T}$ and $\frac{\Delta T'}{T'}$, expressed as percentages, shall be compared with the threshold value of 6% 1.

- If the calculated value of $\frac{\Delta T}{T}$, expressed as a percentage, due to any interfering emission from satellite link A' to satellite link A, is no greater than the threshold value, coordination is not required with respect to interference from link A' to link A.
- If the calculated value of $\frac{\Delta T}{T}$, expressed as a percentage, is greater than the threshold value, coordination is required.

The comparison of $\frac{\Delta T'}{T'}$, with the threshold value, expressed as a percentage, shall be carried out in a similar manner.

¹ Values other than 6% are used in the application of Appendix 30 (Orb-85) and Appendix 30A (Orb-88).

- 3.2 Cases requiring independent treatment of the up-link and the down-link
 - a) In the case of interference into only one link, the up-link or the down-link, the value $\Delta T_e/T_e$ or $\Delta T_I/T_e$, expressed as a percentage, shall be compared with the threshold value of 6% 1.
 - b) In the case of interference into both the up-link and the down-link, between which there is a change of modulation on board the satellite, the values of $\Delta T_c/T_c$ and $\Delta T_s/T_s$, expressed as a percentage, shall each be compared with the threshold value of 6% 1.

4. Consideration of narrow-band and FM-TV carriers

The method of calculation described in this Appendix may underestimate the interference from slow swept TV carriers into certain narrow-band (single channel per carrier, SCPC) carriers.

In order to facilitate coordination between the satellite systems and to reduce the number of administrations involved in this procedure, the administrations whose SCPC assignments are either recorded in the Master Register or are under coordination may inform an administration notifying its new assignment of the radio frequency channels used in their systems for SCPC transmission, so that the notifying administration may be able to avoid using these channels for FM-TV transmissions.

For this special case, administrations are referred to relevant CCIR texts for guidance in facilitating subsequent coordination.

Values other than 6% are used in the application of Appendix 30 (Orb-85) and Appendix 30A (Orb-88).

Conversely, administrations introducing new systems using SCPC transmissions may seek appropriate information from other administrations on their FM-TV transmissions.

'ANNEX I

Calculation of the Topocentric Angular Separation Between Two Geostationary Satellites

The topocentric angular separation θ , between two geostationary satellites from a given earth station can be determined by using the equation:

$$\theta_r = \arccos\left(\frac{d_1^2 + d_2^2 - \left(84332\sin\frac{\theta_v}{2}\right)^2}{2d_1 \cdot d_2}\right)$$

where d_1 and d_2 are the distances, in km, from the earth station to the two satellites respectively, and evaluated as d by the method described in Annex II, and θ_2 is as defined in § 2.1.

ANNEX II

Calculation of the Free-Space Transmission Loss

The free-space transmission loss L can be determined by using the following equation:

$$L = 20 (\log f + \log d) + 32.45$$
 (dB)

where:

f: frequency (MHz);

d: distance (km).

a) The distance d between an earth station and a geostationary satellite is given by the equation:

$$d = 42644 \sqrt{1 - 0.2954 \cos \psi}$$
 (km)

where:

$$\cos \psi = \cos \zeta \times \cos \beta$$

where:

ζ: latitude of the earth station;

β: difference in longitude between the satellite and the earth station.

Note: If $\cos \psi < 0.151$, the satellite is below the horizontal plane.

b) The distance d, between two geostationary satellites is determined as follows:

$$d_{\rm v} = 84\,332\,\sin\frac{\theta_{\rm c}}{2} \qquad (km)$$

where:

θ,: geocentric angular separation as defined in § 2.1.

ANNEX III

Radiation Patterns for Earth Station Antennae to Be Used When They Are Not Published

When neither measured data nor relevant CCIR Recommendations accepted by the administrations concerned are available then administrations should use the reference patterns as described below (dB):

for values of $\frac{D}{\lambda} > 100$ * (maximum gain > 48 dB approx.):

$$G(\varphi) = G_{\text{max}} - 2.5 \times 10^{-3} \left(\frac{D}{\lambda} \varphi\right)^2 \quad \text{for } 0 < \varphi < \varphi_m$$

$$G(\varphi) = G_1$$
.

$$G(\varphi) = 32 - 25 \log \varphi$$

for
$$\varphi_r \leqslant \varphi < 48^\circ$$

$$G(\varphi) = -10$$

where:

🗕 antenna diameter 🕽 -

expressed in the same unit

- off-axis angle of the antenna, in degrees, equal to θ_r or θ_g as applicable

 G_1 = gain of the first sidelobe = 2 + 15 log $\frac{D}{\lambda}$

$$\phi_{m} = \frac{20\lambda}{D} \sqrt{G_{max} - G_{1}} \qquad (degrees)$$

$$\varphi_r = 15.85 \left(\frac{D}{\lambda}\right)^{-0.6}$$
 (degrees)

b) for values of $\frac{D}{\lambda}$ < 100 * (maximum gain < 48 dB approx.):

$$G(\phi) = G_{\text{max}} - 2.5 \times 10^{-3} \left(\frac{D}{\lambda} \phi\right)^2 \quad \text{for } 0 < \phi < \phi_{\text{max}}$$

$$G(\varphi) = G_1$$

for
$$\phi_m < \phi < 100 \frac{\lambda}{D}$$

$$G(\varphi) = 52 - 10 \log \frac{D}{\lambda} - 25 \log \varphi \qquad \text{for } 100 \frac{\lambda}{D} < \varphi < 48^{\circ}$$

for
$$100 \frac{\lambda}{D} < \phi < 48^\circ$$

$$G(\varphi) = 10 - 10 \log \frac{D}{\lambda}$$

[•] In cases where $\frac{D}{\lambda}$ is not given, it may be estimated from the expression 20 $\log \frac{D}{\lambda} \approx G_{\text{max}} - 7.7$, where G_{max} is the main lobe antenna gain in dB.

The above patterns may be modified as appropriate to achieve a better representation of the actual antenna pattern.

ANNEX IV

Example of an Application of Appendix 29

1. General

In this example of Case I (see § 2.2.1), two identical satellite networks each with a simple frequency-changing transponder and a global coverage antenna are assumed.

All topocentric angles θ_i are assumed to be equal to 5°.

For this angular separation and for an earth station antenna with $\frac{D}{\lambda}$ greater than 100, the reference radiation pattern (32 - 25 log θ_r) gives a gain of 14.5 dB in the direction of the satellite of the other network.

The input data are furnished in § 2 below and are expressed in dB values except for the parameters T and θ_i . In § 3 the calculations are performed in dB.

It may be noted that since both satellites use global beams there is practically no antenna discrimination between wanted and unwanted signals at the satellite, and that this constitutes a worst case.

2. Input data

The values of the network parameters given in the table below are derived from those published in accordance with Appendix 3 or 4.

AP29-16

	· Symbol •	Value	Unit
Up-link at 6 175 MHz	P' _c G' ₁ (θ _t) G ₂ (δ _c ·) L _u	-37 14.5 15.5 200	dB (W/Hz) dB d8 d8
Down-link at 3 950 MHz	P; G; (η,) G4 (H1) L4	-57 15.5 14.5 196	dB (W/Hz) dB dB dB
	€0 log y T €,	~15 105 5	dB K degrees

3. Calculation of $\frac{\Delta T}{T}$

From equation (1)

$$10 \log \Delta T_s = P_c' + G_1'(\theta_t) + G_2(\delta_{c'}) + 228.6 - L_u$$

= -37 + 14.5 + 15.5 + 228.6 - 200 = 21.6 dBK

Therefore,

$$\Delta T_x = 145 \text{ K}$$

From equation (2)

10 log
$$\Delta T_c = P_s' + G_3'(\eta_c) + G_4(\theta_t) + 228.6 - L_d$$

= -57 + 15.5 + 14.5 + 228.6 - 196 = 5.6 dBK

Therefore,

$$\Delta T_c = 3.6 \text{ K}$$

^{*} All capital symbols, except T, refer to parameters given in logarithmic units.

From equation (3)

$$\Delta T = \gamma \Delta T_x + \Delta T_c$$

= 0.032 × 145 + 3.6 = 8.2 K

Thus

$$\frac{\Delta T}{T} \times 100 = \frac{8.2 \times 100}{105} = 7.8\%$$

4. Conclusion

In the example shown, the percentage increase in equivalent satellite link noise temperature is 7.8%. Since it exceeds the threshold value of 6%, coordination between the two networks is required.



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