

INTERNATIONAL TELECOMMUNICATION UNION TELECOMMUNICATION DEVELOPMENT BUREAU

WORLD TELECOMMUNICATION DEVELOPMENT CONFERENCE (WTDC-98)

Document 48(Rev.1)-E 26 March 1998 Original: English

Valletta, Malta, 23 March - 1 April 1998

For information

Agenda item: 2.1

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Telecommunication Development Bureau

GLOBAL MOBILE PERSONAL COMMUNICATIONS BY SATELLITE

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GLOBAL MOBILE PERSONAL COMMUNICATIONS BY SATELLITE

I Introduction

Global mobile personal communications by satellite (GMPCS) systems and services represent one of the newest world telecommunication technological breakthroughs of this end of the 20th century.

ITU, from the early stage of the conception of GMPCS services, has given special attention to this new telecommunication means, considering the potential role it could play and the valuable contribution it could make within the overall framework of ITU world telecommunication development strategy.

The Kyoto ITU Plenipotentiary Conference in October 1994 and the ITU Council Meeting in June 1995 in establishing and approving the principle of a periodical World Telecommunication Policy Forum (WTPF) have both concluded and decided to devote the first Policy Forum to the introduction of global mobile personal communications by satellite.

Indeed, the first WTPF took place in Geneva (21-23 October 1996) and adopted five "Opinions" relating to the coordination, the regulation and the introduction of GMPCS services on a worldwide basis.

Among these five opinions, "Opinion 5" especially addresses the introduction of GMPCS services in the developing countries and calls upon the BDT Director to set up appropriate mechanisms and programmes of assistance (Annex 1).

As a matter of fact, the Telecommunication Development Bureau (BDT) as early as March 1994, - during the Buenos Aires First World Telecommunication Development Conference (WTDC-94) had already taken the initiative to integrate in its overall world telecommunication development strategy known as the "Buenos Aires Action Plan" (BAAP), the promotion and development of the application of satellite telecommunication technologies for the improvement of telecommunication services in the developing countries.

This has been materialized in September 1994 by the launching of "SPACECOM Project" which aims precisely at establishing a dynamic partnership between the operators of satellite systems, the equipment manufacturers and the beneficiary countries, in order to optimize the use of satellite technologies to respond to developing countries telecommunication service requirements, in particular in the rural and isolated areas.

The introduction of the GMPCS services falls naturally within these on-going BDT efforts and activities to promote the applications of satellite technology for the development of telecommunication services. The first World Telecommunication Policy Forum has duly recognized this in Opinion 5 by asking namely the BDT Director to:

- "1) Establish a Group of Experts especially from developing countries to:
 - a) prepare, as soon as possible, and not later than July 1997, a checklist of factors which developing countries may take into account in the process of introducing GMPCS services;
 - b) advise and assist in response to the concerns and needs of the developing countries on the technical and regulatory issues associated with the introduction of GMPCS on a global or regional basis, particularly in relation to tariffs and interconnectivity;
 - c) study the policy and socio-economic impacts of GMPCS services in developing countries.

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2) Prepare a report for the next World Telecommunication Development Conference based on the studies carried out by the Group of Experts."

II The first World Telecommunication Policy Forum

The ITU Council decided to convene the first WTPF in Geneva from 21-23 October 1996, immediately after the World Telecommunication Standardization Conference to discuss the theme "Global Mobile Personal Communications by Satellite" with the following agenda:

"To discuss and exchange views and information on the following policy and regulatory issues raised by the introduction of global mobile personal communications systems and services by satellite:

- a) the resulting globalization of telecommunication services and the scope for international cooperation in this context;
- b) the role of such systems in the provision of basic telecommunication services in developing countries, LDCs, and in rural and remote areas;
- c) measures necessary to achieve transborder or such mobile terminals;
- d) policy and regulatory issues relevant to such systems and services, in particular those relating to interconnection, with a view to achieving equitable and standard conditions of access;

and to draw up a report, and if possible opinions, for consideration by the members and relevant ITU meetings."

The Policy Forum was held at the International Conference Centre Geneva from 21-23 October 1996. It was attended by 833 delegates representing 128 Member States and 70 Sector Members.

The Policy Forum adopted five Opinions. i.e.:

Opinion 1 - The role of GMPCS in the globalization of telecommunications:

- considers that implementation of GMPCS systems should complement existing telecommunication infrastructures and offers the potential for further telecommunication developments for all countries;
- invites national policy-makers and regulators, GMPCS system operators and service providers as well as users to work cooperatively within the ITU to facilitate the early introduction of GMPCS, in accordance with the decisions of world radiocommunication conferences.

Opinion 2 - The shared vision and principles for GMPCS:

- offers a set of voluntary principles on international cooperation, global availability, harmonized national regulations, investment partnership, unauthorized use, user terminal and free circulation, universal access, interconnectivity;
- invites:
 - national policy-makers and regulatory authorities to take these principles into account, in accordance with national laws and international obligations, when licensing GMPCS services in their respective countries;
 - GMPCS system operators and service providers to take these principles into account in operating their systems.

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Opinion 3 - Essential studies by the ITU to facilitate the introduction of GMPCS:

- recognizes that important technical and regulatory decisions were adopted by WARC-92 and WRC-95 permitting the implementation of global mobile personal communications by satellite;
- invites:
 - the three ITU Sectors to undertake further studies to facilitate the introduction of GMPCS on a global and regional basis;
 - the members of the Sectors concerned to contribute to the ITU activities related to GMPCS.

Opinion 4 - Establishment of a Memorandum of Understanding to facilitate the free circulation of GMPCS user terminals:

- recognizes that:
 - some GMPCS systems are already in operation and others will be brought into operation as early as 1998, urgent action is needed to facilitate the global circulation and transborder roaming of terminals;
 - the early introduction of GMPCS services will be facilitated by a commonly agreed upon GMPCS Memorandum of Understanding (MoU) to be used as a framework for arrangements to facilitate the global circulation and transborder roaming of GMPCS terminals;
- proposes as annex a draft GMPCS-MoU for comments and further study without commitment;
- encourages Administrations, GMPCS operators, service providers and manufacturers to sign the MoU, and participate actively in its work, with a view to completing the initial set of arrangements by 1 July 1997, and to consider thereafter the need for further cooperation to facilitate the full implementation of GMPCS.

(On 14 February 1997, pursuant Opinion 4 an informal group of Administrations, GMPCS operators, service providers and manufacturers met and finalized the GMPCS-MoU) (Annex 2)

Opinion 5 - Implementation of GMPCS in developing countries:

- recognizes that while GMPCS systems offer significant benefits to the public, both in the developing and developed countries some concern exists about political, economic, social and cultural impacts of GMPCS services;
- stresses the need to study as a matter of urgency the policy, social, cultural and economic impact of GMPCS and to identify the net benefits for developing countries;
- invites the BDT Director to prepare a report to the WTDC-98.

The chart annexed summarized with more details the terms of each of the five Opinions (Annex 3).

The WTPF in bringing together all interested parties (Administration and Industry) in an informal gathering has successfully established a new cooperative approach to global telecommunications, different from the traditional approach based on Resolutions or Conventions.

This has actually helped, in a record time, the world public and private telecommunication players working together, to voluntary agree to introduce, on a global basis, the GMPCS service/technology under well-balanced control obligations and benefits and guiding principles or criteria:

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- GMPCS systems will provide global, regional and local services accessible to all without discrimination nor need for heavy local investments (universal service);
- GMPCS systems will be compatible and complementary to terrestrial systems (integration and interconnection) and, in particular, will enhance the commercial growth of terrestrial systems;
- GMPCS systems will be cost-effective and will deliver services at affordable cost and price to end users;
- GMPCS systems will fully respect countries' sovereignty, national laws and regulations. In particular GMPCS operators will:
 - seek and obtain national service licence and agreement prior to displaying services in any country;
 - incorporate ways and means to locate terminals and to block unauthorized use.

III The arrangements pursuant to the GMPCS MoU to facilitate the introduction and development of global mobile personal communications by satellite (GMPCS)

Preamble

The objective of these Arrangements is to provide a framework for the introduction of GMPCS including: 1) the permission to carry a terminal into a visited country and to use it, within the framework of a licensing scheme (i.e. without the need for obtaining individual authorization for the terminal in the visited country), 2) the permission to carry the terminal into a visited country but not to use it, 3) the technical conditions for placing terminals on the market.

Scope

- The Arrangements do not alter or affect the sovereign right of each Administration and/or Competent Authority to regulate its telecommunications, as recognized in the Constitution and Convention of the ITU;
- Implementation of the Arrangements or any of their provisions is voluntary;
- It is the intention and understanding of all that the Arrangements are consistent with and in furtherance of the GMPCS-MoU, the voluntary principles adopted by the WTPF as contained in Opinion 2, and the relevant treaty provisions of the ITU legal instruments;
- The Arrangements provide a framework for the following:
 - a) Facilitation of mutual recognition of type approvals of GMPCS terminals;
 - b) Simplified licensing of GMPCS terminals;
 - c) A method of identification (marking) of GMPCS terminals;
 - d) Access to traffic data by authorized national authorities.

General provisions

The Arrangements as agreed at the Third Meeting of Signatories and Potential Signatories of the GMPCS MoU held in Geneva (6-7 October 1997) are incorporated in Document 14 dated 7 October 1997.

This document details:

- the scope of the Arrangements;
- the definitions of the list of terms for the purpose of the Arrangements and Recommendations therein;

- the general provision governing the understanding between all parties implementing the Arrangements;
- the specific provisions of the Arrangements agreed upon by the Administration and/or Competent Authorities, ITU Sector Members, GMPCS system operators, GMPCS providers, and GMPCS terminal manufacturers implementing the Arrangements - relating to:
 - a) type approval on marking of GMPCS terminals (GMPCS-MoU, Articles 1 and 3);
 - b) licensing (GMPCS-MoU, Article 8);
 - c) access to traffic data (GMPCS-MoU, Article 5);
 - d) recommendation or custom matters (GMPCS -MoU, Article 4);
- the notification and implementation procedures.

Annex 4 spells out the terms of the above-mentioned definitions, general and specific provisions as well as the notification and implementation procedures.

Market notification procedures

The GMPCS-MoU Informal Group at their last meeting agreed on the GMPCS-MoU mark and notification procedures as spelt out in Annex 9. The mark adopted and which will be presented to the ITU Council for approval to use the letters "ITU" will be: The words "GMPCS-MoU" at the top, "ITU" in the middle and "Registry" at the bottom.

Conclusion

It is expected that, under the provision of these Arrangements, the participants will be able to cooperate in the development of GMPCS to the benefit of users worldwide.

The benefits of GMPCS will be fully realized when a significant number of Administrations and/or Competent Authorities offer necessary authorizations for service provision and access to spectrum.

IV The Group of Experts on Opinion 5

In accordance with the terms of *Opinion 5* on "*Implementation of GMPCS in Developing Countries*" adopted by the World Telecommunication Policy Forum (Geneva, 21-23 October 1996), and after consultation with the ITU Directors of the Radiocommunication Bureau and the Telecommunication Standardization Bureau, the BDT Director established the required Group of Experts to carry out the defined tasks.

More than thirty experts from all five ITU Development Regions were selected and invited to make available their knowledge, expertise and experience to fulfill the tasks.

In addition and in order to enlarge the basis of the Experts' conclusions and recommendations, all the developing countries' Administrations have been urged to express their concerns and needs with regard to the matter.

The first meeting of the GMPCS Group of Experts took place in Geneva from 1 to 2 April 1997 and was attended by 35 experts representing 29 Administrations, recognized operating agencies (ROAs), scientific or industrial organizations (SIOs), and other regional or international organizations. The meeting:

- 1) Elected:
 - **Eng. Nabil Kisrawi**, Permanent Representative of the Syrian Telecommunication Establishment to the ITU, as Chairman.

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- 2) Nominated three Vice-Chairmen to prepare the requested inputs as follows:
 - **Mr. Pape G. Toure** (Senegal): the technical and operational issues of concern to developing countries;
 - **Mr. Dietmar Plesse** (Germany): the regulatory issues of concern to developing countries;
 - **Mr. Abdulrachman Sukarno** (Indonesia): the policy and socio-economic impacts of GMPCS services in the developing countries.
- 3) Drafted a preliminary list of factors which developing countries may take into account in the process of introducing GMPCS services.
- 4) Recognizing the urgent needs of developing Administrations for workshop type seminars on GMPCS, recommended the BDT Director to organize on a regional basis six such workshops, each of a minimum of two working days duration before the next Malta Worldwide Development Conference, in March 1998.

The second meeting was also convened in ITU Headquarters on 30 June to 1 July 1997; and

- 1) finalized "the checklist of factors" (Annex 5).
- 2) reviewed the submissions from Vice-Chairmen on the socio-economic aspects of the GMPCS, the technical and operational issues of GMPCS, the regulatory matters of GMPCS.
- 3) adopted the GMPCS Regional Seminars Program covering the various topics on the provisional checklist and an overview of the World Telecommunication Policy Forum and the implementation schedule, i.e.:

Arab States	Damascus, Syria	5-6 July 1997
Asia and Pacific	Manila, Philippines	18-19 August 1997
Africa	Arusha, Tanzania	8-9 September 1997
Americas	Mexico City, Mexico	29-30 September 1997
Central Europe/CIS	Kiev, Ukraine	16-17 October 1997

- 4) took note of the BDT plans to hold a training course on some of the technical issues of GMPCS for African countries (the course for African English-speaking countries to take place in Kampala, Uganda from 8 to 12 September 1997).
- 5) agreed to finalize the outline of Opinion 5 during the September 1997 meeting based on the contributions from the Vice-Chairmen.

The third meeting of the GMPCS Group of Experts was held in Geneva from 18 to 19 September 1997. The meeting:

- 1) began discussing requests for assistance from developing countries;
- 2) noted that all three workshops (Arab States, Asia-Pacific and Africa) have beenrewarding and profitable to both the countries and the industry;
- 3) noted that the Resolution adopted by the African workshop appealing to the Ministers of South Africa and Tanzania to encourage African Member countries to endorse the MoU and become signatories of it; (Annex 6)
- 4) noted that the proposal that the Group of Experts of the BDT prepare a "Reference Book" on GMPCS for developing countries' use and benefit;

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5) noted the success of the Kampala Seminar for English-speaking Africa on the technical aspects of GMPCS and the appeal made by the participants for further BDT assistance; (Annex 7)

- 6) agreed that the BDT Director's report to the WTDC-98 on the implementation of Opinion 5 will primarily consist of the following chapters:
 - Introduction
 - Needs and concerns of developing countries (mainly the checklist)
 - The regulatory issues of GMPCS
 - The technical and operational issues
 - The socio-economic impact.

In addition to the main chapters, any recommendations could be added, as well as a bibliography. Annexes to the report may include: a model agreement between a regulator/operator, model regulatory framework, Opinion 5, list of experts, Arusha Resolution.

The fourth and last meeting took place in Geneva on 15 and 16 December 1997 and was devoted to:

• finalization and approval of the Report to the WTDC-98 Conference

• adoption of the structure and outlook of the "Reference Book" on GMPCS (Annex 8)

V The regional GMPCS workshops

The five GMPCS workshops for the Arab States, the Asia Pacific, Africa and Americas, CIS Eastern Europe and Baltic countries held respectively in Damascus (Syria, 5-6 July 1997), Manila (Philippines, 18-19 August 1997), Arusha (Tanzania, 8-9 September 1997), Mexico City (Mexico, 29-30 September 1997) and Kiev (Ukraine, 16-17 October 1997) have been carried out.

These workshops - the organization of which was recommended only in April 1997 by the Group of Experts, established in accordance with the provisions of "Opinion 5" of the first World Telecommunication Policy Forum (Geneva, 21-23 October 1996) - had to be implemented in a very short period, from July to October 1997, in order to rapidly help the developing countries to benefit from a maximum of basic information on GMPCS systems and services implementation before the start of the 1997 World Radiocommunication Conference (Geneva, 27 October-21 November 1997) and the second World Telecommunication Development Conference (Valetta, 23 March-1 April 1998).

This has been achieved by the BDT thanks to the efficient cooperation and contribution of:

- The Administration of the host countries the Syrian Telecommunications Establishment, the Department of Transportation and Communications of the Philippines, the Tanzania Communications Commission, the Comisión Federal de Telecomunicaciones - CFT of Mexico and the State Committee on Communications of Ukraine which have provided the necessary logistical and administrative support for the implementation of the workshops.
- 2) **The sponsoring GMPCS operators**: Aces (Indonesia), Eutelsat, Globalstar, ICO, Inmarsat, INTELSAT, Ittisalat (UAE), Iridium, Lockheed Martin, Matra Marconi Space, M-Cell (South Africa), Motorola, Odyssey, Orbcomm, Satphone, Teledesic and Skybridge which have delivered professional lectures and presentations and the valuable financial support to cover part of the costs of implementation of the workshops and attribution of fellowships to encourage and facilitate the representatives' participation from the least developed countries.

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3) **The national telecommunications regulators and operators and, the regional and international telecommunications organizations** who have also greatly contributed to the success of the workshops by their presentations, inputs and questions.

The workshops have achieved their purposes in informing the developing countries on the implementation of the GMPCS services and benefits. This is particularly important knowing that some GMPCS systems are expected to become operative this year.

The workshops achievements can be summarized as follows:

- 1) the lectures have adequately covered all the technical, operational and socio-economic issues of the "checklist of factors" as finalized by the GMPCS Group of Experts;
- 2) the participation of GMPCS operators, international and regional organizations and National Administrations was beyond best expectations. A total of some 500 participants have attended the five workshops representing 17 GMPCS operators, 10 international and regional organization and 105 countries;
- 3) the workshops succeeded in establishing an open interactive exchange of views between, on the one side, the GMPCS operators, acting as one single community, and, on the other side, the Administrations of the developing countries;
- 4) the Administrations acquired a better knowledge of the GMPCS systems and a more accurate understanding of the issues involved and the potential benefits they can derive from the introduction of GMPCS services. The GMPCS operators reached a better appreciation of the priorities and needs of the developing countries, of their expectations and vision in so far as can GMPCS services contribute to their development;
- 5) implications of the WTPF five Opinions were developed, in particular with regards to Opinion 4 on the establishment of a Memorandum of Understanding to facilitate the free circulation of global mobile personal communications by satellite user terminals (GMPCS-MoU);
- 6) the MoU signing was promoted and the importance of its signing was generally well perceived by the participants, with even few parties effectively signing during the workshop or immediately thereafter.

VI Follow-up action: The Reference Book

However and notwithstanding these achievements, BDT is determined to continue its efforts to assist developing countries in the spirit of **Opinion 5** provisions.

Specifically, as part of the envisaged follow-up actions, BDT intends now - as a matter of priority and, if possible, before the Valetta WTDC-98 - to prepare, in close collaboration with all GMPCS operators, a handbook to be available to all interested.

This document entitled "GMPCS Reference Book" will basically summarize the workshops discussions, detail the results and conclusions, elaborate answers to questions raised by the Administrations and the operators and give useful reference to all known published documents or studies which are seen of possible interest and help to decisions-makers from developing countries in their endeavour to secure a smooth and efficient introduction of GMPCS services.

As such the "GMPCS Reference Book"` should not be seen as a "guideline book" but rather as a book aiming at providing countries with basic information relating directly or indirectly to the GMPCS services introduction, leaving to each country the development of its own policy or policies, according to its specific environment and objectives.

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ANNEX 1

OPINION 5

IMPLEMENTATION OF GMPCS IN DEVELOPING COUNTRIES

The First World Telecommunication Policy Forum (Geneva, 1996)

recognizing

that GMPCS systems offer significant benefits to the public both in the developing and developed countries;

recognizing further

that while the benefits and potential of GMPCS have not been challenged, nevertheless some countries have concerns about the political, economic, social and cultural impacts of the emerging new systems;

considering

a) that GMPCS systems built and financed mainly by private investors will offer advanced telecommunications services that would otherwise be cost prohibitive to develop or operate;

b) that developing countries may stand to benefit from these advanced services and in particular where terrestrial infrastructure is limited or non-existent;

c) that GMPCS has the potential of narrowing the existing gap in the provision of telecommunications services between developed and developing countries;

considering further

a) that developing countries ought to benefit from the introduction of the latest technology in the field of telecommunications;

b) that these countries face unique problems such as the lack of, or minimal, interconnectivity between terrestrial networks, however, initiatives are being taken in order to interconnect developing countries through submarine cables, fibre optic cables, microwave links, satellite, etc.

c) that terrestrial connectivity is essential when introducing GMPCS in order to ensure that good quality service is maintained;

conscious

a) that for GMPCS services to be available as widely as possible, the participation of developing countries is essential and should be encouraged, within their capacity to do so;

b) that there is concern that the charges for access and utilization of GMPCS services may well be beyond the means of the local populace in developing countries, particularly those that live in rural and remote areas;

of the view

that it would be useful to study, as a matter of urgency, the policy, social, cultural and economic impacts of the new systems and to identify the net benefits that developing countries may derive from them;

urges

a) GMPCS system operators and service providers to consider including as part of their corporate mission the commitment to offer their services as a further means to contribute to the attainment by developing countries of the goal of universal access;

b) GMPCS system operators, gateway operators, and service providers to take reasonable steps to ensure that their access and utilization charges are set at a level that would make this service as widely utilized as possible including in rural and remote areas and areas lacking conventional infrastructure in developing countries, taking into account the cost of providing service and the economic situation in developing countries;

c) GMPCS system operators consider providing some capacity at reasonable cost in support of service provision to areas lacking conventional infrastructure in developing countries;

d) GMPCS gateway operators to consider offering transport tariffs at reasonable cost in support of service provision to rural and remote areas in developing countries;

invites the Director of the BDT, in liaison with the Directors of the other Bureaux

1 to establish a Group of Experts especially from developing countries to carry out the following tasks:

- a) to prepare, as soon as possible and not later than July 1997, a checklist of factors which developing countries may take into account in the process of introducing GMPCS services;
- b) to advise and assist in response to the concerns and needs of the developing countries on the technical and regulatory issues associated with the introduction of GMPCS on a global or regional basis, particularly in relation to tariffs and interconnectivity;
- c) to study the policy and socio-economic impacts of GMPCS services in developing countries;

2 to prepare a report to the next World Telecommunication Development Conference based on the studies carried out by the Group of Experts;

urges further

developing countries to communicate their concerns and needs to the BDT.

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ANNEX 2



Informal Group - MEMORANDUM OF UNDERSTANDING - GMPCS (Geneva, 14 February 1997)

18 February 1997

Memorandum of Understanding to Facilitate Arrangements for Global Mobile Personal Communications by Satellite, Including Regional Systems (GMPCS-MoU)

Fully recognizing

the sovereign right of each State to regulate its telecommunications and the ITU's Instruments;

in recognition of

the report by the Chairman of the 1996 World Telecommunication Policy Forum, including the Opinions and voluntary principles;

taking into account

relevant national laws and regulations, including those concerning licensing and frequency assignments;

convinced

a) of the need to reach regional, and preferably global, arrangements on issues related to facilitating circulation of user terminals as follows:

- permission to carry a terminal into a visited country but not to use it; and
- permission to carry a terminal into a visited country and to use it within the framework of a licensing scheme (i.e. without the need for obtaining individual authorization for the terminal in the visited country);

as well as technical conditions for placing terminals on the market;

b) that such arrangements would necessarily include as a matter of priority the conditions pursuant to which Administrations would grant mutual recognition of type approval of terminals, mutual recognition of terminal licensing, recognize the marking of terminals and permit terminals to be placed on the market; and that such arrangements could form the basis of national regulations on these matters;

the Signatories to this Memorandum of Understanding, who include Administrations, GMPCS operators, service providers and manufacturers, hereby agree to cooperate, according to their respective roles and competencies, on the following issues:

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Article 1 - Type Approval of Terminals

The Signatories will develop arrangements on the essential requirements necessary for the type approval of terminals, and the means by which such approvals will be mutually recognized. The type approval standards should be based on the relevant ITU Recommendations, and should be impartial with respect to all GMPCS technologies.

Article 2 - Licensing of Terminals

The Signatories will develop arrangements on the means by which licences should be granted based on general licences (e.g. class licences or blanket approvals). Such arrangements will be drawn up and include the means by which these general licences will be mutually recognized.

Article 3 - Marking of Terminals

The Signatories will develop arrangements on the marking of terminals which will permit their recognition and the implementation of the arrangements on mutual recognition of type approval and licensing.

Article 4 - Customs Arrangements

The Signatories will develop recommendations to their Competent Authorities proposing exemption of GMPCS terminals from customs restrictions when brought into a country on a temporary or transitory basis.

Article 5 - Access to Traffic Data

The Signatories will develop arrangements for GMPCS operators to provide, on a confidential basis, within a reasonable period of time to any duly authorized national authority which so requests, appropriate data concerning traffic originating in or routed to its national territory, and to assist it with any measures intended to identify unauthorized traffic flows therein.

Article 6 - Review

The Signatories will periodically review the results and consequences of their cooperation under this Memorandum of Understanding. When appropriate, the Signatories will consider the need for improvements in their cooperation and make suitable proposals for modifying and updating the arrangements, and the scope of this GMPCS-MoU.

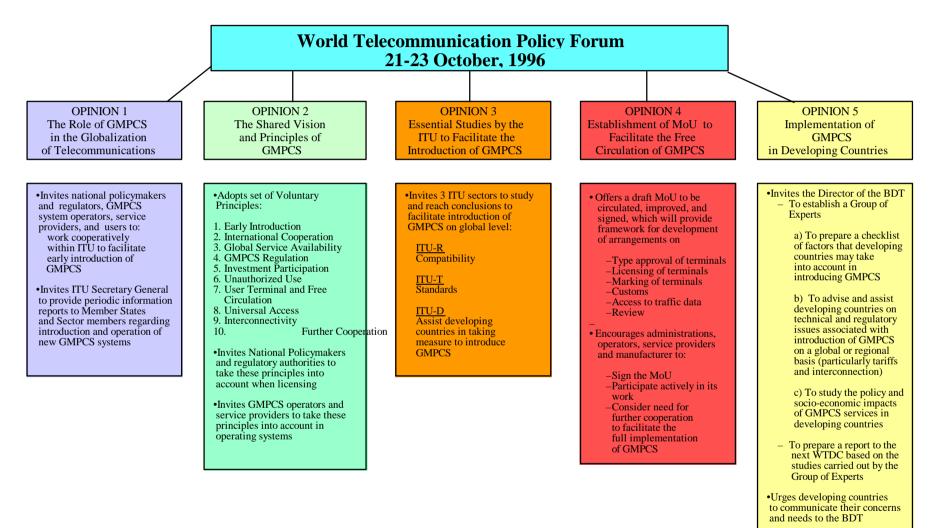
Done in:

[Date]

Signed:

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ANNEX 3



ANNEX 4



Memorandum of Understanding-GMPCS (Geneva, 6-7 October 1997)

Document 14-E 7 October 1997 Original: English

ARRANGEMENTS PURSUANT TO THE GMPCS MoU TO FACILITATE THE INTRODUCTION AND DEVELOPMENT OF GLOBAL MOBILE PERSONAL COMMUNICATIONS BY SATELLITE (GMPCS)

(As agreed at the Third Meeting of Signatories and Potential Signatories of the GMPCS-MoU, Geneva, 6-7 October 1997)

IV. DEFINITIONS

Unless otherwise indicated, the terms listed below will have the following meanings for purposes of the Arrangements and Recommendations herein:

- 1. **Administration** Any governmental department or service responsible for implementing these Arrangements or parts thereof.
- 2. **Circulation** Ability to carry a GMPCS Terminal into a visited country. In these Arrangements, circulation includes:
 - a) Permission to carry a terminal into a visited country and to use it within the framework of a licensing scheme (i.e., without the need for obtaining individual authorization for the terminal in the visited country); and
 - b) Permission to carry a terminal into a visited country but not to use it.
- 3. **Competent Authority** Any organization competent for regulatory issues addressed in these Arrangements.
- 4. **Constellation of satellites** One or more satellites, geostationary or non-geostationary, operated as a system.
- 5. **GMPCS Service Provider** Any entity commissioned by a GMPCS System Operator to provide GMPCS services to the public within a country and which may require an authorization to do so under the applicable legislation of the country concerned.
- 6. **GMPCS System** Any satellite system (i.e., fixed or mobile, broadband or narrow-band, global or regional, geostationary or non-geostationary, existing or planned) providing telecommunication services directly to end users from a constellation of satellites.
- 7. **GMPCS System Operator** The entity responsible for the operation of a GMPCS System.

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- 8. **GMPCS Terminal** A user terminal intended to be operated with a GMPCS System.
- 9. **License** An authorization to carry and use a GMPCS Terminal. According to the national regime, the license can be any of the following:
 - a) An individual license, whereby for each terminal a separate authorization is issued;
 - b) A general license or class license, whereby one generic authorization is issued, which applies to all users and to all terminals of a given category;
 - c) A license exemption, whereby there is an exemption from requiring an individual license for each terminal;
 - d) A blanket license, whereby an operator or service provider is authorized to use a certain number of technically identical terminals.
- 10. **Licensing** The issuance of a license or other authorization by an Administration and/or Competent Authority in conformity with the national laws and regulations of that country and the ITU Radio Regulations and relevant Resolutions.
- 11. **Sector Member** An entity or organization authorized to participate in the work of one or more Sector(s) of the ITU in conformity with the relevant provisions of the ITU Convention.
- 12. **Type Approval** The process through which the conformity of GMPCS Terminals with regulatory technical requirements is assessed. These technical requirements are mainly intended to ensure that GMPCS Terminals do not harm networks, GMPCS users, other users, or other equipment. A variety of procedures (ranging from obligatory third party testing to manufacturer's declaration) may be in place.
- 13. **Single mode terminal** A terminal which is capable of operating with only one GMPCS system.
- 14. **Multimode terminal** A terminal which is capable of operating with a GMPCS system and, additionally, one or more other GMPCS systems or terrestrial mobile systems.
- 15. **GMPCS-MoU Mark** A Mark, agreed upon by the Signatories of the GMPCS-MoU, that may be affixed on GMPCS Terminals pursuant to these Arrangements. The appearance of the Mark, including its size and wording, will be determined by the signatories of the GMPCS-MoU with appropriate consultations with other affected parties.

V. GENERAL PROVISIONS

The Administrations and/or Competent Authorities, ITU Sector Members, GMPCS System Operators, GMPCS Service Providers, and GMPCS Terminal Manufacturers implementing these Arrangements understand and recognize that:

- 1. A variety of GMPCS Systems are at different stages of development and implementation, including some already in service.
- 2. GMPCS Systems provide or will provide global and/or regional coverage.
- 3. GMPCS Systems will typically be characterized by the use of system-specific GMPCS Terminals, manufactured by GMPCS Terminal Manufacturers and designed to be operated with specific GMPCS Systems.

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- 4. The bringing into operation of new GMPCS Systems is subject to satisfactory progress of frequency coordination in accordance with the procedures established by the ITU Radio Regulations and relevant Resolutions.
- 5. The use of the spectrum, assigned by Administrations and/or Competent Authorities for GMPCS Terminals used with GMPCS Systems, will be in accordance with the allocations of the ITU Radio Regulations and relevant Resolutions.
- 6. Because Administrations and/or Competent Authorities have various Type Approval procedures under differing legal regimes, it will not be possible to arrive at a single procedure in the short term; however, it is desirable for Administrations and/or Competent Authorities to mutually recognize Type Approval and marking procedures for GMPCS Terminals.
- 7. It is desirable for Administrations and/or Competent Authorities to continue to strive for a single procedure for Type Approval.
- 8. The exemption of GMPCS Terminals from a requirement for an individual license facilitates regional and global circulation and transborder roaming.
- 9. Administrations and/or Competent Authorities, GMPCS System Operators **a**d GMPCS Service Providers will likely specify data exchange requirements in order to service customers properly and to best comply with national legislative or regulatory requirements.
- 10. Existing and planned GMPCS Systems will vary technically in the level of detail of information captured by the System.
- 11. GMPCS System Operators and GMPCS Service Providers are subject to the national laws and regulations in each country in which GMPCS Services are being provided.
- 12. Customer specific information mustbe protected by GMPCS System Operators and GMPCS Service Providers as private and confidential information.
- 13. Each GMPCS System Operator shall take steps to inhibit the use of its system in any country that has not authorized its GMPCS service.
- 14. GMPCS Terminals brought into a country to be placed on the market will be subject to applicable customs duties, if any, and the technical and regulatory requirements of that country.

VI. SPECIFIC PROVISIONS

The Administrations and/or Competent Authorities, ITU Sector Members, GMPCS System Operators, GMPCS Service Providers, and GMPCS Terminal Manufacturers implementing these Arrangements agree to the following specific provisions:

- A. Type Approval and Marking of GMPCS Terminals (GMPCS-MoU Articles 1 and 3)
- 1. GMPCS Terminals may be required to meet the following requirements (hereinafter referred to as "essential requirements"):
 - a) Safety;
 - b) Electromagnetic compatibility (EMC); and

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- c) Effective use of the radio spectrum and orbital resources, including electromagnetic interference (EMI).
- 2. Compliance with the above essential requirements may be demonstrated, at the discretion of the relevant Administration and/or Competent Authority, by conformity to appropriate ITU-R Recommendations, international, regional, or national standards, or technical specifications. Manufacturers may, at the discretion of the relevant Administration and/or Competent Authority, be allowed to demonstrate compliance by other means.
- 3. Administrations and/or Competent Authoritieswill make their national administrative procedures for Type Approval publicly available, non-discriminatory, and consistent with the objectives of these Arrangements. It is recommended that Administrations and/or Competent Authorities consider whether compliance can be demonstrated through a declaration from the GMPCS Terminal Manufacturer without additional procedures.
- 4. An Administration and/or Competent Authority that has issued Type Approval pursuant to these Arrangements for a class of GMPCS Terminals is encouraged to notify the ITU, upon the request of the GMPCS Terminal Manufacturer, specifying:
 - a) Name of the Administration and/or Competent Authority;
 - b) Name of GMPCS Equipment Manufacturer;
 - c) Name of GMPCS System Operator;
 - d) Model number(s) or similar identifying information of GMPCS Terminal(s); and
 - e) The date Type Approval was granted.

Administrations and/or Competent Authorities are also encouraged to submit to the ITU copies of the standards, specifications, and/or procedures used for Type Approval.

- 5. A GMPCS Terminal Manufacturer may affix the GMPCS-MoU Mark to a GMPCS Terminal provided that the following conditions are met:
 - a) At least one Administration and/or Competent Authority having implemented these Arrangements has issued a Type Approval for a class of GMPCS Terminals which includes the unit and has notified this to the ITU in accordance with paragraph 4 of this Arrangement;
 - b) The Operator of the GMPCS System with which the subject GMPCS Terminal is to be used has notified the ITU that it has implemented these Arrangements and that it has authorized the subject GMPCS Terminal for connection to its GMPCS System; and
 - c) The GMPCS Terminal Manufacturer has notified the ITU that it has implemented these Arrangements.
 - d) The GMPCS Terminal Manufacturer has been authorized to affix the GMPCS-MoU Mark by an entity designated by the signatories of the GMPCS-MoU to authorize use of the GMPCS-MoU Mark.

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6. Administrations and/or Competent Authorities are encouraged to accept the TypeApproval granted by other Administrations and/or Competent Authorities denoted by the GMPCS-MoU Mark or any other mark evidencing Type Approval without the need for additional testing or the submission of test reports. Such acceptance may be subject to the successful conclusion of mutual recognition agreements on conformity assessment or other reciprocal arrangements. Administrations and/or Competent Authorities are encouraged to accept, whenever possible, existing test reports.

B. Licensing

(GMPCS-MoU Article 2)

- 1. Administrations and/or Competent Authorities that have implemented these Arrangements are recommended not to require individual licenses for GMPCS Terminals, provided that:
 - a) these terminals operate within the frequency bands identified for such use by the Administration and/or Competent Authority in question;
 - b) the GMPCS service, with which the GMPCS Terminals operate, has been legally authorized if required, pursuant to national laws and/or regulations;
 - c) the transmissions from the GMPCS Terminals are under the operational control of the GMPCS System Operator and/or the GMPCS Service Provider;
 - d) the GMPCS Terminals meet the relevant essential requirements in these Arrangements; and
 - e) necessary measures are taken to avoid harmful interference between services.
- 2. Administrations and/or Competent Authorities are recommended to cooperate in the development of GMPCS to the benefit of all users and to offer authorization of service provision and access to frequency spectrum, subject to national laws and regulations.
- 3. Administrations and/or Competent Authorities implementing these Arrangements are recommended to allow the circulation and use of GMPCS Terminals, either single mode or multimode, provided that the GMPCS Terminals have been demonstrated to meet the essential requirements in these Arrangements, as may be indicated by the presence of the GMPCS-MoU Mark or another recognized mark.
- 4. Administrations and/or Competent Authorities that have implemented these Arrangements are recommended to allow the circulation of GMPCS Terminals (either single mode or multimode) on a temporary or transitory basis without permission to use for all GMPCS systems.
- 5. Administrations and/or Competent Authorities implementing these Arrangements may, consistent with these Arrangements, issue blanket or class licenses for GMPCS Terminals or may exempt the GMPCS Terminals from individual licenses.

C. Access to Traffic Data (GMPCS-MoU Article 5)

1. Consistent with applicable national legislation in the country where GMPCS service has been authorized, and recognizing technical differences between systems existing and planned, GMPCS system operators or service providers will provide to Administrations and/or Competent Authorities implementing these Arrangements, on a confidential basis, within a reasonable period of time to any authorized national authority which so requests, agreed GMPCS traffic data originating in or routed to its national territory; and will assist with measures intended to identify unauthorized traffic flows.

- 2. Under these Arrangements, all future designed GMPCS systems should be structured to provide appropriate traffic data.
- 3. Existing Agreements between Administrations and/or Competent Authorities and GMPCS System Operators and/or GMPCS Service Providers will not be affected by these Arrangements.
- 4. Traffic data to be provided pursuant to these Arrangements do not include confidential customer information, except as provided for by national laws and regulations in each country in which GMPCS services are being provided.

D. Recommendations on Customs Matters (GMPCS-MoU Article 4)

The Administrations and/or other Competent Authorities, implementing these Arrangements should recommend to their competent national authorities that:

- 1. Duties on GMPCS Terminals placed on the market be reduced or removed, in particular by signing instruments such as the Information Technology Agreement.
- 2. GMPCS Terminals be exempt from customs-related restrictions and fees when visiting or transiting countries on a temporary basis.
- 3. Administrations and/or other Competent Authorities, as well as the ITU Secretariat, if appropriate, work with the World Customs Organization to ensure that GMPCS Terminals are entitled to treatment as a traveller's personal effects for purposes of entry into a country on a temporary or transitory basis.
- 4. Administrations and/or Competent Authorities undertake, within the framework of their national laws, regulations, and international obligations, to bring their legal and regulatory procedures in line with the provisions of the Istanbul Convention on Temporary Admission, and other relevant internationally recognized agreements.
- 5. Administrations and/or Competent Authorities take all practicable measures to bring to the attention of customs officials the need to permit the temporary or transitory entry into their countries of GMPCS Terminals without unduly burdensome restrictions.

VII. NOTIFICATION AND IMPLEMENTATION PROCEDURES

- 1. The ITU Secretary-General will write to all Administrations and/or Competent Authorities, Sector Members, Signatories to the GMPCS-MoU, and all non-signatories that have been participating in the development of these Arrangements inviting them to implement these Arrangements.
- 2. Administrations and/or Competent Authorities, ITU Sector Members, GMPCS System Operators, GMPCS Service Providers, and GMPCS Terminal Manufacturers intending to implement these Arrangements are encouraged to notify the ITU Secretary-General at the earliest possible date their intention to implement the Arrangements and the date by which the Arrangements are planned to be implemented. Upon implementation of the Arrangements, Administrations and/or Competent Authorities, ITU Sector Members,

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GMPCS System Operators, GMPCS Service Providers, and GMPCS Terminal Manufacturers that have implemented these Arrangements will notify the ITU Secretary-General how these Arrangements have been implemented. To this end:

- a) Administrations and/or Competent Authorities intending to implementhese Arrangements on a national level are encouraged to ensure that relevant national telecommunications regulations and customs requirements support the full realization of the goals of these Arrangements.
- b) Administrations and/or Competent Authorities implementing these Arrangements should notify the Secretary-General of the specific GMPCS Systems that are authorized to operate in the country.
- c) GMPCS System Operators that implement these Arrangements should inform the Secretary-General which GMPCS Terminals are authorized for connection to their systems and which GMPCS Service Providers are authorized by them.
- d) Administrations and/or Competent Authorities, ITU Sector Members, GMPCS System Operators, GMPCS Service Providers, and GMPCS Terminal Manufacturers should inform the Secretary-General of any provisions of these Arrangements they do not intend to implement.
- e) The ITU Secretary-General should be notified of any changes in the information provided pursuant to these Arrangements.
- 3. The Secretary-General of the ITU will be the depository of these Arrangements and will make information about the Arrangements readily available to all Administrations and/or Competent Authorities, all Sector Members, all GMPCS System Operators, all GMPCS Service Providers, and all GMPCS Terminal Manufacturers. The ITU will also maintain a list of standards and specifications that are used for Type Approval.
- 4. The Secretary-General will periodically publish, including electronically, a report on the implementation of these Arrangements, which will include: a list of all entities that have implemented the Arrangements, or any part thereof; the GMPCS Systems that are authorized in each country; a list of the GMPCS Terminals that have been granted approval pursuant to these Arrangements indicating the countries that have granted Type Approval; and such other information as may be requested by the Signatories to the MoU and/or the entities that have notified the ITU that they have implemented these Arrangements.
- 5. Some of the provisions in these Arrangements may require action and ongoing activities by the ITU. The entities implementing these Arrangements are invited to work with the ITU to ensure that the ITU has the capability, authority, and resources to perform the functions it is expected to perform pursuant to these Arrangements.

ANNEX 5



INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION DEVELOPMENT BUREAU (BDT)

Document 3-E (Rev.1) 1 July 1997 Original: English

GMPCS GROUP OF EXPERTS

IMPLEMENTATION OF GMPCS IN DEVELOPING COUNTRIES - OPINION N° 5 GENEVA, 30 JUNE-1st JULY 1997

TITLE: FINAL CHECKLIST

ORIGIN: THE CHAIRMAN OF GMPCS GROUP OF EXPERTS

FINAL LIST

The World Telecommunication Policy Forum (WTPF) decided in its Opinion 5 that a Group of Experts be established having among other tasks to prepare a checklist of factors which developing countries may take into account in the process of introducing GMPCS services. In so doing the WTPF urged:

- a) GMPCS system operators and service providers to consider including as part of their corporate mission the commitment to offer their services as a further means to contribute to the attainment by developing countries of the goal of universal access;
- b) GMPCS system operators, gateway operators, and service providers to take reasonable steps to ensure that their access and utilization charges are set at a level that would make this service as widely utilized as possible including in rural and remote areas and areas lacking conventional infrastructure in developing countries, taking into account the cost of providing service and the economic situation in developing countries;
- c) GMPCS system operators consider providing some capacity at reasonable cost in support of service provision to areas lacking conventional infrastructure in developing countries;
- d) GMPCS gateway operators to consider offering transport tariffs at reasonable cost in support of service provision to rural and remote areas in developing countries.

The following checklist is intended to be of assistance to national regulators when defining, within their national regulatory regime, their position in relation to GMPCS systems in general or when negotiating with a given GMPCS system operator. It should be employed in the context of the

voluntary principles contained in Opinion 2, and be based on the results of ongoing ITU activities, in particular those listed in Opinion 3 and on the GMPCS MoU and the related arrangements to which Administrations should be party. In addition, part of the developing countries, Members of the ITU, are committed to a variety of issues contained in this checklist, through agreements relating to satellite communications and the agreement concluded in WTO on telecommunication services. Application of the checklist has to take account of the fact that there are differences between GMPCS systems and that they are not applicable in every case.

- 1 Universal service: role of a GMPCS system in the provision of universal service.
- 2 Affordable prices: what parameters should be taken into account for:
 - prices of proposed services to be considered as being at a level to make the services as widely utilized as possible,
 - costs that affect the affordability of the service such as:
 - interconnection charges
 - reasonable transit charges, if applicable
 - other government charges.
- 3 Global service and roaming availability: the extent to which the introduction of a given GMPCS will permit a world-wide or regional use and roaming, as well as dual operation (space and terrestrial use).
- 4 Matters relating to the MoU:
 - take account of the results of the MoU on type approval, certification, mutual recognition, provision of access to traffic data
 - ensure that the GMPCS system operator is signatory of the MoU.
- 5 Interconnection matters: Are there technical and/or operational limitations that would prevent interconnection, and what steps must be taken to resolve them?
- 6 Numbering: What steps must be taken to implement the internationally agreed numbering scheme for GMPCS systems?
- 7 On the basis of Principle 4 contained in Opinion 2, relating to a transparent and nondiscriminatory licensingprocess and taking account of:
 - the license/authorization delivered by the ITU Member to the GMPCS operator for the space segment,
 - the coordination agreements reached in respect to the system under consideration,
 - the frequency spectrum availability
 - any transitional arrangements, if any, for the use of frequencies with respect to existing and planned services,
 - the probability of interference cases,
 - the need to comply with all applicable domestic and international rules,

consider matters relating to licensing and to any related licensing fees, for:

- user terminal
- gateways
- service providers.

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- 8 Consider the extent to which a system can prevent and/or identify unauthorized uses, means for identifying them, their impact on PSTN and other telecommunication service providers, and the resulting loss of revenue for the operators concerned.
- 9 Consider the impact of the operation of GMICS systems on existing telecommunication networks and services and on their revenues.
- 10 Consider competition matters between GMPCS systems and existing telecommunication networks and services and between GMPCS systems and ensure that no anti-competitive action is taken by any of them.
- 11 Consider the extent to which GMPCS system operators offer opportunities to participate in ownership.
- 12 Consider the extent to which GMPCS systems are able to provide for privacy and security of communications.
- 13 Consider the extent to which the GMPCS system is responsive to communications requirements in cases of emergency.
- 14 Ability of the GMPCS operator to provide locally transfer of know-how on technical, operational and managerial matters.
- 15 The overall benefit that may be derived from the introduction of GMPCS.

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ANNEX 6

Appeal

The African Administrations, regulators and operators attending the African regional GMPCS workshop in Arusha, Tanzania, 8-9 September 1997.

Taking into account:

- a) the Chairman's report and the opinions of the World Telecommunication Policy Forum (WTPF);
- b) the report of the RASCOM Group of Experts on GMPCS;
- c) the GMPCS-MoU and its arrangements;
- d) the outcome of the policy and regulatory, technology and operational and social-economic sessions, and the results of exchange of views that took place during this workshop.

Recognizing the leading role of Tanzania in establishing an independent regulatory body and in particular its pilot role in the introduction of GMPCS in Africa.

Recognizing also that South Africa is the current Chairman of the RASCOM Assembly of Parties.

Express their gratitude to:

- 1) the Tanzania Administration for kindly hosting this workshop and making available all the necessary facilities;
- 2) the ITU-BDT for creating a forum for African countries to get basic information that will enable informed decisions on the early introduction of GMPCS in Africa, and for facilitating the participation of all African administrations and regulators in this forum.

Resolve to request the Honourable Minister of Communications and Transport of Tanzania, as the host country, and the Honourable Minister of Post, Telecommunications and Broadcasting of the Republic of South Africa as Chairman of RASCOM, to:

- a) Urge African Ministers responsible for telecommunications policy to embark in an urgent initiative to consider measures for the early introduction of GMPCS in Africa including the signing of the GMPCS-MoU.
- b) Request the ITU-BDT to continue to provide support and assistance in the framework of Opinion 5 of the World Telecommunication Policy Forum (WTPF) in this endeavour.

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ANNEX 7

Technical, operational and financial impacts of GMPCS services on the existing telecommunications terrestrial network of African countries

The Seminar on the technical and operational aspects of the GMPCS systems, Kampala, Uganda, 8-12 September 1997

recognizing

the imminent coming into service of the GMPCS systems,

recalling

Opinion 5 of the 1996 World Telecommunication Policy Forum,

considering

that various aspects and impacts of these systems, particularly technical, operational and financial are still not so clear to all developing countries,

appeals to the Director of the BDT to consider the possibility of

1 developing a methodology, taking into account the African environment, to assess the impacts of the introduction of GMPCS services on the existing telecommunications terrestrial network. The methodology should, as much as possible, allow countries to evaluate the technical, operational and financial impacts;

2 organizing a seminar to present and discuss the above methodology, so that concerned countries would be prepared to apply it to their particular situation;

3 providing direct assistance to countries, under individual requests, to apply the methodology.

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ANNEX 8

THE GMPCS REFERENCE BOOK

Draft of the proposed structure for the book

I Introduction and background

- 1 The first World Telecommunication Policy Forum
 - background
 - the Chairman's Report
 - the five Opinions
 - achievements of the WTPF

2 Opinion 4

- the GMPCS-MoU
- the Arrangements

3 Opinion 5

- Group of Experts
- Checklist of factors
- Regional GMPCS workshops
- BDT Director's Report to Valletta 98 WTDC

II GMPCS in global telecommunications community

- GMPCS general overview
- Big Leo's systems
- Little Leo's systems
- Geo-MSS systems
- Broadband systems

III Workshops summaries and conclusions

- 1 GMPCS technical and operational issues
- 2 GMPCS policy and regulatory issues
- 3 GMPCS socio-economic issues
- 4 MoU free circulation of GMPCS user terminals

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IV The Regional GMPCS Workshops

- 1 Organization and implementation (logistical and financial aspects)
- 2 Participation and participants
- 3 Documentation (compilation of written material and slides)

V Questions and answers

- VI Reference list of published studies and material on GMPCS
- VII Annexes

ANNEX 9



Memorandum of Understanding-GMPCS (Geneva, 12-13 March 1998)

Document No. 2(Rev.2)-E 12-13 March 1998 Original: English

IMPLEMENTATION OF THE GMPCS-MoU ARRANGEMENTS

At its meeting on 12-13 March 1998, the GMPCS-MoU Informal Group adopted the following, to be annexed to the GMPCS-MoU Arrangements that were adopted on 7 October 1997:

I PROCEDURES FOR NOTIFICATION AND IMPLEMENTATION OF THE ARRANGEMENTS

General Implementation

1 ITU Secretary-General information letter

The ITU Secretary-General sends a letter to all Administrations and/or Competent Authorities, Sector Members, and Signatories to the GMPCS-MoU and all non-Signatories that have been participating in the development of the GMPCS-MoU Arrangements:

- 1.1 forwarding the appropriate documents for implementation of the Arrangements;
- 1.2 inviting them to prepare to implement the Arrangements and to notify the ITU Secretary-General of their intention to implement the Arrangements.
- 2 Letter of intention to implement

Administrations and/or Competent Authorities, ITU Sector Members, GMPCS System Operators, GMPCS Service Providers, and GMPCS Terminal Manufacturers intending to implement these Arrangements notify the ITU Secretary-General, at the earliest possible date, of their intention to implement the Arrangements.

System-Specific Implementation

- 3 GMPCS System Operator's letter to the ITU Secretary-General shall include the following:
- 3.1 Implementation notification

Notification that the GMPCS System Operator has implemented the Arrangements. This includes a statement that the operator will activate only those GMPCS Terminals which it

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authorizes for connection to its GMPCS System under the terms of the Arrangements. It also includes a statement that the Operator commits to bearing its share of the ITU's costs of implementing the Arrangements in accordance with SectionIV.4.

3.2 System description

A description of the GMPCS System. The level of details provided is at the discretion of GMPCS System Operator. The information should contain at least the ITU Special Section Number (and associated ITU Weekly Circular Number) in which the relevant technical information submitted to the ITU can be found and should be sufficient to identify the particular system to an Administration which may not be familiar with it by name alone.

- 3.3 List of GMPCS Terminal types authorized to connect to the system
- 3.4 Request to the ITU Secretary-General to send the system-specific implementation letter

The GMPCS System Operator requests the ITU Secretary-General to send the systemspecific implementation letter called for in item 7 below. This will include an indication of which GMPCS Terminal Manufacturers and which Administrations and/or Competent Authorities will send the ITU the information needed to satisfy the marking conditions of the Arrangements.

- 3.5 List of GMPCS Service Providers and their geographical coverage
- 4 GMPCS Terminal Manufacturer's letter to the ITU Secretary-General
- 4.1 Implementation notification

Notification that the GMPCS Terminal Manufacturer has implemented the Arrangements. This includes a statement that the GMPCS Terminal Manufacturer will place on the market only those GMPCS Terminals that comply with the requirements of the Arrangements. It also includes a statement that the Manufacturer commits to bearing its share of the ITU's costs of implementing the Arrangements in accordance with Section IV.4.

4.2 Relevant type approval information

A list of the relevant technical requirements that the GMPCS Terminals meet or exceed, including a reference to the relevant ITU Recommendations, international, regional, or national standards or technical specifications.

5 Type approving Administration(s) letter to the ITU Secretary-General

Following the request of a GMPCS Terminal Manufacturer, at least one Administration and/or Competent Authority that has commenced implementation of the Arrangements by following the procedure in Item 2 above sends a letter to the ITU Secretary-General, which will include:

5.1 Statement that the terminal has been approved

This should include a list of the requirements that provided the basis for the type approval and indicate how verification of compliance with these requirements was determined (e.g., test data or certification provided by GMPCS Terminal Manufacturer or testing laboratory).

- 5.2 Identifying information
 - 5.2.1 Name of the Administration and/or Competent Authority;
 - 5.2.2 Name of GMPCS Terminal Manufacturer;

- 5.2.3 Name of GMPCS System Operator;
- 5.2.4 Model number(s) or similar identifying information of GMPCS Terminal(s); and
- 5.2.5 The date Type Approval was granted and what, if any, mark was affixed.
- 6 ITU Acknowledgment of Receipt

The ITU Secretary-General immediately informs the GMPCS Terminal Manufacturer that it has received all of the letters described in 3, 4 and 5 above. The Manufacturer may now affix the GMPCS-MoU mark.

7 ITU Secretary-General System-specific implementation letters to Administrations and/or Competent Authorities

Upon request of a GMPCS System Operator, the ITU Secretary-General immediately sends a letter to all Administrations and/or Competent Authorities inviting them to indicate whether they have authorized in accordance with the Arrangements the Terminals of that specific GMPCS System to operate in their country and attaches an annex containing copies of the letters described under 3,4,5 and 6 above.

8 Notification of New GMPCS Terminals

- 8.1 If, subsequent to the implementation of the Arrangements on behalf of a particular GMPCS System, new GMPCS Terminals not covered by the type approval information previously submitted to the ITU are authorized for connection to that GMPCS System, then information about those new GMPCS Terminals should be provided by repeating Steps 3.3, 3.4, and 4-7 outlined above.
- 9 Administrations' and/or Competent Authorities' implementation letters to the ITU Secretary-General

Administrations and/or Competent Authorities send implementation letters to the ITU Secretary-General in which they indicate whether they have authorized the Terminals of the GMPCS System in question to be carried and used in the country in accordance with the Arrangements and whether any other conditions are required for use in that country. In the event that the GMPCS service has not been authorized, the Administration indicates that the terminals of that system can be carried into the country but not used.

10 Information Update

All information should be updated and supplemented, as necessary, to keep the information on file at the ITU up to date.

11 Existing GMPCS Systems

GMPCS systems that wish to obtain the benefits of the GMPCS Arrangements, including the GMPCS-MoU mark, for terminals already in use shall follow the procedures outlined above and abide by all relevant conditions in the GMPCS-MoU and the Arrangements.

II THE ROLE OF THE ITU AS DEPOSITORY

In the GMPCS-MoU and Arrangements (see Section VII.*Notification and Implementation Procedures*, nos. 2, 3, 4), the GMPCS-MoU Informal Group identified the following functions for the ITU Secretary-General:

1 to act as the Depository of the Arrangements and to make available the information supplied by the Signatories implementing the Arrangements;

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- 2 to act as the registry for type approval procedures that Administrations and/or Competent Authorities have notified the ITU as having been used to approve terminals;
- 3 to act as the registry of terminal types once Administrations and/or Competent Authorities have notified the ITU that terminals have been granted type approval;
- 4 to organize meetings, including an annual review meeting.

This role of Depository for the ITU Secretary-General is central to the marking scheme to facilitate free circulation of GMPCS terminals. The function of the ITU Secretary-General as Depository is receiving, acknowledging receipt, and maintaining data collected under the procedures described above. The data should be maintained in a simple and standardized format. The data to be stored should include the information provided pursuant to the notification procedures described above. The information should be updated as received. The ITU Secretary-General shall also maintain a web site containing the data and should disseminate hard copies of new or modified information to Administrations and/or Competent Authorities and GMPCS-MoU Signatories on a semi-annual basis and to others upon request.

III THE GMPCS-MoU MARK

Marking of GMPCS terminals is critical to facilitating the circulation of the terminals across national borders, and, thus, ensuring seamless and reliable GMPCS service for all end-users. The use of the GMPCS-MoU mark does not in any way imply a global type approval, including by the ITU.

The GMPCS-MoU mark is the following text, in English only: the letters "GMPCS-MoU", followed by the abbreviation "ITU", followed by the word "Registry". The format of this registry mark will be decided by the ITU Secretary-General in consultation with the representatives of the Signatories. The ITU has protected the abbreviation "ITU" under the Paris Convention and must therefore authorize the use of the abbreviation for the purpose of the GMPCS-MoU mark. Documents will be prepared and executed to ensure that the terms and conditions under which the ITU will authorize the use of its abbreviation are agreed and understood. These documents will include the rights, obligations, liabilities and responsibilities of all relevant parties, as well as a dispute settlement mechanism.

IV THE ADMINISTRATION OF THE ARRANGEMENTS

1 Meetings

GMPCS-MoU Signatories will administer the Arrangements, meeting at leastnnually to review the GMPCS-MoU, the Arrangements, the budget and related issues.

2 Role of the ITU in the administration of the Arrangements

The ITU will serve as Depository of the GMPCS-MoU, the Arrangements, and the information submitted pursuant to the GMPCS-MoU and Arrangements.

3 Specific tasks and functions to be performed to administer and implement the Arrangements

In the Arrangements and the procedures described above, the following tasks and functions are identified or implied as functions to be performed by the ITU General Secretariat (italicized tasks are those tasks that will be performed for each GMPCS system that implements the Arrangements):

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- 3.1 Develop web site, including a format for maintaining information submitted pursuant to the Arrangements;
- 3.2 Send general implementation information letter to all Administrations and/or Competent Authorities, GMPCS-MoU Signatories, and all non-Signatories.
- 3.3 Send acknowledgment of receipt letters to GMPCS Terminal Manufacturers;
- 3.4 Send system-specific implementation letters to all Administrations and/or Competent Authorities;
- 3.5 Receive letters from GMPCS System Operators, GMPCS Terminal Manufacturers, GMPCS Service Providers, Administrations and/or Competent Authorities providing notification of type approval, and Administrations and/or Competent Authorities implementing the Arrangements;
- 3.6 Maintain copies of all letters sent and received;
- 3.7 Enter information from letters on web site;
- 3.8 Send out hard copies of all information received on a semi-annual basis to all Administrations and/or Competent Authorities and GMPCS-MoU Signatories and to others, upon request;
- 3.9 Respond to inquiries, as appropriate;
- 3.10 Update files and web site as necessary;
- 3.11 *Translation of all correspondence with the ITU, which should be in English, French or Spanish.*
- 3.12 Arrange review meetings.
- 4 Cost Recovery

In conformance with the 1997 Council Resolution 1110, the principle of full-cost recovery for the ITU-incurred administrative costs of implementation including direct and indirect costs will apply.

The expenses to be incurred by the ITU for the tasks and functions described above are to be met by the GMPCS-MoU Signatories and potential Signatories who implement the Arrangements, on a full cost recovery basis. No Administration or Competent Authority shall be required to bear any of the ITU's costs in connection with the implementation of the GMPCS-MoU Arrangements, unless that Administration or Competent Authority is or becomes a GMPCS System Operator, GMPCS Terminal Manufacturer or GMPCS Service Provider.

The method of determining the ITU's costs of implementing the Arrangements will be developed by the ITU Secretary-General. The method of ensuring the reimbursement of those ITU costs will be developed by the GMPCS System Operators and GMPCS Terminal Manufacturers in consultation with the ITU Secretary-General.

V ANNUAL REVIEW

There will be at leastan annual review involving the Signatories and, at the first review meeting, potential Signatories to the GMPCS-MoU to review and evaluate the effectiveness of the procedures established and to make any necessary changes. At that first review meeting, consideration should be given to the status of potential Signatories and implementers of the Arrangements, as well as the issue of Sector membership.