

Guidelines regarding Global Mobile Personal Communication by Satellite (GMPCS) Licensing

Introduction

GMPCS is a personal communication system providing transnational, regional or global coverage from a constellation of satellites accessible with small and easily transportable terminals. Whether the GMPCS satellite systems are geostationary or non-geostationary, fixed or mobile, broadband or narrowband, global or regional, they are capable of providing telecommunication services directly to end users. GMPCS services include two-way voice, fax, messaging, data and even broadband multimedia. According to some estimates, GMPCS services could be expected to constitute approximately 2-3% of the cellular market (source APT).

GMPCS networks varied in the make-up of their components, and in the type of service provided, but generally shared a number of characteristics, with satellite constellations providing direct links to users, and interconnecting with existing terrestrial networks. The underlined fact remains that GMPCS complement rather than compete with existing networks.

Need for GMPCS Regulations

While GMPCS is universally recognized as a basic system for development of telecom infrastructure, it is upto the policy makers to make sure that GMPCS services be available on a non-discriminatory basis, co-exist with PSTN services, be cost-effective and preserve the sovereignty of the country. Setting of common standards and uniform GMPCS regulations result in benefits of economy of scales and help addressing other issues such as security, tariffing, licensing, royalties, etc. While the various GMPCS networks each have specific characteristics, they generally share the following features: space segment (satellite constellation), ground segment (earth stations) and the user segment (terminals).

Manifold changes have happened in global and national areas. The sheer volume of change makes it impracticable to have an antagonistic or non co-coordinated method of approaching regulation of GMPCS Services. The underlying issues are rapid technological change, simultaneous global and regional service availability, transcending of national boundaries, less infrastructure on the ground, policy and regulatory bottlenecks, a focus on consumers and markets rather than products and networks, and the resultant need for collaboration between regulators and industry.

GMPCS MoU

In order to facilitate the introduction and development of Global mobile personal communication by Satellite (GMPCS), ITU carved out a Memorandum of Understanding, which was signed by member states in July 1997 at Geneva.

In the MoU it was agreed that 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. 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. Each GMPCS System Operator shall take steps to inhibit the use of its system in any country that has not authorized its GMPCS service. It was further agreed that consistent with applicable national legislation in the country, GMPCS system operators or service providers will assist with measures intended to identify unauthorized traffic flows and will provide GMPCS traffic data originating in or routed to that country. MoU is a cooperative framework signed by different participants to set out the non-contractual and non binding terms of their cooperation.

GMPCS Licensing in Regional Countries

A number of models are adopted for GMPCS licensing in the region. Some administrations, such as Sri Lanka and Singapore, have opted for a regulatory framework which does not require service licensing, unless a particular GMPCS system includes the installation of an earth station in the country, in which case a facilities licence would be required. Other administrations were licensing systems on first-come, first served basis, with no limit on the number of operators. In both of these categories, service providers offering GMPCS Service from a GMPCS operator had already been licensed to provide telecom services.

In yet some other administrations like Pakistan, GMPCS services remained the domain of a monopoly operator, which was either required to apply for a licence from the relevant regulatory authority, or currently authorised to provide GMPCS Service as part of its general operating licence. In these latter cases, provision of GMPCS Services from an operator was dependent on conclusion of a commercial arrangement with the incumbent operator. However all administrations required some form of licensing with respect to access to frequencies, following on frequency co-ordination.

GMPCS Guidelines for Pakistan

The framework for GMPCS covers variety of aspects such as service licensing, frequency co-ordination, adherence to the ITU GMPCS-MoU and its Arrangements, type approval, and several other topics such as tariffs and quality of service.

The framework for GMPCS is being made liberal and open in line with recently approved Telecom De-Regulation policy. Telecom Policy allows two types of licences i.e. Local Loop (LL) and Long Distance International (LDI). There shall not be any stringent regulatory framework GMPCS service shall not require any license. It will be a solution as part of LDI license (award process). Interconnection and numbering will be as applicable to LDIs but not chargeable to individual GMPCS consortia. The GMPCS service will have the same non-discriminatory access to networks as PTCL or new LDI operators. Keeping the above facts in view GMPCS Guidelines proposes:

- a) An open, technology neutral and non-exclusive regime be followed for the service.
- b) Service be encouraged to enhance coverage for **rural and underserved areas**.
- c) There will be market based tariffs within ITU GMPCS-MoU for this service to have a meaningful GMPCS presence in the country to improve rural coverage.

- d) This service can only be launched under the Long Distance International (LDI) license allowing GMPCS service providers to work under the newly proposed Telecom policy and regulatory framework under commercial arrangement with LDIs on non-exclusive basis.
- e) Space segment (i.e. satellite constellations duly coordinated as per ITU regulations) shall be licensed by the operator's home administration, and no further regulation is necessary.
- f) The Commercial Agreements be signed between parties on non-exclusive basis. Both GMPCS Consortia and LDI operators would be free to sign-up (under liberal/open) on mutually agreed commercial terms and conditions facilitating enhanced coverage.
- g) PTCL be also encouraged to make its existing GMPCS arrangements, on non-exclusive basis as far as possible.
- h) LDI licensee will inform PTA before offering GMPCS services including information on coverage and quality of service. Coordination with FAB will be required and shall be done by GMPCS Consortia prior to Agreement and service will only commence, following the successful frequency co-ordination of the satellite system.
- i) International benchmarks be adopted for type approval of GMPCS terminals instead of developing any local facility for type approval of terminals.
- j) PTA will publish guidelines on its web-sites and publicise same through public process for information of interested parties and stakeholders. Similarly FAB will come out with its own guidelines within spirit of market deregulation in Pakistan.