

# Kingdom of Saudi Arabia

## Communications and Information Technology Commission Licensing of Mobile Satellite Broadband Services

A Public Consultation Document

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## Licensing of Mobile Satellite Broadband Services Public Consultation Document

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## **Introduction**

Pursuant to the Telecommunications Act, the Bylaw and the Ordinance, the Communications and Information Technology Commission (the "CITC") is the entity authorized to regulate the telecommunications sector in the Kingdom of Saudi Arabia ("the Kingdom"). The Telecommunications Act ("the Act"), enacted in June, 2001 and effective in December, 2001, provides the legislative foundation for developing the telecommunications sector and determines that it is regulated pursuant to a number of objectives including to promote and encourage fair competition in all fields of telecommunications, to ensure clarity and transparency of procedures and to ensure principles of equality and non-discrimination. The CITC Ordinance ("the Ordinance"), effective in June, 2001, created the CITC and defines its functions, governance, and financing. The Telecommunications Bylaw ("the Bylaw") was issued in July, 2002 and became effective immediately. The Bylaw provides for the regulation of the telecommunications sector by the CITC in the Kingdom.

At present, in addition to fixed, data and cellular mobile services offered by the Saudi Telecommunications Company ("STC"), and a number of service providers providing internet access using STC's network, the CITC has awarded five VSAT licenses, two GMPCS license, and a new cellular mobile services license. Moreover, two new data communications services licenses have been issued.

By this public consultation exercise, the CITC promulgates its view and solicits public comments as to the usefulness of Mobile Satellite Broadband Services, their licensing issues, their relation with existing telecommunications services and their effect on the competition landscape in the Kingdom. Depending on the outcome of the Commission's review and after consideration of the responses to this public consultation, the CITC may accept applications for licensing from potential service providers intending to provide these services.

## Form of Response and Procedures

The CITC invites comments on all issues related to Mobile Satellite Broadband Services licensing. The CITC particularly invites comments and responses to the specific numbered questions set out in the Document. Parties are invited to provide detailed comments, wherever possible, and to provide relevant data, analysis or experience from other countries to support their comments.

In providing their comments, parties are requested to indicate the consultation question number in this Public Consultation Document to which their comment relates, even if they do not comment on all questions.

The CITC specifically encourages parties considering participating in the Mobile Satellite Broadband Services licensing process to devote the necessary resources at the present stage to provide useful and detailed answers to all questions raised in this Public Consultation Document as these answers will be taken into account in the subsequent finalisation of the licensing process.

The CITC will carefully consider responses from all interested parties in developing its approach to licensing Mobile Satellite Broadband Services in the Kingdom. However, this Public Consultation Document and any responses to it are not binding on the CITC and all responses are the property of the CITC.

In providing their comments, parties are requested to specify contact details including the name of the party (and all related parties if the respondent is part of a consortium) in addition to an address and phone number(s).

#### Mobile Satellite Broadband Service Description

The European Union Satellite Action Plan Regulatory Working Group (SAP RWG), classified the satellite services market into four categories, namely, Satellite Personal Communications Systems, VSAT and Satellite News Gathering, Satellite Broadband and Multimedia, and Direct Broadcast Satellites. As the SAP RWG has indicated, these categories are not mutually exclusive, nevertheless, it is a model for analyzing the satellite services market.

#### Satellite Personal Communications System (S-PCS)

This category is commonly known as the Global Mobile Personal Communications by Satellite (GMPCS). Article 11.6 of the Telecommunications Bylaw stipulates that GMPCS is a Type B class license . After conducting a public consultation in 2004, the CITC issued two GMPCS class licenses: Operator License and Service Provider License.

GMPCS licensees are authorised to provide voice services and data services up to 9.6Kbps using any satellite technology that complies with relevant ITU Recommendations. Subscribers are provided with mobile handsets for accessing the services.

It is also to be noted that ITU gives a wide definition to GMPCS such that it includes fixed or mobile narrowband and broadband data services:

GMPCS is a personal communication system providing trans-national, 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.<sup>1</sup>

#### Very Small Aperture Terminal (VSAT) and Satellite News Gathering

VSAT services provide fixed satellite voice and high speed data channels. Subscribers have to install a dish antenna to access the services.

The CITC has completed the public consultation and licensing process for VSAT and has issued five Type A Class Licenses in 2003. No data speed limits are stipulated in the Licenses and no restriction as to the mobility of the services.

#### Satellite Broadband and Multimedia

This category of satellite service provides high speed data communications using smaller and lower cost terminals.

The Mobile Satellite Broadband Services being addressed in this public consultation is considered to be in this category. These services would be expected to provide broadband communications of more than 64 kilobits per second per user channel. And the footprint of the satellite would be expected to cover all territories of the Kingdom. User terminals would be of portable nature such that no installation other than simple set up is needed.

#### **Direct Broadcast Satellites**

Direct broadcast service is outside the mandate of the CITC, and will therefore not be discussed in this document.

## The Utility of Mobile Satellite Broadband Services

The geography of the Kingdom makes it difficult for existing data service providers to provide ubiquitous service. Without Mobile Satellite Broadband Services, only urban and commercial areas will be able to enjoy applications made possible by high speed

<sup>1</sup> http://www.itu.int/osg/gmpcs/

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data services. Applications enabled by this type of service can include high speed internet access, internet kiosks, virtual private network access, audio and video streaming, e-banking, e-medicine and e-education.

The IMT-2000 initiative envisages that satellite services can be useful in filling the coverage gap in areas which cannot be reached through terrestrial means.

#### Consultation

- 1. Please give your view as to whether, and to what extent, Mobile Satellite Broadband Services can fulfil the role required under Section 4, and what other applications which may be required but would not be supported.
- 2. Please provide information of alternative technologies, provisioning methods, or arrangements which can be a better substitute for Mobile Satellite Broadband Services.

## Market Definitions and Competition Issues

The CITC is of the view that Mobile Satellite Broadband Services can be a complement to other data communications services. Complement in the sense that it can provide service coverage where terrestrial services do not. This section compares various service definitions with that of future Mobile Satellite Broadband Services, so that any competition related issues can be fully addressed by all interested parties.

#### Public Data Telecommunications Services

Since it may be uneconomic for existing data service providers to provide service in remote or sparsely populated areas, it is unlikely that the data service providers and Mobile Satellite Broadband Services Providers will be competing in the same relevant market. Furthermore, the latter would provide mobile as opposed to fixed data services.

#### <u>GMPCS</u>

The relevant market of GMPCS network operators and service providers is mainly realtime voice communications, and therefore they would not be competing with Mobile Satellite Broadband Services Providers in the same relevant market.

#### VSAT

VSAT Licensees are authorized to provide national fixed services and data communications services. The available bandwidth and the degree of mobility between VSAT and Mobile Satellite Services are significantly different. VSAT operates in the Megabit per second range, while Mobile Satellite is in the Kilobit per second range; VSAT is fixed and requires installation, while Mobile Satellite can be setup in minutes.

With these major differences, they have different target customer groups, and therefore are not in the same relevant market.

#### Cellular Mobile

Cellular mobile may compete with Mobile Satellite Broadband Services in the same relevant market in urban areas, but the fact that the latter services have a countrywide coverage makes them unique as compared to cellular mobile services.

#### International Data Communications

The fact that a Mobile Satellite Broadband Service has to go through a satellite and the ground segment in the country in which the earth station is located makes it difficult to compete with terrestrial international services, and consequently puts them in different relevant markets. (Please refer to the section "Internet Filtering and Security Issues" for details of network routing requirements.)

#### Consultation

- 3. Are Public Data Telecommunications Services and Mobile Satellite Broadband Services in the same relevant market? If yes, what considerations should be taken when licensing a Mobile Satellite Broadband Services Provider, and what regulatory obligations should be imposed upon it?
- 4. Are GMPCS and Mobile Satellite Broadband Services in the same relevant market? If yes, what considerations should be taken when licensing a Mobile Satellite Broadband Services Provider, and what regulatory obligations should be imposed upon it?
- 5. Are VSAT and Mobile Satellite Broadband Services in the same relevant market? If yes, what considerations should be taken when licensing a Mobile Satellite Broadband Services Provider, and what regulatory obligations should be imposed upon it?
- 6. Are mobile cellular services and Mobile Satellite Broadband Services in the same relevant market? If yes, what considerations should be taken when licensing a Mobile Satellite Broadband Services Provider, and what regulatory obligations should be imposed upon it?
- 7. Are Mobile Satellite Broadband Services and other international data communications services in the same relevant market? If yes, what considerations should be taken when licensing a Mobile Satellite Broadband Services Provider, and what regulatory obligations should be imposed upon it?

## <u>Roaming</u>

It is submitted that Mobile Satellite Broadband Services have a SIM roaming feature. This is where a GPRS-enabled SIM card issued by a cellular mobile service provider is used in a mobile satellite user terminal, and the user is billed for his mobile satellite usage by his cellular mobile service provider.

The CITC is of the view that a Mobile Satellite Broadband Services Provider should be allowed to enter into roaming agreements with cellular mobile services providers.

On the other hand, users with SIM cards issued by foreign Mobile Satellite Broadband Service Providers or foreign Cellular Mobile Service Providers should be barred from accessing the Mobile Satellite Broadband Services inside the Kingdom unless the issuer of the SIM cards has a roaming agreement with a Mobile Satellite Broadband Services Provider inside the Kingdom. Otherwise, an unlicensed foreign service provider would be in direct competition with a local licensed service provider without the knowledge and control of the CITC.

#### Consultation

- 8. What is the appropriate level of mandate regarding SIM roaming? Should the mandate be specified in the license or should the Mobile Satellite Broadband Services Provider be allowed to choose its roaming partners? What are the appropriate conditions to be stipulated in the licenses regarding the entering into roaming agreements between a Mobile Satellite Broadband Service Provider and a mobile cellular service provider?
- 9. Please give your comments regarding the regulatory requirements and technical feasibility of barring foreign issued SIM cards from being used in Mobile Satellite Broadband Services terminals inside the Kingdom.

## Internet Filtering and Security Issues

The ground segment of a Mobile Satellite Broadband Services system consists of a satellite earth station and network which routes its traffic to terrestrial networks. In the case of a satellite earth station located inside the Kingdom, there would be no internet filtering bypass problem, since any circuit connecting the satellite earth station to international networks would be routed through service providers licensed in the Kingdom.

On the other hand, if the ground segment would be located outside the Kingdom, the CITC is of the view that internet traffic should be routed to the kingdom through the terrestrial network of licensed service providers, such that filtering can be done inside the border of the Kingdom by licensed service providers.

To comply with security regulations in the Kingdom, a Mobile Satellite Broadband Services Provider would be required to perform real time subscriber authentication function inside the Kingdom, make call records available for inspection and provide call interception function as required by law.

#### Consultation

10. Please give your comments regarding the regulatory requirement and technical feasibility of the routing arrangement discussed above.

## Service Coverage

Mobile Satellite Broadband Services are supposed to provide a more ubiquitous and complementary data service to terrestrial services. A Mobile Satellite Broadband Services Provider should immediately inform the CITC, if at any time it discovers that its satellite footprint does not cover any part of the Kingdom.

## Tariff Regulation

Chapter 7 of the Telecommunications Bylaw does not require regulation of tariffs for any service provider that is not defined as a 'dominant service provider' or 'universal service provider' unless the CITC issues a decision to regulate its tariffs. The definitions of dominant service provider and universal service provider are given in Chapter 4 and Chapter 9 of the Bylaw respectively. The CITC will monitor the competition in the Mobile Satellite Broadband and other telecommunications market in order to evaluate accurately the appropriate level of tariff so that the right of the users can be safeguarded. The CITC will exercise its authority to review and, if necessary, to adjust the tariff of the Mobile Satellite Broadband Services Provider.

In order to prevent anti-competitive behaviour, some degree of tariff regulation may be required. The least extent would be to prohibit pricing below cost and the prevention of cross subsidy, in the case where a Mobile Satellite Broadband Services Provider is also a service provider of other services in the Kingdom.

On the other hand, a tariff that is too high would result in services only affordable by commercial users and consumers in the higher end of socio-economic brackets. This would defeat the original purpose of a ubiquitous data service.

Regarding roaming tariffs, the Mobile Satellite Broadband Services Providers would be allowed to negotiate its roaming tariffs with any cellular mobile service providers in the Kingdom.

## Consultation

- 11. Please give your view as to whether the CITC should regulate the tariff, and to what extent tariff regulations should be imposed?
- 12. Please give your view as to an appropriate tariff structure and a reasonable tariff level, and support your view with statistics or benchmarks if available.

## Licensing Matters

Article 11.2(d) of the Telecommunications Bylaw provides that the CITC may issue an individual license, as opposed to a class license, for service providers who wish to provide national or international mobile data communications services.

As mentioned above, the CITC has already issued two types of satellite licenses, the VSAT license and the GMPCS licenses. However, the nature of Mobile Satellite Broadband Services and the regulatory obligations of their service providers would be very different from those stipulated in the previous two types of licenses. It is therefore envisaged that a third type of satellite license, Mobile Satellite Broadband Services License, in the form of an individual license, will be developed.

#### Consultation

- 13. Taking the specific nature of Mobile Satellite Broadband Services into account, what regulatory obligations should be imposed on the licensees? What is the maximum number of licenses to be awarded? Please give your justification to your answer regarding the number of licenses. And, what are the common technical and commercial requirements to be imposed on these licenses?
- 14. What would be the appropriate level of license fee?
- 15. What should be the duration of the licenses?

## Equipment Type Approval of User Terminals

User terminals should be type approved according to the Interim Authorization Procedure for Importing Wireline and Wireless Telecommunications Equipment to the Kingdom of Saudi Arabia as published on the CITC website<sup>2</sup>; or, pending its finalization, the Regulations and Procedures for Type Approval and Registration of Telecommunications and IT Equipment, and for Licensing of Equipment for Licensed Network Operators<sup>3</sup> currently published for public consultation.

<sup>&</sup>lt;sup>2</sup> www.citc.gov.sa, under the headings "Regulations" and "Equipment Type and Approval" <sup>3</sup> www.citc.gov.sa, D.N. Na (0/1425 and as "Distance" and "Distance"

www.citc.gov.sa, P.N. No.:9/1425, under "News and Updates" and "Public Notices"

#### Consultation

16. Please give your view regarding the features of user terminals and equipment type approval related matters.

## Other Issues

Interested parties are welcome to express their views regarding other related issues.

#### Consultation

17. Please give reasons, statistics, benchmarks, or foreign country precedents, where appropriate, to support related issues you would like to discuss under this consultation.

#### **Responses**

Responses to this Public Consultation Document must be submitted to the CITC on or before **2:30pm** local time 25/05/1426H - 02/07/2005G to either one of the following addresses:

1. E-mail to:

#### mbss\_response@citc.gov.sa

2. Delivery by hand or by courier:

The Office of the Governor Communications and Information Technology Commission King Fahad Road Riyadh 11588, KSA