HASHEMITE KINGDOM OF JORDAN

Telecommunications Regulatory Commission (TRC)

INFORMATION MEMORANDUM ON THE UNIVERSAL SERVICE OBLIGATION

Amman, 24 April, 2006

Telecommunications Regulatory Commission

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EXECUTIVE SUMMARY

The Telecommunications Regulatory Commission TRC has undertaken a consultation on the Universal Service Obligations USO Regime and related matters in response to the publication of the Government's USO Policy on 21st December 2004 and the liberalisation of the fixed telecommunications market at the beginning of 2005. The TRC published two consultation documents. The first, published on the 27th December 2004, was concerned with the overall principles. The second, published on the 24th July 2005, was concerned with the wording of the regulations. A Report on the responses received within the public consultations is annexed to the Information Memorandum (Annex1).

The Affordable Tariff

The TRC believes that an affordable tariff will become available in the market without regulatory intervention. If it does not, then the TRC intends to investigate whether a cost-based tariff can meet the criteria for an affordable tariff. If a cost-based tariff can meet the criteria, the TRC may require dominant operators to provide such a tariff. If a cost-based tariff cannot meet the criteria, the TRC may require Universal Service Providers USPs to offer such a tariff to specific disadvantaged groups in accordance with Government USO Policy.

The Instruction on the Sharing of USO Costs

The Instruction on the Sharing of USO Costs specifies the universal service, what happens once Jordan Telecom (JT) faces effective competition, under what circumstances JT would not continue to be the USP and how USPs are to be selected in those circumstances, when USPs are to be compensated, the method of calculating compensation, and who contributes to the universal service fund.

In addition to these Instructions, and in accordance with the requirements of articles 6-p and 86 of the Telecom Law, the TRC has prepared a draft Bylaw for establishing the Universal Service Fund. This draft will be submitted through the MoICT for approval and issuance by the CoMs. This Bylaw sets up the Universal Service Fund and makes the TRC responsible for its administration.

The definition of the universal service itself is set down in Government USO Policy. This service will be provided by one or more USPs. JT will continue to provide the Universal Service until it faces effective competition to its Public Switched Voice Service. Any USP has to be able to satisfy certain conditions to ensure that the service will continue to be provided. A USP will be compensated for any net cost it endures provided that it suffers material competitive disadvantage.

Payphones on private real estate

The Instructions on the Roles and Responsibilities of a Payphone Operator and Associated Service Provider provide the framework for payphones on private real estate to be established. Such payphones are intended to extend the availability of telephony services within communities to meet the requirements of Government USO Policy.

The Instructions allow that in general a payphone on private real estates does not need to be licensed. However, there will continue to be a requirement to license Payphone Operators and Payphone Owners if a large number of payphones is operated or managed at any one set of locations for the provision of Payphone Services. Furthermore, the USP will be required to offer a telephone service to Payphone Operators and Payphone Owners and monitor the performance of the Payphone Operators against a number of quality-of-service parameters. This will ensure that the Payphone Operators provide a satisfactory service to their customers.

INFORMATION MEMORANDUM ON THE UNIVERSAL SERVICE OBLIGATION - USO

1 SECTION 1: INTRODUCTION

In accordance with the requirements of article 3b of the Telecom law, Government published its USO Policy on the 21st December 2004.

The Telecommunications Regulatory Commission (TRC) published the broad principles of regulating the USO in the Information Memorandum dated 2nd December, 2004[1]. The TRC published a consultation paper on the Implementation of the Universal Service Regime on the 27th December 2004. This was followed by the publication of a further consultation covering draft instructions to establish the USO Regime and payphones[2] on the 24th July 2005.

This information memorandum concludes the consultations on the implementation of the Universal Service Regime. It is published in the context of the Government's USO Policy.

This information memorandum has the following parts.

- An explanations of the universal service regulatory framework
- The TRC's response to comments received within the first period of public consultation
- The TRC's responses to the comments received at the end of the first public consultation
- The TRC's response to comments received within the second period of public consultation

1.1 Purpose of this information memorandum

This information memorandum summarises the instructions that formally define the USO Regime[3] and the means of regulating payphones[4]. It also sets out the TRC's views on affordable tariffs, its plans for working with government and licensees to ensure that affordable tariffs are provided, and its plans for working with licensees to provide equipment and services for the disabled.

1.2 The need for a Bylaw

In addition to the Instructions, the TRC has prepared a draft Bylaw that will be required to establish, manage, administer, control, and authorise disbursements from a Universal Service Fund set up under Article 86 of the Telecommunications Law.

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[1] Information Memorandum Related to a Program of Licensing within the Fixed Telecommunications Sub-sector and the evolution to an Integrated Licensing and Regulatory Regime

[2] Draft Instructions on the Sharing of USO Costs and the draft instructions on the Roles and Responsibilities of a Private Payphone Service Provider and Private Payphone Operator

[3] Instructions on the Sharing of USO Costs

[4] Instructions on the Roles and Responsibilities of a Payphone Operator and Associated Service Provider

1.3 Structure of this information memorandum

Section 2 states the definitions of the Universal Service and its geographic scope.

Section 3 discusses affordable tariffs.

Section 4 discusses the provision of equipment and services to disabled users.

Section 5 summarises the Instructions on the regime for sharing USO costs.

Section 6 summarises the Instructions to define the roles and responsibilities of a Payphone Operator and Associated Service Provider.

2 SECTION 2: UNIVERSAL SERVICE OBLIGATION

2.1 Definition of the Universal Service

Government Universal Service Policy provides a specification of the service that should be available universally in the Kingdom. It states that *"the universal service shall be the Basic Public Telephone Service. The Basic Public Telephone Service means the telecommunications services comprising technical features which are the minimum necessary to allow the establishing of a telephony channel capable of allowing customers to make and receive local, national and international calls supporting speech, facsimile and data communications sufficient for functional access to internet services. Functional internet access shall be considered to be available if the service provided is equivalent in data rate, reliability and continuity of service to that used by a majority of subscribers taking account technical factors that may limit the performance of such technologies in certain geographic locations."*

Government USO Policy also indicates that there is no presumption about suitable technology. It states that *"the universal service may be provided using any suitable technology base but there shall be a presumption in determining the net cost of the USO that the optimal technology in cost terms that meets the requirement has been used. The definition of optimal technology may take account of expected developments in functional internet access that may take place. The TRC shall have the responsibility for determining what technologies are optimal."*

The Instructions on the Sharing of USO Costs are concerned, amongst other things, with the obligations on Universal Service Providers to provide the Universal Service. Therefore in the Instructions, the Universal Service is defined as "the Basic Public Telephone Service provided by a Universal Service Provider."

2.2 Geographic availability

Government Universal Service Policy states that *"the universal service shall be available to any Person requesting such service at the prevailing standard connection and other rates for the Basic Public Telephone Service charged by the relevant Universal Service Provider."*

Government Universal Service Policy also states that *"the Universal Service shall be available in all municipalities and populated areas recognized by the Minister of Municipalities and Environment of Jordan that have a population of 300 or more permanent inhabitants as determined from time to time by the Department of Statistics, or its successor."*

Furthermore, Government Universal Service Policy states that *"the universal service shall also be available outside such municipalities and populated areas to any Person requesting such service at the prevailing standard connection and other rates for the Basic Public Telephone Service charged by the relevant Universal Service Provider, provided however that in such circumstances the Universal Service Provider shall be permitted to recover from such customer the full incremental cost of connection over and above the average cost of connection of the Licensee if and to the extent such cost exceeds the Licensee's average cost of 50 man hours work plus 500 JD."*

Without prejudice to the above statements, the Universal Service shall be available within the regulated boundaries that lies within the boundaries of greater municipalities as recognized by the Minister of Municipalities and Environment of Jordan.

This definition of the geographic availability of the Universal Service has been adopted in the Instructions on the sharing of USO costs as an obligation on Universal Service Providers.

3 SECTION 3: AFFORDABLE TARIFF

3.1 Definition of an affordable tariff

The TRC will use the following set of criteria to judge whether a tariff is affordable.

Relative to the monthly income of the lowest 10th percentile household group by income:

(a) The initial payment, excluding the cost of the telephone handset, is no greater than 10% of monthly income.

(b) The average monthly expenditure that is necessary to continue to make and receive calls is no greater than 2% of the monthly income.

(c) The smallest payment increment for purchasing additional units of service is no greater than 5% of monthly income.

In addition, the tariff should be available without a check of the credit worthiness of the prospective subscriber.

Notes:

1. The initial payment for a fixed telephone service is the connection charge. The initial payment for a mobile telephone service is the activation charge.

2. Average monthly expenditure necessary to continue to make and receive calls for a post pay service is the monthly rental. Average monthly expenditure for a prepay service is more difficult to define. Many prepay cards have a limited life. After a certain period any credit on the card is automatically cancelled. The average monthly expenditure for a prepay mobile service is the price of the prepay card divided by the number of months from activation to cancellation of credit by the service provider. For example, a 3 JD card that lasted three months would require average monthly expenditure of 1 JD per month.

3. The smallest payment increment for a post pay service is the monthly rental. The smallest payment increment for a prepay service is the price of the lowest price prepay card.

4. All payments, prices and expenditure exclude sales tax and other taxes.

5. For the purposes of this definition, the income of the 10th percentile household group by income will be taken as that estimated by the Department of Statistics. The TRC's estimate of the 10th percentile household income is 167JD per month, based on information provided by the Department of Statistics using 2003 data. The TRC is intending to use this base for the calculation of payments and expenditure to ensure that any changes in income levels in society are automatically taken into consideration in determining whether a tariff is affordable.

3.2 Introduction of an affordable tariff

The TRC will seek to ensure that affordable tariffs are implemented in the most efficient manner possible and preferably by the market without intervention by the TRC.

The TRC intends to review the availability of an affordable tariff yearly with the next review to be completed by 31st December 2006. Should the TRC find that there is no affordable tariff based on the above affordability criteria, the TRC will inform Government and propose the implementation of an affordable tariff by licensees dominant in a relevant market, provided that the licensee is able to implement the affordable tariff in a cost based manner as determined by the TRC.

If no licensee is able to provide a cost based affordable tariff, the TRC will propose to Government that each USP be required to offer such a tariff in its area. The net cost of such a required and approved tariff shall be included in the calculation of the net cost of the universal service. The effect of obligating a USP to provide an affordable tariff may be to reduce average revenue per line and this change would be taken into account in the USO net cost calculation.

In defining an obligation to provide an affordable tariff under Government USO Policy, the TRC will take account of the requirement in the Policy not to add unnecessarily to the USO burden. The TRC will do this by ensuring that groups to which it is to be made available have a high proportion of low-income households or individuals, and that by making this tariff available to these groups, the service does not then become available to groups that are not economically disadvantaged.

To this end, the obligated tariff would be a low usage tariff having low fixed charges and relatively higher call charges than a ‘standard’ tariff. Such a tariff favours subscribers that make only limited use of a telephone service such as low-income households or individuals. A low usage tariff does not favour the economically advantaged who tend to make a larger number of calls, and therefore pay more for the service than they would under the ‘standard’ tariff. As a consequence, low usage tariffs tend to be used by lower income groups rather than higher income groups. While still being ‘available’ to those that are not economically disadvantaged, the TRC would expect adoption amongst such groups to be low.

4 SECTION 4: SUPPORT FOR THE DISABLED

USO Policy requires that Jordan Telecom (JT) meets “*the terms of its license by preparing a plan to improve access to its services by users with disabilities*”.

TRC encourages all Licensed Telecommunications Operators to extend formal support to the NGOs who are in charge of helping citizens with disabilities. However, the TRC has written to JT requesting its plan for disabled users where they propose an action plan for setting up the plans for disabled. Such plans have not been received by TRC yet. On the other hand, a special offer for disabled users has been implemented, but does not meet the requirements stated within the USO Policy.

When TRC receives JT’s plans, the TRC will review them, and after any subsequent modifications approve them.

This Information Memorandum publicises a decision by the Board of Commissioners of TRC to require all licensed operators to plan to meet the requirements of the Universal Service Policy. The Policy states that “*Government requires that all licensed operators, including those offering Basic Public Telephony Services and licensed mobile operators, in so far as they provide telephone handsets and other communicating devices, shall ensure that the range of devices offered includes models suitable for individuals with disabilities that affect the use of a telephone. The disabilities shall include hearing, sight and manipulation impairments.*

“Government requires that all licensed operators offering Basic Public Telephony Services and licensed mobile operators provide information about the services that they provide, including sales literature, contractual information and billing information in ways that enable access by individuals who have hearing or sight impairments.

“Government would like all operators offering Basic Public Telephony Services and licensed mobile operators to provide directory enquiry facilities that include the placement of the call by

the operator. Government requires that for registered disabled individuals access to this service shall be at the prevailing standard rate for dialled calls."[5]

The TRC believes that the provision of such facilities and services for disabled people is, in the long term, in the interests of all operators. The TRC believes that operators share this belief. Nevertheless, the TRC will require any such licensee to provide plans for such facilities and services.

Furthermore, the TRC will require any such licensee to implement such facilities and services.

5 SECTION 5: THE USO REGIME FOR THE SHARING OF COSTS (THE USO REGIME)

The Instructions on the Sharing of USO Costs forms the Regime for Sharing USO Costs (USO Regime) required by Government USO Policy. The Instructions on the Sharing of USO Costs are published separately to this Information Memorandum.

5.1 Application

The USO Regime will apply from the date of publication of these Instructions. However, the implementation of this Regime will be pended until the issuance of the Universal Service Fund Bylaw.

5.2 Establishing consistency between the Government USO Policy and JT's Obligations under the terms of its current License Agreement

Article 2.6 of Appendix 4 of the JT's License requires that; (i) *"until such time as a competitor to any part of the Licensee's Public Switched Voice Service has begun operations pursuant to a license issued by the TRC, the entire cost of the USO of the Licensee shall be paid for by the Licensee"*, and (ii) *"The TRC shall establish a USO Regime for sharing the USO costs before the start of operations of any Public Switched Voice Service in competition with the Licensee."* That Appendix 4 can be modified only in accordance with Article 8.3 of the JT's License Agreement.

On the other hand, the USO Policy requires that; (i) *"until there is effective competition to JT's provision of a Public Switched Voice Service (as defined in Section 1.1.14 of Jordan Telecom's current License Agreement), JT continues to be the USP in all geographic areas and that JT shall continue to bear the entire cost of the USO under the terms of its license."* and (ii) *"At such time as there is effective competition to JT's provision of a Public Switched Voice Service, the USO and selection of USP shall be administered under the regime defined by the TRC for sharing USO costs."*

Effective competition for JT's Public Switched Voice Service can happen only if the market for fixed public telecommunications network and services becomes fully competitive, and that explicitly implies an absence of operator of market power on such market.

Therefore, and unless Appendix 4 of JT's License is modified to accommodate alternative interpretation, the TRC needs to determine how to test for "effective competition". The TRC has concluded that "effective competition" has two conditions. (a) beginning operation by another Licensee in competition with JT's Public Switched Voice Services, and (b) that any part of the Public Switched Voice Service is available in practice from both JT and another licensee, subject

[5] General Government Policy for Universal Service in the Telecommunication Sector

to any other factors that the TRC determines to be relevant. This is, in short “operational competition”.

TRC had already issued, under the new regime of licensing, three Individual and forty-one Class Licenses which give their holders the right to provide fixed telephone services. However, competition has yet to happen at any level, simply because none of these License Holders has a fixed access network of its own to originate or terminate traffic, and substantially important interconnection services namely; In-bound international traffic termination and bit-stream unbundling have not been offered yet by JT in compliance with Interconnection Instructions. In absence of such services, competition cannot be effective nor operational. Therefore, the conditions for operational competition are not met because Public Switched Voice Services cannot be provided in practice by a second licensee and are currently available only from JT.

Accordingly, the Regime for the Sharing of USO Costs is hereby established. Although the TRC has issued licenses, it cannot be said that they are yet in competition with JT. Until it can be demonstrated that there is competition, JT will continue to bear the entire cost of the USO.

5.3 Overall process

The USO Regime has three major stages.

1. To establish that a competitor to any part of JT's Public Switched Voice Service has begun operations pursuant to a license issued by TRC and that decisions and administration of the USO are therefore to be undertaken using the USO Regime.

2. To establish which licensee or licensees are to be Universal Service Providers (USPs).

3. To compensate those USPs that face a material competitive disadvantage arising from their USO.

This USO Regime is described in more detail below.

5.4 Establishing that the USP/JT can make a claim for compensation under the USO Regime

Figure 1 below provides a brief of the actions that may be required when JT can make a claim for compensation under the USO regime.

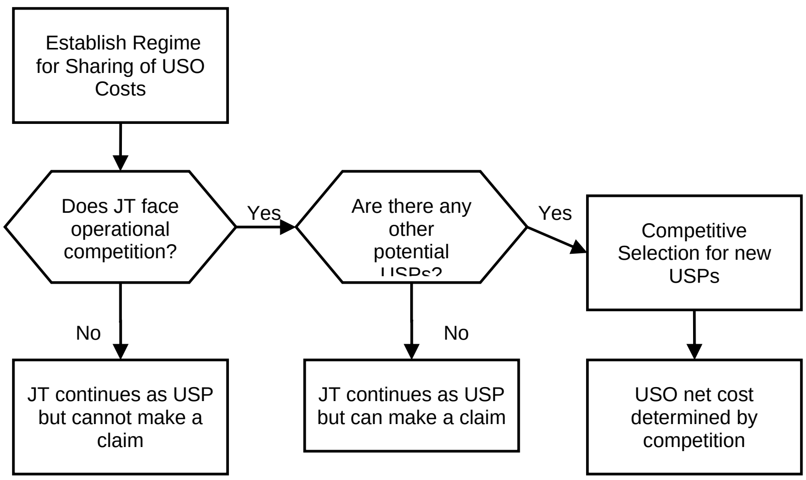

Figure 1: The Effective Competition Test: establishing that JT can make a claim under the USO Regime

5.5 Designation of one or more Universal Service Providers USPs

USO Policy requires that the TRC shall determine who is to be a USP when other Licensed Operator(s) have begun operation in competition with JT.

This determination will require the TRC to identify what operators believe that they have interest and the capability to be a USP and in what areas. The TRC will then evaluate the options to determine whether a tendering process for successful competition can be held. If it cannot be held because there are too few capable operators, the TRC will require JT to continue to be the USP and allow it to make a claim for material competitive disadvantage.

5.6 Material Competitive Disadvantage Test: Determining that a claim has merit

A claim for compensation has merit if the USO imposes a material competitive disadvantage on a USP.

The material competitive disadvantage test is in two parts:

a. The first determines that there is the possibility of competitive disadvantage.

b. The second determines whether there is a net cost and that a claim is material.

The test will be applied to a claim made by a USP. Claims will be allowed yearly in arrears. Therefore, a claim made for 2005 would be made after January 1st 2006.

The Material Competitive Disadvantage Test is shown in **Figure 2**.

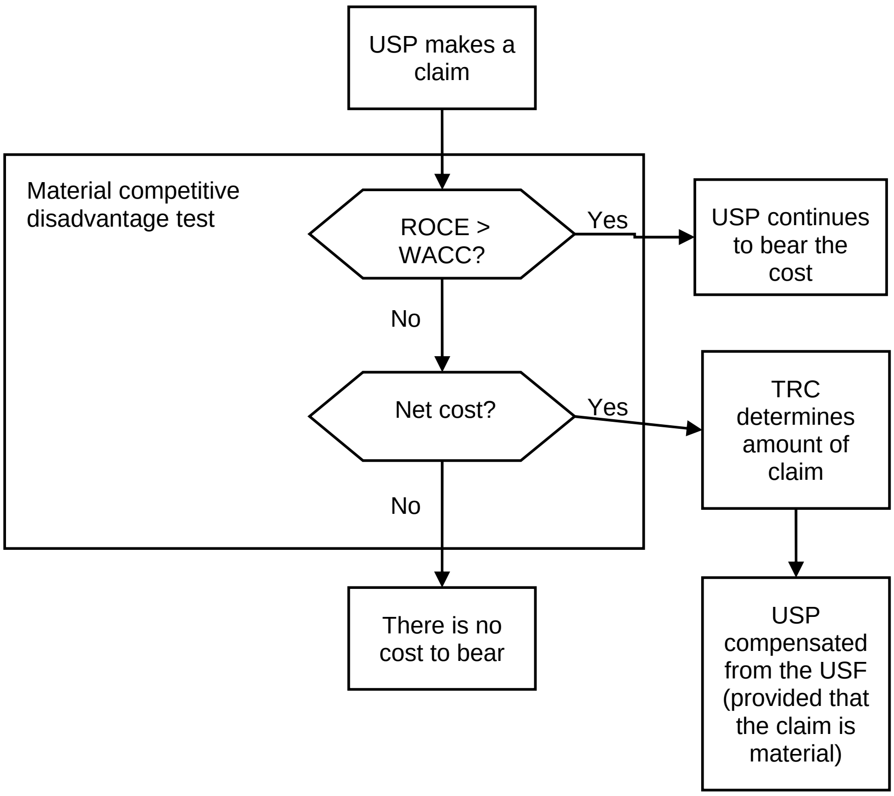

Figure 2: Material Competitive Disadvantage Test: determining that a claim has merit

5.6.1 Competitive disadvantage

The TRC intends to test for the possibility of material competitive disadvantage by evaluating whether return on capital employed (ROCE) for the relevant line of business is greater or less than the USP's weighted average cost of capital (WACC). If ROCE is less than WACC, there is a possibility of competitive disadvantage. The ROCE used and the WACC used will be determined by the TRC and will assume that the USP is an efficient operator both financially and operationally.

The ROCE and WACC will be for the line of business which may be sustained using the infrastructure that is necessary for the Universal Service and any value added and supplementary services offered as a consequence of its ability to deliver the Universal Service. Therefore, the WACC used will be for a fixed services business that provides services at fixed locations regardless of the technology used.

5.6.2 Net cost of the USO

The net cost of the USO will be assessed using a standard approach to USO net cost estimation. The net cost will be defined as avoidable costs minus revenues foregone. If there is a net cost, the estimated benefits of being the USP will be estimated and subtracted from this net cost.

In calculating the net cost, costs avoided and revenues foregone will be based on areas *not* lines. The net cost will be the sum of the net cost of serving all uneconomic areas, where an uneconomic area is one where the costs of serving it are greater than the revenues received from the area.

The basis for assessing the net cost will be a forward looking long run incremental cost model that is consistent with that for interconnect cost modelling in so far as the assumptions are relevant. In the model, it will be assumed that the USP is an efficient operator both financially and operationally. If it proves impractical to design an efficient network, because of lack of data about the locations of customers or for other reasons, then the existing network topology will be used as the basis of the analysis.

5.6.3 Revenue basis of the net cost calculation

The revenues used in the net cost calculation will be average revenue per line by area. Revenue will be based on:

- All revenues from all elements of the Universal Service;
- Positive net revenues of value added and supplementary services provided because the universal service is provided in the area.

This revenue basis will automatically include the impact of affordable tariffs and payphone subsidies. Affordable tariffs will affect the average revenue per line in an area. Payphone subsidies will affect the cost of providing services in the area.

Services to be included in the revenue calculation will comprise:

- Universal Service elements: access services, outbound local, national and international calls and calls to subscribers on other networks, on-net inbound local, national and international calls and inbound calls from subscribers on other networks.
- Value added and supplementary services that are provided because the universal service is provided, including telephone directory, directory enquiry, hunting, DDI, Centrex, call management services, messaging services, other value added voice services, dial internet

access, ADSL, dial access to VPN services and dial internet access services and leased line services.

5.6.4 Period during which a claim can be made

A USP may make a claim to the TRC for compensation for the net cost of a USO for the immediately preceding calendar year. For the avoidance of doubt, a claim for the calendar year 2005 must be made before December 31st 2006. Calculation of contributions would be made using the same calendar year.

5.7 Determining the basis of contribution to the fund

In accordance with article 86 of the Telecom Law, bylaw that enables the TRC to administer a Universal Service Fund will be required before the Fund may be set up. Pursuant to article 12/a/16 of the Telecom Law, TRC has prepared a draft of such a bylaw for consideration by Government (The Bylaw for the Management of the Universal Service Fund). The TRC shall coordinate with the MoICT in order to submit the draft to the Government.

The TRC has concluded that the set of services and products offered by the non-USPs, including public mobile telecommunications service providers, contains some services and products that are similar to that offered by the USP. The revenues generated by such products and services was normally used by the USP to subsidies any net cost of the USO; e.g. fixed telephony services, leased lines, or international calls. Such services and products are sold in one or other markets within the telecommunications sector. Therefore, all licensed operators are competitively advantaged and thus potential contributors to the universal service fund.

Further, the TRC has concluded that the PMTOs are not disadvantaged by their roll out obligations since the cost of the roll out obligations would have been taken into account in the prices paid by the PMTOs for the licenses.

Licensees that have 1% or less of total Operating Revenue are exempted from contributing to the universal service fund. The Operating revenue for any Licensee means Operating Revenue as defined in the individual and class licences. The imposition of contribution to the universal service fund on such operators may reduce their ability to enter and sustain in the market. However, the net cost of USO is expected to be low, and those Licensees whose revenues below the 1% threshold have a significantly small amount of compensation that would otherwise tie up TRC's resources and form an additional administration burden on the TRC.

5.8 Calculation of the contributions to be made

Contributions will be proportional to a contributor’s share of the total contributors' revenue. Total contributors' revenue means the sum of Operating Revenues of all Licensees minus the sum of Operating Revenues of all exempted Licensees.

5.9 Functional internet access

Under Article (23) of the Instructions on the Sharing of the USO Costs, the TRC is responsible for determining the characteristics of the service required for functional access to internet services. The TRC currently believes that a minimum data rate for functional internet access is 28.8kbit/s. However, the TRC does not have sufficient information to evaluate the burden of providing data services at such speed in all areas of the country. Therefore, the TRC requires that where fixed line plant permits, a speed of 28.8kbit/s is provided and that the USP shall take all reasonable steps to ensure that such speed is provided. The TRC reserves its position regarding further obligations in this area.

5.10 Services to be taken into account in the parameters and requirements for the provision of the Universal Service

The USO Policy states that the TRC has, as part of its role, the determination of the services that should be taken into account in deciding parameters and requirements for the provision of the universal service. Thus, USO Policy allows the TRC to take account of services other than the Universal Service in specifying the modern equivalent assets assumed in costing the USO.

The TRC hereby specifies that the modern equivalent assets used to provide the Universal Service shall not prejudice the provision of broadband services. These services are reliant on particular characteristics of the physical path from the customer premises to the nearest switching or routing centre which are not necessary to provide the Universal Service alone.

Therefore, in costing this access facility, the TRC shall assume that assets in the physical path from the customer premises to the nearest switching or routing centre that are shared by the universal service and the broadband service shall be modern equivalent assets sufficient to provide:

- The Universal Service;
- An asymmetric broadband service giving at least 384kbit/s from the exchange to the customer premises and a lower rate of at least 64kbit/s from the customer premises to the exchange where geographic constraints allow.

5.11 Costs associated with the setting up and administering the USO

The administration of the USO imposes costs on the TRC. It is intended that these costs are recovered from the Universal Service Fund. This will ensure that the costs of the USO are borne by the licensees that are affected by the USO only. However, until the Universal Service Fund has received contributions, the cost of administration of the USO, if any, will be recovered from other sources of TRC income.

6 SECTION 6: PAYPHONES

The "Instructions on the roles and responsibilities of a Payphone Operator and Associated Service Provider" allow the provision of payphones “in private real estate”[6]. The purpose of these Instructions is to meet requirements of the USO Policy for payphones in areas where the penetration of fixed and mobile telephone services is low, in order that citizens in such areas shall be able to participate in the economy and in the society by telephone.

Payphone are the Telecom Terminal Equipment (TTE) that has access to the Basic Public Telephone Service and certain Additional Services, located in place that is accessible by individual of public and available to be used by such individuals in return for a payment. These instructions have categorized payphones into three classes according to the extent of public access, namely:

1. **Class -1: "Public Payphones"** which are the payphones that are located on places where public access is not restricted and generally open to the public every hour of the day such as streets and public land. Only licensees can establish, manage and operate Public Payphones. The establishment, operation and management of this class of payphones and the provisioning of the Payphone Service shall be subject to the same applicable terms conditions of the License in addition to these Instructions.

[6] As specified in the USO Policy

2. **Class- 2: "Managed Payphones"** are the payphones that are located on places where public access to the Payphone is more restricted than Public Payphone, and the access to the payphone is controlled by the Payphone Operator. Payphone Operators are intended to be local businesses, for example, cafés, shops, etc. The payphones would be on their premises, available during their opening hours.

3. **Class -3: "Private Payphones"** are the payphones that are located in places with limited access, where the Payphone Owner controls access to the payphone. Payphone Owners are intended to be persons whom owns and operates this payphones, such as hotel rooms, hospital rooms, clubs, residential properties, etc.

These Instructions specify the roles and responsibilities of Payphone Operators who provide the service to the consumer, and Associated Service Providers, who are the licensed operators that provide telecommunications services to the Payphone Operators and Payphone Owners.

USO policy indicates that the service should not require a license. License conditions would be onerous and payments prohibitive for such businesses, and therefore the obligation to obtain a license would make the service unfeasible.

There is therefore a need to forbear from licensing of the service that Payphone Operators and Payphone Owners provide to the consumer through the instruction under Article 6(o) of the Telecommunications Law.

The number of payphones that can be provided on an unlicensed basis is restricted to ensure that there is no exploitation of this position.

The USO Policy states that in some areas Payphones may require a subsidy. Areas where subsidy would be possible would be those where the Universal Service is available, fewer than one in two households has either a fixed or mobile phone, the nearest payphone is more than 1.5 kilometres away and the number of households or inhabitants in the area covered by the phone will provide sufficient calls to cover the operating costs of the Payphone Operator or the Payphone Owner.

Initial estimates suggest that the number of communities requiring a subsidy will be less than 500 depending on the results of the 2004 census conducted by the Department of Statistics.

It is intended that no subsidies are provided until some experience is gained in the provision of unsubsidised services or until the local community can prove that the area suffers from low penetration.

If a subsidy is provided, it will be provided to the Payphone Operator or the Payphone Owner via an Associated Service Provider. The cost of the subsidy will be included in the net cost of the USO. In such case, the Associated Service Provider will necessarily be a Universal Services Provider.

7 ANNEXES

7.1 Annex 1: Report on responses received within the public consultations

7.1.1 Annex 1.1: The report on responses received within the first public consultation

7.1.2 Annex 1.2: The report on responses received at the end of the first public consultation

7.1.3 Annex 1.3: The report on responses received within the second public consultation

Annex 1.1: The report on responses received within the first public consultation

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1 INTRODUCTION

This report presents an analysis of the responses received within the first period of public consultation.

Formal responses were received from the following parties:

- Jordan Telecom
- MobileCom
- Fastlink
- Umniah
- XPress

Jordan Telecom also submitted a supplementary response at the end of the first stage of the public consultation period.

The consultation was in three parts and posed a set of 42 questions to be considered by interested parties.

The parts of the consultation were:

Part I: Issues arising from Government USO Policy

Part II: The Implementation of the USO Regime

Part III: USO Regime revenue and cost modelling, and benefits estimation

This analysis of responses follows the structure of the consultation document and for each question gives an analysis of the responses and the TRC's conclusions.

Part I: Issues arising from Government USO Policy

2 AFFORDABLE TARIFF

1. **The TRC seeks the opinions of interested parties on this definition of an affordable tariff and the threshold of charges at the start of a subscription and for monthly charges.**

A number of Public Mobile Telecommunications Operators (PMTOs) believed that they already provided a tariff with low connection and rental charges that could be considered to be an affordable tariff. One PMTO suggests that such a tariff might be implemented by Jordan Telecom (JT) with any net cost recovered through aggregate revenues.

2. **The TRC seeks the opinions of interested parties on:**

(a) **What types of operator should be obliged to offer an affordable tariff, and whether every operator of that type should be obliged to offer it or just one operator of that type;**

(b) **How the operator should be selected and how the net cost of providing the affordable tariff should be determined.**

(c) **Whether the approach proposed in Part III (of the consultation) is a practical approach to determining the net cost of an affordable tariff.**

All PMTOs were concerned that the present taxes on mobile revenues hindered their ability to provide an affordable tariff. They were also concerned about how any net cost would be recovered as it would be a new obligation placed upon them. One PMTO made the point that the present mobile tariffs are amongst the lowest in the region.

One PMTO was concerned that a below cost tariff could be anti-competitive if implemented by a dominant operator since such a tariff could not be matched by a new entrant. It did not believe that it would be possible to restrict the application of such a tariff to particular groups. Therefore it believed that a tariff should be an obligation on all operators or none, with the implied conclusion that compensation for any net cost would be from outside the industry. It went on to say that the proposed approach was not suitable because each operator would have a different cost base. It therefore proposed that the net cost should be estimated as the difference between the revenue that would accrue from a customer under a standard tariff and under the affordable tariff.

In contrast, another PMTO would be “concerned” by a blanket obligation on all operators. It was of the opinion that an affordable tariff should be part of the fixed operator’s USO. However, it also believed that it was premature to consider this question.

TRC’s comments

TRC believes that there is no need to obligate an affordable tariff if one is already provided by the market. The TRC believes that mobile tariffs are likely to continue to mature, and will give rise to reductions in monthly charges, thereby increasing affordability amongst low-income groups. However, the TRC will review progress in penetration of telephony services amongst households with income less than JD300 per month as required by Government USO Policy and reconsider its position in subsequent years.

The TRC believes also that any obligated tariff that was below cost would need to be constrained in its application to avoid its use in an anti-competitive manner.

The TRC believes that if it is control of expenditure by consumers that makes a tariff affordable, then a pre-pay calling card approach may be very effective. This could be tied to either the fixed or mobile networks. However, the incremental cost of serving a low revenue customer on a fixed network may mean that such a calling card creates larger net losses on the fixed network than it does on a mobile network. Therefore the TRC is still minded to consider the mobile networks as more appropriate for the provision of an affordable service than the fixed network.

3. **The TRC seeks the opinions of interested parties whether household income, household characteristics or some other factors should be used to determine eligibility for an affordable tariff, and if household characteristics, what characteristics these should be.**

Most respondents were concerned that the use of household income or other household-based criteria was arbitrary and impractical.

One respondent proposed that affordable tariffs were introduced based on area characteristics, with availability to all in the area irrespective of household income or other characteristic.

Another respondent suggested that assessment for an affordable tariff could be undertaken as part of an application for social welfare.

Two respondents were concerned that an affordable tariff that they introduced did not cannibalize revenues from standard tariffs and indicated that much may be achieved through ‘smooth’ tariffs that do not require regulation or tariffs with low rental and higher call charges.

TRC’s comments

The TRC agrees that any obligated affordable tariff should be constrained in such a way that it extends the market rather than provides substitute tariffs. The TRC would also agree that much can be achieved in increasing penetration through ‘smooth’ tariffs that do not require regulation.

The TRC’s view is that as far as possible, the tariff should be self selecting. The suggestion by one respondent of a tariff similar to the low user tariff operating in the UK is attractive since it is by its nature self selecting. Such a tariff would benefit subscribers who make limited numbers of outgoing calls since it would provide a low monthly rental. However, it would not benefit subscribers who make an ‘average’ number of calls because they would have to pay a higher call charge or would be automatically moved onto a standard tariff. The same result could be achieved with a combination of low or no rental and high call charges which is the approach currently adopted by Public Mobile Telecommunications Operators.

4. **The TRC seeks the opinions of interested parties regarding the length of time that should elapse prior to the consideration of an affordable tariff obligation and in particular on the TRC proposed date.**

One respondent suggested a period of two to three years. Another tied the length of time to a review of retail price controls.

TRC’s comments

The TRC’s believes that comments received indicate that the proposed date of 31st December 2006 for an assessment is acceptable to the industry.

3 THE USE OF PRIVATE PAYPHONES TO ESTABLISH UNIVERSAL ACCESS IN AREAS WITH LOW PENETRATION OF FIXED AND MOBILE SERVICES

5. The TRC seeks the opinions of interested parties about how to determine the communities and individuals that would have access to a low cost private payphone including:

(a) Whether a proactive or reactive approach should be taken;

(b) What criteria should be adopted for determining which communities are to receive a subsidy for the payphone.

One respondent proposed additional criteria for determining which communities would receive a subsidy for a payphone:

A need for payphones	A penetration rate in a particular community is less than the penetration level available for 80% of Jordan's communities
Eligibility for USO	The community has 300 people or more
Lack of payphones is durable	Is it economic for payphones in the long run?
The cause of lack of payphone in that community	
Only one subsidized payphone per community	

Another respondent considered that payphones would be made available to unserved communities of less than 300 permanent inhabitants.

A third respondent made the point that a wholesale line rental charge for an uneconomic exchange line would increase the difficulty of rebalancing tariffs in line with cost of provision. Moreover, it could not be undertaken on a cost plus basis since the line would be loss making. Furthermore, unlicensed payphone operators would not be eligible to sign JT's Reference Interconnect Offer, and therefore would not be entitled to wholesale rates. The respondent suggested, instead, a scheme whereby Government or another Agency bulk purchases exchange lines on behalf of payphone operators against a discounted tariff.

TRC's comments

TRC have noted the proposed criteria. The criteria that the TRC has adopted cover the need, eligibility and durability, and the number of subsidised payphones in a community. No attempt has been made to determine the reason for lack of telephones in the community.

While the definition of need specified by the respondent is useful, the problem is that as telephony becomes more prevalent, subsidies will need to be provided to communities that may have high levels of penetration. The TRC has chosen to consider absolute need, rather than relative need for telecommunications services in determining whether a payphone should be subsidised. Under the TRC's criterion, as telephony becomes more prevalent, the number of communities requiring subsidised payphones will decline.

The TRC has adopted one criterion for determining eligibility and sustainability – that the traffic estimated to arise from the community will be sufficient to cover the operating costs of the payphone operator or payphone owner. Therefore, only the installation charges will be subsidised. It is in the interests of the payphone operators and payphone owners not to over-estimate call revenue, since to do so would lead to the risk of future losses on the payphone service. This criterion together with a distance limit between payphones, is sufficient to avoid superfluous payphones being provided and there is no need therefore to specify a community size.

The TRC accepts that the installation and rental tariff elements cannot be undertaken on a cost plus basis if the line is already loss making.

There has also been discussion of the possibility of the use of interconnection charges to allow a payphone operator and payphone owner to benefit from incoming calls as well as outgoing calls. Such an approach would require the payphone operator and payphone owner to be licensed. Licensing would significantly increase the administrative burden on the TRC and on operators that were required to pay such interconnection charges. Furthermore, the license charges would make the provision of a payphone service unfeasible. The TRC prefers to avoid such administrative overhead and maintain payphone operators as unlicensed. However, the TRC would like to encourage incoming calls to the payphone, and this would also benefit the payphone service provider who provides services to the payphone operator or payphone owner. The payphone service provider would benefit from increased revenues from incoming calls on its network. Therefore the TRC believes that an administratively simple method of rewarding the payphone operators or payphone owner would be to discount line rental charges to take account of a proportion of the value of incoming calls.

6. The TRC seeks the opinions of interested parties about the obligation to provide a service for payphones. In particular the TRC seeks to know:

(a) Whether such a service is technical feasible now on the fixed network and on a mobile network.

(b) The impact of a migration to so called Next Generation Network technologies that provide voice services through a multi-service access unit rather than an RLU or a local exchange.

(c) Whether the same geographic criteria should be adopted for provision of service as for the provision of the Basic Public Telephone Service.

(d) Any cost impact of providing the means for correct charging of payphone customers.

(e) Whether the service should be provided at the prevailing standard connection and other rates for the Basic Public Telephone Service, or a special wholesale rate below that rate.

One respondent believed that tariffs for payphone services should be at the market rate, and that affordability concerns should be addressed in some other way, for example using a calling card.

Another respondent believed that the maximum rate should not exceed the basic service rate, but that the payphones should be able to use carrier (pre)selection and "number translation traffic origination" for calling card selection.

A third respondent believed that payphones may be provided on a GSM network and that the most efficient method of determining who should provide the payphone service is a competitive tender.

TRC's comments

The TRC believes that payphones should be sustainable without an operating cost subsidy. This implies that payphone call charges may be somewhat higher than those on a private line. The TRC notes the suggestion of calling cards to provide affordable tariffs over payphones, and the possibility of the payphone operator and payphone owner also selling the calling card (see Question 7).

The TRC agrees with the suggestion that payphones should be able to support commercial calling cards and carrier (pre)selection.

7. The TRC seeks the opinions of interested parties regarding:

(a) The licensing of private payphone operators.

(b) Whether the TRC should set prices for calls from private payphones or leave it to the market.

(c) Monitoring of pricing, availability and quality.

One respondent was concerned about possible overcharging in remote communities where there was only one payphone operator or payphone owner. Another respondent had similar concerns about overcharging for subsidised payphones, although more generally, this respondent believed that market forces would be sufficient deterrent to overcharging.

One respondent believed that a pre pay card was the best method of providing payphone services. These would be supplied to payphone operators or payphone owners for resale at a profit and would have the advantage of avoiding over-charging by the payphone operator and payphone owner.

TRC's comments

The TRC shares concern about lack of competition to payphones in remote areas. Nevertheless, mobile phone services provide a substitute for payphone services, and may therefore provide sufficient competition to maintain reasonable call charges. The TRC believes that the country should gain experience of using payphone services once again before imposing what could be unnecessary regulation on service tariffing.

The use of calling cards would absolve the payphone operator and payphone owner of a means of collecting money at the time a call was made, thereby reducing the complexity and cost of the phone provided.

8. The TRC seeks the opinions of interested parties regarding:

(a) Whether a one off payment should be made towards the purchase of the payphone.

(b) Whether a lease purchase approach should be adopted in conjunction with a subsidy of each monthly payment.

(c) Whether subscription charges should be subsidized and to what extent.

One operator was concerned that there should be no bundling of payphones with service provided because it would be anti-competitive. To overcome this problem, in areas where a subsidy is required, this respondent proposed that a coupon be provided that may be used to purchase a payphone from any equipment vendor or that the line rental was subsidized.

Another respondent was concerned about provision of subsidies on lines that subsequently prove to be economic for the payphone operator or payphone owner.

TRC's comments

The TRC notes the proposals regarding the use of a coupon to allow purchase of a payphone from a third party.

The TRC believes that some subsidies for payphones may be found later to be unnecessary. The issue is whether the impact of this unnecessary subsidy will be an undue burden. A scheme whereby the line rental was reduced would allow for such a subsidy to be easily withdrawn.

9. The TRC seeks the opinions of interested parties regarding who should provide the service for payphones.

One PMTO respondent indicated that a GSM network may be able to provide lower cost access than a fixed network.

Another PMTO respondent believed that JT should provide the service for payphones until compensation for the USO is required at which point any operator should be able to provide the service.

A third respondent was concerned that JT has various privileges including the opportunity to roll out a payphone service if it chose to do so. This respondent believed that JT should be obliged to provide a payphone service.

TRC's comments

Subject to license conditions, the TRC is minded to allow that any licensed operator can provide services to payphone operators and payphone owners in order to promote competition in the provision of such services.

10. The TRC seeks the opinions of interested parties regarding the recovery of the net cost of the subsidy on the capital cost of payphones and any subsidy on subscription charges.

TRC's comments

As no comments were received, the TRC believes that all interested parties tacitly accept that the cost of the subsidy for payphones should be included in the net cost of the USO.

4 SERVICES TO BE TAKEN INTO ACCOUNT IN THE PARAMETERS AND REQUIREMENTS FOR THE PROVISION OF THE UNIVERSAL SERVICE

11. The TRC seeks the opinions of interested parties on the services that should be taken into account other than the Basic Public Telephone Service as defined in the USO Policy.

One respondent commented on the definition of the universal service in its entirety. The comment was essentially a re-statement of the service elements that JT is required to provide, but in addition the respondent pointed to the following service elements that are obligated in other countries:

(a) a connection to the public telephone network, able to support voice telephony, fax and data, at data rates sufficient to permit functional Internet access;

(b) the provision of public pay telephones, including the ability to dial emergency service numbers free of charge;

(c) tariff options and packages that depart from normal tariffs to ensure that consumers on low incomes may have access to publicly available telephone services;

(d) the provision of facilities and services to enable subscribers to monitor and control expenditure, and avoid unwarranted disconnection of service; and

(e) specific measures to safeguard the interests of end-users with disabilities and to ensure access to and affordability of publicly available telephone services for such end-users equivalent to those enjoyed by other end-users.

The respondent also recommends that an obligation should be made in all operator licenses for “service offerings which include features that will be of benefit to socially and economically deprived members of Jordanian society.”

TRC's comments

The TRC's view is that Government USO Policy has already set the following positions regarding the aforementioned service elements:

Service Element	Government USO Policy's position
(a) Connection to the public telephone network, able to support voice telephony, fax and data, at data rates sufficient to permit functional Internet access	Required
(b) The provision of public pay telephones, including the ability to dial emergency service numbers free of charge	Not required
(c) Tariff options and packages that depart from normal tariffs to ensure that consumers on low incomes may have access to publicly available telephone services	Although it does require the provision of a service to payphone operators or payphone owners, may require one or more operators to provide service element (c) if the market does not provide it otherwise.
(d) The provision of facilities and services to enable subscribers to monitor and control expenditure, and avoid unwarranted disconnection of service	Not mentioned
(e) Safeguard the interests of end-users with disabilities and to ensure access to and affordability of publicly available telephone services for such end-users equivalent to those enjoyed by other end-users	Net cost free action

The TRC considers that the service element (e) is a revenue opportunity for operators and may therefore be provided by the market. Regulation to obligate the provision of that element would take place only if this did not happen.

Remaining submissions

Another respondent believed that a GSM network can provide the voice aspects of the Basic Public Telephone Service, but is not as efficient from the point of view of the end user at providing a data or fax service. This respondent did not see any reason for including mobility in the USO.

A third respondent believed that functional internet access (at a speed available to 80% of users in the country should be provided. In answer to a later question, this respondent indicated that wireless operators could provide functional internet access.

A fourth respondent argued that internet access should not be included because it is used by only a small proportion of subscribers. Another respondent was concerned that the TRC was proposing a rate of 56kbit/s as functional internet access.

TRC's comments

Regarding the issue of the mobile network ability to support functional internet access, the TRC believes that this may ultimately be possible, but it is likely that the data rate available over a mobile network will lag behind what is available on a fixed network if a large proportion of subscribers take up the internet service, and in addition, the cost of any given speed of access is likely to be greater on a mobile network than on a fixed network.

Regarding argument concerning internet access, the TRC wishes to point out that the policy is to ensure that line quality is sufficient for functional internet access. While penetration is indeed around 15% of households in Jordan, such a requirement is consistent with Government developmental policy, which is of course forward looking. It should be noted that the TRC will not mandate as functional internet access line quality sufficient for 56Kbit/s. This practice has not been adopted elsewhere in the world, and would, the TRC believes, be expensive to implement. Rather, the TRC is minded to obligate a speed that will provide access to the World Wide Web and to email services at speeds generally enjoyed by Jordanian internet users over a narrowband dial up connection. The speed that the TRC has in mind is 28.8kbit/s.

12. The TRC seeks the opinions of interested parties on whether broadband service should be taken into account, and if so, what minimum gross data rate should apply.

All respondents believed that it was premature to include broadband in the USO. One respondent considered the TRC's proposals in more detail and came to the conclusion that it is premature even to consider broadband services in deciding now what infrastructure should be used for the USO.

TRC's comments

The inclusion of this requirement in Government USO Policy was made in order that current infrastructure choices, which to an extent will be determined by the USO, will not rule out the provision of future services. For example, the gauge of the wire used in the local loop has an impact on the data rates that can be delivered over the network and the extent of coverage using DSL technologies. In general the costing methods used to estimate any USO burden allow only incremental costs associated with the universal service.

This requirement was added to the Policy to allow improvements to the universal service infrastructure to be made so that services such as broadband can be carried over the same infrastructure. Such improvements would enable the Government's developmental objectives to be met in the medium term.

This requirement does not mean that broadband is to be provided as part of the universal service. Only infrastructure required for a broadband service that is shared with the universal service would be included in the calculation of the cost of the universal service.

The net contributions of value added and supplementary services are included in the evaluation of the net cost of the USO. A broadband service would be considered to be a value added service and any net contribution of that service would be included in determining the net cost of the USO.

Part II: The Implementation of the USO Regime

5 WHEN THE USO REGIME APPLIES

5.1 What market or markets are relevant to the application of the USO Regime?

13. The TRC seeks the opinions of interested parties regarding the definition of the markets in terms of products or product groups to be used in determining whether JT faces effective competition, and in particular the set of services that should be used to determine the relevant market.

One respondent put forward various proposals for markets. In one part of its submission, the respondent put forward a set of four markets based on "dynamics of pricing and economic viability". In another part of its submission, it puts forward two distinct universal service markets: for affordable uneconomic services and for affordable economic services.

A second respondent proposed constraints on the markets to be considered to the Public Switched Voice Service defined as "the provision of fixed voice telephone service to the public regardless of the technology used". Another respondent adopted a similar position. It recommended that the markets should not be defined now, but that the TRC should use the proposed services as the basis for a market test.

TRC's comments

Under the Competitive Safeguards instructions, markets are defined in terms of products and geographic coverage. While the dynamics of pricing may indicate whether products are in the same market, they are not used to define product markets, and economic viability is a characteristic of a market or parts of a market but does not define a market. Therefore the TRC rejects a view that affordability should be taken into account in defining markets relevant to the application of the USO regime.

The TRC believes that the markets that are relevant to the application of the USO regime are those in which the revenue from products (services) provided by the USP is used in part to fund the USO. The services will, in principle, include all services provided by the USP. The TRC believes therefore that the markets that are relevant include in total, fixed public telecommunications network and services, leased lines, and interconnection. In addition, some elements of mobile public telecommunications network and services market, in particular, international calls, are relevant. Therefore, the TRC believes that it is the telecommunications market in its entirety that is relevant to the USO regime.

14. The TRC seeks the opinions of interested parties regarding the geographic extent of the markets to be used in determining whether JT faces effective competition.

All respondents agreed that the geographic extent of the market should be the Kingdom of Jordan.

TRC's comments

The TRC is in agreement with respondents regarding geographic market extent.

15. The TRC seeks the opinions of interested parties about the substitution for fixed services by mobile services and the circumstances when this might take place.

Two respondents did not believe that there is substitution for fixed services by mobile services. One respondent believed that there may be substitution amongst low income households. One respondent claimed evidence for such substitution.

TRC's comments

While the TRC believes that there may be some evidence for substitution between mobile and fixed services, the TRC has not determined that there is in fact such substitution. As the telecommunications market in its entirety becomes more mature, it is likely that the TRC will need to review this position.

5.2 When is JT subject to effective competition in the relevant market or markets?

16. The TRC seeks the opinions of interested parties regarding the relevance and application of a number of specific criteria to the decision about whether JT faces effective competition.

Two respondents were of the view that the market assessment for the USO should be undertaken as part of the planned and more general market assessment. JT indicated that it would be preferable to undertake the broader market assessment before a narrower market assessment for the USO was undertaken.

One respondent believed that JT's prices for retail services are under threat from new entrants and from Public Mobile Telecommunications Operators, and its data services market was relatively small and competitive. This respondent indicated that in the areas where JT faced competition it was unlikely to have super-normal profits.

Another respondent considered the criteria listed in the consultation paper to be satisfactory.

A third respondent believed that a market assessment using the criteria specified would be unlikely to find that JT faced effective competition. This respondent favoured the approach of using the profitability of JT to determine effective competition.

TRC's comments

The presence of effective competition to JT's Public Switched Voice Service indicates the point at which regulation of the USO under the USO Regime starts. Once there is effective competition, the USO should be administered under the USO Regime. Until then the USO will remain with JT and the USO costs will be borne entirely by JT.

The TRC has come to the conclusion that JT has yet to face effective competition in Public Switched Voice Services because none of the License Holders has a fixed access network of its own to originate or terminate traffic. Moreover, substantially important interconnection services namely; In-bound international traffic termination and bit-stream unbundling have not been offered yet by JT in compliance with Interconnection Instructions. The absence of such interconnection services may constitutes a barrier to entry, to (customer) switching and to expansion by new entrants.

The TRC views profitability as indicative of market power. However, the TRC believes that in practice 'operational' or effective competition can exist at the same time as super-normal profitability of a dominant operator. Therefore, the TRC would not want to use profitability by itself as a determinant of effective competition.

5.3 Retail price control

17. The TRC seeks the opinions of interested parties on this linkage of retail price controls as they now stand and the application of the USO regime.

One respondent pointed out that JT is no longer subject to retail price controls, but proposed that future price controls might be used to encourage cost based pricing. Another respondent argued for a uniform (geographically averaged) tariff that allows JT to recover any potential ‘net costs’ attributable to its USO obligation, places appropriate efficiency incentives on JT, and allows sufficient scope for the development of effective competition to JT (in fixed telephony). A third respondent argued that any price regulations should take account of the need to fund the USO, and that any regulated price reductions should be balanced by an increase in compensation for the USO.

TRC’s comments

The TRC notes the comments, which perhaps are concerned with retail price control as well as the funding of the USO.

The mechanism of retail price control on JT, while it retains its dominance, allows JT adequate opportunity to provide profitable telecom services. However, retail price control is another way of controlling the level of profitability, and if JT is found making super-normal profits in certain year, then its claim for compensation for that year will not be successful.

6 DETERMINING THAT A CLAIM FOR COMPENSATION HAS MERIT AND THE NET COST OF THE USO

18. The TRC seeks the opinions of interested parties on the validity (and trade-offs) of competitive tendering and financial modeling for determining the net cost of the USO.

One respondent believed that the most practical approach for a USO is to determine the cost by modeling. Competitive tendering, it said, would still require a thorough analysis of net costs and hence would require tendering as an extra step. Another respondent was similarly concerned that the cost of determining the net cost should be proportionate and not burdensome on the industry.

TRC's comments

The TRC agrees that competitive tendering will require an analysis of net costs and may therefore be an extra step in providing the universal service. Nevertheless, the TRC reserves the right to use competitive tendering if it can be shown to be the most economically efficient means of providing the USO.

The TRC agrees that the process of determining the net cost of the USO should not be unnecessarily burdensome to the industry.

6.1 Determining the effectiveness of competition

19. The TRC seeks the opinions of interested parties regarding the use of a market power test to determine effective competition.

One respondent voiced concern about the test for effective competition. It believed that JT had faced competition for a period of time prior to 31st December 2004, and that this competition was effective. Nevertheless, if there is a net cost, the USP has to be compensated to maintain competitive neutrality. This has happened in 'all the countries in Europe' from inception of competition. The respondent drew the TRC's attention to clause 2.6 in JT's license that requires a Regime for the sharing of USO costs to be in place before the start of operations of any Public Switched Voice Service in competition with the Licensee.

Two other respondents concurred with the effectiveness test.

TRC's comments

The TRC notes the first respondent's concern. Nevertheless, the establishment of the Regime for sharing USO (net) costs has to be put in place under some strict criteria. The TRC believes that these criteria could not be met before 1st January 2005 because of the continued monopoly in fixed services enjoyed by JT.

20. The TRC seeks the opinions of interested parties regarding the use of a reduction in profitability from a level that would otherwise have been achieved without the USO burden as a test of whether a compensation claim has merit.

and

21. The TRC seeks the opinions of interested parties regarding the criterion or criteria to be used.

One respondent believed that the WACC = ROCE criterion was sufficient to indicate effective competition. Another respondent took the opposite view, that a full assessment against criteria commonly used to establish dominance or significant market power status should be used. This respondent was concerned that using the profitability measures alone, a USP would not be compensated until ROCE fell below WACC. This may mean that the USP responds by embargoing investment.

TRC's comments

The WACC = ROCE criterion indicates whether the USP is making super normal profit. If an organization can make a return on its investment greater than its cost of capital, it should still invest, although if it is an international operator, it may choose to invest elsewhere if it can make greater returns. Nevertheless, the USP is obliged to provide service, and therefore to invest, and compensation that gives the USP greater than normal profits will not be an efficient allocation of resources. Therefore the TRC rejects the view that there may be an embargo on investment by the USP.

The TRC draws the attention of respondents to the use of the WACC = ROCE test. It is not used, as some respondents believed, as a test of effective competition, but as a means of testing for competitive disadvantage. Thus, it defines whether a claim made by a USP could be successful. It does not define when the Regime for Sharing USO Costs is applied.

7 THE DESIGNATION OF ONE OR MORE USPS

22. The TRC seeks the opinions of interested parties on:

(a) Allowing the selection of one or more USPs as an option but not making such a selection process mandatory.

(b) The feasibility of multiple USPs.

(c) The feasibility of operators other than JT being designated as a USP.

(d) The characteristics of licensed operators that could be designated as a USP.

(e) The availability of licensed operators that could be designated as a USP.

(f) The proposal to consider alternative USPs only if JT makes a claim for compensation for the USO. For example, are there other conditions under which the designation of other USPs should be considered?

(g) The impact of liberalization on the feasibility of a competitive process for designating USPs.

(h) Other approaches to the designation of USPs.

One respondent was of the view that another operator could not bid for the USO until there was some indication of the level of compensation available.

A second respondent believed that if PMTOs provided the USO, then the services that they provide should still be limited to fixed services, because any compensation provided to them to support uneconomic customers would subsidize the provision of services to those subscribers in economic areas as well as uneconomic areas, and because of the communal nature of the use of a fixed line, in comparison with the personal nature of the use of a mobile service.

A third respondent believed that competitive tendering should be mandatory because it is difficult to determine the cause of any net cost. The competition system should come into effect on TRC finding that a claim for compensation from JT has merit. The competition would result in one USP for each area.

One PMTO believed that any bidder should satisfy the requirement for functional internet access, and believed that all wireless operators can meet a requirement up to 128Kbit/s with characteristics and a tariff "similar to those of the fixed to any consumer demanding such a service in addition to regular telephony voice service". This respondent went on to propose an extension to the provision of service to cover nomadic use by Bedouins and Roma people.

A fourth respondent believed that compensation should be provided or a competition held only if a meritorious claim for compensation has been made. This respondent also considered that the universal service obligation should be placed only on those providers with market power since these are the only operators that are likely to have sufficient infrastructure. The respondent also indicated that it incurred a net cost from its current coverage obligation.

TRC's comments

The TRC believes that it cannot give an indication of the level of compensation available to potential bidders at this stage since it has incomplete knowledge of available infrastructure. It is therefore not possible to give an authoritative estimate of the net cost of the USO and therefore an accurate estimation of the level of compensation that may be available. To provide an indication of the level of compensation that was inaccurate would mislead potential investors.

The TRC believes that compensation for the USO is concerned with uneconomic areas except for specific action taken to provide services to disadvantaged groups of individuals such as the provision of a regulated affordable service. Therefore, the belief that the 'subsidy' is associated with a particular customer is mistaken. Rather, compensation is associated with a particular area. In calculating the net cost of serving an area covered by a PMTO, the analysis would cover calls made from that area and calls made to that area, and the additional services that can be provided because of infrastructure in that area. The principal difference in the calculation for a PMTO and that for a fixed operator is that for a PMTO the subscriber base in that area is constantly changing, whereas for the fixed operator the subscriber base is fixed. Nevertheless, the same basic calculation can be used for either a fixed or a mobile service, because the calculation is not carried out for each subscriber, but for the cost of providing access in the area and the set of calls made to and from that area. Cabinet and line charges in the fixed network are replaced by some base station costs for example. Compensation for the provision of service in an uneconomic area will not subsidize the provision of service elsewhere, in either the mobile or the fixed network.

Nevertheless, the USO is an obligation to provide a fixed service. Mobile services incur additional costs associated with mobility. It is arguable that the additional costs of providing a mobile service cannot be taken into consideration should a PMTO be obligated to provide the universal service. Thus, the net cost calculation would take account of only those costs of the Public Mobile Telecommunications Operator necessary to provide a fixed service. If this approach was taken, the Universal Service revenue would be assumed to be the revenue from calls made to and from subscribers resident in the area when they were located there. This leads to complications, particularly for subscribers with prepaid calling cards, whose residential addresses may not be known. However, the total revenue taken into account includes net revenue from services provided because an infrastructure to support USO services is available as well as the universal service itself. Therefore, the net revenue (revenue minus cost of provision) from calls made to and from subscribers not resident in the area but located in the area could be taken into consideration in calculating the total revenue. However, for these calls, the cost of the infrastructure required for mobility would also have to be included.

One respondent raised the issue of tariffs where there are multiple USPs. JT provides the universal service using tariffs based ultimately on geographically averaged costs of a fixed network. The profile of the tariff has certain characteristics that another operator may not wish to emulate should it be declared to be the USP. The TRC is of the view that to tie the tariff directly to JT's tariff would be over-restrictive and may be discriminatory. Nevertheless, the principle of a geographically averaged tariff is well established.

The TRC believes that one way out of this dilemma would be to require equivalence in tariffs from any operator bidding for the USO, but not identical tariffs. Thus, the operator would need to demonstrate that its tariff was broadly equivalent in cost to users with the same calling patterns. At extremes, such as for low users or for high users, equivalence in cost may not be well met, and in these cases TRC would need to come to a judgment on the relative merits of each proposed tariff. For traffic volumes around the average, the TRC would expect each tariff to result in similar cost to the subscriber.

Irrespective of such considerations, the tariff provided by the bidders would be for a fixed service provided only within either the residential or the business premises of the subscriber or in close proximity to those premises.

The TRC agrees with the view that the availability of a comprehensive infrastructure is necessary to the provision of a universal service.

The issue of compensation for any net cost incurred by a Public Mobile Telecommunications Operator that becomes the USO gives rise to particular issues regarding the discrimination between Public Mobile Telecommunications Operators that will need to be considered.

7.1 Universal service areas

23. The TRC seeks the opinions of interested parties on:

(a) The criteria for deciding the size of an area.

(b) The TRC's listed options for areas.

(c) Whether the competition should be for new areas only or whether it should be for areas already serviced by JT and new areas.

(d) The feasibility of a new USP offering service on a non-exclusive basis in an area that is already served.

(e) The impact of withdrawing compensation from the existing USP on its ability or willingness to serve an uneconomic area.

(f) The process of transferring customers and assets from the exiting USP to the new USP.

One respondent believed that tendering should be limited to new coverage areas and that the old USP should cover costs of a transfer of responsibility for the USO from the old USP to a new USP.

In contrast, another respondent believed that coverage should be the whole of Jordan because this would give sufficient scale to the new operator. In this respect, there would be a requirement to transfer service from an old USP to a new USP, but there would not necessarily be a need to transfer assets. Use of the old USP's assets could be made possible by regulatory mandate at an agreed or imposed price.

A third respondent responded that in most countries there is only one USP, the issue is concerned with scale and scope economies, and that to divide the country into geographic areas would have undesirable effects. Alternative operators may put in place different technical solutions. There would be a tendency for bidders to take only the most profitable areas, which have historically been used to subsidize the least profitable areas, giving rise to problems of funding these areas. Finally regionalization will increase the administrative burden of the USO.

This respondent pointed to the fact that there is only limited experience of tenders for universal service obligations and indicated that in countries where tendering had been applied there were usually areas that were unserved. This is not the case in Jordan.

TRC's comments

The TRC notes these views. The new areas are probably too small to establish scale economies in the provision of the universal service by a new operator, although JT and the PMTOs could exploit existing scale economies from their networks. An alternative bid for the universal service obligation for the whole country would probably have to include economic areas as well as uneconomic areas, since without the economic areas, there would again be insufficient scale and any new supplier would be unlikely to win. Therefore, the tender process would ultimately select JT or another national operator.

A competition would conceivably be open to the present national operators and other companies that may wish to establish presence in Jordan. Any new operator would require infrastructure that it could procure from one of the established operators (for example it could become an MVNO or rent JT's access infrastructure) or it could build a new infrastructure of its own. In so doing, it would place itself in competition with four well established operators and a further mobile start up. In this environment it would find that it was facing a major marketing investment to build sufficient scale. The TRC suspects this means that it would have lower scale economies in service provision for a number of years, and would therefore be at some disadvantage relative to the existing fixed and Public Mobile Telecommunications Operators.

Therefore, the TRC believes that the number of bidders would be limited, and there would be a requirement on new bidders to exploit the existing infrastructure. Consequently, new bidders would not necessarily have a cost advantage over the present operators.

As a consequence, the number of potential bidders may be too small for an effective auction.

7.2 The designation process

24. The TRC seeks the opinions of interested parties regarding:

(a) The respective advantages and disadvantages of a beauty contest, competitive tendering and auction as described in this paper.

(b) Any other approaches for designating a USP that the TRC should consider.

(c) The selection criteria for operators to take part in a competition for the role of USP in a particular area.

(d) Whether a competitive tender or auction is likely to give a true estimate of the net cost of the USO taking account of intangible benefits.

(e) What should happen if no bidders apply or the TRC judges no bidder is capable of delivering the USO.

One respondent indicated that the tendering has to be technology neutral and apolitical. Criteria used should include the service quality and pricing as well as the required subsidy. This respondent believed that there was a possibility that the tenderers would not be able to assess costs and revenues accurately, and might bid low because they would realize that once the contest was completed the TRC would be faced with a monopoly provider who might then exit the obligation irrespective of contractual liability. JT was also concerned that an enforced transfer of assets would be beyond TRC's powers and that there would be a requirement to modify licenses.

A second respondent indicated that the competition should use a sealed bid process and that the process had to be advertised well to ensure a reasonable number of bids. If no bidder was capable of providing the service, the respondent suggested that the USO be re-tendered.

A third respondent indicated that before participation in a bid process, it would need to know the scale of compensation that was being offered.

A fourth respondent believed that a reserve level of compensation would be needed. Any compensation would still require funding however. This respondent suggested that if no bidders materialized then any operator with market power should be required to provide a universal service.

TRC's comments

TRC notes the practical recommendations and notes the need to establish a reserve, and will consider the issues raised and recommendations further if competitive tendering is used.

7.3 Designation timetable

25. The TRC seeks the opinions of interested parties regarding:

(a) The period of time that should be allowed between a decision by the TRC to adopt competitive tendering and the first tender.

(b) The period of time that an operator should be required to provide the USO before re-tendering.

On respondent pointed to the need to complete the retail price control review and the practical issues associated with preparing for a tender. This respondent concluded that the first tender could be undertaken in 2006 or 2007. The respondent suggested that the period before re-tendering could be linked to the duration of the USP's license.

A second respondent pointed to a six month period from a decision to adopt competitive tendering and a three year period for the USP before re-tendering.

A third respondent suggested a five year period for the USP before re-tendering.

TRC's comments

The TRC notes the three sets of comments. The TRC believes that three years, and even five years is too short for the USP. Frequent changes of USP would unsettle the market and lead to a higher risk for operators. Thus, operators would be faced with higher cost of capital, and this would give rise to higher net costs for the USO. Franchises in other countries for major infrastructure developments are often very long. In the UK, rail services were originally franchised for periods of seven or fifteen years, but subsequently franchise periods have been lengthened in some cases to twenty years. These franchises are for the provision of service only. The service companies pay a usage charge for the rail infrastructure, and the trains themselves are leased. This minimizes the capital investment by the service provider and allows for such capital to be transferred readily to another operating company at the end of a franchise.

The TRC will make a decision about the time interval between retendering if competitive tendering is adopted.

7.4 Failure of a designated USP

26. The TRC seeks the opinions of interested parties regarding what should happen if a designated USP fails.

One respondent indicated that the TRC would need to investigate and then put in place measures to ensure that failure was not repeated.

Another respondent proposed a supplier of last resort and the use of number portability to switch customers over.

TRC's comments

Th first response does not really address the issue of continued and hopefully unbroken customer service.

The proposal of a supplier of last resort has the problem that the failure would happen in areas where the market would otherwise fail to provide a service. Thus, the USP would be the supplier of last resort.

The TRC's view is that in areas where there is only one supplier, and where that supplier failed financially, the TRC would need to ensure that the service continued to be operated using the same technology base and by the same service provider while under administration. During administration, the TRC would work with the Administrator to put in place a tender process for the sale of the USO business including customers, physical assets and rights such as interconnection rights under Jordanian company law.

8 DETERMINING THE BASIS OF CONTRIBUTION TO THE FUND

27. The TRC seeks the opinions of interested parties regarding the sources of contributions to the universal service fund, including:

(a) Amounts earmarked for this purpose by a decision of the Council of Ministers, on the recommendation of the Board, from the returns provided for in Paragraph (a) of Article (18) of [the Telecommunications] Law;

(b) Support for the fund provided through the issuance or renewal of licenses;

(c) Licensed telecommunications operators;

(d) Any other source.

One respondent reported on its estimate of its so called access deficit.

One respondent believed that the USO net cost is a consequence of social policy and should therefore be at least part paid by Government. A second respondent believed that Government and the finance community should contribute. A third respondent suggested that contributions to cover the net cost of the USO could be made from the tax imposed for the development of rural areas.

One respondent was concerned about "allocative inefficiency" arising from contributions from one operator subsidising services provided by another. This respondent suggested that such contributions may encourage consumers to switch from the subsidising operator to the higher cost subsidised operator. The respondent's opinion was that this would not allocate of resources efficiently.

This respondent also suggested that society as a whole should pay towards the USO because it was a social policy issue. Nevertheless, the respondent argued that if the industry was to fund the universal service, then a surcharge would be most efficient.

One respondent identified other sources of revenues including fees from the issuance and renewal of licenses. This respondent was concerned that if such revenues were included then some operators might contribute more than once.

TRC's comments

The TRC believes that an estimate of an access deficit is not a good indicator of the net USO cost because of difference in definitions between the two measures. An access deficit arises when average line rental and connection charges are below some measure of average line costs. An access deficit calculation does not include the revenues and costs of the calls made using the universal service or the net revenues of other profitable services carried over a connection or on the infrastructure. The universal service net cost calculation includes these service revenues and costs as well as access revenues and costs.

In a profit making company in a competitive environment, an access deficit arises not because of high cost lines or low revenue customers but because of the way in which costs are allocated to services or because of pricing decisions.

In deciding who contributes and in what proportion, the TRC is concerned to apply the criteria of transparency, non-discrimination, competitive neutrality, and minimum burden. It is for this reason that the TRC considered that licensed telecommunications operators should contribute to the universal service fund. The size of compensation reqiured shall be determined by the TRC and only in the light of the USP's material competitive disadvantage. The TRC believes that it may be difficult to decide what proportion of fees from the issuance and renewal of licenses should be allocated to USO contributions, and whether the same or different proportions are used depending on the license concerned based on the above criteria. License fees currently do not include contributions to a universal service fund. Therefore, the part of each license fee to be allocated to the funding of the USO would need to be estimated and added to the license fee. The TRC believes that this source has no advantage over contributions based on net revenue, and the TRC is therefore minded not to collect contributions from license issuance and renewal.

The TRC believes that contributions to any universal service fund from taxes imposed for development or other government funds are contrary to Government USO policy. Moreover, the TRC believes that overall society does pay, once any distortions arising from any net cost have been removed, through slightly higher telecommunications costs which most households and all businesses face. These may have a small effect on allocation of resources between sectors, but the TRC believes that at the margin, the overall impact on resource allocation is very small because the utility of a telephone call or other form of telecommunications is generally substantially higher than the cost to the user, and because the alternative to the use of a telecommunications service is generally of far higher cost than the telecommunications service itself. Therefore it is unlikely that a small rise in telecommunications costs gives rise to anything but a very small change in resource allocation. This is demonstrated by the very high proportion of income spent on telecommunications services by lower income groups in all countries and the inelasticity of telecommunications services in general.

28. Assuming that licensed telecommunications operators are required to contribute to the fund, the TRC seeks the opinions of interested parties regarding:

(a) Which operators or types of operator should be required to contribute to the universal service fund.

(b) The services that should be taken into account in deciding contributions.

(c) The proposed definition of net revenue as a basis for determining contributions.

(d) The proposed exclusion of small operators.

One respondent believed that all operators that sell exchange line dependent services should contribute towards the net cost of the USO. These operators should include those service providers that use disruptive technologies such as VoIP.

Two respondents suggested that a practical method of collecting contributions would be to use a higher call termination charge levied via the interconnection billing arrangement.

Two other respondents identified the PMTOs' roll out obligations and actuality with coverage to areas beyond those with economic merit and suggested that they participate *de facto* in the provision of the universal service.

One respondent indicated that prepay card providers, PMTOs, fixed and wireless ISPs and operators using fixed wireless access, and international carriers should contribute in so far as they did not participate in the provision of the universal service. This respondent indicated that only the basic switched voice telephony service should be taken into account in determining contributions, but gave no supporting justification.

Two respondents were concerned that payments should be proportionate to revenue net of payments such as interconnection charges to other operators. They were concerned that loss making operators should not be required to contribute.

TRC's comments

The TRC agrees that there is a *prima facie* case for all licensed operators, including VoIP service providers and mobile operators to contribute to the universal service fund since the ability of the USP to cover the cost of the universal service is subject to the activities of all other licensed operators.

The TRC is mindful of the extensive coverage provided by PMTOs. Nevertheless, the TRC does not believe that PMTOs are disadvantaged by the roll out obligation because the roll out costs have been taken into account in the license fees paid by PMTOs. While telephony services may be established through PMTOs, data elements of the universal service are less likely to be provided by these operators. Therefore, the coverage provided by PMTOs does not fully meet the requirements of the Government's universal service policy.

The TRC has concluded that the calculation of revenue will take account of all telecommunications services provided by each licensed operator since this will spread the burden across the widest set of services.

The TRC does not believe that termination charges are an adequate means of collecting contributions. For example, the TRC anticipates that it will be legally possible to make calls from a computer (or a phone) connected via a broadband connection in Jordan via an independent switching service to a subscriber in another country, to a mobile subscriber in Jordan or to another voice over broadband subscriber in Jordan. Such calls exploit the access network provided by JT but do not require interconnection with JT telephone services since the calls neither originate nor terminate on JT's telephone service. Therefore, there would be no origination or termination charge, and JT would not be able to collect a contribution from the call if that was the only collection mechanism used. This would disadvantage JT and the other contributors.

The TRC's definition of 'net revenue' is the Operating Revenue as defined in the individual and class license. If gross revenue was used then payments to other operators would be counted twice. Interested parties should note that the use of this definition of net revenue is to decide on the proportioning of contributions.

The TRC has decided that operators with 1% or less market share as defined in the regulation will not be required to contribute to the universal service fund. Part of the TRC's role is to encourage competition in the sector, and the imposition of compensation on such operators would reduce the ability of new operators to enter the sector.

Moreover, the size of the universal service fund is expected to be a small fraction (less that 1%) of the total revenue of the telecom market, and consequently, the amount of compensation, corresponding to 1% of that percentage, will be insignificant. This amount may be less than the TRC's administrative cost if those operators otherwise requested to contribute to the universal service fund, and may tie up TRC's resources and constitute an administrative burden on TRC.

9 CALCULATION OF THE CONTRIBUTIONS TO BE MADE

29. The TRC seeks the opinions of interested parties regarding the calculation of contributions made.

Two respondents indicated that contributions should be in proportion to net revenue as a proportion of total industry net revenue.

TRC's comments

The TRC agrees to the principle that net revenue (Operating Revenue as defined in the individual and class license) should be used to calculate contributions made. Contributions will be proportional to a contributor's share of the total contributors' revenue. Total contributors' revenue means the sum of Operating Revenues of all Licensees minus the sum of Operating Revenues of all exempted Licensees (1% or less market share).

Part III: USO Regime revenue and cost modelling, and benefits estimation

10 INTRODUCTION

10.1 Overall proposals for cost and revenue modelling

30. The TRC seeks the opinions of interested parties on:

(a) The feasibility of using forward looking long run incremental costing to determine the cost of the universal service obligation.

(b) The use of geographic areas as the basis for calculating the net cost, and in particular what constitutes the minimum area for which a separate business decision would be taken, since this would constitute the minimum area over which the net cost should be calculated.

(c) The use of the existing network topology as the basis for costing instead of a separately determined efficient network topology.

Three respondents recommended using a forward looking LRIC approach. One respondent thought that incremental common costs should be included.

Regarding geographic areas, one respondent suggested that the minimum area should be a governorate, but gave no justification for this proposal, while another respondent believed that it was the network architecture that would determine the minimum area. This respondent also made the point that multiple services should be available over the USO network.

Regarding topology, a third respondent suggested that a split be made between access and core networks for modelling, the proposal being that only the access elements are built for an individual subscriber.

Finally one respondent indicated that while an ideal network would be preferred, the use of a scorched node approach would be more practical.

TRC's comments

The use of LRIC does not preclude an apportionment of common costs.

Regarding the proposal to set a governorate as an area or to define an area in terms of the network architecture, the TRC believes that both approaches are arbitrary. Better, is to define an area as that which the USP would ordinarily consider. This is likely to be defined in terms of the network architecture, since the investment will be in network elements. The USP will generally make an investment decision based on the set of services that it intends to provide over the network elements, and the TRC concurs that the revenues to be taken into account should include all the revenues that accrue from that infrastructure.

The distinction between core and access is taken into account in modeling USO costs.

The TRC concurs with the view that a scorched node approach is likely to be more practical in determining USO costs.

11 REVENUE BASIS

11.1 Overall revenue basis

31. The TRC seeks the opinions of interested parties on the revenue basis and particularly on the minimum practical geographic area for determining revenues and the value added and supplementary services whose net revenue should be included.

One respondent proposed that average revenue per line by area be used.

TRC's comments

The TRC notes the respondent's proposal. The USP is generally compensated for high cost areas and low revenue areas. The use of an overall average revenue, say for the whole country, will preclude compensation for low revenue areas. However, the TRC believes that in making an investment in access, the USP would use an average revenue per line for the area in question, unless it has a better predictor. Therefore, the TRC has concluded that it will use average revenue per line for the area.which is the minimum that a USP would make a separate investment decision.

11.2 Should a correction be made for tariff rebalancing?

32. The TRC seeks the opinions of interested parties regarding the use of actual tariffs and putative rebalanced tariffs for estimating the net cost of the USO, and in addition, if putative tariffs are to be used, what account should be taken of the price elasticity of demand of access and local, national and international call charges.

One respondent suggested a way around the dilemma posed by the TRC's question. The respondent suggested that the TRC evaluate the net cost using actual tariffs first, to determine whether there was a net cost, and to determine whether there was a need for tariff rebalancing. The respondent then proposed competitive scenario modeling to estimate the impact on net costs of putative rebalanced tariffs.

TRC's comments

Given that the USP will be compensated only when there is competition, the TRC believes that tariff rebalancing will be more or less completed before the possibility of compensation occurs. Therefore,,the TRC believes that it wil be possible to use actual tariffs to determine the net cost of the USO.

11.3 Affordable tariffs

33. The TRC seeks the opinions of interested parties regarding the mechanism for the inclusion of affordable lines in the net cost of the USO.

No comments received.

11.4 Private payphones

34. The TRC seeks the opinions of interested parties regarding the mechanism for the inclusion of private payphone lines in the net cost of the USO.

No comments received.

12 COST BASIS

35. The TRC seeks the opinions of interested parties on the cost basis. In particular it seeks opinions regarding:

(a) The use of average line costs for a given geographic area.

(b) Types of avoidable costs.

One respondent indicated that only those costs that are truly incremental should be included, and voiced concerns therefore over the inclusion of general and administrative costs.

TRC's comments

The TRC understands the respondent's views on incremental costs. However, there may be some general and administrative costs that are incremental for uneconomic customers or areas, and it would be unfair to the USP not to consider them.

13 EFFICIENCY

36. The TRC seeks the opinions of interested parties about:

(a) The use of a scorched node approach

(b) The assumption of modern equivalent assets

(c) The assumption that customer related processes for customers that receive service by virtue of the USO are not distinguishable in cost terms from customer related processes for customers that receive service because they are economic customers.

(d) The use of benchmarking to determine operational efficiency

On respondent was skeptical about the possibility of identifying suitable candidates for a benchmark.

Another respondent indicated that there was a need to review operator efficiency in some way, particularly as a small net cost might well be overcome through improved efficiency.

TRC's comments

The TRC is aware of the difficulty of using a benchmark for estimating operator efficiency. In addition, the TRC believes that the application of modern equivalent assets will require some re-estimation of operating costs, since actual operating costs will not relate to such assets. This is a problem for all LRIC based models.

14 COST RELATED ISSUES

14.1 Depreciation

37. The TRC seeks the opinions of interested parties about depreciation and to what degree the TRC should take account of factors such as depreciation rates set by accounting convention, tax requirements, economic life technical obsolescence, commercial life and physical life in determining the depreciation of assets for the purposes of calculating the net cost of the USO.

One respondent believed that tax and accounting requirements should prevail in determining depreciation. Another respondent believed that the local access infrastructure, by which the TRC assumes the respondent means the metallic path and other passive components, should be depreciated according to physical life and the active components should be depreciated acording to economic or engineering life.

TRC's comments

The TRC believes that the actual economic or engineering life of components should be used to determine asset life. The use of tax and accounting depreciation rates is arbitrary.

14.2 Spare capacity

38. The TRC seeks the opinions of interested parties about this definition of spare capacity and, whether the cost of excessive spare capacity should be included in the calculating the net cost of the USO.

One respondent believed that the whole network cost should be included in the net cost calculation, but did not indicate what this means in terms of spares or impaired assets. Another respondent indicated that prudent network and asset planning required the provision of spare capacity.

TRC's comments

The TRC concurs with the view that there is a need to build in prudent levels of spare capacity into a network. The devil, however, is in the detail, and the TRC will need to examine spare capacity assumed in the cost calculation to determine whether it is prudent or excessive.

14.3 Impaired assets

39. The TRC seeks the opinions of interested parties about the definition of impaired assets, and whether the costs of impaired assets should be included in the calculation of the net cost of the USO.

One respondent put forward the view that the determination of asset impairment was not the role of the TRC because it is a financial issue.

Another respondent believed that a forward looking LRIC based costing did not include impaired assets and therefore concurred with the TRC's view.

TRC's comments

The TRC rejects the first respondent's proposition. It is common regulatory practice for the regulator to determine whether assets are impaired and to exclude such assets from a costing.

14.4 Weighted average cost of capital (WACC)

40. The TRC seeks the opinions of interested parties regarding the calculation of WACC for the USO, and in particular, whether a WACC should be determined for the access network only, or for JT's fixed network business.

No comments received.

15 BENEFITS

41. The TRC seeks the opinions of interested parties about the benefits that apply to a USP in Jordan.

One respondent indicated that it believed the value of JT's network is much reduced as a consequence of the ubiquity of mobile networks and their ability to substitute for fixed line services. The respondent went on to say that ubiquity may give rise to stranded assets which are a net loss of benefit. The respondent also believed that the TRC has put forward two conflicting views – that the ubiquity of the network is a benefit in terms of corporate reputation and a loss of benefit in terms of operator efficiency.

Two respondents put forward revenue streams and benefits that were included in TRC's proposals.

A fourth respondent did not consider the benefits to the USP, but to the country as a whole.

TRC's comments

The TRC is concerned that the first respondent's argument is that competition from PMTOs has so affected JT's business that a proportion of its network assets are stranded and need therefore to be written off. Such a write off could indeed affect the net cost of the USO. Because impaired or stranded assets are not included in a USO net cost calculation, the impact of any admission that some assets were stranded would be to reduce any net cost, or increase any net surplus. The TRC does not believe that the USP would admit that a substantial proportion of its network assets are stranded.

The TRC does not believe that, if there is such a loss of benefit to the USP, it arises from the USO, but rather that the revaluation of its network assets is a consequence of competition, therefore the dis-benefit is not one that should be attributed to the USO.

Therefore the TRC rejects the argument that any revised valuation of the USP's network assets should be taken as a dis-benefit associated with the USO.

The TRC is obliged to undertake an evaluation of potential benefits associated with the USO if a net cost is identified and will do so, in accordance with the regulation and taking account international precedents.

16 RELATED CONSULTATIONS

42. The TRC seeks the opinions of interested parties about:

(a) The feasibility of adopting a similar approach for calculating USO costs and for calculating interconnection costs.

(b) Regarding USO cost and revenue modelling, the responsibilities that fall to the USP and those that fall to the TRC.

One respondent indicated that it was too early to consider (a) and pointed to the USO Policy with regard to (b).

Another respondent believed that a common model could underpin a number of regulatory policies and that the underlying cost parameters should be consistent across interconnection and other cost related policies. This respondent indicated that the TRC needed to ensure that any meritorious claim for compensation would need to be independently audited and verified, and this at least should be undertaken by the TRC. The respondent believed, however, that there were benefits in TRC undertaking the modelling to ensure objectivity and independence, and that the expertise gained would be of use in subsequent LRIC cost modelling projects.

TRC's comments

The TRC concurs with the second respondent's views about cost modelling. Experience in other administrations, notably New Zealand and Hong Kong, illustrates the benefits of the regulator undertaking the cost modelling.

Nevertheless, the TRC believes that the adoption of a common model used by both the USP and the TRC to evaluate the net cost of the USO will enable a common view of the net cost to be developed.

Such a model will need to be auditable and parameters clearly identified. Parameter values used will have to be consistent with those used by the TRC in other models. Therefore the TRC will decide ultimately on parameters and the model structure.

Several publicly available USO models are available. The TRC believes that one of these models could be adopted by the USP, with the agreement of the TRC, to model its costs.

Annex 1.2: The report on responses received at the end of the first public consultation

The following response was received from JT at the end of the consultation period.

JT has reviewed the various submissions of the respondents to the TRC's document "Consultation on the Implementation of the Universal Service Regime" and submits its further comments on these below.

It is apparent that the respondents appeared to be generally in agreement on a number of key issues. JT provides its comments on these issues and areas of disagreement below.

THE NEED FOR TRANSPARENCY

1. Many operators, including JT, demonstrated that the degree of transparency of the funding of existing universal services was unclear. Without this, it is clearly difficult to assess the attractiveness of the affordable economic service market. Greater transparency and publication of the TRC's studies and reference data will do much to encourage operators to contest these less profitable markets as other markets become saturated.

   TRC's comments

   Market research was undertaken in preparation of Government's USO Policy. The TRC has no rights over this market research.

MARKET DEFINITIONS

2. There appears to be consensus that a significant proportion of the affordable tariff market is economically viable and should be governed by the rules of fair competition and not by regulation and external subsidy. Defining the boundary between the economic and uneconomic markets is likely to be inexact, but any distortions will be minimized if a single, national universal service market is identified.

   TRC's comments

   The TRC believes that a substantial proportion of the relevant markets associated with the Basic Public Voice Service can be served profitably by one or more licensed operators. There is no need for an operator to receive compensation for serving profitable parts of these markets. The USO net cost calculation is intended to identify the costs to the USP of providing the Universal Service to parts of the markets for such services that an efficient, rational profit seeking company would not serve. The purpose of any compensation scheme associated with the USO is to minimize the distortions in relevant markets arising from the USO.

3. The issue of qualifying applicants for affordable tariffs is also a substantial consideration with respect to the costs of meeting market demand cost effectively. Whether self-selection or use of a parallel, independent qualification, it is key that placing this administrative burden upon operators will merely increase the amount of funding required unnecessarily.

   TRC's comments

   Understood. Respondents believed that affordable tariffs may evolve in the market and that the best approach to an affordable tariff was a "low user tariff" (ie a tariff for users *who make a low number of calls) that would be selected by individuals who made few calls yet required a phone.*

4. In respect of the distinction between mobile and fixed markets, JT is not in agreement with XPress in respect of their denial of a substitution effect. JT's evidence in this respect is contained within our original submission.

   TRC's comments

   The TRC has concluded that the requirement to cross subsidise losses arising from the USO is met from income arising from all services provided by the USP. As such, it is difficult to identify particular telecommunications services that are not in some way affected by the USO. For example, income from international services is generally used to cross subsidise a USO. International services are provided by fixed operators, mobile operators, VoIP providers and others. While the Competition Safeguards Regulation identifies four product markets within the overall market for telecommunications services, it is the whole telecommunications market that should be considered in determining who should contribute to the Universal Service Fund. Furthermore, the universal service is a social interest service aimed at social and economic inclusion for all citizens, and it is ultimately an obligation that needs to be supported by the whole industry. Therefore, the TRC has concluded that all operators shall in principle be required to contribute to the Universal Service Fund.

UNIVERSAL SERVICE DEFINITION

5. Perhaps unsurprisingly, Public Mobile Telecommunications Operators considered that their coverage obligations already contributed to the universality of telecom services. Notably, however, some operators agreed with JT that the characteristics of mobile services did not represent the most basic needs of users and as such should not be included in a service definition.

   TRC's comments

   The TRC believes that the mobile characteristics of the service available over a wireless network are not included in the USO.

6. With respect to the extent of the functionality of the universal service, there was near unanimity that data rates beyond those currently enjoyed by fixed line dial-up users should not form part of a service definition. As JT stated in its original submission, this is in line with international best practice.

   TRC's comments

   TRC's comment is given in Annex 2.

7. In respect of FastLink's suggestion that JT provide public payphone services, JT has given consideration to this possibility and awaits the outcome of this consultation. However, it is unclear that either sufficient demand exists given the degree of mobile penetration in the Kingdom, nor the likely subsidy required to maintain the service economically.

   TRC's comments

   The TRC believes that competition from the mobile services will adversely affect any demand for a public payphone service and is therefore not inclined to oblige any operator to provide such a service. It is in any case not required by Government USO Policy or more general by the Telecommunications Policy.

FUNDING SOURCES

8. Whilst it is easy to take a cynical view of the telecoms industry seeking external funding to help meets its social obligations, many operators presented a similar argument that since universality of service benefits the entire Jordanian economy, it seems unreasonable that funding it should be constrained to the industry itself.

   TRC's comments

   Government USO Policy indicates that other operators may be required to contribute to the USO. Moreover, if there is a net cost to the USO, it may be considered to create a distortion in the market that would require correction. Contributions from other operators are one way in which that distortion may be removed.

RETAIL PRICE CONTROLS

9. This consultation is difficult to consider fully in isolation of the TRC's consultation programme for 2005. Indeed the forthcoming consultations on retail price controls and the market definition and assessment exercise are crucial elements to forming a cogent opinion to present to the TRC.

   TRC's comments

   The TRC understands that retail price controls have an impact on exchange line rental revenue and call revenue and may therefore have an impact on the net cost of the USO. Nevertheless, if retail price controls are in place, then it is unlikely that the criteria for material competitive disadvantage are met. Therefore, no payment would be made for any net USO cost. Therefore, the regime should be considered to be applicable once retail price controls have ended.

   Regarding market definition and assessment, the TRC acknowledges that there may be an overlap between the definition and assessment of markets and several parts of the USO regime, including the determination of effective competition.

ADMINISTRATIVE COSTS

10. Given the need to keep the costs of addressing the universal services market as low as possible in order to not unduly burden operators and, of course, to increase the addressable economically viable market, the administrative solutions to the universal service regime need to be kept in proportion to the size of the issue. JT's concern in this respect has always been that the funding requirement could be doubled by a complex administrative solution such as regionalization of universal service markets.

    TRC's comments

    The TRC understands that any remedy should be efficiently administered and that the cost of administration should not be unduly large.

Annex 1.3: The report on responses received within the second public consultation

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1 INTRODUCTION

The Draft Regime on the Universal Service Obligation was published for comments on the 24th July 2005. Comments on the Draft Regime were received from:

- Jordan Telecom
- Fastlink
- Umniah
- XPress
- LaSilkee

The TRC would like to thank all respondents for their useful and considered input into the drafting of the USO Instructions.

In reviewing the comments, the TRC identified general comments concerning the overall USO Regime and detailed comments about the wording of the regulations. Section 2 of this annex provides the TRC's response to the general comments received. Section 3 provides the TRC's response to particular drafting proposals.

The TRC is aware that USO Instructions have been prepared in parallel with the establishment of a formal Rulemaking framework and the development of a framework for defining markets and assessing competition. It is intended that analysis associated with the USO Regime will be undertaken in accordance with these frameworks.

The TRC is also aware that the interconnect regime and the Universal Service regime need to be consistent with one another and that the net USO cost may be affected by any retail price controls placed on a Universal Service Provider.

2 GENERAL COMMENTS AND COMMENTS ABOUT THE APPROACH

2.1 Nature of the Instructions

There was some confusion amongst respondents about whether the Instructions were a Bylaw, or whether there is a separate Bylaw.

The Instructions that have been published in draft form are concerned with the Regime for Sharing USO Costs. The TRC has also prepared a draft bylaw to set up and administer the Universal Service Fund in line with its responsibilities under the Telecommunications Law.

One respondent suggested that the Bylaw should be subject to the TRC's consultation process.

The Bylaw is an administrative measure for Government to enact. Therefore it falls outside the remit of the TRC's own rule making procedures.

2.2 A five year plan

JT is concerned that the Instructions may become irrelevant with changing telecommunications technology. JT asks the TRC to define a five year plan setting out how Universal Services might be provided as technology develops.

The TRC has attempted to make the Instructions technology independent. The TRC also believes that universal availability of telecommunications services is an enduring requirement. Furthermore, the TRC believes that the USO should set service requirements not technological requirements.

The TRC has indicated in the Instructions that it is for the USPs to decide what technology platforms they use to provide the Universal Service. Further, the TRC does not believe that the Instructions stop a USP procuring services from another operator to meet the requirement in particular (probably new) areas. Therefore the USP may exploit technological advantages that another operator may have to provide the Universal Service, subject to service requirements and quality of service requirements specified in Articles 18, 19, 21 and 23.

Under Article 13, the TRC will have to decide how to cost the network used to provide the Universal Service. In doing so, it will need to consider what constitutes 'modern equivalent assets' for a fixed telephony service. Up until recently, the definition of modern equivalent assets was generally a question of detail. However, the TRC believes that the definition of modern equivalent assets is now very difficult indeed. There are issues to be considered at a number of levels.

First, at a physical level should wireline or wireless be assumed, and should the same technology be used everywhere?

Secondly, should call conveyance assume a traditional network of circuit switches or should it assume soft switches operating over an IP network?

Thirdly, a convergent mobile infrastructure could be used to provide the Universal Service.

The TRC has not assessed these questions in any detail, but acknowledges that any determination of net cost will have to provide answers. To provide some certainty on this issue, therefore for the time being, the TRC will consider that USO costs will be based on the infrastructure currently used in Jordan for delivering the Universal Service, which is wireline access and a traditional circuit switch network for call conveyance. Nevertheless, the TRC reserves its longer term position in this regard, which is likely to evolve in line with international best practice in the provision of such services.

Given this explanation of the TRC's current thinking and its proposals for considering technology change, the TRC is inclined not to provide a five year plan for how technology is to be used.

2.3 Enforcement

JT is concerned that Instructions will not be enforced.

The problem of enforcement goes beyond the scope of the Universal Service consultation.

2.4 Fair and non-discriminatory treatment of all operators

JT states its belief that JT and PMTOs are not treated consistently and this difference in treatment discriminates in favour of the PMTOs. Evidence of this discrimination is:

- The ability of a the PMTOs to charge the affordable tariff

- The nature of the interconnect regime, and particularly of the costs that are included in call conveyance by PMTOs, and are therefore included in interconnect charges paid by JT

The TRC is aware of JT's concerns regarding interconnect which are beyond the scope of this paper.

2.5 Requirement for a Universal Service Obligation

LaSilkee questions whether a Universal Service Obligation is required, referencing recent papers from the EU that seem to question the requirement.

The TRC believes that Europe is not intending to wind up its USO, but may revise it to meet changing market circumstances, particularly the introduction of VoIP. The TRC's view is that much competition in telecommunications arises not in access markets but in call conveyance markets. Call conveyance markets rely on access. Without access there would be no calls to convey and there would be no opportunity for VoIP services. Furthermore, calls made via VoIP bypass the incumbent's national and international call conveyance services, and may also avoid payment of termination charges to the USP if delivered over a broadband network. Therefore the incumbent has a reduced ability to make up any shortfall on access from call conveyance. As a consequence, the introduction of VoIP services may reduce the propensity of the access provider to provide access in unprofitable areas. Therefore, the introduction of VoIP may increase the need for a Universal Service regime to ensure that services are provided in such areas.

The TRC acknowledges that mobile services and fixed services are available almost everywhere in Jordan. While it is unlikely that any operator would remove service from an area already covered, operators may not build out to newly developed areas of the country, and would certainly not do so until the scale of the opportunity was sufficient to satisfy their business case. This may leave areas of the country without service. Quite apart from the requirements of Government Telecommunications Policy and USO Policy, the TRC believes that it would be politically unacceptable for areas of the country to suffer such deprivation.

Furthermore, the universal availability of a telecommunications infrastructure is a public good on which government and commerce can build. Universal availability and a very high penetration of telecommunications services allow government and commerce to use such services in the delivery of their own services. The use of telecommunications to deliver government and commercial services has been shown to lead to benefits for both users and providers of services.

LaSilkee states that the draft USO regime is "unnecessarily complicated". Much of the complexity arises because, as LaSilkee points out, a number of operators provide telephony services and in this new environment any assignment of roles and obligations, and any compensation if there is a net cost have to be fair. While the TRC acknowledges that the proposed process is complicated, LaSilkee, unlike some other respondents, has not identified any element that can be revised or removed and therefore the TRC is not able to consider any specific changes.

2.6 Affordable tariff

LaSilkee refers to the affordable price as being 16.7JD per month. In fact the proposed fixed charge for an affordable tariff is 3.34JD per month.

XPress and JT have asked who is obliged to provide an affordable tariff. Fastlink believes that there is an inconsistency between Article 20 of the Draft Instruction and the discussion of affordable tariffs in Section 3 of the paper.

At this stage, no operator is obliged to provide an affordable tariff under Article 20. However, the TRC will monitor tariffs against the proposed criteria for an affordable tariff. Article 20 would be invoked only after other methods of implementing an affordable tariff have been exhausted.

First, the market may provide an affordable tariff without any intervention by the TRC or Government. The TRC believes that this is very likely since tariffs from some mobile operators are close to satisfying the criteria.

Secondly, if an affordable tariff does not evolve, then Government through the TRC may require an operator to provide an affordable tariff. The TRC will first consider those operators that are dominant in a relevant market since it may impose some controls over retail prices. The TRC may therefore require dominant operators to provide affordable cost based tariffs.

Thirdly, if no operator can provide an affordable cost based tariff because costs are too high or for other reasons, then an affordable tariff will be obligated under Article 20. This tariff will have to be provided below cost. There are two major implications of this. To avoid market distortion, this tariff will have to be restricted to specific sectors of society as provided for in Government USO policy. Secondly, the operator could ask for compensation. It is intended therefore that the tariff would be provided by the USP and that compensation would be provided from the Universal Service fund. Any such affordable tariff would depress average call revenues and would be taken into account automatically in calculating the net cost of the USO.

The difference between Section 3.2 and Article 20 arises because Section 3.2 specifies the alternatives, whereas Article 20 specifies additional powers for the TRC. Therefore there is no inconsistency between Article 20 and Section 3.2.

XPress raises the requirement for an operator to contract with a subscriber for a service at the affordable tariff without resort to a credit check. The reason for this requirement is that a credit check may not be possible for many subscribers who would be eligible for the affordable tariff. Therefore the credit check might stop them being able to use the tariff.

XPress notes that no mention has been made of call charges in the affordable tariff criteria. This is deliberate. The purpose of the affordable tariff is to increase penetration of telephone services in Jordan. Once an individual has a telephone, he or she will tend to use it, since it substitutes for other far more expensive methods of communicating or because the utility is very high in comparison with the cost. Therefore, there is some headroom for call charges to be slightly higher than on other tariffs that do not meet the affordability criteria. At the same time, users who make a lot of calls may find that the affordable tariff is not the best for them and will migrate to another tariff. Therefore the possibility that operators will levy high call charges on the affordable tariff should be limited. Nevertheless, if operators that meet the affordable tariff criteria impose very high call charges, then the TRC may well consider altering the criteria by adding an upper limit to call charges.

XPress notes that mobile operators may already offer the affordable tariff. It should be noted that the mobile operators have arrived at a tariff that meets the affordability criteria as a result of their own commercial decision making process and without obligation. Therefore there is no requirement for mobile operators to be compensated for the provision of any tariff that meets the affordability criteria.

If a mobile operator was obliged to provide a cost based affordable tariff, then again, because it was not loss making there would be no requirement for compensation.

2.7 Support for the disabled

XPress claims that given "the considerable costs and efforts needed for support for the disabled, all Licensees will also be eligible for compensation from the USF."

The TRC stands by its belief that the disabled markets represent an opportunity that an operator may service profitably, and that operators should not view the provision of services to the disabled as a constraint on their business. The TRC's proposals for support for the disabled are limited. In many cases, they are fulfilled by adding to the list of handsets that are available and to the free provision of some operator services.

Access to telecommunications services are of particular importance to the disabled who may find it more difficult to access services and socialise than the able bodied. Therefore it is important that the disabled are not discriminated against in service provision.

As the proposals apply to all operators, they do not give rise to a competitive disadvantage for one or a number of operators. Therefore, it is not necessary for any operator or operators to be compensated. Jordan Telecom is already obliged to submit a plan, under its license, to provide support for the disabled. By obligating all other operators, TRC is removing a possible disadvantage on JT.

XPress states that the "TRC's object is presumably the disadvantaged residential consumer" and asks therefore whether the requirement will fall on those operators that focus on business markets. The TRC's response is that this requirement will fall on operators that provide business services as well as those providing residential services since an inability of a disabled person to use telephone services may limit their ability to work and thereby their opportunity to contribute to society through work.

2.8 Who is a USP?

XPress believes that there is an inconsistency between the regulation and the supporting document in specifying who is a USP.

To clarify this issue, Jordan Telecom is the USP currently. However, in determining that there is effective competition, another 'capable' operator could be made a USP under certain circumstances. However, the TRC views this as being unlikely at this stage because of the requirements for the provision of a narrowband internet access service and the need for a universally available service.

JT raises the question about whether a PMTO could seek to become a USP and make a claim for compensation.

The TRC believes that it is unlikely at this stage that a PMTO could be designated as a USP because of the requirement for internet access. If a PMTO was designated as a USP, it would probably be unable to make a claim for compensation. For the USO regime to be consistent with the interconnect regime the definition of access used in calculating the net USO cost would have to be consistent with the definition of access implicit in interconnect pricing. The TRC believes that such a definition would result in a very low access cost that was always covered. Therefore there would be no net cost of serving high cost areas or low revenue areas.

2.9 Definition of effective competition

Fastlink argues that “effective” competition has to come from a fixed operator unless it has been “determined that fixed and mobile telephony belong to the same economic market”. To do otherwise would pre-empt the process set out in the Competitive Safeguards consultation. Fastlink also wants the TRC to limit “effective competition” to competition from fixed operators “until an economic analysis has been conducted on the substitutability of fixed and mobile services”.

JT argues that under the terms of its license it is prevented from making a claim for compensation “until such time as a competitor to any part of the licensee’s Public Switched Voice Service has begun operations pursuant to a license issued by the TRC” and argues that the TRC should determine that “mobile voice telephony” is a competitor to the (fixed) Public Switched Voice Service.

XPress and Umniah argue that for competition to be effective it must be more than the availability of another licensee in the market. Fastlink argues that this is an extremely weak test and inconsistent with the Competitive Safeguards consultation. Fastlink goes on to argue that the test should be one of dominance.

Umniah believes that the TRC has already determined that JT faces effective competition.

XPress states that if all other operators that provide similar or substitute services to the Basic Public Telephone Services are considered to be competitors to JT, then it could be argued that effective competition exists already and that JT could make a claim. XPress goes onto say that this would be a nonsensical outcome, but does not say why it is nonsensical.

Three Individual and forty-one Class Licenses, which authorize their holders the right to provide "Fixed Telephone Services", have been let. Nevertheless, the TRC has concluded that JT does not yet face effective competition to the provision of the Public Switched Voice Service since licensees do not have an access network of their own to originate or terminate traffic, and JT has yet to implement the relevant Interconnection Instructions or allow the termination of In-bound International traffic. Until such competition exists, JT will be required to continue to provide the USO under the terms of its license.

Respondents should note that the effective competition criterion is a threshold for the application of the regime for sharing USO costs, and does not by itself determine whether JT will be compensated for any net cost of the USO. Once the regime has been applied, any claim that JT may make is subject to the material competitive disadvantage test. Let us suppose that there is a net cost to the USO. Under the material competitive disadvantage test, the USP will not be compensated if it is making supernormal profits based on an assessment of revenues and costs according to the Instructions. The TRC believes that this will avoid the issue of a dominant and highly profitable operator using the USO to disadvantage its competitors further through compensatory transfer payments.

In conclusion, there is no need for the effective competition test to be one of dominance.

2.10 Material competitive disadvantage test

Fastlink argues that the material competitive disadvantage test is impractical and open to continuous challenge by the USP.

First, there is an issue in determining ROCE and WACC. Fastlink argues that it will be difficult to demarcate a relevant business and have separate accounts for that business.

This is an issue that faces all regulators when calculating costs (and benefits) of a USO and usually leads to a long argument between the USP and the regulator. The TRC has examined the experiences of a number of countries in framing the Instructions and the calculation of revenues and costs of the USO. The TRC has also considered what would be reasonable for a USP to undertake as far as accounting separation is concerned associated with the USO. Furthermore, it should be pointed out that the calculation of interconnect costs are subject to similar criticism.

As a consequence, the intent behind the material competitive disadvantage test was to consider the business that was dependent on the access and call conveyance systems used by the USP and only those businesses. The conclusion that the TRC has reached is that this is essentially the fixed business of the USP. Therefore the WACC used would be the WACC as determined by the TRC for the fixed business of the USP.

Further cost and revenue estimation will be required for the Universal Service and net revenue estimation for value added and supplementary services. This is standard practice and undertaken by a number of regulators in North America, Asia and Australasia.

Secondly, Fastlink is concerned about the assumption of efficiency and believes that this will leave the TRC open to challenge.

The TRC understands this problem, but in the interests of fairness, the calculated net cost of the USO has to be that of an efficient operator. Again, there are many precedents for this conclusion.

Thirdly, Fastlink is concerned about retail price controls, and in particular that the USP's profitability may be affected by retail price controls.

The TRC understands and agrees with this argument. Retail price controls are inconsistent with payment of compensation, and therefore the TRC does not believe that compensation should be paid while retail price controls are in place. In practice, the following conditions may apply when a USP is subject to retail price controls.

- The USP makes super normal profits, in which case the USP will not be entitled to compensation for the USO.

- The USP fails to make normal profits, in which case there are two possible remedies: the relaxation of retail price controls, and the provision of compensation. The TRC would expect to relax retail price controls before providing compensation.

2.11 Materiality of any net cost

XPress argues that a small net cost would not be a material disadvantage to a USP. The TRC is of a similar view, but it is difficult to judge what small means. The TRC prefers to rely on the rationality of the USP in making a claim. Since the USP is likely to have to bear a significant proportion of the USO cost itself, and making a claim is a costly activity, the TRC believes that if the claim is small, then the USP will choose not to go to the expense of submitting a claim.

2.12 Cost of access on a fixed network in comparison with a mobile network

JT argues that it is disadvantaged because of a perceived inconsistency in the way JT's call termination costs are calculated and the way PMTO's call termination costs are calculated. This inconsistency arises out of what is included in the definition of call conveyance on a fixed network and on a mobile network. JT argues that elements that would otherwise be considered to be part of the call conveyance network if they were used to provide a mobile network are considered to be part of access in its fixed network. The consequence of this is that call termination is determined to be more costly on a PMTO's network than it is on a fixed network. JT argues that this means that its own customers contribute to the cost of the PMTO's access when making calls to a PMTO's networks, but PMTOs' customers do not contribute to JT's access when making calls to JT. Therefore JT is disadvantaged. Furthermore, JT cannot provide a profitable access tariff, whereas mobile operators are able to do so. JT argues, therefore, that it suffers discrimination if similar or substitute services are found to be present from PMTOs. Finally, JT argues that a revision in the way interconnect charges are determined, would enable JT to offer the affordable tariff and may eliminate the net cost of the USO. The consequence of this would be higher interconnect charges.

Although this argument has implications for USO cost modelling, it falls outside the scope of a discussion of the USO.

2.13 Calculation of Contributions

XPress asked for a clarification of the calculation of contributions. The TRC draws XPress's attention to Article 17.2.

2.14 Costs of administering the Universal Service Fund

XPress asked about the costs of administering the Universal Service fund and argued that there should be a further consultation if these costs were large. The TRC does not believe that the costs of administering the Universal Service Fund will be large in comparison with total industry revenues or even of license fees.

2.15 Compliance costs

JT argues that it needs to have certainty of funding before a claim is made.

In arriving at a claim, the TRC will be pleased to help JT decide whether a claim will be successful or not. For example, a claim is unlikely to be successful if the published accounts of JT indicate that its ROCE is greater than the TRC determined WACC for its fixed business. The TRC will also need to come to a conclusion about modern equivalent assets and JT's level of efficiency. The TRC believes that it should do this before JT calculates its claim.

2.16 PMTO's roll out obligations

XPress believes that the discounts on the license fees paid by PMTOs were small in comparison with the roll out obligations. Umniah also has comments about the roll-out and coverage obligations.

The TRC is of the view that when PMTOs acquired their licenses, they were rational decision makers acting as private investors who were purchasing an asset, and that Government was acting in accordance with the Market Economy Investor Principle in which it was selling an asset that was under its control. The price paid was therefore a market price. The price paid comprised a revenue share, taxes and license fees. There was no indication that PMTOs were to receive further compensation for their roll out obligation. JT was purchased in full knowledge that its provision of the Universal Service would be subject to a Regime for the sharing of USO costs once a competitor was licensed. The terms of JT's license were public and therefore accessible to investors in PMTOs. Therefore the TRC believes that it is reasonable to provide a Regime for sharing of USO costs that compensates the USP, and that PMTOs, if found to be competitors to a USP, should be obliged to provide compensation.

2.17 Similar or substitute services

JT argues that the set of services included in the term "similar or substitute services" used in Article 16.4 should be defined explicitly to avoid confusion. JT is particularly concerned that a potential competitor is not excluded because the service is not identical.

The TRC has concluded that all operators should contribute to the universal service fund on the basis of all revenues from licensed activities. The TRC has reached this conclusion because the set of services that are related to the universal service or the services used by the USP to cross subsidise any net cost is extensive.

3 DETAILED COMMENTS ON THE WORDING OF THE DRAFT REGULATIONS.

Article 1: Citation:

JT proposes the following change to Article 1.These Instructions may be cited as the Instructions on the Sharing of USO Costs from January 1st 2005, and shall come into effect as of the date of their publication in the Official Gazette. All matters conducted and determination made by the TRC in relation to the execution of these instructions shall be conducted at the highest standards of transparency and without undue preference for one solution over another.

The TRC rejects these proposals. Retrospective application is not possible under Jordanian law. This applies to JT's proposed changes in Article 3, Article 6 and Article 7 also. Furthermore, the TRC is always under an obligation to be fair and non-discriminatory and to be transparent wherever possible.

Article 5: JT's to be sole USP until there is ~~effective~~ competition

JT proposes to strike the word "effective".

The word "effective" has been used in the Instructions to be consistent with Government USO Policy and cannot therefore be stricken. This applies to Article 6 also.

Article 6: Determination of effective competition

1. Fastlink proposes to define effective competition in terms of lack of dominance.

   The TRC rejects this proposal based on the conclusions above.

2. JT proposes the following addition to Article 6.2:

   In making its determination the TRC shall take account of:

   (a) The availability of the Public Switched Voice Service from any other Licensee.

   (b) The availability and price of similar services to and substitutes for Public Switched Voice Services

   (c) Other factors that the TRC determines to be relevant.

   The TRC rejects this addition. JT's license clearly refers to a competitor to the Public Switched Voice Service.

Article 8: Assigning the role of the USP to one or more Licensees

1. Paragraph 8.5 of this article sets out the criteria which TRC shall take into consideration when deciding which Telecommunications providers will be designated as the USP. Fastlink proposes the following addition criterion should be added:

   "The financial stability of the communications provider".

   The TRC accepts this proposal.

2. JT proposes to make consultation explicit in Articles 8.7 and 8.8.

The TRC does not believe that consultation needs to be made explicit and therefore rejects the proposal. The TRC has published draft Rule Making Procedures[7] *that define a consultation process. It is anticipated that these procedures would be used to undertake this determination.*

Article 9: Sharing of USO Costs

Fastlink indicates that a definition of material competitive advantage needs to be provided.

The TRC has amended Article 9.4 to read "The TRC may require Licensees to contribute to the Universal Service Fund under Articles 16 and 17 of these Instructions."

Article 10: Definition of a material competitive disadvantage

1. Fastlink proposes what it believes is a simpler approach to the determination of material competitive disadvantage, which is to calculate the costs and benefits of being a USP in a given area.

   In fact, the draft Instructions specify how to make the calculation of the net costs and benefits of being a USP. The additional requirement to determine ROCE is a consequence of this calculation, and the calculation of net costs assumes a WACC. Therefore, the TRC's proposed test does not require any further work than would otherwise be necessary to do what Fastlink proposes and does not add to the complexity of the determination. Therefore the TRC rejects Fastlink's proposed simpler approach.

2. JT proposes to make the Article read "either (a) or (b)"

   The TRC rejects this proposal, and inserts the word "and" so that clause (a) reads:

   > *(a) The return on capital employed for the business that is used to support the Universal Service in any year is no greater than its weighted average cost of capital for that business as determined by the TRC; and*

3. JT proposes an annual determination of WACC.

   The TRC rejects this proposal. The TRC believes that an annual determination of WACC is too frequent.

(Article 11) Calculation of the net cost of the USO

1. JT proposes the addition of the following to Article 11.4. Until such time as JT is no longer the sole USP, the size of economic area shall be treated as consistent with the size of area considered by JT. If JT is no longer designated as the sole USP, the size of economic areas considered by all USPs shall be consistent between operators.

   The TRC rejects this addition. The TRC believes that the proposal is an over-specification and that there may be circumstances when different areas are considered for different operators, particularly as the TRC has left the flexibility to use existing network topology if insufficient market data is available to design an optimal topology. If the size of an area was

[7] Draft Rulemaking Instructions issued by the Telecommunications Regulatory Commission, May 2005

defined based on an existing network topology of one USP, it might advantage or disadvantage that USP in comparison with other USPs.

2. JT proposes an additional article:

   11.5 The USP, when making a claim for compensation, shall keep a record of significant, reasonable resources utilized and their costs, to comply with the obligations contained in Article 14 such that these costs may be included in the reasonable costs of meeting the Universal Service obligation. In the event that the USP's claim for compensation is denied for any reason, costs exceeding JD50,000 shall be compensated from the Universal Service fund.

   The TRC rejects this addition. Compensation for the cost of a claim would encourage frivolous claims that may tie up TRC resources and cause other operators to incur unnecessary expenses.

3. JT proposes the following additional Article:

   11.6 The principles of cost recovery and cost allocation used to determine the costs of the network which provides Universal Services shall be consistent with those developed for the purposes of calculating interconnection tariffs.

   While recognising the need for consistency between determinations, the TRC believes that this addition is too general and does not define consistency with sufficient rigour. The TRC believes that from JT's point of view the issue is concerning the scope of access and call conveyance. While the TRC does not want to tie the USO regulation explicitly to interconnect, the TRC believes that it will need to ensure consistency with interconnect cost modelling when undertaking USO cost modelling.

4. JT proposes the following additional Article:

   11.7 The relevant market definitions used to assess market power in other telecommunications markets shall be consistent with those used to determine competition in respect of clause 6.

   The TRC is not clear on what is intended. If the intention is to ensure that there is consistency in the process used to define markets and to determine market power then the TRC refers JT to the Competitive Safeguards paper.

13 (Article 13) Specification of the costs to be taken into account

1. JT proposes the following revision to Article13.1. The following cost basis shall be used in determining what areas are uneconomic and the avoidable costs in those areas. The TRC may choose to re-estimate any costs, subject to reasonability and comprehensive justification, provided to it by a USP taking account of this basis and to recalculate the avoidable costs of the USO.

   The TRC believes that it is always under an obligation to act reasonably and with justification and therefore this addition is unnecessary.

2. JT proposes the following revision to Article 13.1.1 A forward looking long run incremental approach as described in EC Directive XX.

   The TRC has developed its own rules for long run incremental costing with respect to determining the costs of interconnection.

3. JT proposes that if the life of an asset used to provide the universal is shorter than normal for that type of asset, the shorter life be used to determine depreciation.

The TRC believes that the introduction of the possibility of different asset life for components used to provide the Universal Service is unnecessary. In general, there will be some assets that are taken out of service early and cannot be used as spares. These assets are considered to be sunk costs. However, on exception and where it can be demonstrated that the asset life was planned to be shorter than normal because asset replacement or termination of service is planned before the normal life of the asset has expired, the TRC will allow such a shorter asset life.

4. JT proposes the following addition to Article 13.1.7. Spare capacity. Normal levels of spare capacity shall be allowed taking account of:

   ...

   (e) The likelihood of growth in demand when the assets were originally installed.

   The TRC believes that under a forward looking long run incremental cost model, this growth in demand is understood to be forward looking from today, not forward looking from a historical point.

5. JT proposes the following addition to Article 13.1.9 Impaired assets. All unused facilities except for spare capacity shall be considered to be impaired assets. The costs associated with impaired assets will not be taken into account in the net cost calculation unless it can be demonstrated that the assets were installed as a consequence of JT's Universal Service obligation.

   The TRC assumes that JT is thinking about cases where it has installed capacity to provide the Universal Service and no or only a small amount of that capacity is used. Under such circumstances, this unused capacity may be considered to be spare, if the capacity installed is the minimum that may be installed in an area to meet current demand. If there is absolutely no demand, then there may well be a minimum amount of capacity that would need to be installed to provide the Universal Service within a reasonable period of time. That capacity would be considered to be spare capacity. Therefore, there is no requirement for this addition, which would give a USP an open book to install capacity.

6. JT proposes the following change to Article 13.2. The Universal Service may be provided using any suitable technology base but there shall be a presumption in determining the net cost of the USO that the optimal technology in cost terms that meets the requirement has been used. This presumption shall also take into consideration the total cost of ownership of the service and necessary equipment for subscribers. The definition of optimal technology may take account of expected developments in functional internet access that may take place. The TRC shall have the responsibility for determining from time to time what technologies are optimal.

   The TRC believes that this is an unnecessary addition. The LRIC modelling will include operating costs and cost of financing, and should therefore compute a total cost of ownership. Equipment provided to subscribers will be included if it is a necessary part of the service. However, any charges that the subscribers pay for such equipment will also be included in the calculation of revenue.

14 (Article 14) Specification of the process to be used in determining net avoidable costs and revenues foregone

1. JT proposes the following change to Article 14.1. A USP may make a claim to the TRC for compensation for the net cost of a USO for the immediately preceding calendar year. For the avoidance of doubt, a claim for the calendar year 2005 must be made before December 31st 2006.

The TRC will not change the regulation but will include this in the explanatory text.

2. JT proposes the following change to Article 14.2 ~~On~~ Within three months of making a claim for compensation for the net cost of a USO, a USP shall provide an analysis of its relevant business giving its Return on Capital Employed based on the WACC for the business determined by the TRC.

   The TRC accepts this change.

3. JT proposes the following change to Article 14.4. The USP shall provide the TRC with a copy of any computer programs used and a copy of the data used in those programs in an electronic form that will allow the TRC to rerun the computer programs with the data to replicate the estimation process undertaken by the USP with the data supplied or with a modification of the base assumptions used as prepared by the TRC. The TRC shall provide the USP with the details of any subsequent analysis performed by the TRC in a timely manner. The USP shall provide ~~full documentation~~ a detailed explanation of the model which explains its structure, the assumptions, formulas, and how the model is run. The USP shall also provide supporting and proving documents. The USP shall provide assistance to the TRC in loading the programs and data onto a computer that is under the control of the TRC, and in replicating the estimation process with the data supplied and with any modifications made to that data. Should the TRC not have a suitable computer available, then the USP shall provide such a computer or sufficient time on a computer under its control for the TRC to run the programs and data with the assistance of the USP.

   The TRC believes that it has a duty to provide an explanation of its actions and would therefore provide details of any subsequent analysis performed. The TRC therefore rejects this change. The TRC accepts the change in wording from "full documentation" to "a detailed explanation", since it is an explanation that is required.

4. JT proposes the following change to Article 14.5. The TRC shall review the claim and determine an interim compensation payment to made to the USP within three months of the USP complying with the provisions of Article 14.4 which shall represent one half of the expected claim. ~~t~~The TRC shall make a final determination of the net cost of the USO within twelve months of receiving the claim, supporting documents, computer programs and data as stated in paragraph 14.4 and shall make a balancing payment, or the USP shall make a balancing repayment if necessary, taking into consideration the time value of the financial award from June 30th of the year for which the claim is being made by applying the WACC.

   The TRC rejects the possibility of an interim compensation payment. In other countries, initial claims have been very large in comparison with the final determination. Such claims would require payment from the Universal Service Fund and this would require the Fund to borrow or to obtain funds from other operators. There is a possibility that these funds would be tied up for a considerable period if the final determination was contested.

15 (Article 15) Specification and evaluation of benefits

JT proposes the following change to Article 15.1. The TRC shall evaluate the benefits, or disbenefits, of being a USP and take account of the value of these benefits, or disbenefits, in determining the amount of any required compensation.

The TRC rejects these changes on the grounds that it knows of no precedents where disbenefits are identified and estimated.

Article 16: Specification of the contributors to the Universal Service Fund

1. Fastlink believes that it has identified a possible difference in interpreting Article 16.4.

The TRC has deleted Article 16.4..

2. JT proposes the following change to Article 16.3. A contributor shall be a potential contributor whose revenue net of payments to USPs and other potential contributors in the relevant market is not less than 1% of the sum of such net revenues from all USPs and potential contributors. If an operator's net revenues from the relevant Universal Service market is less than 1% of the total net revenues from the relevant Universal Service market, the operator shall not be required to make a contribution to the fund, whilst other operators will be required to increase their contributions accordingly.

   The calculation of contributions from each contributor is covered in Article 17. This addition is not necessary as the calculation specified in Article 17 will achieve the result proposed.

Article 17: Specification of the contribution by each contributor to the Universal Service Fund

1. Fastlink complains that there are two bases on which a contributor will be asked to contribute Article 9 and Article 17.

   The TRC has revised Article 9 to refer to Articles 16 and 17.

2. JT proposes the following change to Article 17.1. Each contributor shall contribute to the Universal Service Fund yearly in arrears ~~in~~ prior to March 31st of each year in which there is a net USO cost, or within three months of the TRC's determination of the contribution requirement if such determination is made later than three months from the end of the year for which the Universal Service compensation claim is being calculated. Payments made after these dates shall be subject to penalty interest charges set at the average USP's WACC plus 10%.

   The TRC accepts the requirement for a time limit and a penalty and will amend this Article accordingly.

3. JT believes that Article 17.2 is not clear and another respondent indicated that Operating Revenue has not been defined. The TRC has revised Articles 16 and 17.

Article 23: Functional Internet Access

1. Fastlink complains that an actual rate for functional internet access has not been provided.

   The definition of functional internet access in Europe has been shown to be difficult as shown by the two examples given by Fastlink. The TRC acknowledges Fastlink's concern in this area.

Article 24

JT proposes the additional Article **(Article 24) Review**

24.1 The TRC shall conduct a consultation with interested parties and present its recommendations for comment by industry within two years of the date of this instruction coming into force.

The TRC recognises that there will be a need to review the working of the Instruction within two to three years. However, the TRC would prefer not to place what would be a sunset clause in the Instruction.