

EAST TIMOR TRANSITIONAL ADMINISTRATION

NATIONAL TELECOMMUNICATIONS POLICY

1. INTRODUCTION

The National Telecommunications Policy is a statement of the philosophy, objectives, strategies and methodology, which sets the scene and defines the goals that the Government wishes to achieve in telecommunications in East Timor.

As both the situation in the country and the technologies involved are constantly changing the East Timor Transitional Administration (ETTA) will from time to time make changes, modifications and additions to the policy through a regular process of review.

It is generally recognised that access to reliable and affordable telecommunications [*as recommended by the International Telecommunications Union (ITU) – Telecommunications include: any process that enables a correspondent to pass to one or more given correspondents (i.e. voice, data or video), or possible correspondents (broadcasting), information of any nature delivered in any usable form (written or printed matter, fixed or moving pictures, words, music, visible or audible signals, signals controlling the functioning of a mechanism, etc.) by means of any electromagnetic system (electrical transmission by wire, radio transmission, optical transmission, etc., or a combination of such systems*], is a prerequisite for sustained economic growth and social cohesion.

In post-conflict areas it is moreover particularly important that people can freely express themselves and have access to as many sources of information as possible. Freedom of exchange also contributes to national integration and helps preserve the social and cultural fabric of the nation.

The general guidelines embodied in this policy document therefore emphasise the need for the rapid development of a telecommunications infrastructure, coupled with a high quality of service in line with and supporting national development.

2. INSTITUTIONAL ARRANGEMENTS

Approval of the National Telecommunications Policy Paper formalises the first step in the rehabilitation of the telecommunications sector in East Timor. It can be the catalyst upon which to build a viable, self-sustaining state. The immediate task is to establish a solid organisation and a telecommunications policy framework, progressively increasing the capacity of East Timorese to take responsibility for their own future.

The role of the Government and hence of the Department of Infrastructure (DOI), will be defined in the Telecommunications Act. Only after Cabinet has approved the Act will the BOT tender be issued to interested bidders. Whilst the tenderers are preparing their bids, the regulatory regime pertaining to the tender procedure, evaluation and selection will be defined and established in preparation for contract negotiation and signature.

Although every effort is being made to ensure that the DOI will be capable of assuming its responsibilities in respect of the telecommunications sector it is recognised that the DOI will require the continued assistance of international advisors for some time in the future.

Services, such as public Internet, will not be the subject of sector specific regulations and may therefore be initiated even prior to the promulgation of "The Telecommunications Act".

3 POLICY PRINCIPLES:

The Government recognises that a basic affordable, universal, cost-based telecommunications system taking into account the specific circumstances in East Timor should be available to all people in East Timor in the same manner and according to the same terms and conditions without discrimination.

Internet connections and "value-added" services such as, paging, data services, voice-mail and video conferencing – should be made available in sufficient quantity to satisfy demand, at present and in the future.

The following more specific objectives are central to the National Telecommunications Policy:

A. Privatisation / Liberalisation

- General
- Privatisation / liberalisation in East Timor
- Customer Premises Equipment (CPE)

B. Network development

- Transmission Backbone
- International Gateway
- Public Fixed Network
- Mobile network
- Private networks
- Internet
- Voice over IP
- Other Services (Transport of broadcast programs, data, video, etc.)

C. Regulatory framework

- General
- Provision of a Basic Universal Service with unrestricted access for all users
- Licensing
- Tariffs
- Interconnection
- Frequency spectrum

D. Training and Public Awareness

3.1 GENERAL PRIVATISATION / LIBERALISATION PRINCIPLES

Privatisation and liberalisation can be introduced at the same time or separately. A Government may wish to open up the market to other operators without selling any of its holdings, or it may wish to sell (part of) its holdings without opening up the market to other operators or both.

It is crucial to the development of the sector that the timing and the extent of the liberalisation / privatisation is right.

3.1.1 Privatisation

In the developed economies and even in many developing countries there has been a strong push towards privatisation of all sectors of the government where it is possible for the private sector to provide a similar or better service. In many countries this stops short of those services which deal with security of the nation, education and other services to which the public in general is considered to be entitled or where it is unrealistic to assume that the market will be able to provide the consumer with any real choice e.g. national defense systems.

Telecommunications is one of the prime examples of a service which can be better provided by the private sector, albeit within a framework of a regulatory regime which ensures a level playing field for all goods and services providers and which protects the interests of the consumer.

In most countries this has meant that the government, in a number of stages, has sold its holdings in the telecommunications sector. This not only brings in substantial revenue for the government but also brings in expertise in both technical and managerial terms to complement the existing staff.

3.1.2 Liberalisation

Liberalisation i.e. the introduction of competition is an issue, which is paramount in the policies and regulations of developed and developing countries.

The aim of liberalisation is to achieve higher growth rates and lower prices by allowing different operators/suppliers to compete for customers.

In many cases this has multiple benefits. Not only have prices come down but also the market has increased substantially. It has therefore not been a case of sharing an existing market but developing new ones and expanding existing ones.

Liberalisation has always taken place where there has been an established monopoly operator, a functioning infrastructure and a relatively developed market.

3.2 SITUATION IN EAST TIMOR

East Timor is one of the very few countries in the world where there is no existing (monopoly) operator, where there is no fully functioning infrastructure and a very underdeveloped market.

It is therefore not possible to compare the situation in East Timor with that in other countries let alone apply the same solutions. Therefore solutions and a process of development will need to be introduced which are unique to East Timor.

3.2.1 Privatisation in East Timor

As East Timor does not have the funds to buy a telecommunications system, the country is dependant on external financing. The most effective way to realise both the funding and the development of the system is to go through a competitive tender for a Build, Operate and Transfer (BOT) project. In effect the proposed BOT tender would, de facto, be a direct and complete privatisation of the sector. The government at the end of the BOT period could, when the assets are transferred from the BOT operator to the Government, then decide to formalise a partial or complete conventional privatisation of the assets.

3.2.2 Liberalisation in East Timor

The BOT approach to the establishment of a viable telecommunications network and services implies giving the successful tenderer a period of exclusivity. This will be necessary to allow the BOT operator to recoup the investments plus a margin and, equally importantly, to ensure the expansion of the system to areas outside of the most profitable locations. If competition were to be introduced from the beginning operators would be forced to limit their activities to Dili and possibly one or two of the larger district capitals. Competition would then prevent any of the operators from moving out into less profitable areas. The price that the expansionist operator would have to charge would necessarily be higher than if he were to provide services in only the profitable areas. This would result in loss of market share in the areas that would be providing the income to finance the expansion.

The introduction of competition at this stage in the development of East Timor would therefore be counter productive and seriously undermine the development of the telecommunications sector.

3.3 Customer premises equipment

One element of the telecommunications sector will be liberalised immediately and that is the sale and installation of Customer Premises Equipment (CPE). The only requirement on suppliers will be that all equipment must conform to the relevant international standards and in no way negatively effect the operation, reliability or integrity of the network.

4. NETWORK DEVELOPMENT

The goal is to establish an integrated, sustainable and reliable telecommunications network that covers the entire country and is capable of providing voice, video, data and imaging services and which is compatible with the networks in other countries thereby creating a network that is part of the global market of information processing.

The development of the East Timor telecommunications sector and administration of the network can be viewed as follows:

- a. A Network Provider (NW)
 - A high capacity national backbone based on the transmission towers that are still in situ and with enough capacity to transport television, radio, internet and possibly other services not yet available. (The marginal cost of creating sufficient capacity to allow for the carriage of all these services on the network is in the order of 5%)
- b. The following Facilities and Service Providers: (Services)
 - An International Gateway to handle international connections in and out of East Timor.
 - A fixed line national public telephone network
 - A national cellular mobile network covering the Capital of Dili, the District Capitals and at a later stage expanding as required to include the areas between, including rural communities.
 - Customer access networks (cable or wireless) for connection of subscriber equipment (telephones, fax machines, etc.) to the fixed line network.
 - Other network services, including private networks, government networks, internet, voice over IP and other services (transport of broadcast programs for radio and television, video conferencing, etc.)

Whereas it is technically viable to contract one single NW provider and several Service Providers for the various Services listed above, there are factors against this approach.

In a situation where the winner of the BOT controls both the NW as well as all of the Services such an operator can adversely affect the entrance of new service providers to the market by making access to the infrastructure (in particular the NW) difficult or impossible.

The converse where the BOT contractor controls only the NW and the Services license is awarded to other providers the BOT contractor will be motivated to promote his facilities aggressively. This therefore may seem to be a good solution. However, the minimum investment for the NW backbone would be in the order of \$9.6M, with a marginal addition of \$0.45M to incorporate the additional capacity for transport of video and other facilities. It will not be possible to recuperate this order of investment if the BOT winner does not participate in the Services side of the project.

In this scenario the complexity of interconnection agreements would be an issue of significant concern for the future Regulator.

The best approach would be to permit a temporary “monopoly”, allowing the winner to operate the NW and the necessary number of services to provide a viable business before the “T” period of the BOT. However, the option will be kept open for the Government to admit other Services providers if and when convenient. For example a second mobile service operator could be admitted when opportune.

Based on the above principles, the DOI envisages issuing a tender in the near future for a Build, Operate and Transfer Project for a complete telecommunications system consisting of the trunk backbone, fixed and mobile networks, international gateway and ancillary equipment. This project will result in the desired coverage and initial level of service.

The period required by the initial operator to build the system and make a reasonable return will be approximately 10 years. The shorter the period the higher the prices will be to the consumer.

4.1 Mobile communications

Although the Government at this stage does not consider that the market can support a second mobile operator, as stated above there is no a priori decision to restrict the market and the government may consider issuing a license for a second mobile operator at some time in the future.

4.2 Private networks

The establishment of private networks will not be restricted but will be subject to Government approval according to a set of criteria to be determined by the Telecommunications Regulatory Authority (TRA). Other contractors, independent of the BOT winner, could provide these networks.

4.3 Internet

The Government recognises that the internet is becoming a powerful tool of communication and the community should be encouraged to learn of the possibilities which the internet offers and to make maximum use of it.

It is a commercially attractive sector which in general is characterised by rapid growth and vigorous competition and which can have great value in terms of education, information, and communication. Under these conditions there should be regulation with a light touch aimed at ensuring the protection of the customer (privacy), quality of services and adherence to general principles of fair competition and network integrity where there is connection with the public network.

There will therefore, in principle be no restrictions on the establishment of Internet Service Providers. However, in the present circumstances in East Timor where there is no effective competition and the understanding of the public of the workings of the market is limited, the Government wishes to ensure that any entrant onto this market will be fully capable of providing an acceptable level of service to the public. As a transitional phase the Government therefore intends to introduce a registration requirement for Internet Service Providers (ISP's). ISP's in this initial phase will be given permission to operate on the basis of a commitment to a minimum level of service. In order to stimulate the provision of Internet services by the private sector ETTA will issue a public announcement in due course informing interested parties that they may register as an Internet Service Provider. The announcement will also contain details of the registration requirements.

The registration regime will be reviewed annually to determine whether or not there is sufficient activity on the market to warrant the complete removal of any sector specific regulations.

4.4 Voice over the Internet

In East Timor only a small number of the general population has access to computers. Moreover the computer skills are very low. Although this is likely to change quite rapidly in the future it is not expected that the development of Internet services and in particular Voice over Internet will have a significant impact on the income position of the main NW operator. In the event that an Internet Service Provider might wish to market telecommunications services as a distinct service, that provider will have to apply for a license to become a Telecommunications Operator.

5. REGULATORY FRAMEWORK

The progressive introduction of competition in the telecommunications sector, rapid technological advances and the increasing convergence of Telecommunications, Information Technology (IT) and broadcasting technologies means that the regulator will have to adopt a flexible approach which will facilitate the development and the introduction of new services whilst at the same time ensuring that the interests of the consumer are protected in terms of access, quality and quantity of services and price. In effect this means that regulation should be kept to a minimum and that only those issues should be regulated which are essential to ensure a level playing field and to protect the interests of consumers.

In the case of East Timor the market will not be developed enough in many areas and government intervention through specific sector regulation will be necessary for a number of aspects of the telecommunications sector.

However, this approach to regulation of the sector i.e. regulation only where it is necessary, should not result in an inability of the Government to intervene swiftly in areas where initially it was not foreseen that sector specific regulations would be necessary. Where competition does not deal with an issue effectively or where competition does not result in the envisaged outcome within a reasonable time it must be possible for the Government to introduce regulations to compensate for the delay in what was expected to be achieved by market forces.

As competition increases the need for sector specific regulations will decrease and the regulatory regime should therefore also be constructed in such a way that it can be modified whenever necessary to take into account developments in the market, the level of competition and the ability of the consumer to express himself.

The Telecommunications Act, which defines the regulatory framework, will focus on the following issues:

- Basic Universal Services
- Licensing
- Interconnection
- Tariffs
- Frequency spectrum

5.1 Basic Universal Services

A fundamental aspect of both Policy and Regulation is the availability and unrestricted access to telecommunications services. Bearing in mind the level of investment required to re-establish services and the requirement of prospective operators to balance their books within a certain (limited) period, one can only realistically put a universal service obligation on the future operator in the rather general sense that access must be provided to all persons within a reasonable geographic distance from their homes. What that geographic distance will be will depend on the period of the license granted to the operator and on the price that the operator will be able to charge for services. In effect there will have to be a trade off between coverage and the quantity of services provided and it will be for the tender evaluators to determine which proposed package of services, tariffs and coverage would provide the greatest benefit to East Timor.

Telecommunications is one of the most important growth factors in modern economies. Initially it is the business sector, which will benefit most from the provision of advanced communications. Advanced telecommunications services will allow businesses to increase their productivity by making it cheaper, faster and easier to do business.

Although it is socially and politically attractive to ensure that individuals have access to telecommunications the benefit to the economy and therefore the benefit to the population, albeit indirectly, will be greatest if priority is given to connections which are predominantly used for the conduct of business. However, it remains the aim of the Government that access to and delivery of a full range of contemporary and cost-effective services will be provided to as many users as is economically justifiable.

5.2 Licensing

The quality and quantity of services can be best optimised in a free market environment where providers compete for customers and customers have a choice of several service and equipment providers.

It is, however, recognised that the full liberalisation of the market may not be feasible in East Timor for some considerable time. The market is small and the potential for growth is limited at this stage in some areas. Initial entrants to the market will have to be given some degree of certainty that the relatively large investments required could be translated into a sustainable business before having to compete with a (limited) number of competitors. There will therefore have to be a process of gradual liberalisation and introduction of competition over the next few years. The speed of liberalisation will depend on the market sector and will be determined by the Regulator.

In the intervening period a regime of licenses will ensure an orderly and efficient development of both infrastructure and services. Such a regime will be subject to regular review in order to ensure that regulations do not restrict the growth and development of the sector or create unfair advantages for any operator.

The Government recognises that the sale or auction of licenses could generate substantial income. However, the cost of these licenses will be reflected in the price to the consumer, which is contrary to the goal of providing maximum access at the lowest price, and the Government therefore does not intend to charge more for the license than the cost that is necessary to produce the license.

As has been pointed out above different approaches to the BOT project would result in different licensing regimes. However it must also be recognised that the new Regulator will be inexperienced and any complicating factors in terms of number of licenses or interdependency of licenses will have a negative effect on the effectiveness of the regulator.

5.3 Interconnection

Interconnection and interoperability of networks are important aspects of the telecommunications system. All operators will therefore be required to provide any other operator with access to their network on demand wherever that is technically possible.

Interconnection agreements also have a direct bearing on the price the subscriber has to pay. In the absence of full competition it is the role of the government to ensure that interconnect is carried out in a cost-effective and transparent manner.

Where one or more of the parties has a significant market position, the terms and conditions of the Interconnection Agreements, will be regulated under the Telecommunications Act, possibly through a price cap system.

5.4 Tariff Policy

Tariffing in general should be on the principle of cost-orientation. However, it is recognised that in the specific circumstances of East Timor strict application of the principle of cost orientation might mean that, in particular, rural tariffs would increase by an extent that is considered to be socially unacceptable.

In view of the fact that switching is only done in Dili and that the largest determinant of cost is the switching, the Government considers that initially a uniform price for both local and long distance calls is justifiable. The Government accepts that the minor deviation from cost orientation which results from providing both local and long distance calls at the same price is acceptable in the light of making telecommunications (financially) accessible to low income populations in rural areas. Even though there might therefore be a small cross subsidy from local to long-distance traffic, the government does expect, the principle of cost-orientation to be adhered to for the total provision of national public services.

Tariffs will be subject to review and revisions by the TRA from time to time in relation to the changes in the cost of equipment, development in technology, increase in the use of services, and socio-economic considerations such as affordability of users, consumer price index, extent of rural service requirement and any other requirements pertaining to telecommunications services.

In determining the actual tariffs the costs of similar services / packages of services in neighbouring countries with more advanced systems will be taken as a benchmark.

In the case of re-sale of services by individuals (*this refers to the services provided by a person or a group of persons forming very small enterprises to extend telecommunications services such as overseas telephone calls, facsimile and Internet services at a nominal additional service charge under license from the service provider*), permission may be given by the Government to add service charges, which will be required to be displayed to their users at the point of service. This may be appropriate in rural areas where only a very limited number of phones are available and the only one available is on the premises of a business or an individual who would be prepared to allow third parties to make use of the phone for a small charge. The Government, however, will retain the right to fix the maximum surcharge, which may be applied to any such service charges in order to protect the interests of the users.

Each operator will be required to provide separate itemised billing for mobile, fixed (local and international) and Internet services.

6. FREQUENCY SPECTRUM

Spectrum is a scarce and valuable national resource. It is therefore appropriate that the responsibility for management and assignment of frequencies is given to the Government. In practice the role of the Government in respect of frequency planning, management, monitoring and enforcement will be delegated to a Radio communications department. It will be the responsibility of this department to establish a frequency plan and to make and maintain an inventory of the frequencies which are in use and which are available. It will also ensure that the assignment of frequencies is coordinated with neighbouring countries in accordance with the tables of frequencies established by the ITU.

A licensing system will be introduced on the basis of which individual licenses will be issued according to a clearly defined methodology and criteria for the distribution of frequencies thereby ensuring transparency and equitability. Each license will contain details of the frequency, the purpose for which it may be used, the transmitter power and other relevant details.

The license fees, which will be set by the Regulator, will, under normal circumstances, be just sufficient to cover the Government expense of providing the license and the costs of monitoring and enforcement of compliance with the conditions of the license. However, where frequencies are scarce the Government reserves the right to either tender or auction specific licenses.

The Radio communications department is responsible for the entire frequency spectrum. However, in the case of frequencies to be allocated to broadcasters, the Radio-communications department and any future Media Authority together will have to make an initial inventory of the frequencies, which will be required for the foreseeable period.

Frequencies for broadcasting purposes will subsequently be issued by and in close cooperation with the future Media Authority. In practice this means that a frequency for either television or radio broadcast purposes will be issued at the request of and through the future Media Authority following on the recognition by that Authority of the applicant as a legitimate broadcaster.

7. TRAINING and PUBLIC AWARENESS

The creation of trained and skilled manpower in all fields of telecommunications is a prerequisite for the successful development of the sector. All telecommunications operators will be required to establish their own training programs. The need to create short, medium and long term plans for the training of manpower for all operators is imperative.

Besides the creation of the physical facilities and the training of the workforce there is also a need for the greater public participation. This will be achieved through the establishment of consultative fora where the views and the needs of the business community and the public can be heard.

One such forum will be the Advisory Board to be set up under the Telecommunications Act but the Government will encourage all interested parties (including user groups) to ensure that they are informed and that their views are heard either individually or collectively.

The Government also expects operators who wish to enter the East Timorese market to put into place information programmes to raise the level of consumer awareness.