

CO-LOCATION & INFRASTRUCTURE SHARING POLICY & GUIDELINES

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1. Introduction

The telecommunication sector in Samoa is expanding dramatically. This has resulted in an increase in the number of service providers with more services, increased competition and expansion of the infrastructure requirements. In order to sustain such dramatic growth, the Office of the Regulator ("OOTR") has called for the development of an Infrastructure Sharing Policy to accommodate the huge growth of the market and the corresponding infrastructure requirements. The existing infrastructure is generally poorly maintained and this coupled with the increased spectrum usage has led to serious complications for spectrum management especially with cases of harmful interference. The Office of the Regulator concerned with this situation, now seeks to introduce a policy in accordance with section 68 of the Telecommunications Act 2005 as amended ('TA 2005'), section 59 of the Broadcasting Act 2010 ('BCA 2010') and the Samoan National Infrastructure Strategic Plan (May 2011)

The telecommunications and broadcasting sectors have contributed to the economic growth of Samoa through significant investments. The aim of the proposed policy is to maximize the use of the available resources while at the same time ensuring healthy and sustainable competition. If the available resources are used efficiently this could then lead to the provision of services at affordable prices and overall improvement of the delivery of services to the customer.

Both the TA 2005 and the BCA 2010 empower the OOTR to ensure access to dependable, reasonably priced and modern telecommunications and broadcasting services to most of the population. Under section 8 of the TA 2005 and section 7 of the BCA 2010, the Regulator shall publish instructions/guidelines or codes of practice to be followed by the licensees and service providers relating to various services as defined in the respective Act; such compliance extends to access to infrastructure facilities. Infrastructure sharing is an approach to reduce the cost of network operation and to protect the environment by reducing the number of towers and facilities installation. Infrastructure Sharing also contributes to a reduction of environmental degradation due to unnecessary developments.

Infrastructure sharing also requires that consideration be given to several very important factors, including but not limited to load bearing capacity of towers, space within sites, tilt and height of the antenna and possible negative effects on the quality of the service provided by the operators. Sharing infrastructure from a Regulator's point of view will reduce cost and will allow for a more efficient service for the customers allowing for possible expansion of coverage to previously unserved geographical areas. It could also provide an additional source of revenue for owners of the infrastructure. The challenge for the operators is to optimally utilize the available resources. The OOTR is aware that infrastructure sharing can be effectively leveraged to roll out services at faster speed and at affordable costs, in fact sharing infrastructure is an important measure to reduce costs. It also of the view that

the development of the infrastructure sharing policy and guidelines will allow the operators, policy makers, stakeholders and the Office of the Regulator to address issues related to sharing, networking, competition and other related matters.

2. Purpose

The purpose of this policy is to set forth the objectives and recommendations to all service providers to encourage infrastructure sharing. The intention is to ensure and support the idea that improved telecommunication services can be given to the customers if the provisions of co location and infrastructure sharing are encouraged. In the unserved and underserved communities this will be in line with the OOTR's stated commitment to promote Universal Access of the public to telecommunication services. It is also the intention of this policy to encourage and stimulate competition between service providers and seeks to reduce operating costs of telecommunications services (including broadcasting services) especially in the provisioning of service in rural areas. This policy will include but not be limited to identifying network elements which can be shared, conditions under which sharing should occur, various terms and conditions of sharing arrangements including pricing and regulatory measures such as licensing. The OOTR also takes into consideration existing international practices and has opted for co-operative efforts amongst telecoms and broadcasting service providers with minimal regulatory intervention. The OOTR through the proposed policy requires that the entire process be transparent and non-discriminatory.

3. Scope

This policy applies to all aspects of the Telecommunications and Broadcasting Networks in Samoa associated with the use of the Spectrum whether on a primary or secondary basis. It includes all services using the spectrum whether for public, private, administrative, academic, community, non commercial or commercial use. The Office of the Regulator is also encouraging providers to take into consideration special non-discriminatory discounts for nonprofit organizations during finalization of agreements.

4. Definitions

4.1 Unless the context otherwise requires, the different terms and expressions used in these guidelines shall have the following meaning assigned to them.

"Active Infrastructure Sharing" means the sharing of electronic infrastructure & facilities.

"BCA 2010" means Broadcasting Act 2010

"Infrastructure Provider" means any telecommunications operator who owns or

is in control of facilities or infrastructure, access to which another operator desires or into an agreement for the purposes of collocation or infrastructure sharing.

"Infrastructure Seeker" means any telecommunications operator who is desirous to enter or has entered into an agreement with other telecommunications operator(s) who own or are in control of telecommunications infrastructure and facility(ies) for the purpose of collocation or infrastructure sharing.

"Passive Infrastructure Sharing" means the sharing of non-electronic infrastructure.

"TA 2005" means Telecommunications Act 2005 as amended.

5. Objectives of the Guidelines

The Objectives of the Guidelines are as follows:

Objective 5.1

To ensure that unnecessary duplication of infrastructure is minimized or completely avoided so as to enhance sharing and to maximize the use of network facilities including but not limited to network capacity and capabilities, base station sites, backbone, towers etc. In this context "Infrastructure Sharing" means the joint use of telecommunication and broadcasting infrastructures and facilities by two or more operators.

Objective 5.2

To promote the availability of a broad range of high quality, efficient, cost effective and competitive telecommunications and broadcasting services throughout Samoa by ensuring optimum utilization of telecommunications resources and to promote fair competition through equal access being granted to the installations and facilities of operators on mutually agreed terms.

Objective 5.3

To reduce barriers of entry into the telecommunications and broadcasting markets in an effort to increase competition in these markets through the provision of reasonable cost alternatives for network infrastructure.

Objective 5.4

To protect the environment by reducing the large number of infrastructure and facilities installations and consequently protect the beauty of Samoa's landscape.

Objective 5.5

To optimize the operators' capital expenditure in terms of supporting infrastructure and to free more funds for investment in core network equipments and promote the development of service innovation through creation of new value added services

Objective 5.6

To ensure that the economic advantages derivable from the sharing of facilities are tied in with the overall benefit of all telecommunications and broadcasting stakeholders.

Objective 5.7

To ensure that harmful interference is significantly reduced through the implementation of best practices in installation and safety precautions..

Objective 5.8

To ensure that new infrastructure developments and installations in the future by infrastructure provider should be proofed for scalability and should be allowed of spacing for sharing.

Objective 5.9

To ensure that new projects and developments should be cater for the unserved and the underserved areas to be in line with the Government Universal Access Policy.

Objective 5.10

To avoid potential damage to property caused by failure of communications structures by ensuring that such structures are soundly and carefully designed, constructed, modified, maintained and removed when no longer used or when determined to be structurally unsound.

6. Types of Infrastructure Sharing

The type of infrastructure tenable for sharing are those that can be shared without an attendant risk of lessening competition or hindering of service provision to the population.

The manner in which the infrastructure sharing is implemented should be non discriminatory and competitively neutral.

6.1 Passive Infrastructure Sharing

The OOTR shall encourage and promote Passive Infrastructure Sharing and therefore proposes that passive infrastructure sharing should be mandatory in Samoa. It is basically the sharing of non-electronic infrastructure and facilities. It is mainly the civil engineering elements of the telecommunications and broadcasting network. It means sharing of physical sites, buildings, shelters, antenna masts and tower structures, electric power supply and battery backup, grounding/earthing, air conditioning, security arrangement, poles, access to dark fiber and unused capacity on backbone infrastructure, technical premises etc. The OOTR recognizes that the setting up of passive infrastructure is time consuming; but the sharing of those networks would greatly reduce the timeframe for service provision that is dependent on the infrastructure. The larger telecommunications companies in Samoa could, through infrastructure sharing and co location have available an additional source of

revenue. Other providers planning to expand nationwide would also benefit in a reduced time frame for rollout of services.

6.2 Active Sharing

The OOTR at this point in time is not proposing active Infrastructure Sharing. Active Infrastructure Sharing is the sharing of electronic infrastructure and facilities. The sharing of structures such as base stations, complete network structures, switching centres, antennas, transceivers, router, microwave radio equipment, roaming, RAN, LAN, wavelength sharing does not form part of this proposed Policy.

7. Terms and Conditions for Infrastructure Sharing

- **7.1** These guidelines are applicable to the sharing of passive structures amongst all existing licensed telecommunications operators.
- **7.2** The operators shall provide capacity on its infrastructure to other operators on a non-discriminatory "first come, first serve" basis and that Service providers with existing telecommunications network facilities shall allow other service providers to co-locate their telecommunications network facilities on their existing facilities.
- **7.3** The Infrastructure Provider and Infrastructure Seeker shall enter into an agreement for sharing infrastructure. Charges for Infrastructure Sharing shall be mutually agreed in accordance with section 68 of the TA 2005 and with directives issued by OOTR from time to time.
- **7.4** The Infrastructure Seeker shall compensate the Infrastructure Provider to provide colocation for such an amount as the parties may agree or, where the parties are unable to agree, as may be determined by the Regulator
- **7.5** In case of any dispute or where the parties are unable to agree on the conditions of colocation, either or both parties may apply to the Regulator to mediate and, if mediation fails, the Regulator may issue an order to resolve any outstanding issues between the parties.
- **7.6** The Infrastructure Provider shall develop, build, maintain and operate new passive infrastructure for providing telecommunications and broadcasting services to the Infrastructure Seeker. However, the Infrastructure Provider would build passive infrastructures satisfying all the requirements given by OOTR (this should include a contract agreeing to co-location) together with the development consent from Planning and Urban

Management Agency ("PUMA"). The development consent from PUMA is based on Section 14 of the Samoa Codes of Environmental Practice 2007 and the consent requirements must be considered by all providers intending to erect infrastructures for telecommunications and broadcasting services.

- **7.7** The operators shall have to fulfill all of their individual obligations including but not limited to rollout obligations as contained in their individual licenses irrespective of infrastructure sharing agreement with other operators.
- **7.8** The Infrastructure Providers shall develop and share with the Regulator, a Registry of persons interested in sharing towers and infrastructure to be used as evidence in an event that a public owned infrastructure is to be built to provide data for demand analysis before such development is made.

8. Procedure for Infrastructure Sharing

- **8.1** The Infrastructure Seeker shall submit a written request to the Infrastructure provider expressing the interest of sharing infrastructure. The Infrastructure Provider shall enter into negotiation with other operators with respect to the sharing of the infrastructure.
- **8.2** The request for Infrastructure Sharing by the Infrastructure Seeker to the Infrastructure Providers and the approval or rejection of the request by the Infrastructure Provider must be in writing.
- **8.3** All negotiations for Infrastructure Sharing must be done in good faith. The Infrastructure Provider shall not:
 - (a) Obstruct, delay negotiations in resolving disputes.
 - (b) Refuse to provide information relevant to an agreement including information necessary to identify the facility needed e.g. drawings, maps etc. A pre agreement confidentiality Obligation should be signed by both parties to protect informations given out by the Infrastructure provider.
 - (c) Refuse to designate proper representative to speed up negotiation.
 - (d) Overcharge Infrastructure Seeker.
- **8.4** The Infrastructure Providers may refuse an application for infrastructure sharing on grounds of insufficient capacity or a valid excuse related to technical difficulties the Infrastructure Provider would face if sharing was permitted. This would however require the

approval of the Regulator, who may request detailed information to substantiate such a claim.

- **8.5** The period to respond (either acceptance or rejection) by the Infrastructure Provider to any request for Infrastructure Sharing shall be 3 (three) weeks and the parties may agree to negotiate an Infrastructure Sharing Agreement for an additional timeframe of 4 (four) weeks. If no response is received within 3 (three) weeks of request, or if negogiations have not been successful after four weeks of commencing, the Infrastructure Seeker shall refer the matter to the OOTR and the OOTR shall take necessary action.
- **8.6** In the event of any differences or disputes between the Infrastructure Provider and Infrastructure Seeker and failure to resolve the differences or disputes amicably among themselves, either or both parties shall refer the matter to the OOTR for resolution of the same after consideration of any comments submitted by the parties. Where the Regulator issues an order to resolve the matter, such order shall be binding on both parties.

9. Charges

The charges for infrastructure sharing shall be reasonable based on the cost of the Infrastructure Provider incurred in the establishment of the facilities. The charges would be commercially agreed to by both parties and subject to approval of the Regulator. In the event that agreement is not reached for applicable charges, the Regulator in accordance with section 68 (2) of the TA 2005 and section 59(2) of the BCA 2010 (whichever is relevant) will seek to establish the cost of provision of services and provide an Order for infrastructure sharing based on the established costs and other relevant factors.

10. Implementation of the Policy

After consultation on the Policy, the Office of the Regulator will produce the final documentation which will be sent to the stakeholders; such stakeholders shall be guided by the policy. It is expected that the implementation of this policy shall be the responsibility of all parties involved. In order to provide efficient services (telecommunications and broadcasting) to members of each community in Samoa, co-operation is required from all sectors of the telecommunications community in order to efficiently share infrastructure and minimize potential harmful interference. The policy will be presented to Cabinet for approval.