

This PDF is provided by the International Telecommunication Union (ITU) Library & Archives Service from an officially produced electronic file.

Ce PDF a été élaboré par le Service de la bibliothèque et des archives de l'Union internationale des télécommunications (UIT) à partir d'une publication officielle sous forme électronique.

Este documento PDF lo facilita el Servicio de Biblioteca y Archivos de la Unión Internacional de Telecomunicaciones (UIT) a partir de un archivo electrónico producido oficialmente.

ىجر ينوركتال فمانم تذخوماً يهو تناظوفحموال، تمكتبال قسم ، (ITU) تصالالاتا يلوالد ادحتالا نم تممقد PDF قسنب تخسنال هذه اميرسًدادمعا

本PDF版本由国际电信联盟(ITU)图书馆和档案服务室提供。来源为正式出版的电子文件。

Настоящий файл в формате PDF предоставлен библиотечно-архивной службой Международного союза электросвязи (МСЭ) на основе официально созданного электронного файла.

Final

Best Practice Guidelines on innovative infrastructure sharing strategies to promote affordable access for all

Over the last decade, the telecommunication sector worldwide witnessed a first wave of reforms resulting in the establishment of a regulator in the vast majority of countries, introduction of competition in some or all service segments and at least partial privatization of the incumbent operators (among other measures). The result has been unprecedented take-up of mobile voice services in developing countries. However, despite these impressive gains, much of the world's population still remains without access even to voice services, and very few citizens in developing countries have access to multimedia broadband services including Internet. Regulators around the world are considering infrastructure sharing as a tool to promote infrastructure deployment, in particular IP backbones and broadband access networks. Today, a second wave of regulatory reforms is necessary.

We, the regulators participating in the 2008 Global Symposium for Regulators, have identified and proposed best practice guidelines for innovative infrastructure sharing and open access strategies to promote affordable broadband access.

A. Promoting an enabling environment

1. Appropriate Regulatory framework

We recognize the need for an appropriate regulatory framework fostering broadband access including Internet, to enable the development of infrastructure-based competition, in addition to service-based competition, and the emergence of new innovative players at the national level.

Certain sharing options can deliver specific benefits while others could pose risks, in particular by reducing competition, and these need to be carefully balanced in the light of specific national circumstances when designing the most appropriate regulatory strategy.

In doing so, regulators recognize the importance of holding public consultations with all stakeholders on the various strategies and regulations that deal with infrastructure sharing.

2. Competition and investment incentives

We recognize the potential benefits of infrastructure sharing, whether mandatory or optional, in situations where competition and investment incentives are not undermined, bearing in mind the need to safeguard competition and investment incentives. We recognize that offering of shared facilities must not be biased towards any specific service provider or types of services.

Where capital and operating expenditures are likely to be reduced by the joint deployment, management and maintenance of certain facilities (for example, by tower sharing), such sharing can bring about long-term efficiencies, which may in turn enable more investment in innovative products and services and ultimately benefit consumers.

We recognize the importance of ensuring that regulatory policy does not restrict competing market players installing their own independent facilities, and that it promotes open access to international capacity and international gateways (for example, collocation and connection services at submarine cable landing stations).

We believe that the establishment of Internet Exchange Points could also encourage shared and more affordable access to national and international broadband capacity for Internet service providers willing to enter the market.

B. Innovative regulatory strategies and policies to promote infrastructure sharing

We also recognize that successful infrastructure sharing may be facilitated by the introduction of regulatory obligations and regulatory policies that include:

1. Reasonable terms and conditions

It is important that implementation of sharing takes into account the necessity to protect the value of existing investment in infrastructures and services. However, price and non-price terms and conditions should not act as an artificial barrier to sharing.

2. Pricing

Pricing for shared facilities should provide the right economic signals to market players, assisting them in making reasonable and commercial "build-or-buy" decisions (i.e., is it more commercially reasonable to self provision facilities or to lease existing ones). At the same time pricing should provide for the right incentives for investments in infrastructure (in a form of reasonable return on investment), but should not be used as an artificial barrier to entry for new market players. Commercially negotiated pricing should prevail, except where market power exists.

3. Efficient use of resources

Non-replicable resources such as towers, ducts and rights of way can be shared for installations that serve a similar purpose, which allows for optimal use and can be offered on a first-come first-served basis subject to commercial agreements under fair pricing conditions.

4. Scarce resources

Shared-use bands could be promoted as long as interference is controlled. Spectrum sharing can be implemented on the basis of geography, time or frequency separation.

5. Licensing

Regulators could consider licensing or authorizing market players that only provide passive network elements, but which do not compete for end-users, such as mobile tower companies, public utilities companies with rights of way access, and fibre backhaul providers.

6. Conditions for sharing and interconnection

Regulators recognize that infrastructure sharing can only take place on a neutral, transparent, fair and non discriminatory basis and that interconnection frameworks can ensure that all licensed operators are granted the right to interconnect as well as encourage the sharing of essential facilities and guarantee that network security and quality of service are not compromised.

7. Establishing an infrastructure sharing one-stop-shop

Establishing a one-stop-shop would facilitate the coordination of trenching and ducting works between telecommunications service providers as well as between telecommunications service providers and those of other utilities.

Regulators recognize the key role local authorities could play in fostering the deployment of broadband access and development of competition and the importance of close cooperation to

simplify administrative proceedings and ensure timely response to requests for infrastructure sharing.

8. Improving transparency and information sharing

Regulators recognize the need for transparent processes to facilitate infrastructure sharing, and market players need to know what is available for sharing under clearly established terms and conditions, in order to avoid unfair actions. Regulators could require publication on websites of the details of existing as well as future infrastructure installations available for sharing by other service providers, such as the availability of space in existing ducts, planned deployment or upgrading works and interconnection.

9. Dispute resolution mechanism

We believe that regulators should introduce necessary enforcement tools to ensure compliance and successful adoption of infrastructure sharing regulations. As an infrastructure sharing relationship between service providers involves elements of both cooperation and competition, the regulators recognize the need to first explore alternative dispute resolution mechanisms which are speedy and simplified to encourage negotiated outcomes while maintaining the certainty of an adjudicated decision where necessary.

10. Universal access

To encourage infrastructure sharing in support of its universal access goals, regulators can consider the introduction of incentives for service providers that share infrastructure as part of their efforts to deploy to rural and underserved areas. Such incentives may, for example, take the form of regulatory exemptions (ensuring that such exemptions do not lead to re-monopolization of the market and do not unreasonably restrict consumer choice) or financial subsidies taking into account the need to minimize distortions to competition.

11. Sharing with other market players and industries

Regulators also recognize that sharing should be encouraged not only within the boundaries of the Telecommunications/ICT and Broadcasting industry, but together with other infrastructure industries (such as electricity, gas, water, sewage, etc.) as well. In the context of technological development, joint infrastructure building (with other market players and with other industries) may be encouraged, providing for timed, organized opportunities for access to ducts and conduits (for example, for the joint laying of fiber) to distribute the cost of civil works among service providers and reduce the inconvenience for traffic in towns and cities. This would also provide for a positive environmental (including aesthetic) impact, in particular by reducing the number of mobile masts and towers.

12. Sharing of regulatory practices

Regulators recognize the need for an appropriate level of international and regional harmonization to ensure that best practice regulatory policies on sharing are widely spread, and regional organizations have an important role to play in this regard. This is even more important in areas where a specific regulatory issue has a significant cross-border effect and thereby cannot be tackled by a national regulator.