Contribution

Agencia de Regulación y Control de las Telecomunicaciones (ARCOTEL) Ecuador

Proposal for regulatory uplift for financing digital infrastructure, access and use

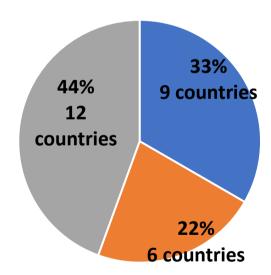
Economic models used in other countries for deployment in rural areas

In most developing countries, indicators for socio-economic development and infrastructure in rural areas remain at a very low level. Once the underdevelopment of rural and remote areas has been identified, it is also possible to pinpoint problems associated with the development of the telecommunication sector and either directly or indirectly stimulate telecommunication development in such areas.

A study carried out by ITU¹ has helped to identify economic models used by regulators in 27 countries of varying levels of development to promote deployment in uncovered rural areas.

The ITU document found that 33 per cent of the countries under study use a free-market economic model, i.e. a mobile service provider is free to decide whether or not to install a radio base in a rural area, based purely on level of competition. In addition, 22 per cent of the countries use an economic model based on the granting of capital subsidies to the existing operator for development in uncovered rural areas, while 44 per cent of the countries under study use a model based on a capital subsidy and an additional ongoing subsidy as an incentive for deployment by providers in uncovered rural areas.

Economic models used in rural areas



- Free market
- Capital subsidy provided to existing operator
- Capital subsidy and ongoing subsidy provided to existing operator

¹ Telecommunications/ICTs for rural and remote areas, ITU, 2014

Figure 1: Economic models used to promote deployment in rural areas.

Source: ITU. Produced: CRDM

In addition, Figure 2 shows the different economic models used by the 27 countries² under study, disaggregated by level of development. 27 per cent of developing countries, such as Ecuador, use a free-market economic model, while another 27 per cent use an economic model based on capital subsidy grants to the existing operator and 47 per cent use a model based on a capital subsidy and an additional ongoing subsidy as an incentive for deployment by providers in uncovered rural areas.

(disaggregated by level of development) 100% 60% 50% 47% 40% 33% 27% 27% 17% 0% 0% 0% **Developed countries** Transition countries **Developing countries** Less developed countries Free market ■ Capital subsidy provided to existing operator

■ Capital subsidy and ongoing subsidy provided to existing operator

Economic models used in rural areas

Figure 2: Economic models used to promote deployment in rural areas, disaggregated by level of development. Source: ITU. Produced: CRDM

Business models used in other countries for deployment in rural areas

The ITU report on telecommunications/ICTs for rural and remote areas also analysed the business models used in the 27 countries under study for the deployment of uncovered rural areas: 19 per cent of countries use a State-owned incumbent operator as the business model for providing mobile services in uncovered rural areas; 15 per cent use a public-private partnership (PPP) model as the means of guiding mobile service deployment, in particular in rural and underserved areas; 22 per cent of the countries adopt a business model based on the use of regulatory incentives, without considering subsidies to private operators; 4 per cent use a multistakeholder partnership model; while 41 per cent use other business models, such as in

Andorra, Argentina, Bahamas, Belarus, Brazil, China, Colombia, Democratic Republic of the Congo, Egypt, India, Japan, Latvia, Lebanon, Mauritius, Republic of Nepal, Niger, Oman, Paraguay, Peru, Portugal, Rwanda, Seychelles, Slovenia, Swaziland, Syrian Arab Republic, United Kingdom and Vanuatu.

² List of 27 countries that participated:

Oman, where the public company provides passive infrastructure for telecommunication operators in remote areas.

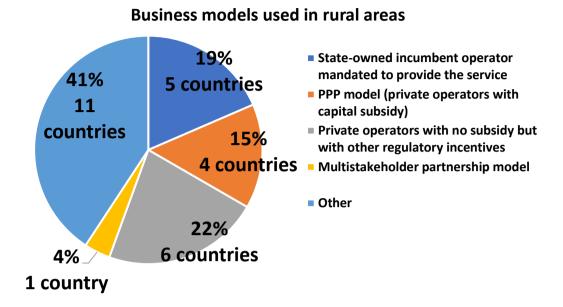


Figure 3: Business models used to promote deployment in rural areas (disaggregated).

Source: ITU. Produced: CRDM

Figure 4 illustrates the various business models used by different countries according to level of development: 20 per cent of developing countries, such as Ecuador, employ an approach based on a State-owned operator; 13.33 per cent use a PPP model; 13.33 per cent adopt a business model based on the use of regulatory incentives, without considering subsidies to private operators; another 13.33 per cent use a multi-stakeholder partnership model; and 53.33 per cent use other business models, such as in Brazil, where the State-owned operator is obliged to provide mobile services in rural areas and private operators receive a subsidy to serve these areas.

Business models used in rural areas (disaggregated by level of development)

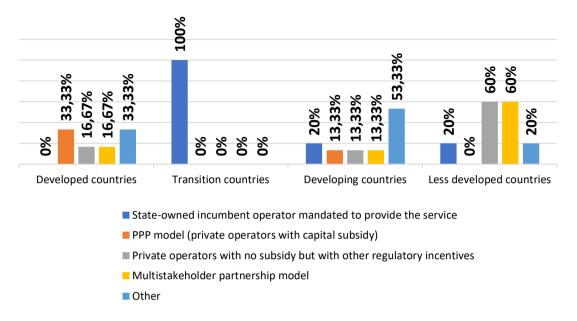


Figure 4: Business models used to promote deployment in rural areas, disaggregated by level of development. Source: ITU. Produced: CRDM

In view of the different economic and business models used by the 27 countries, at different levels of development, for the deployment of telecommunication services in rural areas, the following is being considered in the case of Ecuador:

 Proposal for the possible exemption from a certain amount of the annual payment made by providers, equivalent to the amount of CapEx for every new radio base or equipment in rural areas where, to date, there is no given telecommunication service, such as advanced mobile services or Internet services (capital subsidy for existing operators).