

CASE STUDY Mexico

The Government in Mexico made constitutional changes to try to foster competition in the telecommunications and broadcasting markets. As part of this, they proposed the deployment of a shared public network for broadband access and mobile telecommunication services. The construction of this single wholesale network (SWN) was intended to begin before the end of 2014 and the network was intended to be operational by 2018.

The SWN would rely on 90 MHz of the 700 MHz band. The regulatory reform bill stated that it would consider both public and private investment. In either case, providers of telecommunication services would not be allowed to own a share or influence the operation of the shared network. The SWN would have access to the CFE¹'s fibre backbone network, as well as any other Government-owned utilities that were required for the purposes of installing and operating the SWN.

The SWN would provide only wholesale services in unbundled form. If an existing operator were to buy wholesale services from the SWN, that operator would only be allowed to resell these services to third parties under the same conditions it enjoyed from the SWN.

The network would be operated with nondiscriminatory access and competitive pricing.² The exception to this was the preponderant player, who would only gain access to the shared network with prior approval of the IFT,³ who would also determine the terms and conditions of any such agreement. It appeared from interviews that there would be an obligation imposed on the SWN to reach 98% of population coverage. A Cofetel study⁴ suggested that this could be achieved with around 8,200 cell sites.

It was understood that the main rationale for introducing an SWN in Mexico was to promote competition and increase investment. The Congressional declaration of purpose of the Constitutional changes in June 2013 stated the necessity of making the Mexican telecommunications sector more competitive. It mentioned the construction of the SWN as one of the measures to achieve this objective. According to interviews with the regulatory stakeholders, there was also a concern that continuing with the status quo would not provide Mexicans with universal connectivity, as envisaged in the constitutional reform.

It was forecast that the demand for 4G services would increase substantially in the future, and the concern of public authorities was that, without more investment, there would soon be a "capacity crunch." The authorities believed that the SWN was a reliable way to provide the much-needed 4G capacity.

The creation of the SWN (which would exist alongside private networks) would also kick-start a wholesale market. The SWN was expected to decrease the risks and costs for new operators to enter the market. As a result, there would be a dramatic increase in the number of MVNOs,⁵ which in turn would make the Mexican retail market more competitive and lead to lower prices for consumers.

¹ Comisión Federal de Electricidad.

² What is meant by competitive pricing is not explained fully, although the provisional article 16 of the constitutional reform states "It will work to ensure that the pricing policy of the shared network boosts competition and ensures reinvestment of profits for the modernisation, growth and universal coverage."

³ Instituto Federal de Telecomunicaciones.

⁴ The Federal Commission of Telecommunications (former regulator prior to the setting up of the IFT) published a report with the title "Opciones regulatorias para el uso óptimo de la banda de 700 MHz en México" in May 2013.

⁵ Mobile virtual network operators.

The decision was based on the Cofetel study, which estimated significant benefits in terms of GDP, consumer surplus and fiscal surplus from the construction and implementation of a single wholesale network. The study suggested that the wholesale model would allow more efficient access to rural areas, as a single network would achieve lower costs.

Wholesale operators would be able to reduce their costs and pass this on to consumers and act as low-cost platforms to new participants. The study valued this impact as having a 12 to 16 percent reduction in retail prices in the Mexican market.⁶

Mexico announced its intention to allocate 700 MHz spectrum to the SWN, for launch in 2018.⁷

The proposed open-access, wholesale-only wireless network (OAWN) was one element in the government's basic reform of the country's telecommunications sector to introduce more competition⁸ into a market that has been dominated by one operator (America Movil) in both the fixed and mobile segments. As a result of this quasi-monopoly, Mexico has suffered from high prices and poor service for many years even by comparison with countries at comparable levels of economic and social development, let alone world leaders.⁹

Mexico intended to launch a public competition in 2016 for a licence for 90 MHz of frequencies in the 700 MHz band,¹⁰ in which the network was to be deployed. The regulator Ifetel¹¹ and the Ministry SCT were steps, which still had to be finally established, to maximise the chances of success, including:

- The competition would be as open as possible to attract interest and investment from as wide a variety of sources as possible:
 - It was open to 100% foreign ownership, with the requirement that a domestic Mexican company be established;
 - Existing Mexican operators could participate if they showed that they would not have a significant influence over its operation.
- Some OAWN's capacity would be reserved for MVNOs to stimulate retail competition.
- The costs of the spectrum to the winner of the competition would be reduced well below what was customary in Mexico, recognising that the ultimate goal and value of the venture would be to provide affordable broadband to as many users as possible with as wide a geographic coverage as possible.
- The OAWN would have wholesale access to the national fibre-optic network of the state-owned electric utility (CFE¹²). That network would be transferred to Telecom¹³ (an autonomous state-owned agency responsible for supplying communications and financial services throughout the

⁶ Frontier Economics Ltd, London. Sep 2014. "Assessing the case for Single Wholesale Networks in mobile communications. A report prepared for the GSMA," Annex 2: Summary of existing SWN proposals: Mexico, pp 137–139.

⁷ Webb Henderson, 7 Sep 2015. "Rural solution options for governments in emerging markets to increase broadband coverage in unserved and underserved rural areas." Malcolm Webb.

⁸ Secretaría de Comunicaciones y Transportes.

⁹ TechCentral, 15 Oct 2015. "Open-access wireless network: be careful, SA." Dr. Martyn Roetter.

¹⁰ Using the Asian band plan not the less efficient US one.

¹¹ The IFT (Instituto Federal de Telecomunicaciones).

¹² Comisión Federal de Electricidad.

¹³ Telecomunicaciones de México.

country). Telecomm would provide wholesale services to the OAWN, as well as to other customers including CFE to support its electricity generation, transmission and distribution activities.

- A new agency would be established, to run the competition to operate the OAWN, establish the PPP contract with the winner, and then monitor and enforce fulfilment of the contract, which would endure for 20 years with provision for renewal. The agency would have a governing board of four government appointees and three independent directors.

The decision to reduce substantially the spectrum costs incurred by the OAWN operator was a rejection of the common idea (notably in national treasuries trying to reduce next year's national budget shortfall) that the main goal of an auction was to maximise its revenues.

(The consequence of such a goal was that the financial resources of the auction winner may be so depleted as to hobble its ability to deploy networks as rapidly or widely as would be desirable, thereby reducing its positive economic impact in future years, most likely by a greater amount than the one-time boost from maximised auction revenues.)

Mexico's specific way of reducing spectrum costs for the OAWN operator was based on the unusual structure of the spectrum fees it charges. The winner of a spectrum licence in an auction pays an initial fee (the amount of its winning bid), but is then also required to pay annual fees (determined as a function of the frequency-band involved and the zones covered by the licence, but independently of the amount of the winning bid) for the period of the licence, which is typically 20 years. The net present value of these annual fees can exceed substantially the amount of the winning bid to acquire the licence.

The proposal was to reduce specifically the amounts of the OAWN licensee's annual fees by up to 90 percent.

The role and power of Ifetel were said to be critical for the programme of launching an OAWN in Mexico.¹⁴ Ifetel is an autonomous agency created in 2013 that is independent from the executive and legislative branches.

Ifetel's controlling body is appointed through a three-step process designed to be more stringent than the criteria for appointing Supreme Court justices.¹⁵ Candidate selection involves an open, competitive process that is subject to a technical-evaluations committee, which, together with higher education institutions, submits to the president three to five candidates, from whom one is proposed to the Senate for confirmation.

Ifetel was established to make the sectors of the economy which it regulates more competitive and effective. It is roughly equivalent to¹⁶ the Federal Communications Commission (FCC) in the U.S. Ifetel is responsible for regulating, promoting, supervising and overseeing competition in the telecommunications and broadcasting sectors.

Ifetel also has powers in these sectors similar to the Antitrust Division of the U.S. Department of Justice, including the power to order divestitures to correct anti-competitive circumstances. Thus Ifetel plays a complex dual role as regulator and competition authority.¹⁷

¹⁴ Ifetel is said to operate under a very different set of circumstances from those applying to Icasa in South Africa.

¹⁵ Which involves only the Executive and the Senate.

¹⁶ But in some respects more powerful than.

¹⁷ Ifetel's authority is described as much more extensive than that of Icasa in South Africa.

Ifetel includes among its key staff persons with considerable international experience and contacts in professional technology and engineering communities and other expertise.

A commentator noted in 2015 that there could be no guarantee that the OAWN initiative would come to fruition or would prove to be viable or successful if implemented. Apart from any other stumbling block, the goals of an OAWN can be frustrated if it falls victim to corruption or to incompetence in its leadership and governance, or is plagued by political interference driven by short-term or selfish motivations and interests.¹⁸

The final Mexican request for proposals (“RfP”) was published in late January 2016. Public consultations were foreseen for the period from 26 February until 18 March. The bidders were requested to apply for the Anti-Trust opinion at the IFT on 3 May.

Even though the SCT promoted the project at different events and during dedicated roadshows in the US, Europe and Asia, only a limited number of consortia was interested. Of the original 21 qualified bidders, most struggled with the business case.

The final bids were due by 8 August. The selection of the winning bidder was set for end of August.¹⁹

Multiple delays forced the regulator to lower its ambitions on funding. The roll-out was intended to begin in 2014.²⁰ In May 2015, the government announced that the investment target had been reduced from \$10 billion to \$7 billion.²¹

In November 2016 it was announced that the successful bidder was the Altán Redes multinational consortium.

Its promised population coverage of 92.2 percent by the seventh year will exceed the 85 percent minimum stipulated in the request for proposals.²² The network must begin commercial operations by March 2018. At launch it will cover 30 percent of the population.

The only other bidder was disqualified for allegedly failing to provide necessary financial guarantees.²³

In March 2017 Nokia announced that Altán Redes had awarded it a turnkey contract to design, build and operate the network.²⁴

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¹⁸ “Can open access wholesale-only wireless networks be viable?” *BMI-T Technowledge White Paper*. Dr Martyn Roetter, Oct 2015.

¹⁹ Detecon Consulting, March 2016. “Open Access with a Mobile Wholesale NetCo: Red Compartida in Mexico.” A Heuermann, U Eberhard.

²⁰ And be operational by 2018.

²¹ GSMA. Jul 2017. Wholesale Open Access Networks. Mexico: The roll-out has been delayed several times.

²² *Financial Times*, 18 Nov 2016. “Mexico selects winning tender for national wholesale mobile network.”

²³ *The Register*, 2 Feb 2017. “MNOs will lose 5G rewards to new entrants if they will not share networks. Even in rural Australia, sharing is resisted.”

²⁴ Nokia Oyj, press release, 30 Mar 2017: “Nokia selected by ALTÁN Redes to build and manage nationwide LTE wholesale network in Mexico.”