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Spectrum Licensing Best Practice
Nigeria

Despite a good supply of spectrum and increasingly transparent award processes, high reserve prices remain a challenge

Key lessons

- **With over 900 MHz available for mobile, Nigeria is one of the leading countries in terms of spectrum availability in Sub-Saharan Africa. The country has a long history of making spectrum available through increasingly transparent processes, with the 2021 auction for 3500 MHz being a good example.**
- **The auction included large spectrum blocks to reduce fragmentation as well as rollout obligations to ensure efficient spectrum use. In the 2021 auction, all spectrum sold, with two operators acquiring 100 MHz in 3500 MHz each. The market subsequently saw a quick 5G launch by incumbent MTN.**
- **The auction was also held in a very transparent manner – with information on all bids being available, enabling a clear understanding of how the spectrum was awarded.**
- **Despite this strong track record, some concerns remain, especially around high reserve prices and the efficiency of spectrum use. NCC plans to address the latter through further legislation, including an innovative pricing framework and 'use-it-or-lose-it' clauses.**
- **A subsequent auction at the end of 2022 confirmed Nigeria's good track record of spectrum availability while underlining high reserve price concerns with one lot going unsold.**

Background

Nigeria has a long track record of using auctions for awarding spectrum, going back to the initial 2G licences in 2001. The auctions have been successful to varying degrees and the results are visible today in the Nigerian mobile market.

Nigeria has awarded over 900 MHz of spectrum across eight mobile bands from 700 MHz to 3500 MHz, placing the country at the forefront in Sub-Saharan Africa with respect to the total amount of available mobile spectrum. Two recent 3500 MHz auctions have contributed to this good supply of spectrum and have provided the necessary frequencies for the first 5G networks in Nigeria.

The 2021 auction offered two lots of industry-recommended 100 MHz. During the auction, operators MTN and Airtel as well as new entrant Mafab competed in eleven rounds of bidding, with the successful bidders MTN and Mafab paying $273.6m each – a 38.6% increase on reserve prices. A further auction at the end of 2022 sold 100 MHz of 3.5 GHz spectrum to Airtel at the same $273.6m cost, with the reserve price set at the winning bid of the previous auction. There were no other bidders and the remaining 100 MHz went unsold.

Although Nigeria has succeeded in awarding spectrum via auctions, high reserve prices have led to some important spectrum assets remaining unsold on other occasions as well, e.g. 2 x 20 MHz in 2100 MHz and 2 x 10 MHz in 2600 MHz. Spectrum has also been awarded, sometimes through non-transparent processes, to a large number of different bidders with no history of deploying network infrastructure. As a result, there are now ten different entities holding spectrum in Nigeria, of which only five have deployed mobile networks with near-nationwide coverage. This raises concerns about transparency, spectrum fragmentation and the efficiency of spectrum use.

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Benefits from the policy

The 2021 spectrum auction provided transparency and was designed to prevent further spectrum fragmentation and promote efficient spectrum use:

- The available spectrum was split into only two lots that each provided the recommended 100 MHz per operator of contiguous 3500 MHz spectrum.
- Moreover, to ensure an efficient use of spectrum, winning bidders were required to deploy a 5G network within 12 months of the auction.
- Finally, the auction provided round-by-round information and was observed by industry body representatives to ensure procedural transparency.

Increased auction transparency

Strong spectrum supply

Spectrum usage obligations

Ongoing challenges and final impact

The 2021 auction enabled MTN to build 127 5G sites and launch commercial services in Lagos in September 2022, making Nigeria one of the first Western African nations to see 5G deployments. MTN plans to cover six further major cities in the short term, with full coverage achieved by 2025.

Whilst the 2021 auction provided MTN with the required 5G assets, the reserve prices proved prohibitive for some bidders to participate, and this again proved problematic in the 2022 auction. Future awards must ensure that reserve prices are set at levels that maintain wider market interest.

In addition, more work is required to reduce spectrum fragmentation and promote efficient spectrum usage. Mafab's successful bid in the 2021 auction saw Airtel, unsuccessful in the 2021 auction, wait for its 5G spectrum for a further year. However, Mafab subsequently requested an extension to the deadline for deploying its network and may potentially add to the list of spectrum holders without networks – increasing concerns about the efficiency of spectrum use.

The NCC's National Broadband Plan 2020-2025 recognises and aims to address these issues by:

- adopting a more innovative pricing framework to lower reserve prices
- assigning spectrum through transparent processes
- removing broadcasting services from the 700 MHz and 2600 MHz bands to clear the spectrum for mobile use
- implementing policies such as forfeiture for non-utilisation of spectrum ('use-it-or-lose-it' clauses)
- developing a 3-5 year spectrum roadmap.

Achieving these aims should further improve spectrum licencing in Nigeria and help pave the way for continued 4G and 5G deployments.

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