Spectrum Price of Tanzania's Multi-band Auction

Article by EICON LTD | 15 October 2022

Tanzania Communications Regulatory Authority (TCRA) successfully concluded a multi-band auction this week, raising a total of $187.5 million, and releasing 360MHz of spectrum over the 700, 2300, 2600 and 3500 MHz bands. All four incumbents Vodacom, Airtel, MIC (Tigo), and Viettel (Halotel) secured spectrum, on average doubling their holdings. In this brief review, we analyse spectrum prices of auctioned bands, and compare with selected international benchmarks, and against set reserve prices.

Auction Outcome and Analysis

Plans to auction spectrum in the 700/2300/2600/3500MHz bands were announced in July 2022. Consultations followed in August, and the IM was released a month later in September. TCRA organized a primary stage with a single sealed bid first price auction format. The auction which was held on 11 October 2022 concluded after the primary stage when all spectrum was sold, and the results were announced as in Table 1.

Table 1: Tanzania auction results, Oct-22

Operator	Band	MHz	Proceeds, US$
Vodacom	700 FDD	20	25,548,469
	2300 TDD	70	34,378,598
	2600 TDD	20	3,300,000
Airtel	3500 TDD	80	21,100,001
	2600 FDD	60	39,000,200
MIC (Tigo)	3500 TDD	80	34,000,000
Viettel (Halotel)	2600 FDD	30	30,169,000

Table 2: Auction prices in $/MHz/pop

Band	Reserve	Auction	Auct/ Res
700	0.014	0.021	1.5
2300	0.003	0.009	3.1
2600 FDD	0.003	0.014	5.2
2600 TDD	0.003	0.003	1.2
3500	0.003	0.006	1.9

Table 3: Spectrum holding/operator

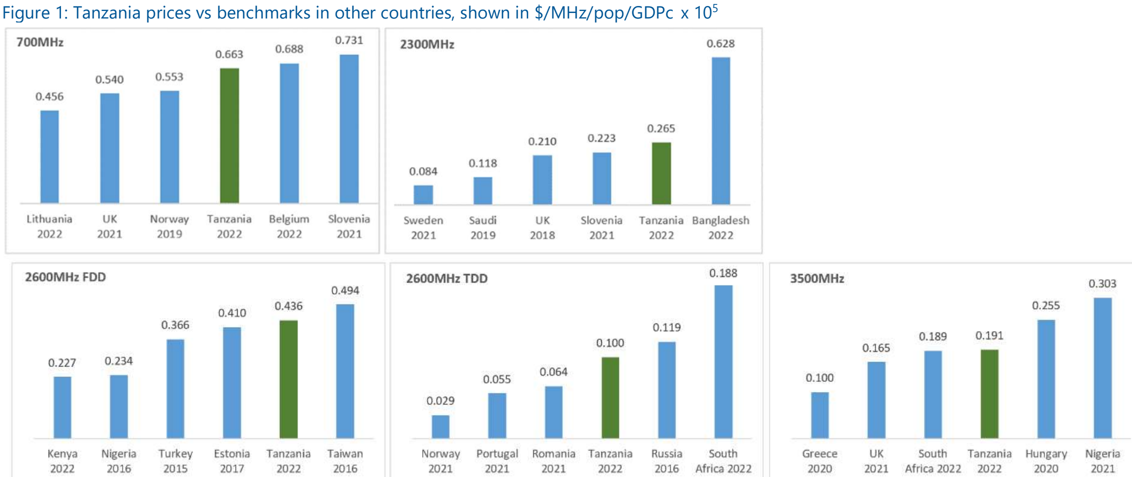
Operator	Pre-auction	Auction	Oct-22	Increase
Vodacom	85	110	195	2.3
Airtel	60	140	200	3.3
Tigo	90	80	170	1.9
Halotel	50	30	80	1.6

Ratios of prices (Auction/Reserve) shown in Table 2 indicate more interest in 2600FDD (b7) than in TDD (b38). Operators Vodacom and Airtel seem keen to consolidate their lead with more capacity on the 4G bands, albeit with different spectrum strategies. Vodacom acquired 2300 and 2600 TDD bands, most probably for expanding their 4G network capacity. Airtel on the other hand were aggressive acquiring spectrum in 2600FDD for 4G and FWA services, in addition to 80MHz on 3500 MHz to compete in the 5G market. Tigo, while keeping to their 90MHz on 900, 1800, and 2100 MHz for voice and 4G services, acquired 80MHz on 3500MHz, which must be an aggressive move to launch 5G services.

Since all lots on offer were sold within the first round, this may indicate demand, although not so clear since the auction format of a single sealed bid, one round auction allows for no price discovery, and provides little indication of competition, possibly resulting in lower auction proceeds.

Prices compared with international benchmarks are normalised against GDP/capita (GDPc), and presented in ($/MHz/pop/GDPc x 10^5) as in Figure 1. Normalisation is to account for the wide range of GDPc values against that of Tanzania ($3,211 in 2022, IMF, April-22). Overall, the amount of spectrum released, together with the modest spectrum prices, should significantly improve 4G services, and boost 5G take-up rate.

Figure 1: Tanzania prices vs benchmarks in other countries, shown in $/MHz/pop/GDPc x 10^5



(End)