

5G deployment surges in emerging regions, while developed regions roll out SA networks

May 2023 Stephen Burton

According to the latest edition of Analysys Mason's 5G deployment tracker, 44 new 5G networks were launched by operators in 2022, a slight decrease from the 48 launches in 2021 (see Figure 1). Some 5G launches in 2022 were postponed due to delays in the spectrum allocation process and regulatory barriers. There has been one 5G network launch in 1Q 2023 and an additional 67 are either in deployment or are scheduled for launch later this year.

In 2022, the largest number of 5G launches were by operators in three regions – emerging Asia–Pacific (EMAP), Latin America (LATAM) and Sub-Saharan Africa (SSA) – and all three have numerous launches planned for 2023. Emerging Asia–Pacific now accounts for 18% of all 5G networks worldwide that are either planned, in deployment or have been launched, second only to Western Europe (WE) (25%). 5G standalone (SA) launches continued to grow in developed regions such as Western Europe and developed Asia–Pacific (DVAP), although the adoption of these networks remains slow.

Our 5G deployment tracker includes over 317 entries dating from 2018 to 1Q 2023, with 248 confirmed launches of 5G networks and 36 commercial launches of 5G SA networks across the world.



Figure 1: 5G network launches and commercial 5G SA launches, worldwide, 2019 (and before)-2022



Emerging Asia–Pacific leads 5G network launches post-2020, with 23 launches across 12 countries in 2021 and 2022

The number of operational 5G networks across emerging Asia–Pacific, Latin America and Sub-Saharan Africa continued to grow in 2022. Emerging Asia–Pacific recorded the highest number of 5G launches post-2020 – accounting for 25% of all launches, worldwide, in this period. In total, there have been 37 5G launches across 15 countries within the region, including pre-2020 launches, with 14 of these taking place in 2022.

Notable 5G network launches within the region in 2022 included:

- China: China Broadnet soft-launched 5G in June 2022 to become the fourth operator to launch 5G services in China. By September 2022, all 31 provincial levels reported coverage.
- India: Bharti Airtel and Reliance Jo launched 5G networks in 2022. Airtel launched in October 2022 and announced over 1 million 5G users 1 month later. Reliance Jo has promised complete 5G coverage by December 2023.
- Malaysia: In November 2022, four operators were able to launch 5G services in Malaysia because of a network sharing agreement with state-controlled Digital Nasional Berhad to operate under a single wholesale network model. Celecom Axiata, Digi Telecommunications, Telekom Malaysia and U Mobile all now offer 5G services across the country in the sub-GHz, 3–4GHz and 26–28GHz bands.

This trend looks set to continue throughout 2023, with a further 16 5G networks already either in deployment or planned for launch in 2023. These include:

- **Cambodia:** Three operators are in the middle of testing and trialling 5G technologies in Cambodia. CamCSM (Cellcard), Smart Axiata and Viettel Cambodia (Metfone) have all committed to launching the first 5G network in Cambodia in 2023.
- Sri Lanka: Both Bharti Airtel Lanka and Hutchison Telecommunications Lanka are in the middle of deploying their networks and have held successful 5G trials. Both operators are expected to launch their networks in 2023.
- Vietnam: Four operators continue to conduct trials as they vie to be the first operator to launch 5G in Vietnam. MobiFone, Viettel, VNPT (Vinaphone) and Vietnamobile all had planned to launch in 2022 but have now delayed their launches until 2023.

Analysys Mason expects new 5G networks to continue to be deployed in increasing numbers in 2023 in emerging Asia–Pacific, as well as across Latin America and Sub-Saharan Africa.

Developed Asia–Pacific (DVAP) continues to boast the highest number of 5G SA networks as launches slowly continue worldwide

Although progress in deployment of 5G SA has been slow, an additional 15 5G SA networks were commercially launched worldwide in 2022. Western Europe recorded the largest number of 5G SA launches in 2022 with 5, followed by developed Asia-Pacific (4) and Latin America (3). There were some SA roll-outs in every region except Sub-Saharan Africa, which did not record a single 5G SA launch in 2022. Operators across Sub-Saharan Africa continue to prioritise non-standalone (NSA) launches, if they have begun 5G deployments at all.



Developed Asia-Pacific remained the region that accounted for the highest percentage of 5G SA launches, at 31% of the worldwide total (see Figure 2), between 2018 and 2023, with networks now launched in Australia, Hong Kong, Japan, Singapore and South Korea.



Figure 2: 5G SA launches, worldwide, 1Q 2018-1Q 2023

5G SA launches in 2022 within developed Asia-Pacific included:

- Australia: Optus, Telstra and Vodafone all commercially launched 5G SA networks in 2022. Coverage will be initially provided in major cities.
- Japan: KDDI became the third Japanese operator to launch its 5G SA network in March 2022, joining NTT Docomo and SoftBank.

Other regions also had notable 5G SA launches. These include:

- Austria: Hutchison Drei (3) and Spusu both launched their 5G SA networks in 2022. This takes the total of Western European countries with 5G SA networks to eight.
- Saudi Arabia: Zain released the first 5G SA network in Saudi Arabia in March 2023 to make it the third country within the Middle East and North Africa (MENA) to have a 5G SA network after Bahrain and Kuwait.
- United States: Verizon launched its 5G SA network in 2022, becoming the third operator to offer 5G SA in the USA after T-Mobile and Dish, though only T-Mobile has deployed nationally as of yet.

