

The launch of 5G by South Korean operators serves as a first benchmark for other operators around the world

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In December 2018, the three mobile network operators (MNOs) in South Korea soft-launched their 5G services with mobile hotspots for selected enterprise customers. SK Telecom, KT and LGU+ expanded their offerings when the first 5G smartphones became available by launching 5G services for consumers on 3 April 2019. These are sizeable launches already, with coverage available in parts of the Seoul metropolitan area and other major cities in the country. Moreover, local operators are planning to provide coverage for 85 of the largest cities in the country by the end of the year, which will correspond to approximately 90% population coverage. This comment discusses the introduction of consumer 5G services in South Korea in more detail and highlights potential lessons for operators worldwide.

5G plans are only available in the mid- and high-end tiers but are priced competitively for these segments

The government in South Korea required operators to launch affordable 5G tariffs, and it approved a price of KRW55 000 (USD48), which set the tariff for all three operators' basic plans with 8–9GB of data (unlimited at 1Mbit/s after). This tariff is comparable with SK Telecom's and KT's existing LTE plans, which cost KRW50 000 and KRW49 000 (USD43) per month, respectively, for 6GB of data (unlimited at 1Mbit/s after).

All other 5G tariffs offer generous data allowances (from 150GB to unlimited data) but are more expensive (KRW75 000–130 000 (USD66–114)). SK Telecom's and KT's fully unlimited 5G plans cost KRW89 000 and KRW80 000 per month, respectively (USD78 and USD70), which is less expensive than their two fully unlimited LTE plans (launched in 2018), which cost KRW100 000 and KRW89 000 (USD88 and USD78) per month, respectively.¹ However, LGU+'s unlimited monthly LTE plan at KRW78 000 is cheaper than its 5G contract at KRW85 000 (USD69 compared with USD75).

Discounts are available for both LTE and 5G plans, and customers typically receive a discount if they sign a 2-year contract and/or if they sign up with a family member. For example, a customer that signs a 2-year contract with KT together with a family member can benefit from unlimited 5G for a monthly tariff of only KRW40 000 (USD35). Plans come with different perks (including data sharing, allowances and data roaming), which means it is difficult to make an exact comparison with LTE plans.

In general, our tariff analysis shows that 5G plans are positioned at the mid and high-end of the market but priced competitively compared with LTE plans in these segments (however, more affordable LTE options are available). Speed-tiering is not a primary feature, even if different plans offer different throttling and roaming speeds.

In terms of speed, operators are claiming that their 5G service will offer gigabit speeds but are not guaranteeing any minimum or average speeds. SK Telecom said that the maximum theoretical speed on its network is

¹ Operators can enhance their unlimited mobile data plans to address the declining rate of traffic growth.

2.7Gbit/s, achieved by combining 5G NR with LTE, compared with a maximum theoretical speed of 1.2Gbit/s with LTE.

Figure 1: 5G plans available at launch, by operator, South Korea, April 2019

Type of Plan	SK Telecom	KT	LGU+
Basic plan	KRW55 000 8GB 1Mbit/s after	KRW55 000 8GB 1Mbit/s after	KRW55 000 9GB 1Mbit/s after
Intermediate plan	KRW75 000 150GB 5Mbit/s after 20GB data sharing	KRW80 000 Unlimited data + unlimited roaming 100Kbit/s	KRW75 000 150GB 5Mbit/s after 10GB data sharing
Premium plan	KRW89 000 Unlimited data 30GB data sharing	KRW100 000 Unlimited data + unlimited roaming 100Kbit/s	KRW85 000 Unlimited data 50GB data sharing
Super premium plan	KRW125 000 Unlimited data 50GB data sharing	KRW130 000 Unlimited data + unlimited roaming 3Mbit/s	KRW95 000 Unlimited data 100GB data sharing
Voice	Unlimited calls 300 minutes for video calls/special numbers		300 minutes
Messages	Unlimited		

Source: Operator-provided information, 2019

Only one smartphone is available for now – and it is expensive

The first and only device available on launch day was the Samsung Galaxy S10 5G. The 512GB model costs KRW1 550 000 (USD1356). Subsidies vary by operator and go up to KRW500 000 (USD438). LG's V50 ThinQ and Samsung's Galaxy Fold were both expected to be made available by the end of April, but release dates had not yet been confirmed at the time of writing. Only premium smartphones will be available in the near future and operators have not yet announced any plans to launch more-affordable models. The high price of 5G smartphones is an issue and to facilitate their acquisition, operators in South Korea are offering incentives such as replacement programmes (for example, the device can be returned and replaced with a new device with the same brand), rental options and longer instalment plans (up to 48 months). Significantly, these solutions could be replicated in other markets worldwide.

A large amount of content and value-added services are bundled in order to attract early adopters of 5G and encourage new usage

Operators are concentrating on designing their plans by bundling content and offering value-added-services (VAS) in order to attract early adopters of 5G, promote high-end plans and drive new usage. Most of these new services and content relate to video, music, games and social applications, but also help to promote new formats, especially virtual reality (for video, games and communications).

A number of games and applications are preloaded on to 5G devices. The content is often free and the data zero-rated so that customers can discover the service. Operators hope that they will be able to monetise these services and content later by encouraging consumers to continue to use them. Operators are working in partnership with

other service and content providers to encourage data usage. For example, SK Telecom has partnerships with local video streaming service Pooq and music streaming service Flo; KT partners with YouTube and cloud-gaming service Hatch; and LGU+ has joined forces with both Netflix and YouTube.

VAS bundling, zero-rating and partnerships with game and content companies existed before the introduction of 5G, and most services are already available using 4G, but not all. For example, KT's eSports Live, a dedicated app that allows users to watch a set of five screens simultaneously, is available only with 5G. Operators have also announced promotions that are only available to 5G early subscribers. For example, customers of SK Telecom's 5G Game Pack can play the same games using 4G, but they would not have access to free in-game items, zero-rated data or the enhanced user experience.

Conclusion

The mobile market in South Korea serves as a model for the ways that operators worldwide can position their 5G tariffs. It is too early to judge the success of these launches in South Korea. However, it is worth highlighting that the government reported that 260 000 subscribers (equivalent to 0.4% of the connections base) had signed up for 5G at the end of April 2019.