

Monetising consumer 5G: opportunities for operators



Stephen Sale with Rupert Wood

About this report

This report examines the opportunities for operators within the consumer market, including consumer 5G mobile services, new services enabled by 5G (such as AR/VR content and in-car entertainment) and home broadband via fixed-wireless access (FWA).

The report examines the current and forthcoming 5G market launches in order to assess the pricing and positioning of consumer 5G services. It also takes a broad view of the longer-term opportunities and the potential roles that telecoms operators may play in addressing these.

The report provides recommendations for telecoms operators that are considering launching consumer 5G services, and outlines how such launches may affect their current and future business.

It is based on several sources:

- Analysys Mason's internal research including the *Next-generation communication services tracker*¹ and our annual *Connected Consumer Survey*²
- analysis of the commercial 5G launches from operators including EE, SK Telecom, Sprint, Sunrise and Verizon.
- interviews with stakeholders in telecoms operators and their suppliers.

KEY QUESTIONS ANSWERED IN THIS REPORT

- What does the first wave of commercial 5G services look like? How are they priced and positioned?
- How does the 'experience premium' for 5G compare to that for 4G?
- What is the status of consumer 5G devices?
- What are the main new consumer use cases enabled by 5G?
- What levels of consumer awareness are there for new 5G services?
- What kind of content partnerships are being struck by 5G market leaders?
- What are the main opportunities for 5G fixed-wireless access?

WHO SHOULD READ THIS REPORT

- Strategy executives in telecoms operators.
- Marketing and commercial executives in telecoms operators that are interested in developing 5G consumer propositions.
- Vendors that are developing their own visions for 5G and working with telecoms operators on 5G.
- Investors that are interested in the short-, medium- and long-term impact of 5G on telecoms businesses.

¹ For more information, see Analysys Mason's *Next-generation communication services tracker*.

² For more information, see Analysys Mason's *Connected Consumer Survey*.

Executive summary

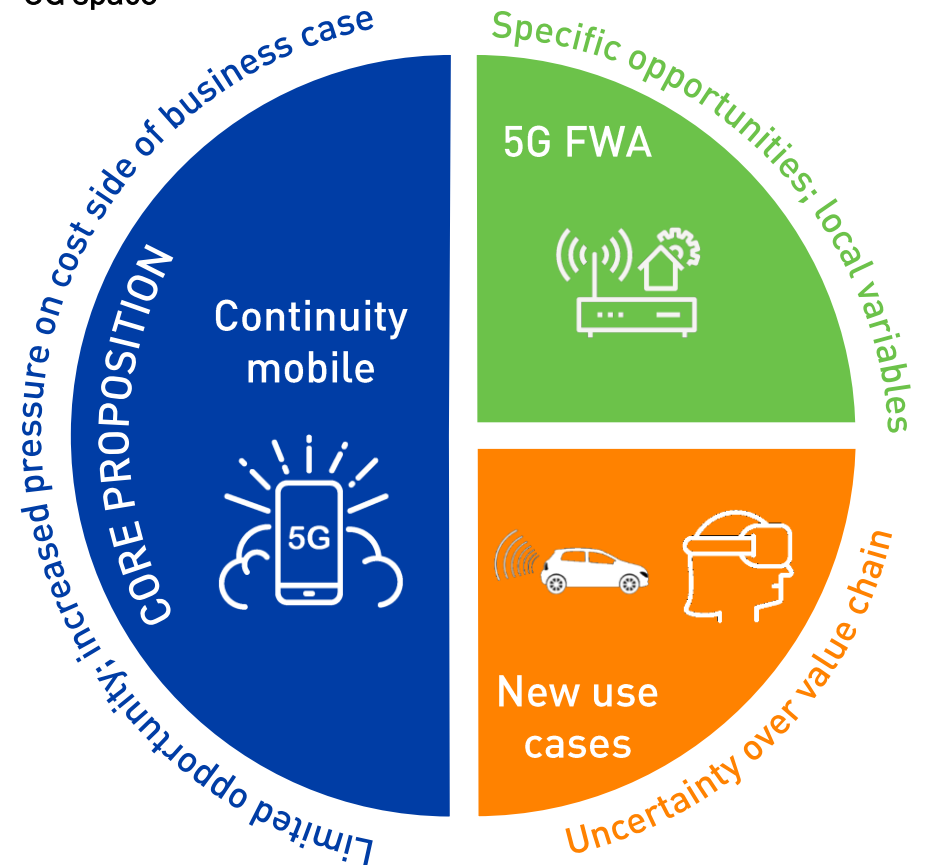
Consumer services will account for a substantial part of the 5G business case, yet monetisation opportunities remain unclear. Fixed-wireless access is a tangible revenue opportunity for some operators. Building a business from the new 5G-enabled consumer use cases, however, will be more challenging.

Commercial 5G services are coming to market. Operators need to think about how to monetise the 'experience premium' of 5G mobile services in the short term, and should assess the potential of 5G FWA to address the home broadband market. They must also consider the potential demand for new 5G-enabled consumer use cases and identify suitable roles to play in emerging value chains.

KEY RECOMMENDATIONS

1. Operators should review their mobile pricing models as 5G services are launched; they could potentially introduce speed tiering or further evolve service-based pricing.
2. Operators should identify potential roles to play in new edge-enabled consumer use cases and match these with a realistic view of their assets and capabilities.
3. Operators should assess the opportunity for 5G FWA offerings carefully, taking local factors into account.

Figure 1: Revenue opportunities for operators in the consumer 5G space



Source: Analysys Mason

Challenge: 5G deployments are well underway, but the longer-term ability of operators to monetise the consumer 5G opportunity is unclear

Consumer services are a crucial part of the business case for most 5G deployments, but operators must still clarify the monetisation opportunities.

Operators are already launching 5G services, and many more deployments are planned for 2020 and 2021. 5G will affect most areas of operators' existing businesses and, in many cases, will provide new opportunities. This report focuses on the potential opportunities in the consumer segment.

5G is being launched at a time when mobile data growth rates are slowing and ARPU is generally stable. Furthermore, smartphone penetration is high, and device replacement rates are lengthening. As a result, it will be challenging for operators to monetise their 5G investment in the mobile market (which is currently the largest source of revenue for operators).

The telecoms industry believes that the high-speed and low-latency networks used for 5G will open up new consumer use cases such as VR/AR experiences (notably gaming), drones and in-car entertainment. However, the business case for these services remains at the 'build it and they will come' stage for many operators.

Many early 5G launches are focused on the use of 5G to address the home broadband market with FWA. 5G FWA is a significant improvement over 4G FWA, but it will face some of the same constraints. It is also being launched alongside widespread wireline next-generation access (NGA) deployments.

Figure 2: Selected 5G launches, May 2019

Operator	Country	Service	Launch date	Spectrum	Coverage
Verizon	USA	FWA	October 2018	28GHz and 39GHz	Initial launch in districts of Chicago and Minneapolis
		Mobile	April 2019		
SK Telecom, KT and LG U+	South Korea	FWA	December 2018	3.5GHz	SK Telecom claimed coverage of 85 cities at launch
		Mobile	April 2019		
Optus	Australia	FWA	January 2019	3.6GHz	Initial launch in areas of Canberra and Sydney
Sunrise	Switzerland	FWA	April 2019	700MHz and 3.5GHz	Soft launch only; 150 cities/villages
EE	UK	Mobile	May 2019	3.4GHz	Initial launch in 6 cities
Sprint	USA	Mobile, FWA	May 2019	2.5GHz	Initial launch in 4 cities

Source: Analysys Mason

Solution: FWA is a tangible revenue opportunity for some operators; building a business from the new 5G-enabled consumer use cases will be more challenging

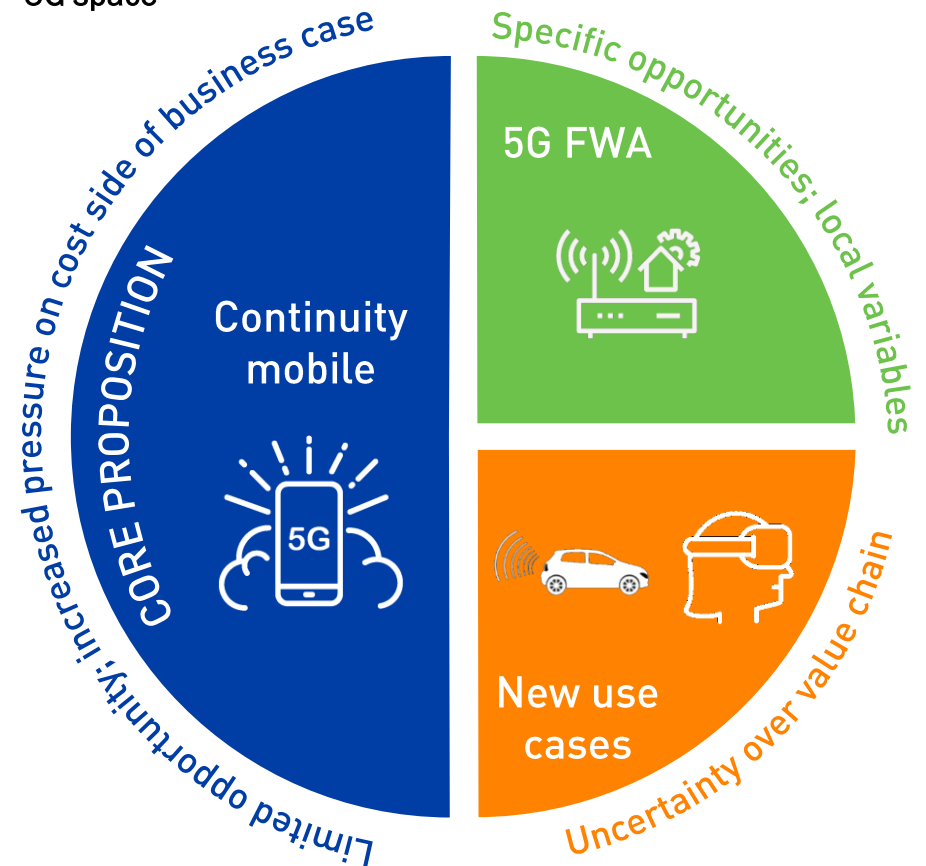
Fixed-wireless access is a tangible revenue opportunity for some operators. Building a business from the new 5G-enabled consumer use cases, however, will be more challenging.

‘Continuity’ mobile. We expect that consumers’ adoption of 5G will be slower than that of 4G due to a less compelling ‘experience premium’ and the current trend of increased handset replacement cycles. Operators’ monetisation efforts will therefore focus on higher-value customers. Operators should consider using value-accretive speed-tiering models or a more content-focused approach, building on app- or service-based pricing.

New consumer use cases. Many of the flagship 5G consumer use cases (such as VR experiences and AR gaming) rely on collaboration between members of a broader value chain, including device OEMs, content providers and edge computing ecosystems. The potential value of new services remains unclear, as does how this value will be distributed. Telecoms operators must therefore realistically assess their future roles in the emerging value chain and work towards these.

Fixed-wireless access. 5G FWA offers a tangible revenue opportunity for many players. However, the technology will coexist with other home broadband options, most notably FTTP. Its viability as a solution for mobile-centric challengers, and its role as a complementary coverage solution for integrated operators is dependent on many local variables.

Figure 3: Revenue opportunities for operators in the consumer 5G space



Source: Analysys Mason

Recommendations



1

Operators should review their mobile pricing models as 5G services are launched.

5G offers the promise of faster speeds and lower latency, but comes to market at a time when mobile ARPU is stable or declining in many mature markets. Volume-based pricing models are already under pressure and appear to be ill-suited to further monetisation. Operators will therefore need to review their mobile pricing models when launching 5G. Many will use value-accretive speed-tiering models, as pioneered by Elisa in Finland, while others will build price plans around content, potentially using app- or service-based pricing. Partnerships will be key.



2

Operators should identify potential roles to play in new edge-enabled consumer use cases and match these with a realistic view of their assets and capabilities.

Many of the flagship consumer use cases for 5G rely on high speeds and low latency, often supported by edge computing. The potential value of new services remains unclear, as does how this value will be distributed. Telecoms operators must therefore realistically assess their future roles in the emerging value chain for each of the major use cases and to match these against their capabilities. It is a complex area that is still evolving.



3

Operators should assess the opportunity for 5G FWA offerings carefully, taking local factors into account.

5G as a home broadband proposition already has many, often technologically superior, substitutes, and the challenge is in working out where the weaknesses in substitutes' coverage and offerings lie. There is potential for mobile-centric operators to find real organic revenue growth by targeting these weaknesses. Many integrated operators will also find a role for 5G FWA, albeit more limited, given their long-term preference for FTTP.



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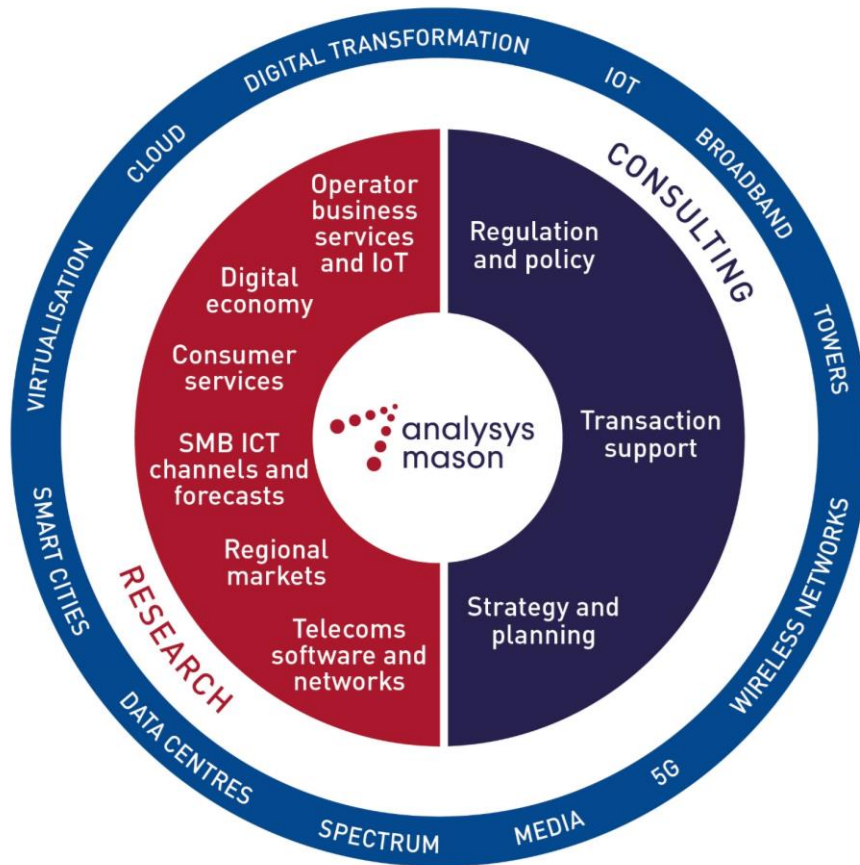
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