

Operators have assets to exploit in the edge market, even if differentiating on technology features is hard

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At least 50 telecoms operators have [announced their interest in edge computing](#), and more have plans in the works. Strategies are limited by the central role played by the hyperscalers – most operators are deploying technology from AWS, Azure and Google. This reliance makes it hard for operators to offer unique technology features. However, operators have plenty of opportunity to differentiate their offer in other parts of the value chain as illustrated in our recent report, [Operator edge computing: eleven case studies](#).

Operators are realistic about the need to work with hyperscalers on edge

Almost two thirds of operators with plans for edge computing have announced deals with AWS, Azure or Google (see Figure 1 for selected examples). Many other operators have similar partnerships in preparation. These agreements are logical; the hyperscalers have the scale and capabilities to develop edge computing technology, and are more willing than operators to invest in it.

Enterprises may want to use the same technology provider for both public cloud and edge computing (for example, AWS Outposts/Wavelength in combination with AWS’s public cloud). Operators need to offer solutions from the hyperscalers to complement their growing cloud businesses.

Figure 1: Example agreements between operators and hyperscalers for edge computing

Operator	Technology partner(s)
AT&T	Azure and Google
KDDI	AWS Wavelength
Orange Business Services	Publicly announced partnerships with AWS, Azure and Google
SK Telecom	AWS Wavelength, Azure
T-Systems	AWS Outputs and Azure announced. Other agreements may follow.
Verizon	Microsoft Azure Private Edge Zone, AWS Outposts and AWS Wavelength
Vodafone	AWS Wavelength

Source: Analysys Mason

Operators need to differentiate on top of the edge computing platform

Hyperscalers are selling their edge computing platforms direct to enterprises or through local service providers, as well as through telecoms operators. This creates an obvious challenge for operators – if they are selling the same technology as these other channels, what can they offer that is different?

Operators most commonly respond to this by packaging edge computing alongside other services and differentiating with a broader solution.

This solution could include the following features.

- **Private network and customer edge.** Many (perhaps most) private networks will require edge computing capacity, probably onsite (that is, customer edge). SK Telecom and others are looking to offer both as part of an integrated solution.
- **Public network and network edge.** The combination of network edge products, such as AWS Wavelength and 5G is obvious – customers should benefit when buying mobile capacity and edge computing together. However, most uses cases will require a fixed, not mobile, connection. Fixed operators will need to show why buying edge computing combined with fibre offers meaningful benefits, either in the form of a better service (for example, low and reliable latency) or a financial incentive (for example, by showing that the total cost of ownership is lower). Telefónica claims that with a fibre connection it can offer 1–2 m/s latency on network edge, almost equivalent to that of on-premises solutions.
- **Edge computing services combined with other services, in particular cloud/security.** Most of the large telecoms operators have substantial cloud and security teams. Orange Business Services boasts that it has over 2000 cloud specialists. BT has a similarly sized security team. 40% of Orange’s enterprise revenue is from IT services. Edge computing is a natural fit with these other products, and can be combined with cloud, security, consulting, professional services and other capabilities.
- **Solutions from multiple vendors.** A key element of the operator proposition in cloud services is offering multiple hyperscalers. Enterprises may also want a mix of edge computing technology providers. This could even mean using different technologies in customer edge, network edge and the public cloud, something that SK Telecom is planning to offer.

Marketing edge computing skills is also important, especially while the opportunity is nascent. Vodafone is doing this well. Its commercial offer is at an early stage (network edge is live in just one UK location) but it has an informative [webpage](#) featuring multiple customers and has been vocal about its progress. Other operators have arguably done more on edge computing, but have said less.

Operators also need to make edge computing easy to consume. Edge computing will always need some customisation, but operators can make it easier for customers to understand and purchase. T-Systems is doing a good job of this – it has put some standard solutions together that help to simplify decisions for customers.

Edge computing builds on the strengths of some operators

The differentiators that operators can build imply the following.

- **Operators without other assets will struggle to compete in edge computing.** Operators need to capitalise on a large existing enterprise customer base, and skills in areas such as cloud, security, private networks and IoT. However, if an operator does not have these, it may be able to exploit other resources. For example, Liberty Global has created a joint venture with Digital Colony to provide co-location space for customers to use for edge computing.
- **Operators should not delay edge initiatives.** Operators were slow to work with hyperscalers for public cloud services, partly because they were undecided whether to embrace the public cloud model or to sell their own data centre capacity. With edge, operators should have no such conflict to delay decisions. With many other players also serving the market, operators cannot delay if they want to be seen as leading providers.

- **Edge computing should play to operator strengths.** The reliance on AWS, Azure, Google and others simplifies edge strategies for operators. It does not require the sort of multi-million dollar R&D investment that operators are ill-placed to do. Instead, it requires them to bring existing technologies together, and sell them as a service – a role that fits more comfortably with their skills.

The dependence on technology supplied by AWS, Microsoft or Google limits the scope to differentiate based on technology features. However, operators have many other ways to compete. The combination of connectivity (including private networks) and edge is obvious, but operators can also combine edge with other capabilities (such as systems integration, cloud and security) and with different delivery models.