



RESEARCH STRATEGY REPORT

GO-TO-MARKET STRATEGIES FOR MOBILE VIDEO: PRICING, TECHNOLOGY AND REGULATION

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About this report

This report analyses various mobile data pricing models that operators can adopt to encourage additional video consumption over cellular networks and, significantly, to monetise and manage their mobile video traffic more effectively.

We examine the impact of different pricing models on consumption behaviour and highlight the key factors of engagement/traffic growth, as well as the most-suitable pricing strategies for each model. In addition, we discuss mobile video traffic management solutions that can support the introduction of these video pricing models and maximise their profitability.

Furthermore, we discuss the regulatory requirements that operators should consider when adopting new mobile video pricing approaches.

The report provides recommendations for mobile operators and vendors active in the mobile video management and delivery space.

It is based on several sources:

- Analysys Mason's internal research; smartphone analytics, mobile handsets data pricing; consumer surveys
- interviews with operator and vendor stakeholders in the mobile video market.

KEY QUESTIONS ANSWERED IN THIS REPORT

- What is the current end-user behaviour in relation to video consumption on mobile devices and networks? How can pricing affect demand?
- What service quality methods are better suited for various mobile video pricing approaches to ensure quality and customer satisfaction?
- What are the main mobile video optimisation solutions that communications service providers (CSPs) can invest in to manage OTT video traffic growth?
- How do mobile video optimisation solutions evolve with encrypted OTT video traffic and virtualisation?
- What is the vendor landscape for mobile video optimisation?
- What are the net neutrality issues that operators need to understand?

WHO SHOULD READ THIS REPORT

- Operator strategy teams, product managers and pricing teams that are interested in exploring mobile video pricing methods and their potential benefits and challenges.
- CSP chief technical officers (CTOs) that are rethinking their mobile video traffic management architectures.
- Vendors that want to gain insight into the drivers and inhibitors of CSP investment in mobile video optimisation, build their solutions around CSPs' various monetisation strategies and understand other vendors' solutions and positioning.

Executive summary

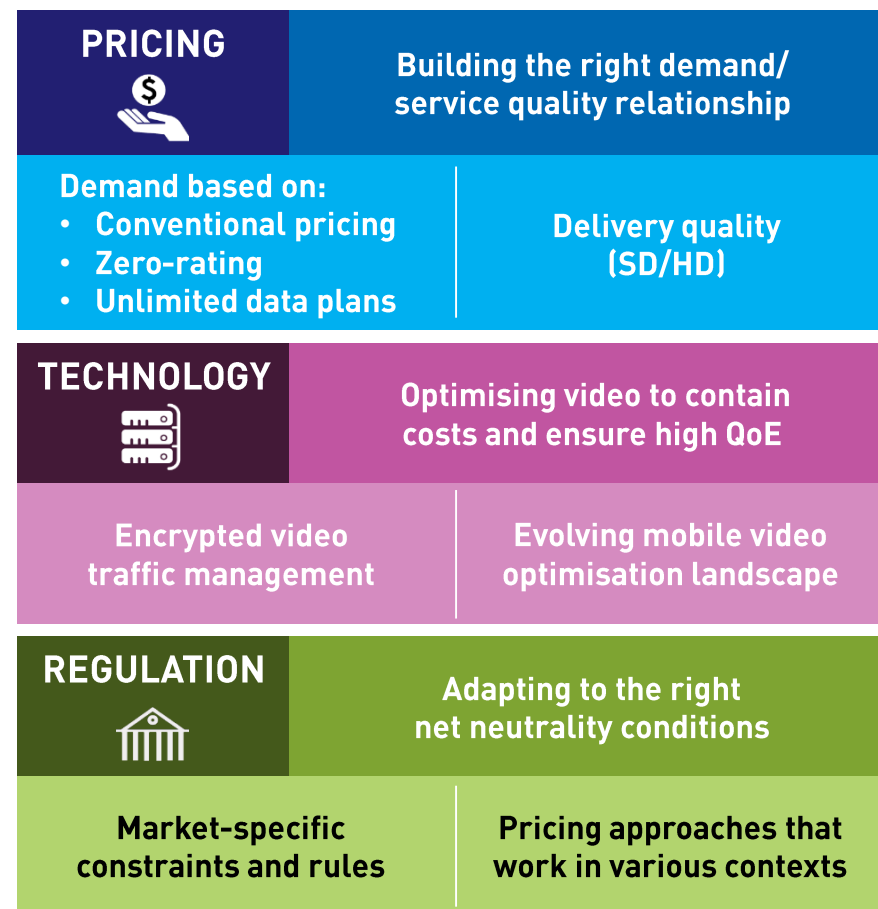
Consumers' smartphone engagement and data usage takes place primarily on Wi-Fi networks, leaving few opportunities for operators to monetise mobile data. A successful mobile video strategy is critical for operators that want to monetise mobile data; zero-rating can profitably support this effort if the content justifies the subscription fees and quality is managed to contain costs.

In this report, we investigate how mobile video can increase customer engagement if priced in ways that appeal to mass markets; how it can be a source of differentiation if the content allows; and explain how it can help to grow traffic without adversely impacting profitability if delivered in cost-effective ways. Finally, we assess the extent to which operators are limited by net neutrality and legislation when using mobile video as a basis of competition.

We make the following recommendations in this report.

- When mobile video's bandwidth is managed, its impact on cellular traffic is not dramatic in either zero-rating or unlimited data scenarios; operators should view this as a great source of pricing flexibility.
- Vendors should provide mobile video management and optimisation solutions that are flexible in order to underpin different data monetisation strategies.
- Operators that launch zero-rated mobile video plans that are open to as many content providers as possible would find it easier to operate in the European Union and the USA.

Figure 1: Key considerations for introducing new mobile video pricing models for mobile operators



Source: Analysys Mason

Consumers' smartphone engagement and data usage occurs mostly on Wi-Fi; MNOs must create more monetisation opportunities

Consumers spend a great deal of time on smartphones, but most of their engagement and data usage takes place on Wi-Fi networks with limited monetisation of mobile data.

Consumers spend, on average and depending on the country, between 2 and 3 hours everyday and generate between 8GB and 16GB of data traffic every month on their smartphones. Yet, mobile network operators (MNOs) can monetise only a small portion of this traffic because most of this engagement occurs on Wi-Fi.

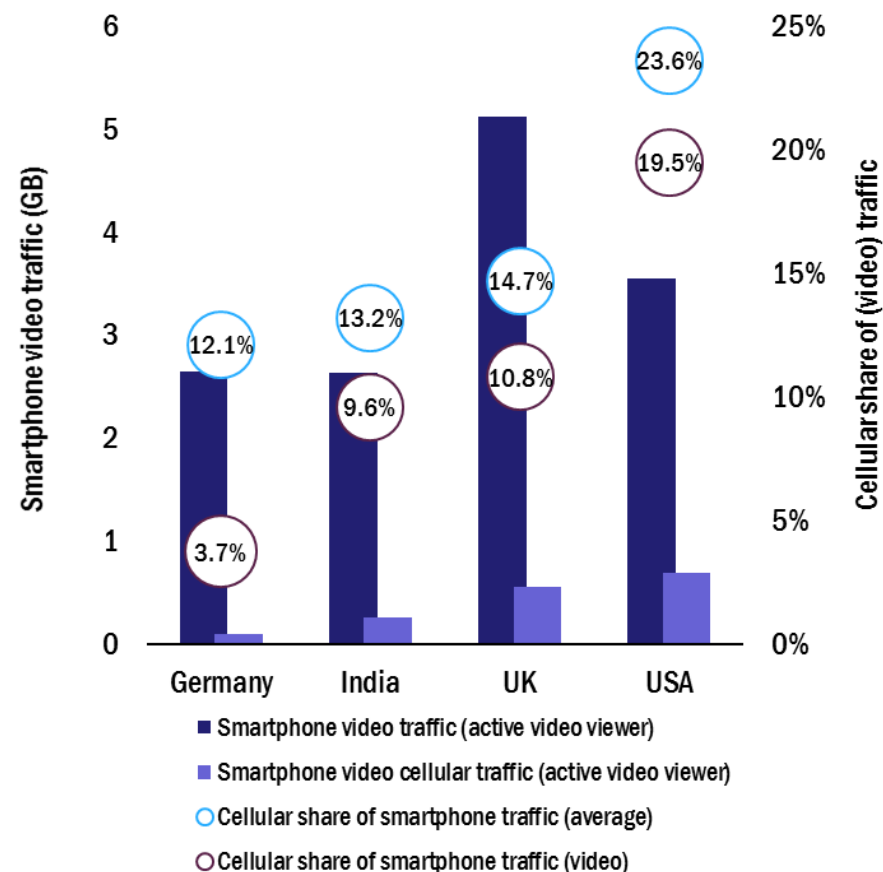
Video presents operators with an obvious opportunity to shift usage to, and grow engagement on, cellular networks. However, many smartphone users are hesitant to watch videos on cellular networks due to concerns about using up or exceeding their data allowances, and operators are reluctant to subsidise mobile video traffic in case it leads to extremely high usage and costs.

In this report, we investigate how operators can stimulate further user engagement and traffic through mobile video while managing the associated costs. This report considers the following questions.

- How are engagement, traffic and pricing affected if operators introduce zero-rated video offers or unlimited data plans?¹
- What are the commercial implications and technical means of managing video traffic?
- What does zero-rating video mean in terms of net neutrality?

¹ This report focuses on these pricing models as they are likely to impact engagement and traffic more than other models. See the annex for an overview of all mobile video pricing options.

Figure 2: Smartphone app-specific video traffic and cellular share of traffic



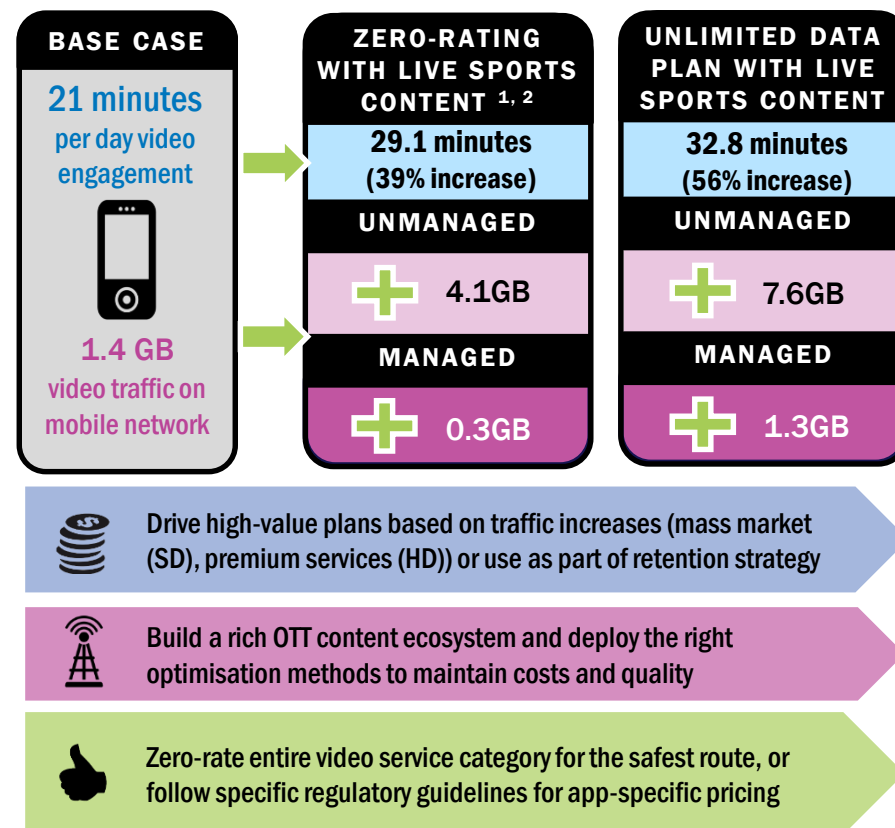
Source: Analysys Mason and Verto Analytics

Mobile video pricing models must have a rich content selection, intelligent video optimisation and the right service design to improve monetisation

MNOs that aim to better monetise mobile video consumption should consider the following when designing their service plans.

- **New mobile video pricing models will stimulate consumption, but its impact on network traffic can be managed to increase pricing flexibility.** We found that average video engagement time on smartphones and mobile network traffic under zero-rating and unlimited data plans can grow considerably high without video quality restrictions. This may require MNOs to position these plans as premium services. However, with the use of the right traffic management techniques to restrict video quality (such as SD), mobile network traffic growth can be limited to 300MB per user in zero-rated plans and 1.3GB in unlimited data plans, which can allow these services to be made available to the mass market.
- **Collaboration with OTT providers, as well as encrypted video optimisation across the mobile network, will be essential** for offering a rich content portfolio to attract users to new mobile video plans and managing video traffic more efficiently to maintain network costs and quality of experience.
- **Regulatory concerns related to net-neutrality can be addressed in zero-rated plans** if MNOs zero-rate the entire video service category and make the service available to all content providers to join. If MNOs want to pursue app-specific plans instead, their service design needs to follow local regulatory guidelines (for example, in the European Union, zero-rating stops when a user's mobile data allowance is consumed).

Figure 3: Potential impact of mobile video pricing models on engagement and traffic, and key commercial and technical considerations in service design



¹ Our assumptions are aggressive in order to establish the upper limits of any potential impact.

² We focus on live sports streaming exclusively to test the pricing models with operator provided content because operators use live sports content as a differentiator (especially in the UK market, which is our base case), and operator VoD services are typically associated with low usage.

Recommendations

1

When mobile video's bandwidth is managed, its impact on cellular traffic is not dramatic in either zero-rating or unlimited data scenarios; operators should view this as a great source of pricing flexibility.

Zero-rating and unlimited data plans can grow video-related smartphone engagement considerably on cellular networks. Significantly, the implications of these two pricing methods on traffic will not be dramatic if bandwidth management policies are used. In most of our scenario analyses, we found managed cellular traffic increased between 100MB and 1.3GB per month, a range that many mobile operators can flexibly price around.

2

Vendors should provide mobile video management and optimisation solutions that are flexible in order to underpin different data monetisation strategies.

Traditional mobile video optimisation techniques are becoming obsolete with the increasing adoption of encrypted delivery (HTTPS and QUIC) by OTT video providers. Communications service providers (CSPs) need new, scalable, future-proof mobile video optimisation solutions that help them to optimise OTT encrypted video traffic while maintaining QoE, facilitate building video partnership ecosystems and support their own multi-screen video offerings.

3

Operators that launch zero-rated mobile video plans that are open to as many content providers as possible (ideally the entire category of a service) would find it easier to operate in the European Union and the USA.

Zero-rating is not likely to cause net neutrality-related concerns unless an offer is deemed to be anti-competitive because it discriminates against service/app/content providers. Regulators have a tough stance for app-specific pricing, but operators still have significant flexibility when designing their plans, as long as they comply with the guidelines detailed in section 3.

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About the authors



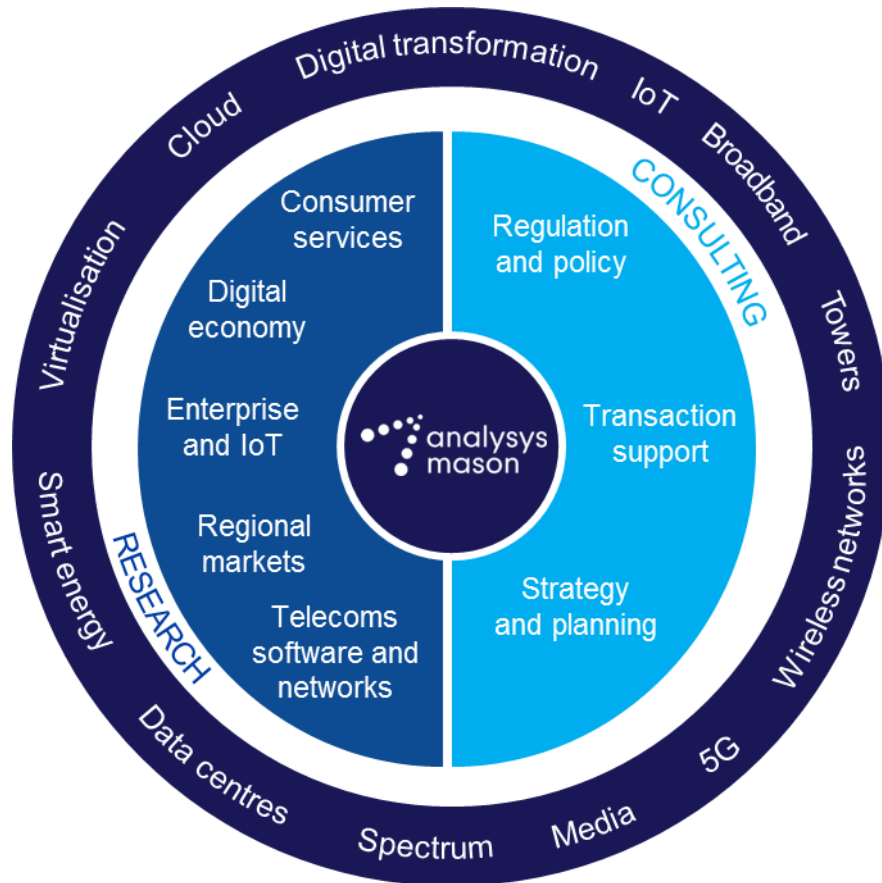
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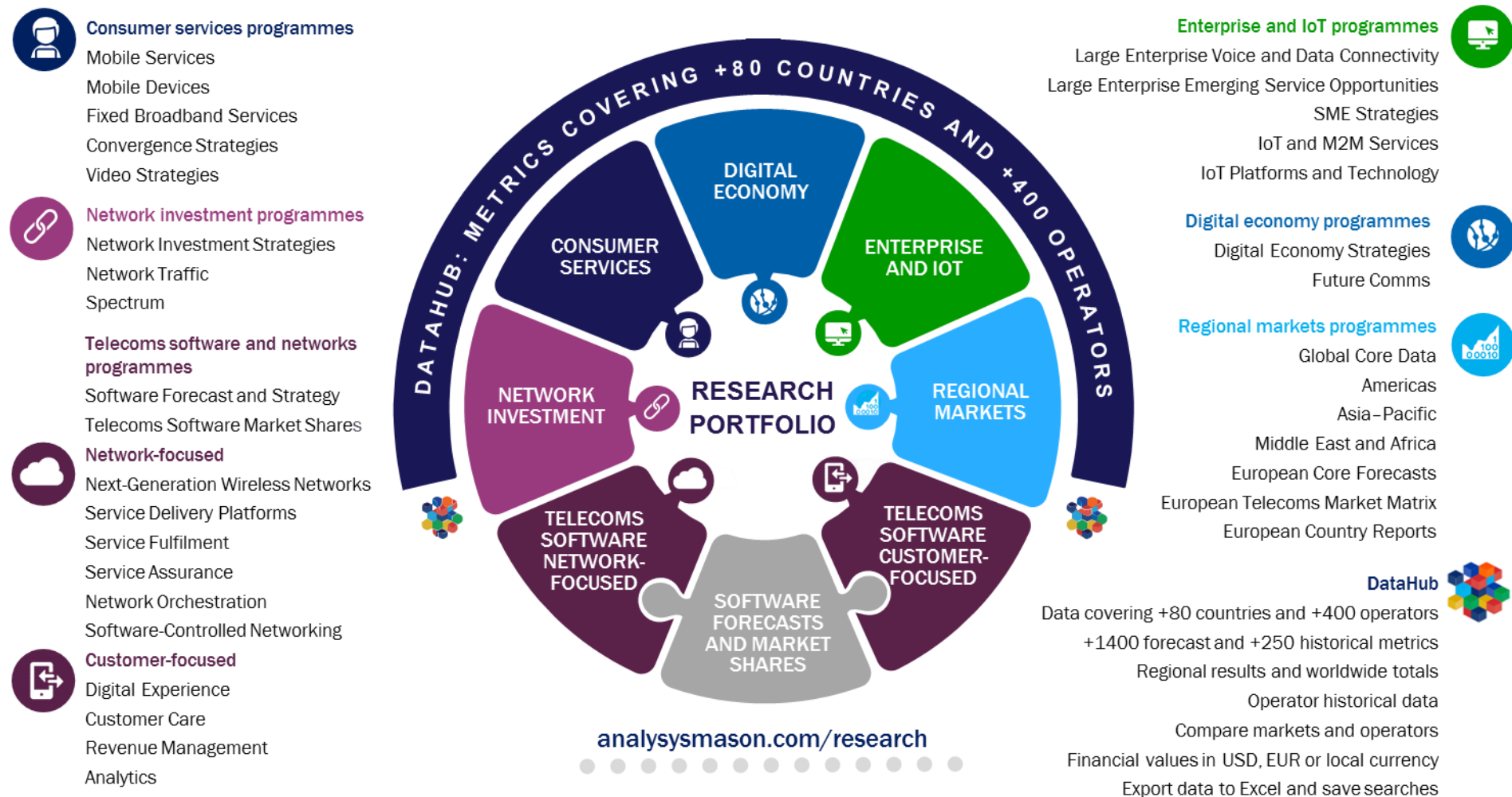
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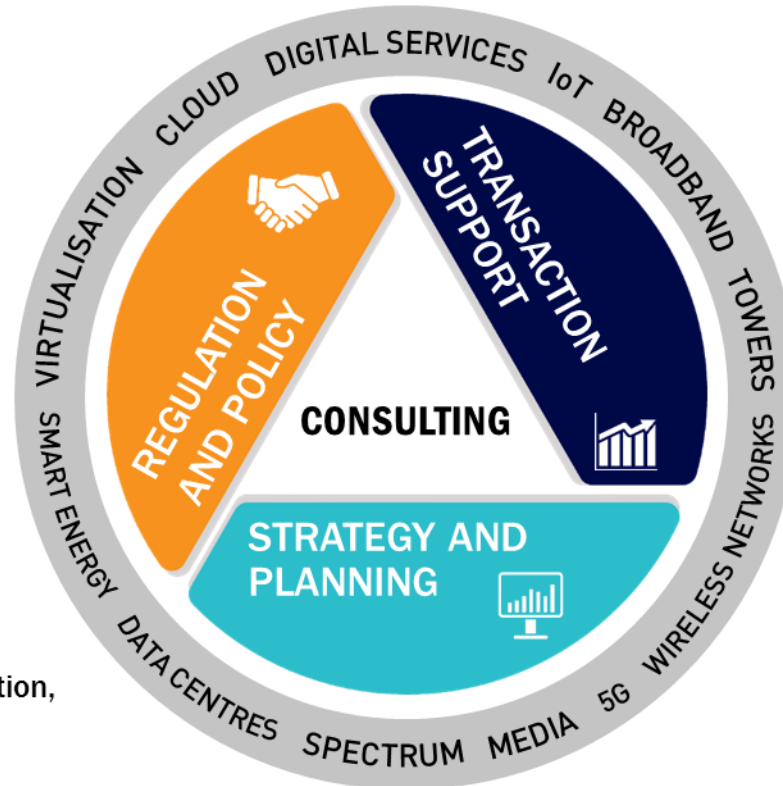
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