



# Consumer 5G use cases: operator strategies for mobile gaming



Giulio Sinibaldi



## About this report

This report is part of a series of reports that examine potential consumer use cases for 5G.<sup>1</sup> Gaming is one of the most-immediately addressable use cases that operators can use to demonstrate the experience improvements that 5G can offer and to develop edge cloud capabilities. This report:

- qualifies and quantifies the market opportunity for 5G-enabled gaming
- identifies roles that operators can play in the value chain and associated business opportunities
- explores the go-to-market strategies for bundling gaming services with 5G.

### KEY QUESTIONS ANSWERED IN THIS REPORT

- How can operators monetise the growing consumer consumption of video games?
- Does 5G enable operators to play a unique role in gaming?
- How much revenue can gaming services generate for operators and how does the revenue break down by devices, and B2C and B2B services?
- What does the value chain for gaming look like and what role do operators play?
- How are early-moving operators using gaming to sell 5G?

### WHO SHOULD READ THIS REPORT

- Product managers and strategy teams working for operators that are looking for new revenue streams or new value-added services to support their core services.
- Marketing executives and product managers for operators that are making decisions about content strategy and consumer service design.
- Senior strategy or CTO executives within operators that are formulating strategies for IaaS product and service models and need to understand the implications of gaming services and consumption models.
- Strategy and business development executives for edge cloud and 5G equipment vendors.

<sup>1</sup> For more information, see Analysys Mason's [Consumer 5G use cases: operator strategies for virtual reality video](#).

## Executive summary

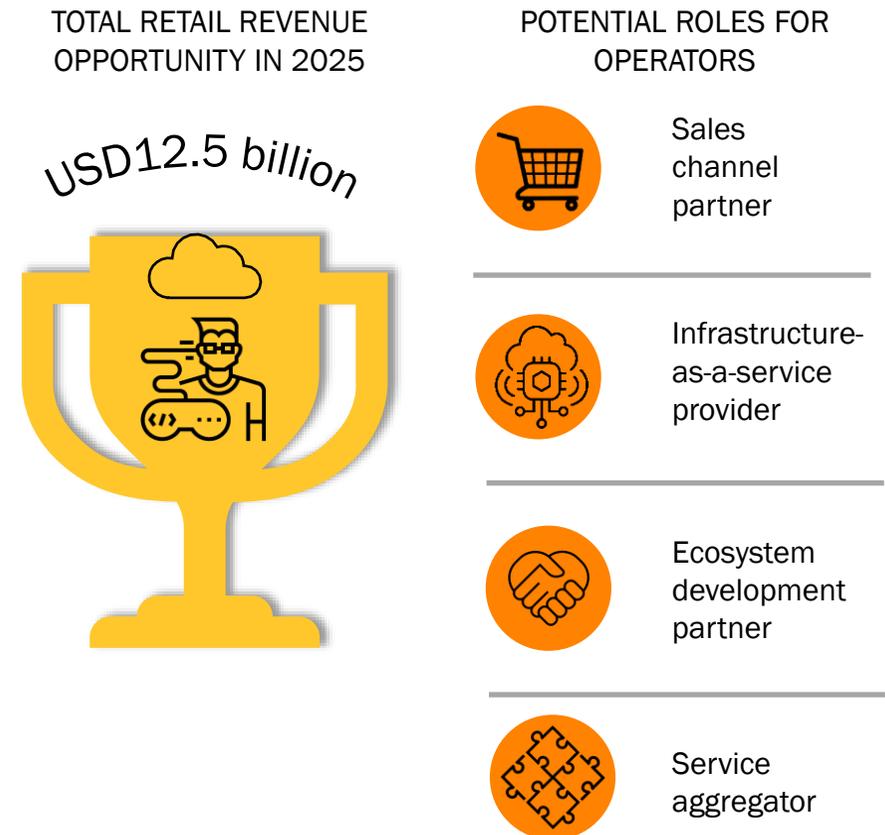
**5G should enhance the opportunity for operators to generate revenue from gaming, and gaming should enhance the attractiveness of 5G. For this to be realised, operators must define the right strategy.**

Cloud gaming may be the single best use case for operators to demonstrate the speeds and latency benefits of 5G, and 5G will enable operators to address up to 9% of the total retail revenue generated by mobile gaming services by 2025. Operators can access value directly from B2C services as well as from B2B partnerships. The value chain for gaming is complex and operators need to make sure they have the right assets, resources, capabilities and partnerships that correspond to the role they want to play. They then need to establish their go-to-market strategy.

### KEY RECOMMENDATIONS

1. Operators should enter the gaming value chain to gain a share of the revenue that 5G will generate.
2. Operators will add value to their core consumer proposition by offering gaming as a value-added service, or reselling third-party or own-branded services.
3. Operators should use the growth of 5G-enabled gaming to target the B2B opportunity and to build an MEC proposition, which they can do in partnership with other operators and/or public cloud providers.

**Figure 1: Addressable opportunity for operators from 5G-enabled mobile gaming and their potential roles in the value chain, worldwide, 2020–2025**



Source: Analysys Mason

## Challenge: how can operators capture a share of the mobile gaming retail revenue that 5G will generate between 2020 and 2025?

### 5G offers a unique chance for operators to develop a position in the gaming value chain.

Operators face many challenges at the beginning of the 5G network lifecycle: they must migrate subscribers from 4G, they need to stimulate demand for content and services that require high-performance connectivity, and they need to develop advanced network management and edge computing capabilities that will enable them to maximise the potential of 5G.

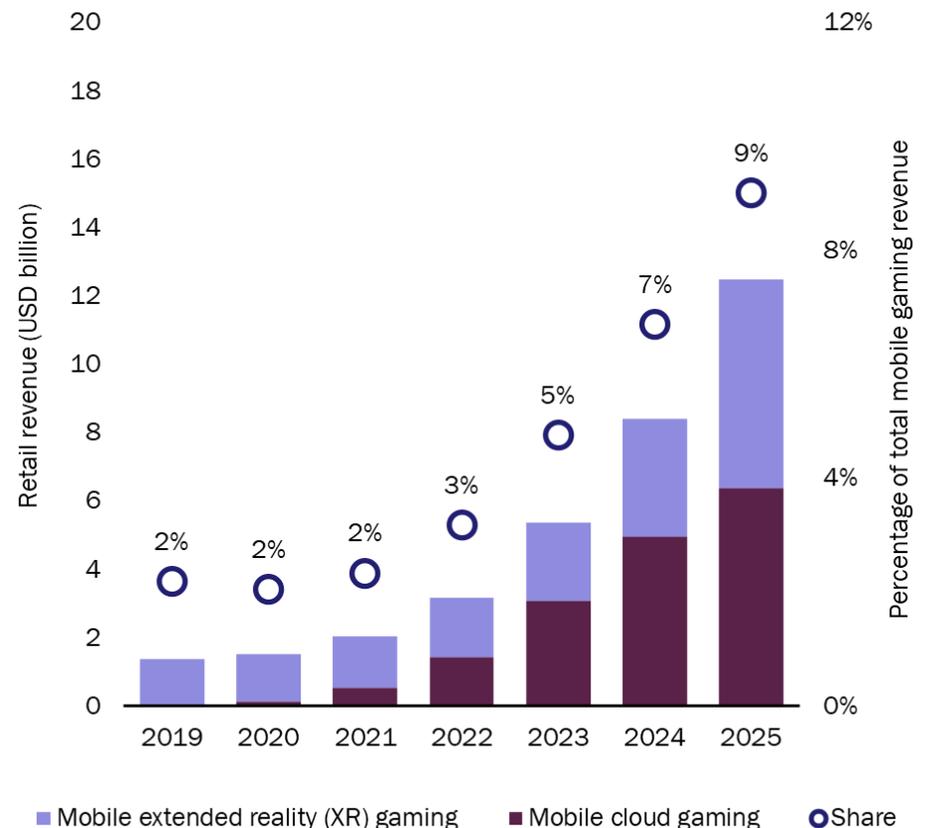
Mobile gaming is one of the most likely solutions that operators can use to address these challenges, but many operators will miss this opportunity if they do not establish a secure position in the value chain. Most telcos have failed to capture any significant value from it and will continue to do so. Nevertheless, gaming revenue will grow at an estimated CAGR of 10% between 2020 and 2025. 5G will boost the growth potential of gaming, particularly mobile gaming, and will create the conditions for the next generation of services – and telcos' assets will be key to the success of these services, enabling them to reach all consumers.

The gaming market that is addressable by operators is not limited to 5G-enabled cloud gaming. Fixed cloud gaming on the laptop or the TV represents a bigger opportunity for operators, particularly for fixed broadband and TV service providers. Therefore, integrated operators should consider how to bring games to their customers across multiple screens. We covered the broader cloud gaming topic in a previous report.<sup>1</sup>

<sup>1</sup> For more information, see Analysys Mason's [The cloud-gaming opportunity for operators](#).

<sup>2</sup> See figure 22 on slide 30 of this report for the underlying forecast methodology and assumptions.

Figure 2: Retail revenue for 5G-enabled gaming services, worldwide, 2019–2025<sup>2</sup>



Source: Analysys Mason

## Solution: telcos have different options depending on their assets, market position and appetite for risk

5G is necessary for operators to monetise consumer demand for the next generation of video games and for gaming service providers to upgrade the user experience.

Gaming offers a wide range of options to operators and they should select the one that fits their long-term strategy.

- **Develop an own-branded service:** operators with content leadership ambition, ideally with a multi-country footprint, should launch own-branded solutions. Such solutions are most appropriate for operators that want to become service aggregators.
- **Resell third-party service:** suited to smaller players that need to offer gaming services to raise awareness of the improvement in experience that is available with 5G, without committing too many resources.
- **Infrastructure as a service provider:** build machine edge computing (MEC) capabilities and even more advanced features that belong to native 5G cores such as network slicing. These capabilities are necessary to assure the required quality of service (QoS) experience for own services or to sell such differentiation power to other gaming providers.

Operators should proactively decide their role in gaming before the next-generation gaming ecosystem matures in order to maximise the value that they can extract from it.

Figure 3: Strategic options available to operators that plan to monetise demand for 5G-enable gaming services

Option	Objective	Profile of most-suited operator
Go-to-market strategy (option 1): own-branded service	Short-to-medium term: create a VAS to bundle with 5G to encourage consumers to migrate; educate consumers on the value of 5G. Long term: develop a brand and a commercial position in the gaming value chain; revenue diversification.	Multi-country converged operators can deploy a new platform across multiple markets, leveraging the multi-device nature of mobile cloud and XR gaming.
Go-to-market strategy (option 2): resell third-party service	Short-to-medium term: create a VAS to bundle with 5G to differentiate migration; educate consumers on the value of 5G; premium connectivity upsell.	Single-country (and not converged) operators with little interest in building a long-term position in gaming.
Infrastructure-as-a-service provider	Long term: network monetisation. Short-to-medium term: gaming can be the first large-scale application in the MEC business case.	Operators that are, or intend to become, edge cloud service providers.

## Recommendations

1

**Operators should enter the gaming value chain to gain a share of the revenue that 5G will generate between 2020 and 2025 (for example, USD12.5 billion in 2025).**

Operators can partner with gaming service providers to accelerate the development of the next-generation gaming ecosystem, new devices, XR content and supporting infrastructure as well as offering them a go-to-market partner that can educate consumers on the value of 5G and the gaming experience that it can offer. Telcos can choose one or more roles in this segment, depending on their profile, long-term strategy and appetite for risk.

2

**Operators will add value to their core consumer proposition by offering gaming as a value-added service, or reselling third-party or own-branded services.**

Operators' direct relationship with consumers and control of the network could enable them to become gaming service providers, offering own-branded consumer products or reselling third-party services and devices. In the short-to-medium term, they can use those services to incentivise the migration to 5G and educate consumers, while in the long run they can offer services via their own consumer platform and infrastructure via the service aggregator play.

3

**Operators should use the growth of 5G-enabled gaming to target the B2B opportunity and to build an MEC proposition, which they can do in partnership with other operators and/or public cloud providers.**

As next-generation gaming ecosystems mature, operators should use their MEC, end-to-end network management capabilities to monetise the gaming service providers' demand for QoS assurance, strengthening the go-to-market partner role. Operators can use gaming as the first large-scale application to build MEC capabilities.



# Contents



Executive summary

Market opportunity

Value chain

Go-to-market strategies

Appendix

**About the author and Analysys Mason**

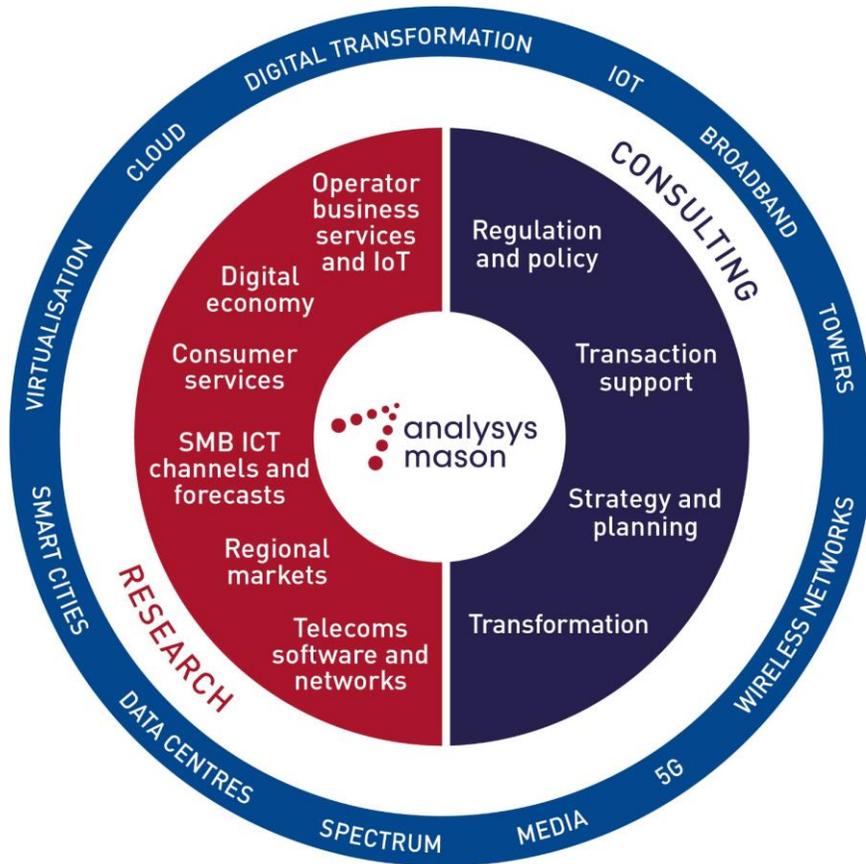
## About the author



**Giulio Sinibaldi** (Senior Analyst) is a key contributor to Analysys Mason's Consumer Research practice. He is the lead analyst for the *Future Comms* research programme, which focuses on operators' and OTT service providers' communications services. Giulio also specialises in research on gaming strategies and has extensive experience in managing and analysing primary research data sets. He currently manages Analysys Mason's annual Connected Consumer Survey. Giulio holds a BSc and an MSc in Economics from Bocconi University.

# Analysys Mason’s consulting and research are uniquely positioned

Analysys Mason’s consulting services and research portfolio



## Consulting

We deliver tangible benefits to clients across the telecoms industry:

- communications and digital service providers, vendors, financial and strategic investors, private equity and infrastructure funds, governments, regulators, broadcasters and service and content providers

Our sector specialists understand the distinct local challenges facing clients, in addition to the wider effects of global forces.

We are future-focused and help clients understand the challenges and opportunities new technology brings.

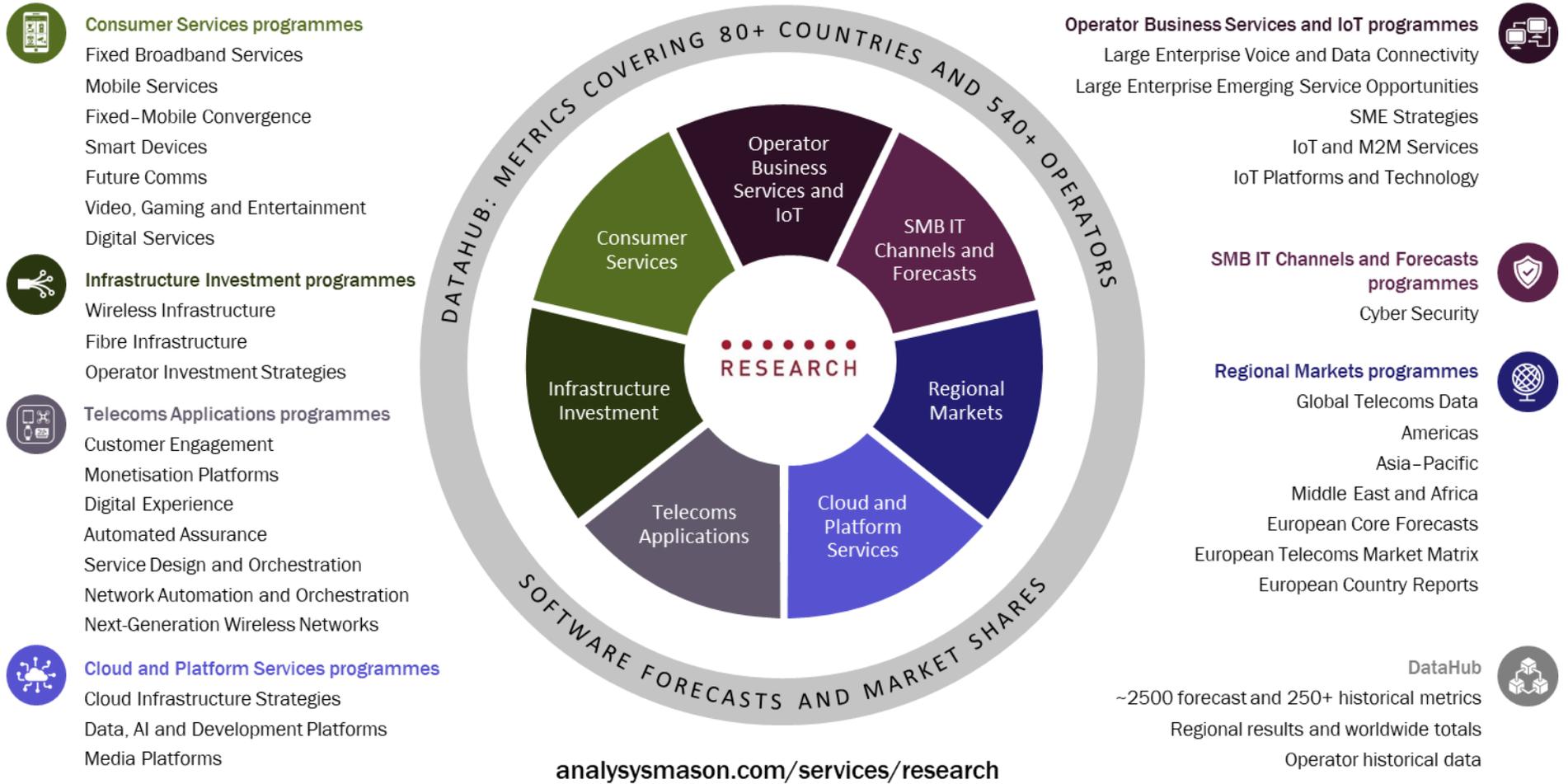
## Research

Our dedicated team of analysts track and forecast the different services accessed by consumers and enterprises.

We offer detailed insight into the software, infrastructure and technology delivering those services.

Clients benefit from regular and timely intelligence, and direct access to analysts.

# Research from Analysys Mason



[analysismason.com/services/research](https://analysismason.com/services/research)

# Consulting from Analysys Mason



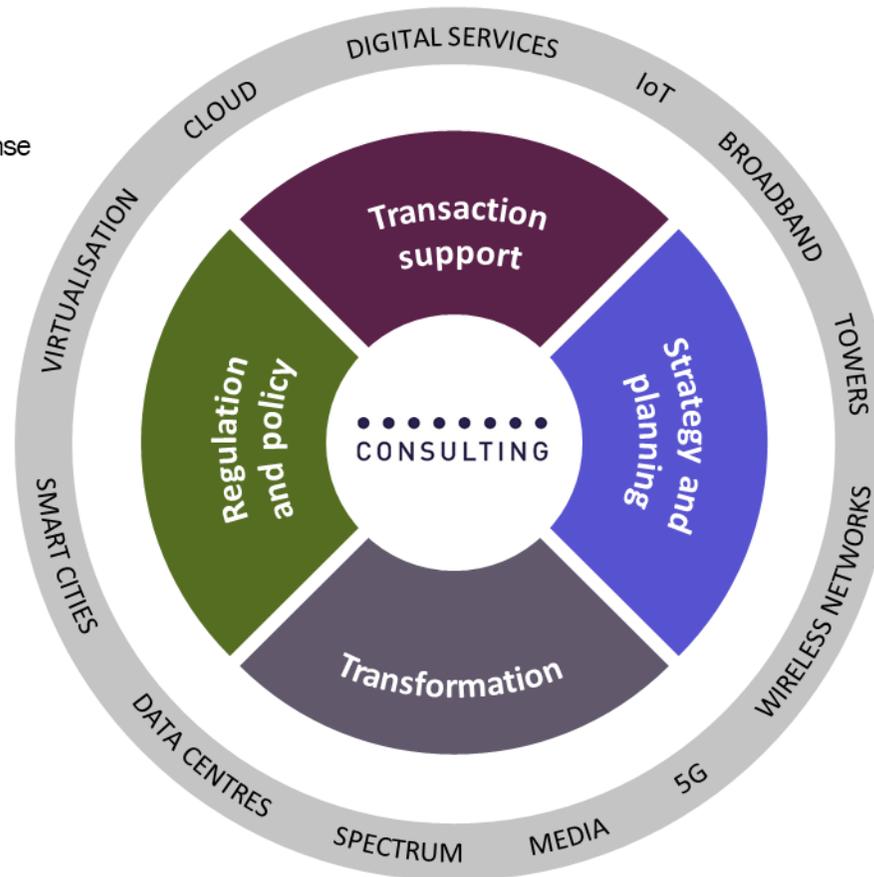
## Regulation and policy

- Policy development and response
- Ex-ante market reviews, remedies, costing...
- Universal Service Obligation (USO)
- Scarce resources: radio spectrum management, auction support, numbering...
- Ex-post / abuse of dominance
- Postal sector



## Transformation

- Transformation programmes
- Assurance
- Implementation
- Delivery



## Transaction support



- Commercial and technical due diligence, buy-side and sell-side
- Initial public offerings (IPOs)
- Financial valuation
- Debt financing
- Lending technical advisory
- Opportunity scouting
- Business plan review

## Strategy and planning



- Commercial expertise
- Technology optimisation
- New digital frontiers

[analysismason.com/services/consulting](https://analysismason.com/services/consulting)

**PUBLISHED BY ANALYSYS MASON LIMITED IN JANUARY 2021**

Bush House • North West Wing • Aldwych • London • WC2B 4PJ • UK

Tel: +44 (0)20 7395 9000 • Email: [research@analysismason.com](mailto:research@analysismason.com) • [www.analysismason.com/research](http://www.analysismason.com/research) • Registered in England and Wales No. 5177472

© Analysys Mason Limited 2021. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior written permission of the publisher.

Figures and projections contained in this report are based on publicly available information only and are produced by the Research Division of Analysys Mason Limited independently of any client-specific work within Analysys Mason Limited. The opinions expressed are those of the stated authors only.

Analysys Mason Limited recognises that many terms appearing in this report are proprietary; all such trademarks are acknowledged and every effort has been made to indicate them by the normal UK publishing practice of capitalisation. However, the presence of a term, in whatever form, does not affect its legal status as a trademark.

Analysys Mason Limited maintains that all reasonable care and skill have been used in the compilation of this publication. However, Analysys Mason Limited shall not be under any liability for loss or damage (including consequential loss) whatsoever or howsoever arising as a result of the use of this publication by the customer, his servants, agents or any third party.