# Sealing a comeback: enabling Apple and Android RCS

INSIGHT SPOTLIGHT

January 2025

Apple's announcement in September 2024 that it will incorporate support for Rich Communication Services (RCS) in the iPhone and wider device portfolio was a significant move for the messaging ecosystem. Up until then, RCS had primarily been a Google-led initiative (following Google's acquisition of Jibe Mobile in 2015) for the Android device base. This is, of course, larger in scale than the iPhone universe. However, in practice, the number of people actually using RCS was much lower than the Android base because only other Android users could be messaged and, even then, the service required people to activate it. Apple's entry opens a new messaging gateway between different OS worlds, making RCS a more scaled alternative to WhatsApp. This report looks at the device provisioning through an entitlement server required for telcos to enable RCS for Apple and Android that will come into effect in 2025, in particular for securely enabling the message flow between the two OS platforms.

# Analysis

## The Apple boost effect

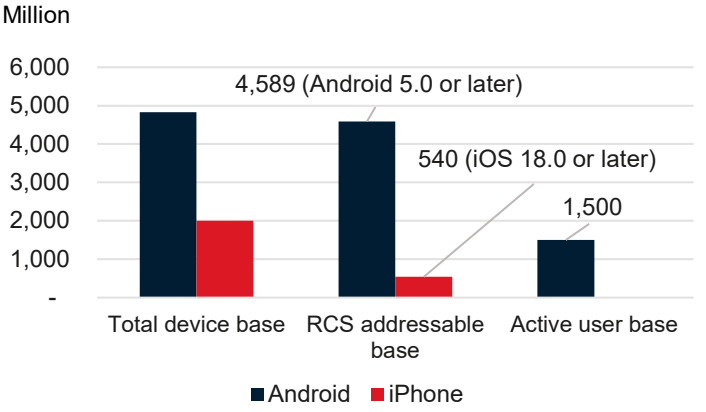
Apple's move into the RCS world is a material boost for this messaging ecosystem for two reasons. First, the fact it has adopted the industry standard means that Apple and Google have converged on the product, paving the way for their customers to message each other securely. Previously, Android device owners could only use RCS to message other Android device owners, with messaging to iPhones done using traditional SMS/MMS or over-the-top (OTT) options such as WhatsApp.

Second, Apple's 30% global market share in smartphones adds significant scale. RCS will be available for iOS 18.0 or later, with estimates that 25–30% of iPhones are already converted to this version of the OS, implying an addressable base of around 540 million people (see chart). Combined with Android's 4.5 billion base, RCS capabilities are available to over 5 billion people. This must be caveated given that an addressable base does not necessarily mean an actual user base. Google's disclosure in 2023 that RCS had around 1 billion active users would suggest, at least then, that 20% of people with an Android smartphone actually used RCS. Not all mobile operators support RCS, which further reduces the theoretical addressable base. However, our analysis indicates the active user count is rising, not falling, so Apple's move will only accelerate this trend given the interoperability between smartphone ecosystems.

The move also opens up further opportunities for telcos in the business messaging space. This is a fragmented market in which rich business messaging (RBM) sits alongside a collection of other options from application-to-person (A2P), effectively SMS, to WhatsApp Business and other OTT alternatives. We estimate that RBM volumes are currently running slightly over 20 billion messages per year. This equates to around 0.4 messages received per mobile subscriber each month via RBM. For context, the average person receives around 15 A2P messages a month – including delivery driver updates, medical appointment reminders and bank account balance notifications. However, aided by Apple's move into the RCS space, we expect the RBM count to rise 4–8× to 80–160 billion messages a year by 2029, or 1–2 per person per month. There is, however, a higher impact on margins given that RBM prices are, on average, higher than those of A2P messaging.

Source: GSMA Intelligence

**Apple has added another 540 million to the RCS addressable base**




## How to set up RCS on the network

The converged RCS standards and adoption by Google and now Apple mean that a new provisioning solution is required to authenticate handsets and other devices that support the technology. The provisioning requires an entitlement server that can authenticate and activate RCS on handsets and other devices running on the networks of mobile operators that support RCS. The entitlement server by Motive, for example, was designed in partnership with Google to manage the provisioning and is compliant with the RCS standard set by the GSMA and in line with Apple's ACME and Android's TS.43 specifications. The provisioning covers two main tasks:

- **Secure enablement:** Motive's entitlement server uses highly secure SIM-based authentication to activate RCS functionality on compatible devices, including video, emoji and other rich media. It is secure and prevents a hacker from getting into the middle of a cross-platform communication (an Android phone sending an RCS message to an iPhone and vice versa).
- **Scalable configuration:** The process of managing the provisioning of large-scale device volumes on a single network, which can run into the millions. The entitlement server provisions all relevant devices to be able to run RCS.

The entitlement server is a prerequisite to enable RCS for operators and will come into effect in 2025.

# Implications

## Mobile operators

- **The power of network effects –** Apple's blessing of RCS gives the messaging platform a material boost in the scale of people that can use it. The iPhone has a 30% global market share in the actual number of device owners (not just channel sales), and this will be higher – often double – in the US, Europe and other advanced economies. RCS is a telco-led initiative to try and wrestle back relevance and revenue in messaging that has migrated to WhatsApp and other OTTs. While there is little prospect of people substituting OTTs in favour of RCS, at least at a meaningful level, even a small uptick in usage matters because of the network effects that come from Apple-Android customer messaging now being possible. The business product (i.e. RBM) is more meaningful from a revenue (and profit) perspective, and demand has grown given ongoing grey market fraud and other security risks with A2P and OTT messaging options
- **Buy now, benefit now –** Operators that support RCS should ensure they have the right provisioning systems in place in 2025 to activate the service on devices running on their networks. The mix effect that will play out over the course of 2025 towards a higher share of iPhones running on iOS 18, combined with compatible releases from Samsung and other Android OEMs, means that having the entitlement server in place earlier will give operators a competitive advantage by being able to market RCS to customers. The entitlement server value, however, goes beyond RCS to include provisioning for other technologies, including eSIM, direct-to-cell (D2C) satellite connectivity, Open Gateway CAMARA APIs and security checks that use SIM-based authentication. The scale benefits of the provisioning system should not go unnoticed.

## OEMs

- **Android OEMs –** Android makes up the vast majority of the RCS addressable user base at around 90% (with Apple accounting for the other 10%) and virtually all of the active customers. However, with RCS now available on the iPhone, this opens the door to Android-iPhone messaging traffic and therefore provides an incentive to innovate and improve the product. Google has the most influence on the RCS trajectory but it can and should leverage input from Samsung, and indeed Apple, on how to upgrade features to maintain relevance given the range of OTT options.
- **Apple –** RCS is a complementary platform to iMessage, the native client for iPhone-to-iPhone messaging. RCS adoption also helps preempt compliance obligations stemming from the EU's Digital Markets Act, which places requirements on large tech companies for interoperability in certain digital service areas, including messaging. Keeping up with RCS standards changes in future iOS updates will be important, alongside alignment with entitlement server platforms so that future iPhone, iPad and Apple Watch models are set up for seamless bootstrapping on the networks of telcos that support RCS.

## Author

**Tim Hatt, Head of Research and Consulting**