



# RICH COMMUNICATION SERVICES: THE UNIVERSAL ANSWER FOR ADVANCING OPERATOR MESSAGING



Headquarters United States and Ireland

Type Private sector

Web Site www.interoptechnologies.com

Employees 100+ people in three countries

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### MARKET OVERVIEW

Smartphones have become essential to modern day society and advances in technology have quickly evolved how consumers communicate and share information. While the launch of traditional voice and text messaging may have been revolutionary two decades ago, today's subscriber expects a seamless connection to their friends and family, the businesses they love and the social networks they use most often. This is exciting news for mobile operators, as the industry embarks on a global messaging transformation that will undoubtedly provide new revenue opportunities and increased customer insight.

As we've seen by the extraordinary rate at which subscribers have adopted over the top (OTT) messaging apps, the demand for richer communications is already here. Luckily, without universal application profiles, these apps ultimately limit the end-user from communicating with any contacts outside of those that use the same app. Mobile operators can take advantage of this change in end-user habits by leveraging the reach of SMS, while providing native Rich Communication Services (RCS).

RCS is an advanced communication solution that transforms traditional voice and text messaging by incorporating enhanced features like 1-to-1 messaging, group chat, audio messages, location and file sharing, video sharing, enriched voice calling, as well as enhanced A2P capabilities. While RCS has been around for almost a decade, early attempts by operators to adopt the solution were delayed due to fragmented standards, lack of interoperability and the inability to provide subscribers with RCS-enabled clients. Today, the GSMA's RCS Universal Protocol (UP) Initiative has provided the mobile industry with universal standards and the interoperability operators needed to cross networks. Furthermore, with major device OEMs and interconnect hub providers supporting RCS, operators will now be able to deliver a secure and unified messaging experience across the entire Android ecosystem.



# INTEROPERABILITY AND THE RCS UNIVERSAL PROFILE

Interoperability and testing for RCS is key to its success and requires proven capabilities. That's why Interop Technologies is proud to be one of the most accredited RCS service providers globally. This formal statement of GSMA Accreditation certifies that Interop's RCS solution is compliant with the universal RCS specifications and is interoperable with other devices, clients and operator services, as demonstrated by passing a series of rigorous tests.

By selecting an accredited provider like Interop Technologies, operators who launch RCS today can be assured that their solution interoperates with RCS-enabled clients and operator networks, and will be continually upgraded as standards updates evolve in the RCS ecosystem. Interop's RCS solution is fully compliant with the GSMA's UP 1.0, 2.0, 2.1 and 2.2 specifications.

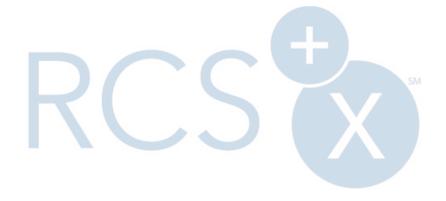
# STANDARDS DEVELOPMENT:

- GSMA development of RCS specifications:
  RCS-e, RCS5.0 UNI, RCS 5.0 NNI, RCS 5.1 UNI
  RCS 6.0 UNI
  RCS UP 1.0
  2.0, 2.1 and 2.2
- SIMPLE IM, CPM, Device Management, and other enablers
- GSMA and OMA IOP activities for RCS functionality
- RCS API and OMA API programs

#### ADDITIONAL INTEROPERABILITY

#### PRODUCTS:

- OEM Handsets
- Andriod and iOS Clients
- RCS APIs
- IMS Core
- RCS International Interconnect





"The Universal Profile makes this acceleration and take-up by end users a much simpler exercise for operators, simplifying the evolution of SMS and voice. It opens up that whole new realm of revenue possibilities but operators must think forward, accelerate their messaging strategies now or risk missing out on those new revenues."



- GSMA, Network 2020



"Very early on we identified prerequisite IMS as both a financial and technical hurdle many operators would face when deploying RCS. At the same time, we understood the need for a standards-based RCS solution that would support interworking with existing services, such as SMS and MMS. So we designed a solution that is standards-based, deployable with or without IMS, and which seamlessly integrates with SMS and MMS."

 Steve Zitnik, EVP and Chief Technology Officer



# NETWORK-BASED INTERWORKING AND PROTOCOL FUNCTIONALITY

Interop Technologies understands the importance of developing an RCS solution that enables operators to offer IMS-based standards including network-based interworking to legacy protocols such as SMS and MMS without the need for an IMS Core to be deployed prior to service launch.

In 2011, Interop was the first in the wireless industry to announce and offer RCS without the need for an operator-owned IMS core. This solution was the first of its kind without IMS to provide full RCS compliance and seamless client integration.

In 2012, Interop further enhances its RCS solution and becomes the first to introduce and demonstrate full backwards compatibility and legacy interworking on a live carrier network. This advancement enabled mobile devices connected to the Interop RCS solution to exchange messages with other devices, regardless of whether those devices used RCS or SMS/MMS technology. This revolutionary solution helped to bridge the gap between legacy and next-generation messaging through network-based interworking gateways.

In 2014, the United States Patent and Trademark Office officially recognized Interop's RCS solution as a distinctly differentiated technology in the mobile communications industry by granting Interop intellectual property rights pertaining to RCS without IMS and RCS interworking with the legacy network.

In 2017, the United States Patent and Trademark Office granted two additional U.S. patents on Interop's RCS technology. These U.S. patents protect Interop's RCS to RCS technology, and Legacy to RCS technology, further demonstrating Interop's ongoing commitment to finding better ways to innovate and migrate operators to advanced mobile communication technologies.

In 2018, Interop's RCS solution was among the first to receive Triple Accreditation for Full UP 1.0 from the GSMA.

In 2019, Interop became the first Rich Communication Services (RCS) solutions provider to achieve the most current Universal Profile (UP) 2.0 Application-to-Person (A2P) Accreditation from the GSMA.

### RCS OPENS REVENUE POTENTIAL

Through the implementation of RCS, operators have the opportunity to combat revenue losses, provide subscribers with the best experience possible, and start to evolve their messaging as a platform (MaaP) to diversify revenue streams through new innovative services.

#### MESSAGING AS A PLATFORM: THE OPERATOR OPPORTUNITY

With subscribers adopting new technologies at staggering rates, industry leaders have recognized the potential for future applications and an all-new services model that will be built upon the advanced messaging capabilities of RCS. With Interop's RCS Business Messaging platform, operators can begin to regain control of their subscriber network and quickly offer the next generation of desired features and functionality through RCS A2P services.

By implementing RCS now, operators can begin to provide subscribers with native and rich messaging functionality that will then pave the way for a range of future service offerings through Chatbots, Plugins, Artificial Intelligence and third-party industrial applications.



"As data network speeds increase, smartphone prices tumble, penetration soars and OTT messaging apps proliferate, the mobile industry cannot afford to wait with Advanced Messaging."

-GSMA, Network 2020



"Operators' support for RCS is growing as the revenue potential becomes apparent. Whilst the technology has been unsuccessful as a P2P messaging channel, its capabilities as an A2P service will prove popular with advertisers".

- Sam Barker, Juniper Research

















## RCS TO A2P USE CASES

#### **TRAVEL**

Speak with an airline booking or travel agent through a conversational interface.

#### **MOBILE BANKING**

Speak with a banking agent or investment officer through conversational interface.

#### **CUSTOMER SERVICE & SUPPORT**

Personalized support through real-time messages with companies you do business with.

#### **TRANSLATION**

Transform your text messages into any language as you time with translation services.

#### **PAYMENTS**

Securely pay for bills, products and services.

Utilize geo-location and calendar-based payment services.

#### **LOCAL TRACKING**

Quickly share your location with friends and family so they know where you are.

#### **SHOPPING**

Purchase goods and services, send messages directly to the seller, and coordinate and track shipping with real-time alerts.

#### **GEO LOCATION & CALENDAR SERVICES**

Use location tracking, calendar syncing and public APIs in real-time.

# FIVE REASONS TO LAUNCH RCS

# RCS...

- 1. Provides a native and rich communications experience to subscribers.
- 2. Unlocks monetization opportunities by connecting subscribers to brands they love.
- **3.** Drives stickiness and relevance for operators through increased quality of service and experience.
- **4.** Places operators' native messaging back into the mobile life of subscribers.
- 5. Ensures reach for all subscribers as networks evolve.

#### Resources:

- -Mobilesquared: Global A2P Messaging Forecasts by Country, 2015 2020.
- -GSMA, Network 2020.



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