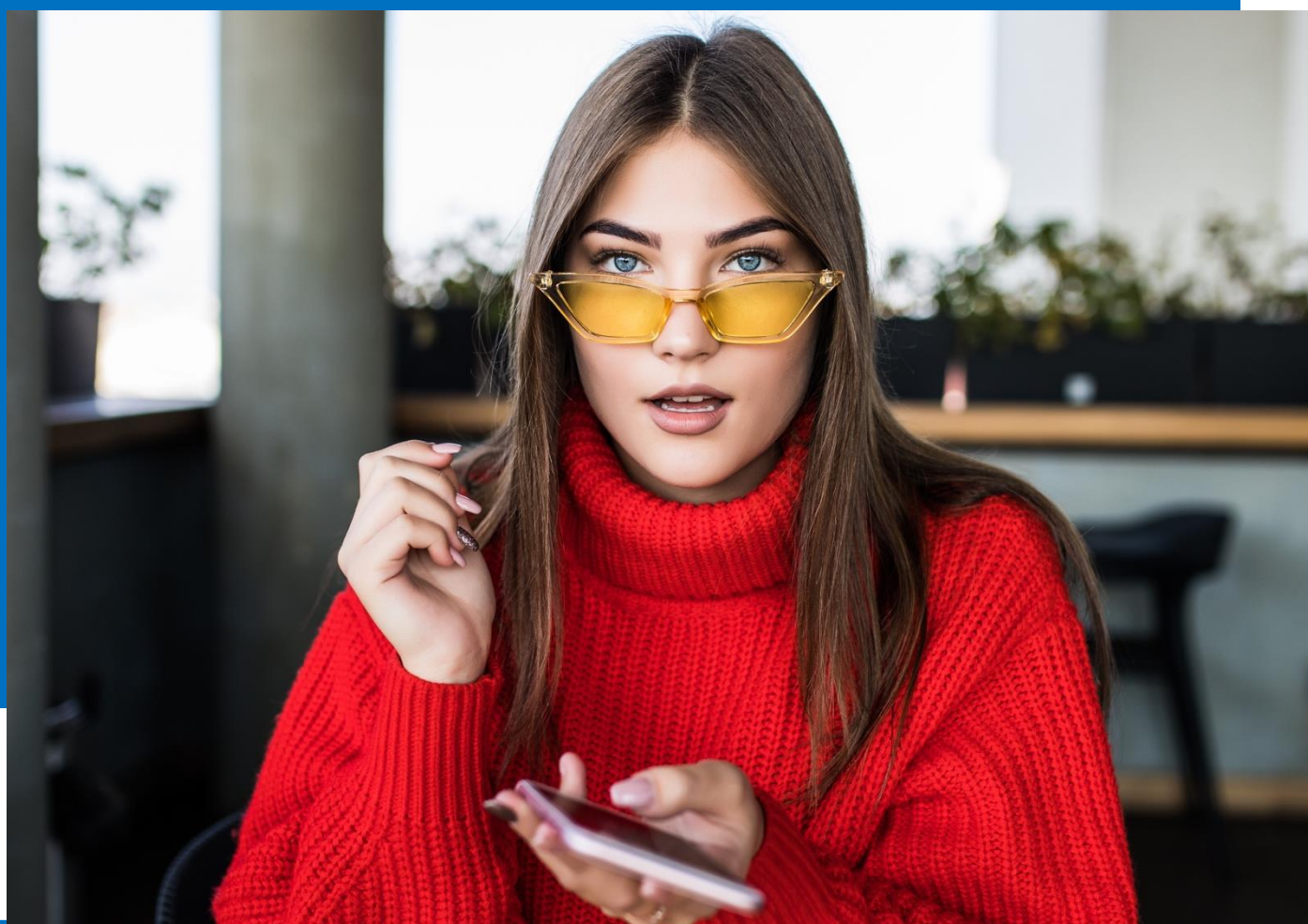


RCS Charging Models



November 2022

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RCS Business Messages – Commercial Templates for Conversational Commerce

1. Overview

The next generation of SMS is here. Rich Communication Services (RCS) is becoming the go-to messaging technology for enterprises looking for the most effective touchpoints to engage customers and promote their brands. RCS is a new, visually appealing messaging channel that offers rich functionalities to enable more engaging customer journeys. Businesses are using RCS to build strong relationships with their customers through branded two-way communication.

Conversational commerce assumes multiple messages are exchanged between enterprises and their customers, so session-based models are introduced to encourage conversational user journeys.

Currently, different session models are rolled out across markets. The lack of a unified session definition framework and guidelines makes it difficult for enterprises to understand cost and conduct their budgeting. At the same time, the messaging providers face challenges when integrating with their billing systems.

Whatever the product or service in question (and particularly when entering an already crowded market) simplicity has proven time and again to be the winning formula.

With the help of its members, MEF has created this document to help everybody in the RCS value chain (carriers, messaging partners, enterprises) fully understand the commercial aspects of conversational commerce.

Antitrust disclaimer – Mobile Ecosystem Forum is a global trade body that acts as an impartial and authoritative champion for addressing issues affecting the broadening mobile ecosystem. All work carried out within MEF working groups follows strict antitrust policy. Please note therefore that whilst this document categorically does not endorse any particular business model, it is intended to provide great insight. This document should be seen as an overview of the prevailing conversational business models and use cases.

2. Introduction to RCS Business Messaging

RCS is an IP-based messaging service provided to mobile phone users through mobile operator networks. It is used for both Person to Person (P2P) and Application to Person (A2P) communications and incorporates the global reach of SMS with the rich features of chat apps (such as WhatsApp, Viber, and Facebook Messenger) to deliver interactive, compelling experiences to users.

RCS-enabled A2P communication is known as RCS business messaging, and it's used to deliver branded, interactive mobile experiences that improve and empower how people and businesses communicate. For the remainder of this paper, when we refer to RCS, we mean RCS business messaging. Through a rich feature set that allows the creation of branded messages incorporating multimedia, suggested reply to buttons, barcode delivery, click-through options and more, brands now have a new way to develop relationships through two-way communication.

3. RCS Live Repository

New RCS business messaging campaigns are being developed and delivered to consumers with interesting new insights on return and engagement. It is important to trace the development and best practices in this exciting time for conversational commerce over the RCS channel.

The [RCS Live Repository](#) is a replacement and an extension of the [RCS Use Cases](#) document published by MEF in January 2022. It's an open collaboration between the industry. It will be updated each time members and industry players share information with us. Please send us information about your campaign via email to rcs@mobileecosystemforum.com.

4. The Rise of Conversational Commerce

Conversational commerce is a marketing strategy that aims to integrate aspects of shopping with messaging to make the buying process easier for consumers. Essentially, conversational commerce takes advantage of customer service to make the buyer's journey a two-way conversation instead of a one-way funnel. The integration of shopping and messaging enables consumers to effortlessly communicate with brands to assist with their purchase decisions.

Conversational commerce is more than support. Conversational commerce can bridge the gaps in the customer journey where the consumer requires an exchange. It is why customer care and professional community management are of the utmost importance for brands using social media (and commerce) today.

It enables consumers to ask questions, request personalised recommendations, read reviews, and make purchases by communicating with human representatives or AI chatbots at every stage of the buyer's journey. By making the buying process easier for consumers, brands can increase sales and customer satisfaction.

Juniper report forecasts that RCS, with its rich and interactive features, will be the fastest-growing conversational commerce channel over the next five years. The growth is attributed to support from operators and the growing interest of enterprises who want to benefit from the channel.

5. Conversational Business Models

Building on top of the RCS commercial models for consideration elaborated in [MEF RCS Best Practices v2.0](#) this document is focused on defining a framework to uniquely describe any session models. Individual messages between an enterprise and a customer are bundled into a conversation 'session' and the session is the billable event, not the individual messages. This allows the enterprise to make full use of conversational chatbots and RCS to form a better relationship with the customer.

The Unified Session Definition framework will consist of describing the common parameters and showing them in action to define various session models currently in use.

5.1. Session Definition Parameters

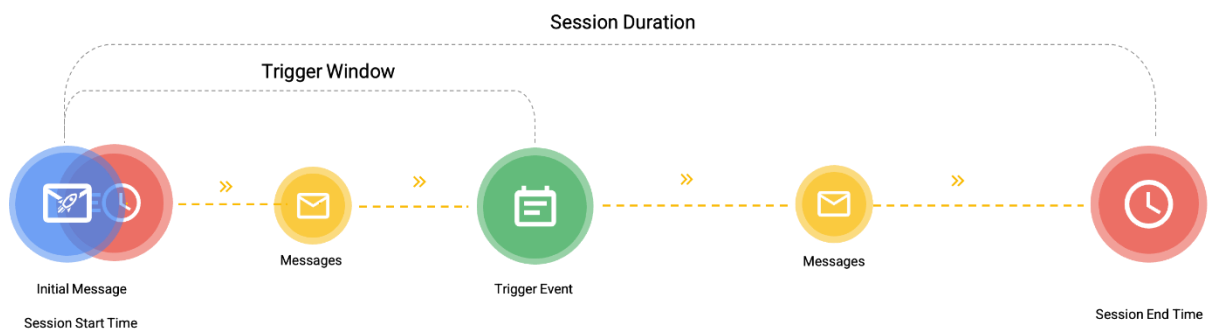
The following list of common terms is used when describing a session.

Term	Definition
A2P Message	A message sent from Brand to User.

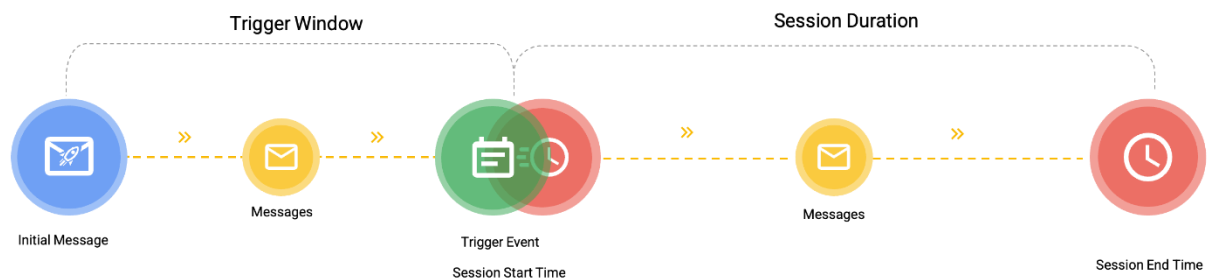
P2A Message	A message sent from User to Brand.
Session	A set of messages grouped together as a unit for the purpose of charging.
Initial Message	<p>The message leading up to the "Trigger". The Initial Message can be</p> <ul style="list-style-type: none"> • An A2P message that is not part of an existing Session, or • A P2A message that is not part of an existing Session, or • An A2P or P2A message that is not part of an existing Session, • None (for a Session that is triggered by a P2A Message or an A2P Message).
Trigger Event	<p>An event that "triggers" or "starts" a Session. The trigger can be:</p> <ul style="list-style-type: none"> • A message sent in response to the Initial Message. It can be: <ul style="list-style-type: none"> ◦ A P2A Message in response to the Initial A2P Message. ◦ An A2P Message in response to the Initial P2A Message. ◦ A P2A or A2P Message in response to the Initial A2P/P2A Message. • The Nth A2P Message sent after the Initial A2P Message. • The Nth P2A Message in response to the Initial A2P Message.
Trigger Window	Duration of the window from the Initial Message, within which the Trigger Event should happen to "trigger" or "start" the Session.
Session Start Time	<p>The start time of the Session. The Session Start Time can be:</p> <ul style="list-style-type: none"> • The time of the Trigger Event, or • The time of the Initial Message.

Lookback Count	<p>Lookback count is the number of A2P messages before the Session Start Time that are considered as part of the Session.</p> <p>This is relevant only when the Session Start Time is the time of the Trigger Event.</p>
Session Duration	<p>Duration of the session from the "Session Start Time". It can be:</p> <ul style="list-style-type: none"> • A period specified in terms of number of hours, or • Period till end of the calendar day. • Period till end of the calendar month.
Session Message Limit	<p>The maximum number of A2P Messages allowed in a session. Most Session definitions being used in the ecosystem do not have a hard Session Message Limit. Instead, the maximum number of messages in Session is enforced as part of Fair Use Policy.</p>
A2P Single Message	<p>An A2P Single Message is an A2P Message that isn't part of a Session.</p>
P2A Single Message	<p>A P2A Single Message is a P2A Message that isn't part of a Session.</p>

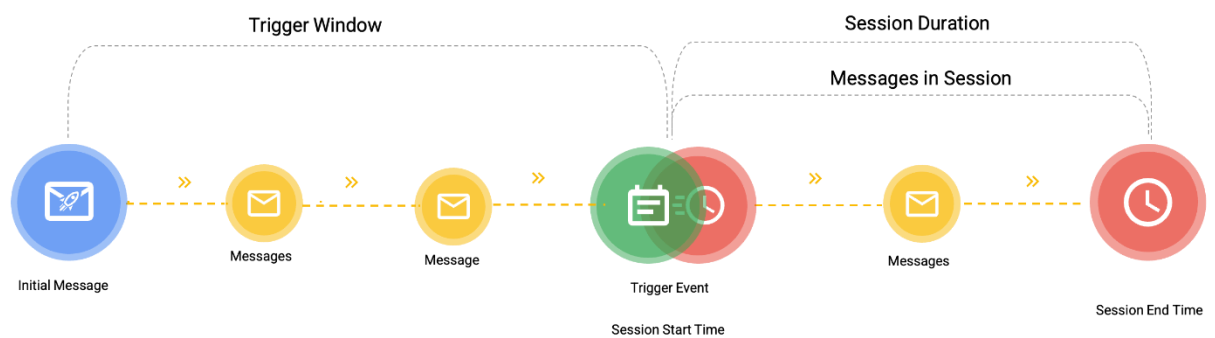
5.1.1 Charging Model – Session Start Time = Time of Initial Message



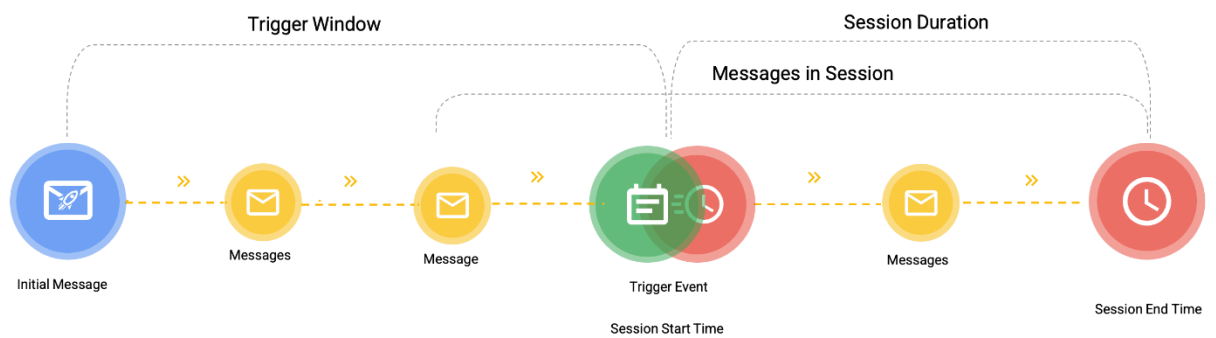
5.1.2 Charging Model – Session Start Time = Time of Trigger Event



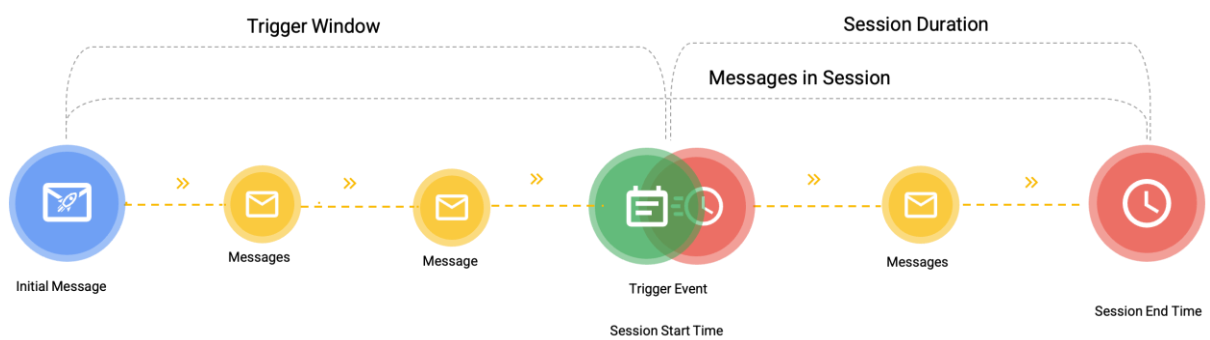
5.1.2.1 Lookback Count = 0



5.1.2.2 Lookback Count = 1

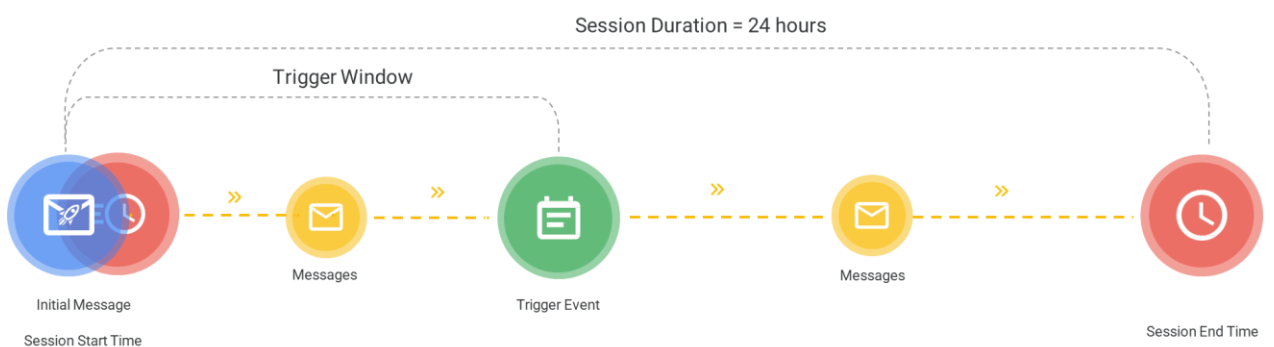


5.1.2.3 Lookback Count = ∞

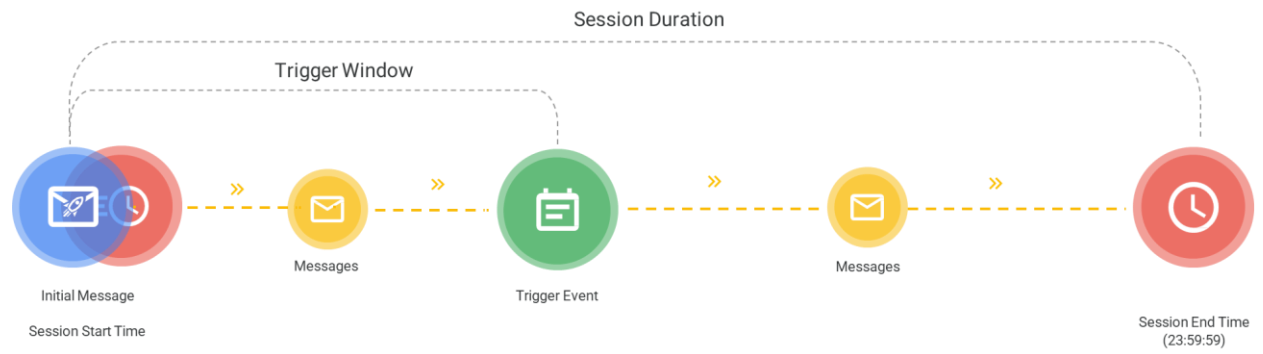


5.1.3 Session Duration

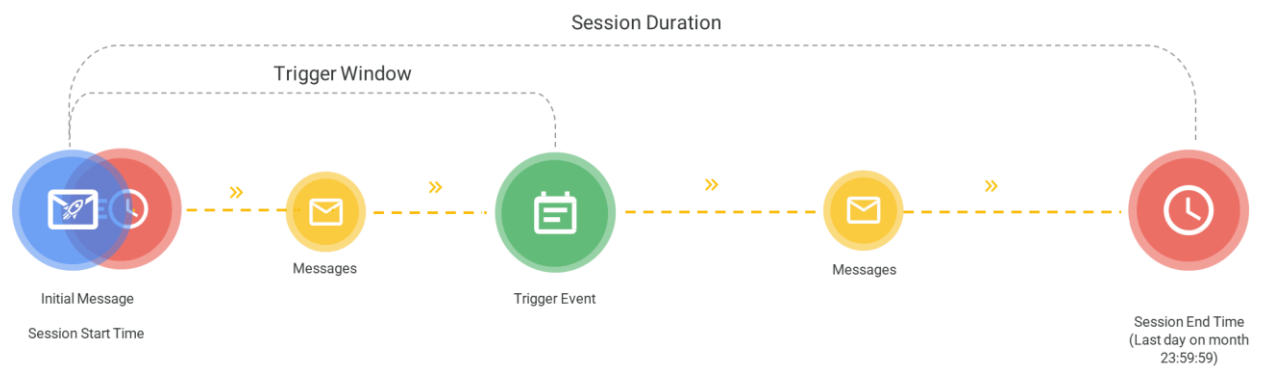
5.1.3.1 Session Duration = N hours



5.1.3.2 Session Duration = Calendar Day



5.1.3.3 Session Duration = Calendar Month



5.2 Common Models with Unified Session Definition

Sessions with similar features are grouped together for clarity with the main differentiating factor being how they are triggered – by Brand or a response from either Brand or the User.

5.2.1 Models Triggered by Response

Parameters	Model R1	Model R2	Model R3	Model R4	Model R5	Model R6
Model Name	Response Triggered, Fixed Duration from Response, No Look Back	Response Triggered, Fixed Duration from Response, Single Look Back	Response Triggered, Fixed Duration from Response, Unlimited Look Back	Response Triggered, Fixed Duration from Initial Message	Multiple Response Triggered, Fixed Duration from Initial Message, No Look Back	Multiple Response Triggered, Fixed Duration from Initial Message, Single Look Back
Key Attributes	<ul style="list-style-type: none"> Session is triggered by a response to an Initial message from the other party. Symmetric definition - can be User Initiated or Brand Initiated. 				<ul style="list-style-type: none"> Session is triggered by Nth response by User to an Initial message from Brand. Asymmetric - Brand Initiated followed by User Response 	
	<ul style="list-style-type: none"> Session starts from Trigger Event (Response) 			<ul style="list-style-type: none"> Session starts from Initial Message 	<ul style="list-style-type: none"> Session starts from Trigger Event (Nth Response) 	

Initial Message	An A2P message or a P2A message.				An A2P message	
Trigger Event	A P2A or A2P Message in response to the Initial A2P/P2A Message.				Nth P2A Message in response to the Initial A2P Message,	
N	N/A (Implicit value of N = 1)				Typical value: 2 to 4	
Trigger Window	Typical range: 4 to 24 hours					
Session Start Time	The time of the Trigger Event.			The time of the Initial Message.	The time of the Trigger Event.	
Lookback Count	0	1	∞	N/A	0	1
Session Duration	Typical range: 4 to 24 hours.					

5.2.2 Models Triggered by Brand Initiated Messages

Parameters	Model B1	Model B2	Model D1	Model M1
Model Name	Brand Initiated, Fixed Duration from Initial Message	Brand Initiated, Session defined by Calendar Day	Daily Active User Model (special case of Model B2)	Monthly Active User Model (like Model D1, but with Session Duration as Calendar Month)

Key Attributes	<ul style="list-style-type: none"> Session is triggered by Nth A2P message from Brand Asymmetric definition - Brand Initiated. 	<ul style="list-style-type: none"> Session is triggered by Nth A2P message from Brand Asymmetric definition - Brand Initiated. 	<ul style="list-style-type: none"> Session is triggered by 1st A2P message from Brand Asymmetric definition - Brand Initiated. 	<ul style="list-style-type: none"> Session is triggered by 1st A2P message from Brand Asymmetric definition - Brand Initiated.
	<ul style="list-style-type: none"> Session starts from Initial Message 		<ul style="list-style-type: none"> Session starts from Initial Message 	Session starts from Initial Message
Initial Message	An A2P message.		An A2P message.	An A2P message
Trigger Event	Nth A2P Message starting with the Initial A2P Message.		1st A2P Message.	1st A2P Message
Trigger Window	Typical range: 4 to 24 hours	Calendar Day	Calendar Day	Calendar Month
N	Typical Range: 2 to 5		N = 1	N = 1
Session Start Time	The time of the Initial Message.	The time of the Initial Message/Start of Calendar Day (same).	The time of the Initial Message/Start of Calendar Day (same).	The time of the Initial Message/Start of Calendar Month (same).
Look Back Count	N/A		N/A	N/A
Session Duration	Typical range: 4 to 24 hours (Typically same as Trigger Window)	Calendar Day	Calendar Day	Calendar Month

5.2.3 Real Life Examples Described Using Unified Session Definition Framework

Parameters	Example 1	Example 2	Example 3	Example 4	Example 5	Example 6
Description	The session starts when either the User (MO) or Brand (MT) responds within 8h. The session duration is 2h.	Session is triggered by a response to an Initial message from the other party. 24 hours Response Time, 24 hours Session Time. Single Lookback.	Unlimited messages within the next 24h from the second User (MO) message after receiving the first Brand (MT) message. Response time window to start the session is 24h.	4 or more Brand (MT) messages within 4h time frame is considered a session. The session starts with the first Brand (MT) message. Each Brand (MT) message has a small transaction fee.	The session starts with the 6th Brand (MT) message within the same day.	Session triggered by P2A Message; Session extended every time there is a new P2A message.
Initial Message	An A2P message or a P2A message.	An A2P message or a P2A message.	An A2P message.	An A2P message	An A2P message.	NULL
Trigger Event	<ul style="list-style-type: none"> P2A Message in response to the Initial A2P Message, or An A2P Message in response to 	<ul style="list-style-type: none"> P2A Message in response to the Initial A2P Message, or An A2P Message in response to 	The Nth (N=2) P2A Message in response to the Initial A2P Message.	The Nth (N=4) A2P Message starting with the Initial A2P Message.	The Nth (N=6) A2P Message starting with the Initial A2P Message.	Any P2A Message.

	the Initial P2A Message	the Initial P2A Message				
N	1	1	2	4	6	N/A
Trigger Window	8 hours.	24 hours	24 hours	4 hours	End of day	N/A
Session Start Time	The time of the Trigger Event.	The time of the Trigger Event.	The time of the Trigger Event.	The time of the Initial Message.	The time of the Initial Message.	The time of the Trigger Event.
Session Duration	2 hours.	24 hours	24 hours	4 hours	End of Day.	24 hours
Look Back Count	0	1	0	N/A	N/A	N/A

5.3 Commercial Model for A2P Single Message Based on Type of Message and Use Case

Another factor included in the commercial model for sending RCS messages – particularly A2P Single Messages that are not part of a Conversation – is the type of message, its size and, in some situations, the use case. Several carriers have identified a few different categories of RCS messages that are being charged at par with SMS. These include:

- Basic Message: An A2P Single Message that is a text message that would fit into a single SMS (maximum of 160 characters ASCII/GSMA encoding, or 70 characters Unicode)
- OTP Use Case: An OTP sent as an RCS message, even if it includes a rich card (to represent the brand logo) or a suggested action/reply for actions such as “Confirm the transaction”, or “Report suspected fraud”.
- Messages sent by a brand using existing SMS API (SPMM or a REST SMS API) but delivered as an RCS message.

5.4 Commercial Model Based on Domestic/International Classification of Brand

In many markets, including India, South and South-East Asia and Africa, there is differential pricing for A2P SMS sent by domestic and international brands. Carriers in these countries/regions are implementing differential pricing for RCS Business Messaging based on the domestic or international classification of the brand.

6. Conclusion

RCS offers rich features for delivering branded, interactive conversational messaging experiences that improve and empower communications between businesses and their customers or users.

Currently, different session models are rolled out across markets. The lack of a unified session definition framework and guidelines makes it difficult for enterprises to understand costs and budget reliably. Similarly, this complicates the implementation of messaging providers' billing systems. Therefore, to ensure RCS market success, commercial models are required which provide the basis for wholesale message providers to realise the value of the RCS services delivered to their enterprise customers.

This report establishes a common vocabulary and example models providing a sound basis for clear understanding between players in the value chain. Common marketing, transactional and ongoing relationship scenarios have been considered and are well supported.

These reference commercial models and vocabulary can be used directly or simply used as a benchmark for comparing new model innovations. Such a common vocabulary and benchmark models allow all players in the value chain to negotiate terms clearly and quantify costs thus embarking on conversational commerce with commercial certainty. [Whilst these models can be used throughout the value chain they are aimed primarily at the interface between Messaging Application Providers and Enterprises. Other interfaces such as MNO to Application Provider and Business to Customer can adopt these or different models provided the parties accept the associated potential gains and losses.]

The frameworks described here are built around 'sessions', a session is a collection of messages between an organisation and its user. Sessions recognise that the value in conversational messaging is in the exchange rather than in the individual messages.

A common set of parameters is defined with some example values, however, the values used in actual market cases should be chosen by the provider and customer to suit the particular scenario.

In summary, this report provides a framework of understanding as the market migrates from the massively successful per-message charging of era SMS to what should be an even more successful era of conversational commerce built on the sound foundation of RCS business messaging.

7. Contributing Members

- Cisco IMI
- Dotgo
- DT
- Infobip
- Mobilesquared
- Ian Germer (Independent Consultant)
- Telefonica

MEF is a not-for-profit trade association with over 150 members globally. We provide our members with a range of services covering insight, interaction, and impact. For more details, please visit www.mobileecosystemforum.com



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