



## NNI Parameter forms

Version 1.0

28 May 2019

*This is a Non-binding Permanent Reference Document of the GSMA*

---

### **Security Classification: Confidential - Full, Rapporteur, Associate and Affiliate Members**

Access to and distribution of this document is restricted to the persons permitted by the security classification. This document is confidential to the Association and is subject to copyright protection. This document is to be used only for the purposes for which it has been supplied and information contained in it must not be disclosed or in any other way made available, in whole or in part, to persons other than those permitted under the security classification without the prior written approval of the Association.

### **Copyright Notice**

Copyright © 2019 GSM Association

### **Disclaimer**

The GSM Association ("Association") makes no representation, warranty or undertaking (express or implied) with respect to and does not accept any responsibility for, and hereby disclaims liability for the accuracy or completeness or timeliness of the information contained in this document. The information contained in this document may be subject to change without prior notice.

### **Antitrust Notice**

The information contain herein is in full compliance with the GSM Association's antitrust compliance policy.

## Table of Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
1.1	Overview	3
1.2	Scope	3
1.3	Abbreviations	3
1.4	References	3
<b>2</b>	<b>NNI parameters for RCS Services</b>	<b>4</b>
2.1	RCS Interworking form	4
<b>3</b>	<b>NNI parameters for VoLTE service</b>	<b>4</b>
3.1	VoLTE Interworking form	4
<b>Annex A</b>	<b>Document Management</b>	<b>5</b>
A.1	Document History	5
A.2	Other Information	5

## 1 Introduction

### 1.1 Overview

This document is intended as a repository for all Networks Group, NG related interworking forms to permit simplified access to the forms for all parties. The goal of the forms is to minimize interoperability issues when deploying Internet Protocol Multimedia Subsystem, IMS services between Service Providers by outlining comprehensive service parameters to be exchanged when establishing interworking.

### 1.2 Scope

This document contains the interworking forms developed for IMS Service Parameters. The forms are intended to be used by Service Providers when establishing interworking.

The detailed SIP/SDP (Session Initiation Protocol/ Session Description Protocol) profile across the inter-IMS NNI (Network to Network Interface) in support of Voice over LTE, Long Term Evolution (VoLTE), Video Call, SMSoIP (SMS over IP), VoWiFi (Voice over WiFi) and RCS (Rich Communication Services) services can be found in IR.95 [6].

### 1.3 Abbreviations

Term	Description
IMS	Internet Protocol Multimedia Subsystem
LTE	Long Term Evolution
NNI	Network-Network Interface
PRD	Permanent Reference Document
RCS	Rich Communication Services
SDP	Session Description Protocol
SIP	Session Initiation Protocol
SMSoIP	SMS over LTE
VoLTE	Voice over LTE
VoWiF	Voice over WiFi

### 1.4 References

Ref	Doc Number	Title
1	IR.65	GSMA PRD IR.65 - "IMS Roaming and Interworking Guidelines"
2	IR.90	GSMA PRD IR.90 - "RCS Interworking Guidelines"
3	IR.92	GSMA PRD IR.92 - "IMS Profile for Voice and SMS"
4	NG.103	GSMA PRD NG.103 - "VoLTE - RCS Roaming and Interconnection Guidelines"
5	RCC.54	GSMA PRD RCC.54 - "RCS Interconnection Guidelines"
6	IR.95	GSMA PRD IR.95 - SIP-SDP Inner-IMS NNI Profile

## 2 NNI parameters for RCS Services

GSMA PRD RCC.54 provides guidelines for interconnection between Service Providers for the purposes of interchanging Rich Communications Services (RCS) traffic originating from and terminating to the respective Service Providers' customers. To facilitate the interconnection between Service Providers the following interworking form for RCS services was developed as a reference.

### 2.1 RCS Interworking form

This interworking form covers the NNI parameters for RCS services between Service Providers.



Interworking form  
for RCS

## 3 NNI parameters for VoLTE service

GSMA PRD IR.65 [1] and PRD NG.103 [4] provide guidelines for interconnection between Service Providers for the purposes of interchanging VoLTE Service traffic originating from and terminating to the respective Service Providers' customers. To facilitate the interconnection between Service Providers the following VoLTE NNI form was developed as a reference.

### 3.1 VoLTE Interworking form

This interworking form covers the NNI parameters for VoLTE services between Service Providers.



VoLTE NNI form.xlsx

## Annex A Document Management

### A.1 Document History

Version	Date	Brief Description of Change	Approval Authority	Editor / Company
1.0	29 May 2019	New PRD (NG.118), Initial Version.	TG	Kathleen Leach (Sprint)

### A.2 Other Information

Type	Description
Document Owner	Network Group
Editor / Company	Kathleen Leach (Sprint)

It is our intention to provide a quality product for your use. If you find any errors or omissions, please contact us with your comments. You may notify us at [prd@gsma.com](mailto:prd@gsma.com)

Your comments or suggestions & questions are always welcome.