IMEI Database Application Forms
Version 12.0
10 December 2019

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1   Introduction

1.1   Overview

This document provides information to help Manufacturers with the completion and submission of the different application forms used within the GSMA IMEI Database that are defined and described in detail in this document.

Within this document references made to the "Manufacturer" also apply to the "Brand Owner".

Due to regulatory requirements in some countries, the GSMA requires that the Brand Owner selling the device should be identical to the company requesting and owning the TAC. This will help to avoid problems with regional regulators and customs agencies.

1.2   Scope

This document is restricted to the forms used within the GSMA IMEI database, these are:

- the Manufacturer Registration Application form
- the TAC Request form.

All forms MUST be completed in English.

Full details of the IMEI Allocation and Approval Process are available in PRD TS.06 and it is strongly recommended that TS.06 is completely read before registering a company and applying for TAC.

1.3   Definition of Terms

Term	Description
Brand Owner - BO	Brand Owners are Private Labels that neither design nor manufacture any products. These companies generally select and acquire existing products from Original Design Manufacturers (ODMs) who offer their off-the-shelf portfolio to their customers. Brand Owners / Private Labels sometimes also work through IDHs for their design requirements and Electronic Manufacturing Services (EMS's) for contract manufacturing. These companies market the procured products under their own brand names to the consumers
Electronic Manufacturing Services - EMS	Companies that provide manufacturing services to other companies including Original Equipment Manufacturers (OEMs) and Independent Design Houses (IDH's). EMS do not sell or market any product under their own brand
eUICC	A removable or non-removable UICC which enables the remote and/or local management of Profiles in a secure way (As defined in SGP.21 & SGP.22)
IMEI	International Mobile Equipment Identity
Independent Design House - IDH	Companies that have independent in-house design expertise and produce custom / reference designs for other companies including ODM's, OEM's, and EMS's but do not provide any manufacturing services to their customers neither do they sell or market any products under their own brand.
Original Design Manufacturer - ODM	Companies that design and manufacture products that are sold by other companies under their own brand names. The ODM's do not sell or market their products directly to the consumers

Original Equipment Manufacturer - OEM	Company that designs, manufacture, sell, and market products under their own brand name. Some OEM's only design their products while the manufacturing is outsourced to contract manufacturers, generally referred to EMS / ECM (Electronic Manufacturing Services / Electronic Contract Manufacturing).
PRD	Permanent Reference Document
RB	Reporting Body – these are the organisations that process the manufacturer / brand owner registration form and allocate the TAC (These are NOT automatic processes)
TAC	Type Allocation Code
UICC	As defined in ETSI TR 102 216

1.4   Document Cross-References

Ref	Document Number	Title
[1]	GSMA PRD TS.06	IMEI Allocation and Approval Process
[2]	3GPP TS.36.101	E-UTRAN: User Equipment radio transmission and reception
[3]	3GPP TS 38.101	NR: User Equipment radio transmission and reception

2   Manufacturer Registration Application Form

When a Manufacturer / Brand owner requires a TAC it must first register its company and contact details in the Database.

The following table shows the different fields that are required to be completed by a Manufacturer / Brand Owner when it registers its company in the GSMA IMEI Database.

Most of the requested information is Mandatory (M) however a few fields are Optional (O). Completion of the Optional fields will help with the verification of the manufacturer registration.

2.1   Company Details

M / O	Requested Information	Example of Completed Information	Notes
M	Company Name (Text Box)	*ABC Mobile Phones*	Only one company name is allowed per registration form.
M	The Registered Head Office Address (Text Box)	*55 High Street London*	
M	Country where the Head Office is located(Dropdown list)	*United Kingdom*	Select the country where your head office is located from the drop down list.
M	Office Phone Number (Text Box)	*+44 1234 567 890*	To be completed in an international format. This should be the head office main switch board phone number.

M	Company Registration Number (Text Box)	ABCD1234	This is a number obtained from your local authority when the company was first registered. A copy of this registration certificate will be requested by the RB.
O	Company Website (Text Box)	www.ABCM.co.uk	
O	ISO 9000 Certificate Allocation Body (Text Box)		The organisation issuing your ISO9000 certificate
O	ISO 9000 Certificate Number(Text Box)		
M	Do you manufacturer and sell devices under your own brand name?	Yes / No	
M	Do you manufacturer devices which are sold under other companies brand names?	Yes / No	
M	Do you sell device under your brand name, which are made by other manufacturers?	Yes / No	
M	Company Registered Brand Name (Text Box)	ABC	
M	Company Registered Brand Name certificate number		A copy of the brand registration certificate must be sent to the RB when requested.
M	My company is a GSMA Member	Yes / No	The GSMA offers a 10% discount to GSMA members. Eligibility will confirmed by the RB.
M	Are you aware of GSMA IMEI Allocation and Approval Process TS06	Yes / No	

2.2 Main Contacts Details (This should be a director or a senior manager of the company)

M / O	Requested Information	Example of Completed Information	Notes
M	Name (Title, First Name & Family Name(text boxes)	Mr Fred Flintstone	This person will be contacted to approve any changes to the second contacts details.
M	Job Title (Text Box)	Director	
M	Mobile Phone Number	+44 1234 567 890	To be completed in an international format. This should be the main contact's own phone number.
M	Email (Text Box)	fflintstone@ABC.com	

O	Comments (Text Box)	*I will be importing devices from China and I need to give the manufacturer my TAC*	

2.3 Second Contacts Details (This may be agent working for the registered company or may be the person tasked with requesting the TAC)

M / O	Requested Information	Example of Completed Information	Notes
M	Name (Title, First Name & Surname text boxes)	*Mr Fred Flintstone*	
M	Job Title (Text Box)	*Director*	
M	Mobile Phone Number	*+44 1234 567 890*	To be completed in an international format. This should be the contact's own phone number.
M	Email (Text Box)	*fflintstone@ABC.com*	
O	Comments (Text Box)	*I will be importing devices from China and I need to give the manufacturer my TAC*	

2.4 Completion of the Registration Form

M / O	Requested Information	Example of Completed Information	Notes
M	I accept, the Terms & Conditions on behalf of the company I work for (Check box)	Yes	Yes must be selected to proceed with the registration
		No	After confirmation, the application form will be terminated.
M	Submit, Reset & Back (Buttons)	Submit	This will send a notification to the RB that the registration application has been made.
		Reset	This will clear all of the information and it will need to be entered again.
		Back	This will take the applicant back to the previous page and the completed data will be cleared.

2.4.1 Additional Explanations of the registration form (If required)

Text to be added if/as required.

2.5   What happens next

Notification of the completed application form is automatically sent to the RB. The RB will verify the details that have been provided. If more information is needed the RB will contact the applicant.

When the form has been verified the applicant will be sent an email with its login details (manufacturer I.D. and password). This process is normally be completed by the RB within 2 working days.

The applicant can now login to the IMEI database, using these details, and request a TAC. See TS.06 for the full process details.

3   TAC Request Form

The TAC request form should be completed providing full details of the device that the TAC is to be used for, additional information like a technical specification may be requested by the RB before the TAC is allocated.

Most of the requested information is Mandatory (M) however a few fields are Optional (O). Completion of the Optional fields will help with the verification of the device for which the TAC is being requested.

3.1   Character Encoding

All fields in the database are stored in ASCII encoding and only printable ASCII characters (character codes 32 – 126) are permitted, subject to any further limitations/exclusions below.

3.2   Rules for the creation of the "Model Name", and "Marketing Name" fields

In order to improve the data with the IMEI Database the following rules are implemented with the database. These rules must be followed by all users of the IMEI Database when completing the TAC Request forms.

3.2.1   Mandatory Syntax Checks

The IMEI Database will check for syntax errors in new entries, this will be applied to all new entries or updates to existing entries.

3.2.2   Whitespace

- No entry SHALL contain leading or trailing spaces
- No entry SHALL contain 2 (or more) consecutive spaces

3.2.3   Forbidden Symbols

- No entry SHALL contain any of the following symbols:

`	¬	¦	£	$	€	%	^	&	*	@	~	#	<	>	?	=	|

- The following is a list of symbols that can be used as a single entry which is then followed by a letter Aa to Zz, or number 0 to 9. Two or more consecutive symbols as

listed below are not allowed. Combinations of symbols from the list below are also not allowed.

(	)	+	-	_	,	.	;	:	'	'	[	]	{	}	/	\	'	'

- No entry SHALL end with any of the following symbols:

(	'	[	{	/	\

- No entry SHALL start with any of the following symbols:

)	'	]	}	/	\

3.2.4   Length of Name

- Names must be between 1 and 50 characters long.

3.2.5   Forbidden Strings

- TBC, tbc, TBA, and tba are forbidden on their own, within single or double quotations

Not allowed

TBA	TBD	tba	TBC	tbc	"TBA"	'TBA'

3.3   Naming Consistency Check

When a new Model Name is added to the TAC Request Form that is similar to an existing name in the database, the database will offer the user a list of names that they have already used that match or are similar to the name they are entering.

The user can select one of the names from the list or confirm that they want to proceed with the name they have entered.

3.4   Details of the device the TAC will be used for.

M / O	Requested Information		Example of Completed Information	Notes
M	Applicant Name		*Mr Fred Flintstone*	
M	Applicant Email Address		*fflintstone@ABC.com*	
M	Brand Name (Pick list)		*ABC*	
M	Are you the	Yes		

	OEM?	No	*Mr B Rubbel* *Beadrock Manufacturing* *Shenzhen PRC* *b.rubbel@gmail.com*	If No then the details of the manufacturer (ODM) or design house (IDH) MUST be completed on TAC application form (Company Name, Address, Contact name, Contact email)
M	Equipment Type (Dropdown list)		Mobile Phone/Feature phone	For details of these different equipment types see TS.06
			Smartphone	
			Tablet	
			IoT Device	
			Wearable	
			Dongle	
			Modem	When "Modem" is selected no UICC or eUICC, removable or non-removable can be ticked. The following note is to be added to the TAC Certificate for "Modem": A Modem may support interfacing to multiple UICC form-factors described in ETSI TS 102 221 and ETSI TS 102 671, however not all of the UICC form-factors supported by the Modem may be used on the final device, which the Modem is used in. At the time the Modem is manufactured, it is unknown if the final device will support eUICC/UICC. It is also unknown if the eUICC/UICC in the final device will be accessible via a SIM slot or will be fixed into the device.
			WLAN Router	
M	Model Name (Text Box)		*Rock Mobile*	See section 3.1 and 3.2

M	Marketing Name (Text Box)	*Hard Rock, Rock Star*	This is the name that will be used for the sale of the device. More than one Marketing Name can be added with a comma between each name, max 3. Marketing/sales material and/or technical specifications are to be provided to the RB when requested to show these models are exactly the same. See section 3.1 and 3.2
M	Quantity of TAC Required (Dropdown list)	1	In normal circumstances 1 TAC (1,000,000 IMEI) is all that is required. However for production quantities in excess of 1,000,000 of the same device additional TAC can be requested.
		2	
		3	
		4	
		5	
O	Device Certification Bodies	CE, FCC, IC, GCF, PTCRB, CCC, Anatel, etc.	This should be a list of ALL the different organisations that the devices will be approved by. These should be listed with a comma between each organisation.
M	Operating System/Platform Supported (Dropdown list)	Android	"None" is automatically selected when the device type "Dongle", "Modem" or "WLAN Router" is selected. No manual selection is allowed. For more details see TS.06 section 8.0
		Android Wear	
		Bada	
		BlackBerry	
		CyanogenMod	
		Firefox	If the OS that you are using, is not listed, please contact the GSMA IMEI Database Helpdesk and they will review if it can be added. imeihelpdesk@gsma.com
		iOS	
		KaiOS	
		Linux	
		MAC OS	
		Nucleus	
		Proprietary OS	
		Phoenix	
		RTOS	
		S30	
		Sailfish	
		Symbian	
		ThreadX	

		TIZEN	
		UBUNTU	
		Windows	
		Windows Phone	
		YunOS (Aliyun)	
		None (Automatic selection ONLY)	

Other Radio Interfaces Supported			
M	Radio Interfaces	CDMA	
		3GPP2	
		Satellite	
		None	

Low Power Wide Area Network support.			
M	Does your device support EC-GSM-IoT?	Yes / No?	
M	Does your device support Cat-NB1?	Yes / No?	If "Yes" then select the Cat-NB LTE bands supported below. At least one FDD band MUST be selected. TDD Bands are optional
M	Does your device support Cat-NB2?	Yes / No?	If 'Yes' then Cat-NB1 is automatically ticked as well. If "Yes" then select the Cat-NB LTE bands supported below. At least one FDD band MUST be selected. TDD Bands are optional
O	Does your Cat-NB device support multicast.	Yes / No?	Must be completed if Cat-NB1 or Cat-NB2 is ticked.
O	**Cat-NB E-UTRA (LTE) FDD**	1	These bands are applicable to Cat-NB1 and Cat-NB2. If Cat-NB2 is selected, which implicitly selects Cat-NB1 the **same** selected bands from this list are applicable to BOTH Cat-NB1 and Cat-NB2
		2	
		3	
		4	
		5	
		6	
		7	

		8	
V12.0		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	
		17	
		18	
		19	
		20	
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		23	
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		25	
		26	
		27	
		28	
		29	
		30	
		31	
		32	
		65	
		66	
		67	
		68	
		69	
		70	
		71	
		72	
		73	
		74	
		75	
		76	

O	Cat-NB E-UTRA (LTE) TDD	33	These bands are applicable to Cat-NB1 and Cat-NB2. If Cat-NB2 is selected, which implicitly selects Cat-NB1 the **same** selected bands from this list are applicable to BOTH Cat-NB1 and Cat-NB2
		34	
		35	
		36	
		37	
		38	
		39	
		40	
		41	
		42	
		43	
		44	
		48	
		50	
		51	
M	Does your device support Cat-M1?	Yes / No?	If "Yes" then select the Cat-M LTE bands supported below. At least one FDD **and** one TDD band MUST be selected.
M	Does your device support Cat-M2?	Yes / No?	If 'Yes' then Cat-M1 is automatically ticked as well. If "Yes" then select the Cat-M LTE bands supported below At least one FDD **and** one TDD band MUST be selected.
O	Cat-M E-UTRA (LTE) FDD	1	These bands are applicable to Cat-M1 and Cat-M2. If Cat-M2 is selected, which implicitly selects Cat-M1 the **same** selected bands from this list are applicable to BOTH Cat-M1 and Cat-M2
		2	
		3	
		4	
		5	
		6	

		7	
		8	
		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	
		17	
		18	
		19	
		20	
		21	
		22	
		23	
		24	
		25	
		26	
		27	
		28	
		29	
		30	
		31	
		32	
		65	
		66	
		67	
		68	
		69	
		70	
		71	
		72	
		73	
		74	
		75	
		76	

O	**Cat-M E-UTRA (LTE) TDD**	33	These bands are applicable to Cat-M1 and Cat-M2. If Cat-M2 is selected, which implicitly selects Cat-M1 the **same** selected bands from this list are applicable to BOTH Cat-M1 and Cat-M2
		34	
		35	
		36	
		37	
		38	
		39	
		40	
		41	
		42	
		43	
		44	
		48	
		50	
		51	
M	Does your Cat-M device support multicast.	Yes / No?	Must be completed if Cat-M1 or Cat-m2 is ticked.
O	Is LTE Category supported in the device?	Yes / No?	If UE supports E-UTRA (LTE) FDD and/or E-UTRA (LTE) FDD then at least 1 of the following must be ticked. Note: This capability is not applicable to UE only supporting Cat-NB. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
M	0		
M	1		
M	2		
M	3		
M	4		
M	5		
M	6		
M	7		

M	8		
M	9		
M	10		
M	11		
M	12		
O	Does your device signal explicit LTE DL Category?	Yes / No?	If Yes then at least 1 of the following must be ticked. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
M	0		
M	1bis		
M	4		
M	6		
M	7		
M	9		
M	10		
M	11		
M	12		
M	13		
M	14		
M	15		
M	16		
M	17		
M	18		
M	19		
M	20		
M	21		
M	22		
M	23		
M	24		
M	25		
M	26		

O	Does your device signal explicit LTE UL Category?	Yes / No?	If Yes then at least 1 of the following must be ticked. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
M	0		
M	1bis		
M	3		
M	5		
M	7		
M	8		
M	13		
M	14		
M	15		
M	16		
M	17		
M	18		
M	19		
M	20		
M	21		
M	22		
M	23		
M	24		
M	25		
M	26		

The following requested frequency band information can be read into your TAC application form in the following formats: CSV, XML, JSON

For a template and instructions on how to do this contact the IMEI Database Helpdesk – imeihelpdesk@gsma.com

The information can also be completed manually if preferred.

Implementation of the above in the TAC Database TAC Request Form – Target is April 2020

At least one Frequency Band Option must be selected to complete a TAC Request form. This could be one of the LPWAN options and/or GSM and/or WDCMA and/or E_UTRA and/or 5G.

	Modes, Bands Supported		
O	**GSM**		If "GSM" is selected then at least one of the frequency bands below must also be selected.
		GSM 450	

		GSM 850 (GSM 800)	
		GSM 900	
		GSM 1800	
		GSM 1900	
O	**WCDMA (UTRA) FDD**		If "WCDMA FDD" is selected then at least one of the frequency bands below must also be selected.
		1	
		2	
		3	
		4	
		5	
		6	
		7	
		8	
		9	
		10	
		11	
		12	
		13	
		14	
		19	
		20	
		21	
		22	
		25	
		26	
		32	
O	**WCDMA (UTRA) TDD/TD-SCDMA**		If "WCDMA TDD" is selected then at least one of the frequency bands below must also be selected. "WCDMA TDD" is also known as "TD-SCDMA Band A"
		A	
		B	
		C	
		D	

		E	
		F	
O	**E-UTRA (LTE) FDD**		If "LTE FDD" is selected then at least one of the frequency bands below must also be selected. For every FDD band selected options (5), (6), (7) and (8) MUST also be completed.
		1	
		2	
		3	
		4	
		5	
		6	
		7	
		8	
		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	
		17	
		18	
		19	
		20	
		21	
		22	
		23	
		24	
		25	
		26	
		27	
		28	
		29	
		30	
		31	

		32	
		65	
		66	
		67	
		68	
		69	
		70	
		71	
		72	
		73	
		74	
		75	
		76	
O	**E-UTRA (LTE) TDD**		If "LTE TDD" is selected then at least one of the frequency bands below must also be selected. For every TDD band selected options (5), (6), (7) and (8) MUST also be completed.
		33	
		34	
		35	
		36	
		37	
		38	
		39	
		40	
		41	
		42	
		43	
		44	
		48	
		50	
		51	

O	E-UTRA (LTE) V2X		If "LTE TDD" is selected then at least one of the frequency bands below must also be selected. For every TDD band selected options (5), (6), (7) and (8) MUST also be completed.
		47	
(5)M	Which of the following modulations does your E-UTRA Band (X) support in "Uplink"	1. **No Optional Modulations** 2. 16QAM 3. 64QAM 4. 256QAM	"No Optional Modulation" is the default value. "1" or "2" can only be selected on their own If "3" is selected then "2" is also selected. If "4" is selected then "2" and "3" are also selected. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(6)M	Which of the following modulations does your E-UTRA Band (X) support in "Downlink"	1. **No Optional Modulations** 2. 256QAM 3. 1024QAM	"No Optional Modulation" is the default value. "1" or "2" can only be selected on their own. If "3" is selected then "2" is also selected. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(7)M	Which of the following MIMO does your E-UTRA Band (X) support in "Uplink"	1. None 2. 2x2	"None" is the default value with 2x2 as an option **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(8)M	Which of the following MIMO support does your E-UTRA Band (X) support in "Downlink"	1. None 2. 2x2 3. 4x2 4. 4x4 5. 8x2 6. 8x4 7. 8x8	"None" is only allowed for IoT Devices 2x2 is the default value with others as the options **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**

O	Intra-band contiguous Carrier Aggregation (CA) operating bands and configurations		If "CA" is selected then at least one of the frequency bands below must also be selected. For every CA band selected options (9), (10), (11), (12), (13), (14) and (15) MUST also be completed. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
A complete list of CA bands and all CA band combinations as defined in 3GPP TS.36.101 [2] will be listed on the TAC form. **If a CA band or CA band combination is missing please contact the IMEI database helpdesk and they will add the missing information. The request must be accompanied with a version of the 3GPP TS.36.101 [2] showing the missing CA bands / combinations.**			
(9)M	Does your devices support the same MIMO for ALL CA bands / CA Band Combinations in **DOWN link**	Yes or No?	If "Yes" is selected then option (9a) must be completed as a **one off** and the database will automatically record this information for every CA band or CA band in a CA band combination which is selected. If "No" is selected then option (9a) must be completed for each CA band and each CA band in a CA band combination which is selected. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(9a)M	MIMO level supported in **DOWN link**	1. 2x2 2. 4x4 3. 8x8	

(10)M	Does your devices support the same MIMO for ALL CA bands / CA Band Combinations In **UP link**	Yes or No	If "Yes" is selected then option (10a) must be completed as a **one off** and the database will automatically record this information for every CA band or CA band in a CA band combination which is selected. If "No" is selected then option (10a) must be completed for each CA band and each CA band in a CA band combination which is selected. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(10a)M	MIMO level supported in **UP Link**	1. 2x2 2. 4x4 3. 8x8	**Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(11)M	Does your devices supports the same modulation scheme for ALL CA bands / CA Band Combinations in **DOWN link**	Yes or No	If "Yes" is selected then option (11a) must be completed as a one off and the database will automatically record this information for every CA band and CA band in a CA band combination which is selected. If "No" is selected then option (11a) must be completed for each CA band and each CA band in a CA band combination which is selected. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(11a)M	CA bands / CA Band Combinations modulation scheme **Down link**	1. 16 2. 64 3. 256 4. 1024 5. 2056	**Implementation in the TAC Database on the TAC Request Form – Target is April 2020**

(12)M	Does your devices supports the same modulation scheme for ALL CA bands / CA Band Combinations in **UP link**	Yes or No	If "Yes" is selected then option (12a) must be completed as a one off and the database will automatically record this information for every CA band and CA band in a CA band combination which is selected. If "No" is selected then option (12a) must be completed for each CA band and each CA band in a CA band combination which is selected. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(12a)M	CA bands / CA Band Combinations modulation scheme **Up link**	1. 16 2. 64 3. 256 4. 1024 5. 2056	**Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(13)M	Does your devices support the same maximum contiguous bandwidth for ALL CA bands / CA Band Combinations in **DOWN link**	Yes or No	If "Yes" is selected then option (13a) must be completed as a **one off** and the database will automatically record this information for every CA band and CA band in a CA band combination which is selected. If "No" is selected then option (13a) must be completed for each CA band and each CA band in a CA band combination which is selected. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(13a)M	Maximum contiguous bandwidth for ALL CA bands / CA Band Combinations in **DOWN link**	1. A 2. B 3. C 4. D 5. E 6. F	**Implementation in the TAC Database on the TAC Request Form – Target is April 2020**

(14)M	Does your devices support the same maximum contiguous bandwidth for ALL CA bands / CA Band Combinations in **UP link**	Yes or No	If "Yes" is selected then option (13a) must be completed as a **one off** and the database will automatically record this information for every CA band and CA band in a CA band combination which is selected. If "No" is selected then option (14a) must be completed for each CA band and each CA band in a CA band combination which is selected. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(14a)M	Maximum contiguous bandwidth for ALL CA bands / CA Band Combinations in **UP link**	1. A 2. B 3. C 4. D 5. E 6. F	**Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(15)M	Does your devices support the same maximum Power Class for ALL CA bands / CA Band Combinations in **UP link**	Yes or No	If "Yes" is selected then option (15a) must be completed as a **one off** and the database will automatically record this information for every CA band and CA band in a CA band combination which is selected. If "No" is selected then option (15a) must be completed for each CA band and each CA band in a CA band combination which is selected. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(15a)M	Maximum power class supported by the device **UP link**	1. 1 2. 2 3. 3 4. 4 5. 5 6. 6	**Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
This list has been created using 3GPP TS 38.101-3 **If any bands are missing from the TAC form these can be added by contacting the IMEI database Helpdesk and suppling the latest version of 3GPP TS 38.101**			

O	5G New Radio (NR) Standalone		If "5G NR" is selected then all of the 5G NR frequency bands supported by the device must be selected. Below is the selectable list. Options (16), (17), (18) & (19) must also be completed for each band selected.
		List of bands as per 3GPP TS 38.101-**1** Table 5.2-1	
O	5G New Radio (NR) Standalone Intra-band Carrier Aggregation (CA) (FR1)		If "5G NR Standalone Intra-band CA" is selected then all the bands for which 5G NR Intra-band CA supported by the device must be selected. This option conditional on "5G NR Standalone" being selected. Below is the selectable list. Options (16), (17), (18) & (19) must also be completed for each band selected.
		List of bands as per 3GPP TS 38.101-1 Table 5.2A.1-**1**	
O	5G New Radio (NR) Standalone Two Band Carrier Aggregation (CA) (FR1)		If "5G NR Two Band CA" is selected then all of the 5G NR Two Band CA frequency band combinations supported by the device must be selected. This option conditional on "5G NR Standalone" being selected. Below is the selectable list. Options (16), (17), (18) & (19) must also be completed for each band selected.
		List of bands as per 3GPP TS 38.101-**1** Table 5.2A.2-1	

O	5G New Radio (NR) Standalone Carrier Aggregation (CA) for SUL		If "5G NR CA SUL" is selected then all of the 5G NR CA SUL frequency band combinations supported by the device must be selected. This option conditional on "5G NR Standalone" being selected. Below is the selectable list. Options (16), (17), (18) & (19) must also be completed for each band selected.
		List of bands as per 3GPP TS 38.101-**1** Table 5.2C.1	
O	5G New Radio (NR) Standalone Intra-band Carrier Aggregation (CA) (FR2)		If "5G NR Standalone Intra-band CA" is selected then all the bands for which 5G NR Intra-band CA supported by the device must be selected. This option conditional on "5G NR Standalone" being selected. Below is the selectable list. Options (16), (17), (18) & (19) must also be completed for each band selected.
		List of bands as per 3GPP TS 38.101-**2** Table 5.2A.1	
O	5G New Radio (NR) Standalone Inter-band CA between FR1 and FR2		If "5G NR CA FR1-2" is selected then all of the 5G NR CA FR1 / FR2 frequency bands supported by the device must be selected. This option conditional on "5G NR Standalone" being selected. Below is the selectable list. Options (16), (17), (18) & (19) must also be completed for each band selected.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2A.1-1	

O	5G New Radio (NR) Standalone Two Band Carrier Aggregation (CA) (FR2)		If "5G NR Two Band CA" is selected then all of the 5G NR Two Band CA frequency band combinations supported by the device must be selected. This option conditional on "5G NR Standalone" being selected. Below is the selectable list. Options (16), (17), (18) & (19) must also be completed for each band selected.
		List of bands as per 3GPP TS 38.101-**2** Table 5.2A.2-1	
O	5G Dual Connectivity (DC) Intra-band CA contiguous EN-DC (Two Band)		If "5G DC CA EN-DC 2B" is selected then all of the 5G DC CA EN-DC 2B frequency band supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.2.1-1	
O	5G Dual Connectivity (DC) Intra-band CA non-contiguous EN-DC (Two Band)		If "5G DC CA NC EN-DC 2B" is selected then all of the 5G NDC CA NC EN-DC 2B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.3.1-1	
O	5G Dual Connectivity (DC) Intra-band CA non-contiguous EN-DC (Three Band)		If "5G DC CA NC EN-DC 3B" is selected then all of the 5G DC CA NC EN-DC 3B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.3.2-1	
O	5G Dual Connectivity (DC) Inter Band combinations for EN-DC within FR1 (Two Band)		If "5G DC BC EN-DC FR1 2B" is selected then all of the 5G DC BC EN-DC FR1 2B frequency bands supported by the device must be selected. Below is the selectable list.

		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.4.1-1	
O	5G Dual Connectivity (DC) Inter Band combinations for EN-DC within FR1 (Three Band)		If "5G DC BC EN-DC FR1 3B" is selected then all of the 5G DC BC EN-DC FR1 3B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.4.2-1	
O	5G Dual Connectivity (DC) Inter Band combinations for EN-DC within FR1 (Four Band)		If "5G DC BC EN-DC FR1 4B" is selected then all of the 5G DC BC EN-DC FR1 4B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.4.3-1	
O	5G Dual Connectivity (DC) Inter Band combinations for EN-DC within FR1 (Five Band)		If "5G DC BC EN-DC FR1 5B" is selected then all of the 5G DC BC EN-DC FR1 5B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.4.4-1	
O	5G Dual Connectivity (DC) Inter Band combinations for EN-DC within FR1 (Six Band)		If "5G DC BC EN-DC FR1 6B" is selected then all of the 5G DC BC EN-DC FR1 6B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.4.5-1	
O	5G Dual Connectivity (DC) Inter Band combinations for EN-DC including FR2 (Two Band)		If "5G DC BC EN-DC FR2 2B" is selected then all of the 5G DC BC EN-DC FR2 2B frequency bands supported by the device must be selected. Below is the selectable list.

		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.5.1-1	
O	5G Dual Connectivity (DC) Inter Band combinations for EN-DC including FR2 (Three Band)		If "5G DC BC EN-DC FR2 3B" is selected then all of the 5G DC BC EN-DC FR2 3B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.5.2-1	
O	5G Dual Connectivity (DC) Inter Band combinations for EN-DC including FR2 (Four Band)		If "5G DC BC EN-DC FR2 4B" is selected then all of the 5G DC BC EN-DC FR2 4B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.5.3-1	
O	5G Dual Connectivity (DC) Inter Band combinations for EN-DC including FR2 (Five Band)		If "5G DC BC EN-DC FR2 5B" is selected then all of the 5G DC BC EN-DC FR2 5B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.5.4-1	
O	5G Dual Connectivity (DC) Inter Band EN-DC including both FR1 and FR2 (Three Band)		If "5G DC IB EN-DC FR1-2 3B" is selected then all of the 5G DC BC IB-DC FR1-2 3B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.6.2-1	
O	**5**G Dual Connectivity (DC) Inter Band EN-DC including both FR1 and FR2 (Four Band)		If "5G DC IB EN-DC FR1-2 4B" is selected then all of the 5G DC IB EN-DC FR1-2 4B frequency bands supported by the device must be selected. Below is the selectable list.

		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.6.3-1	
O	5G Dual Connectivity (DC) Inter Band EN-DC including both FR1 and FR2 (Five Band)		If "5G DC IB EN-DC FR1-2 5B" is selected then all of the 5G DC IB EN-DC FR1-2 5B frequency bands supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.6.4-1	
O	5G Dual Connectivity (DC) Inter Band EN-DC including both FR1 and FR2 (Six Band)		If "5G DC IB EN-DC FR1-2 6B" is selected then all of the 5G DC IB EN-DC FR1-2 6B frequency band supported by the device must be selected. Below is the selectable list.
		List of bands as per 3GPP TS 38.101-**3** Table 5.2B.6.5-1	
(16)M	Does your devices supports the same modulation scheme for ALL CA bands / CA Band Combinations in **Downlink**	Yes or No	If "Yes" is selected then option (16a) must be completed as a one off and the database will automatically record this information for every CA band and CA band in a CA band combination which is selected for "5G NR Standalone" and/or "5G NR Non-Standalone". If "No" is selected then option (16a) must be completed for each CA band and each CA band in a CA band combination which is selected for "5G NR Standalone" and/or "5G NR Non-Standalone". **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**

(16a)M	Supported downlink Modulation Order	1. No Optional Modulation 2. BPSK-halfpi, 3. BPSK, 4. QPSK, 5. QAM16, 6. QAM64 7. QAM256	"No Optional Modulation" is the default value. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(17)M	Does your devices supports the same modulation scheme for ALL CA bands / CA Band Combinations in **Uplink**	Yes or No	If "Yes" is selected then option (17a) must be completed as a one off and the database will automatically record this information for every CA band and CA band in a CA band combination which is selected for "5G NR Standalone" and/or "5G NR Non-Standalone". If "No" is selected then option (17a) must be completed for each CA band and each CA band in a CA band combination which is selected for "5G NR Standalone" and/or "5G NR Non-Standalone". **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(17a)M	Supported uplink Modulation Order	1. No Optional Modulation 2. BPSK-halfpi, 3. BPSK, 4. QPSK, 5. QAM16, 6. QAM64 7. QAM256	"No Optional Modulation" is the default value. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**

(18)M	Does your devices supports the same maximum number of MIMO layers for ALL CA bands / CA Band Combinations in **Downlink**	Yes or No	If "Yes" is selected then option (18a) must be completed as a one off and the database will automatically record this information for every CA band and CA band in a CA band combination which is selected for "5G NR Standalone" and/or "5G NR Non-Standalone". If "No" is selected then option (18a) must be completed for each CA band and each CA band in a CA band combination which is selected for "5G NR Standalone" and/or "5G NR Non-Standalone". **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(18a)M	Maximum number of MIMO layers in downlink ALL CA and DC Bands	1. No Layers 2. Two Layers, 3. Four Layers 4. Eight Layers 5. Or Higher	"No Layers" is the default value. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
(19)M	Does your devices supports the same maximum number of MIMO layers for ALL CA bands / CA Band Combinations in **Uplink**	Yes or No	If "Yes" is selected then option (19a) must be completed as a one off and the database will automatically record this information for every CA band and CA band in a CA band combination which is selected for "5G NR Standalone" and/or "5G NR Non-Standalone". If "No" is selected then option (19a) must be completed for each CA band and each CA band in a CA band combination which is selected for "5G NR Standalone" and/or "5G NR Non-Standalone". **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**

M(19a)	Maximum number of MIMO layers in uplink ALL CA and DC Bands	1. No Layers 2. One Layer, 3. Two Layers or 4. Four Layers 5. Or Higher	"No Layers" is the default value. **Implementation in the TAC Database on the TAC Request Form – Target is April 2020**
M	Does your device support: 5G network architecture option 2 series?	Yes / No	
M	Does your device support: 5G network architecture option 3 series? 3x/3/3A	Yes / No	
M	Does your device support: 5G network architecture option 5 series?	Yes / No	
M	Does your device support: 5G network architecture option 7 series? 7x/7/7A	Yes / No	
O	**CDMA2000**		If "CDMA2000" is selected then "CDMA2000" below must also be selected.
		CDMA2000	
O	**GAN**		If "GAN" is selected then "GAN" below must also be selected.
		GAN	
M	**Does your device support:** Removable UICC	Yes / No	If selected as Yes then the number of UICC supported shall be selectable (1) and the number of IMEI used shall also be selected (3)
M	**Does your device support:** Removable eUICC	Yes / No	If selected as Yes then the number of eUICC shall also be selectable (2) and the number of IMEI used shall also be selected (3)
M	**Does your device support:** Non Removable UICC	Yes / No	If selected as Yes then the number of UICC supported shall be selectable (1)
M	**Does your device support:** Non Removable eUICC	Yes / No	If selected as Yes then the number of eUICC shall also be selectable (2)

(1)M	UICC Support (Dropdown list)	1 UICC	Select the number of UICC slots that the device supports. The default is 1
		2 UICC	If multiple UICC are selected then you need to indicate the quantity of IMEI that will be used in the devices according to TS.06 Section 8.0. (3)
		3 UICC	
		4 UICC	
(2)M	eUICC Support (Dropdown list)	1 eUICC	Select the number of eUICC that the device supports. The default is 1
		2 eUICC	If multiple eUICC are selected then you need to indicate the quantity of IMEI that will be used in the devices according to TS.06 Section 8.0.)(3)
		3 eUICC	
		4 eUICC	
(3)M	Total number of IMEI used in the devices for UICC and or eUICC (drop down list)	1, 2, 3 or 4	
(4)M			
(5)M	What is the total number of SIM slots in your device?	1, 2, 3 or 4	If BOTH "Removable UICC" and "Removable eUICC" are selected then the total number of SIM slots supported by the device shall also be selected. If only "Removable UICC" OR "Removable eUICC" is selected then the total number of SIM slots supported by the device shall be the same as the number of "Removable UICC" OR "Removable eUICC" selected and this is not changeable. If only Non-Removable UICC and / or eUICC are selected then the number of SIM slots will be Zero
O	Other 3GPP Frequency bands not listed on the form (Text box)		3GPP Frequency bands not listed above can be listed here
M	Does the device support NFC?	Yes	
		No	
M	Does the device support WLAN?	Yes	
		No	
M	Does the device support Bluetooth?	Yes	
		No	

3.5   GSMA Reporting Body use only (for information only)

M / O	Requested Information	Example of Completed Information	Notes
	TAC	35123456	This is where the RB will add the TAC to the application form

3.6   Completion of the TAC Form

M / O	Requested Information	Example of Completed Information	Notes
M	Submit, Reset & Back (Buttons)	Submit	This will send a notification to the RB that the registration application has been made.
		Reset	This will clear all of the information and it will need to be entered again.
		Back	This will take the applicant back to the previous page and the completed data will be cleared.

3.6.1   Additional Explanations of the TAC form (If required)

Text to be added if/as required.

3.7   What happens next

Notification of the completed TAC request form is automatically sent to the RB. The RB will verify the details that have been provided. If more information is needed the RB will contact the applicant.

When the form has been verified, the applicant will be sent an email with the TAC number(s) on a certificate along with the device details that the TAC has been allocated for.

See TS.06 for the full process details.

Annex A   Document Management

A.1   Document History

Version	Date	Brief Description of Change	Approval Authority	Editor / Company
1.0	25th September 2014	Submitted to DQRT and will be submitted for PSMC approval	PSMC	Paul Gosden, GSMA
2.0	Oct 2015	Addition CA bands added	TSG	Paul Gosden, GSMA
3.0	Jan 2016	Updated with CR1003 approved at TSG22 meeting.	TSG	Paul Gosden, GSMA
4.0	June 2016	Updated with CR1005 approved at TSG25 meeting	TSG	Paul Gosden, GSMA
5.0	Jan 2017	Updated with CR1006	TSG	Paul Gosden, GSMA
6.0	Sept 2017	Updated with CR1007 & CR1008	TSG	Paul Gosden, GSMA
7.0	Dec 2017	Updated with CR1010	TSG	Paul Gosden, GSMA
8.0	May 2018	Updated with CR1011	TSG	Paul Gosden, GSMA
9.0	July 2018	Updated with CR1012	TSG	Paul Gosden, GSMA
10.0	September 2018	Updated with CR1013	TSG	Paul Gosden, GSMA
11.0	June 2019	Updated with CR1014 & CR1015	TSG	Paul Gosden, GSMA
11.1	June 2019	Implementation dates added to items which are in TS.30 but have not yet been added to the TAC Database, TAC Request form	TSG	Paul Gosden, GSMA
12.0	Dec 2019	Updated with CR1016	TSG#38	Paul Gosden, GSMA

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

Your comments or suggestions & questions are always welcome.