

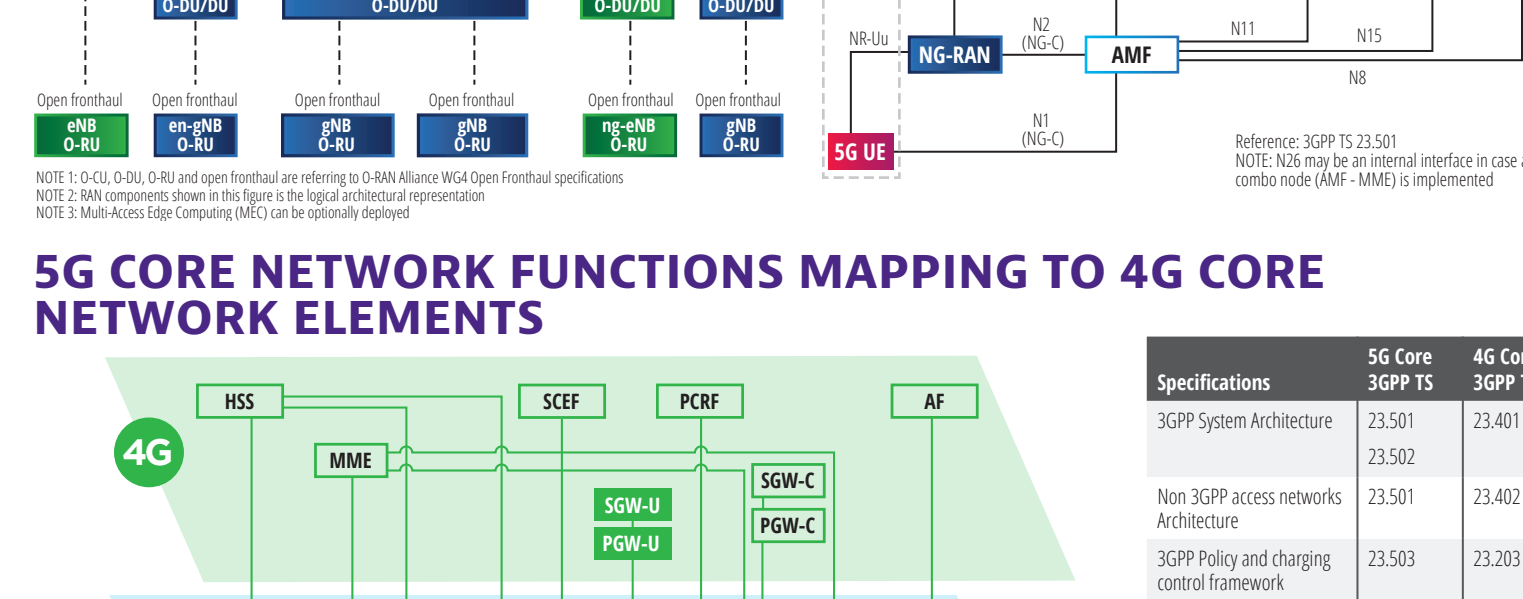
5GS PDU CONNECTIVITY SERVICE AND SESSION

5G QoS Profile	5G QoS Identifier (SQI)	5G QoS Characteristics	5G QoS Identifier (SQI)
1	1	1. Resource Type (GBR, Delay critical GBR or Non-GBR)	1. Resource Type (GBR, Delay critical GBR or Non-GBR)
2	2	2. Priority Level	2. Priority Level
3	3	3. Packet Delay Budget (PDB)	3. Packet Delay Budget (PDB)
4	4	4. Maximum Packet Loss Rate (UL/DL)	4. Maximum Packet Loss Rate (UL/DL)
5	5	5. Averaging window (for GBR and Delay-critical GBR resource type only)	5. Averaging window (for GBR and Delay-critical GBR resource type only)
6	6	6. Maximum Data Burst Volume (MDBV) (for Delay-critical GBR resource type only)	6. Maximum Data Burst Volume (MDBV) (for Delay-critical GBR resource type only)

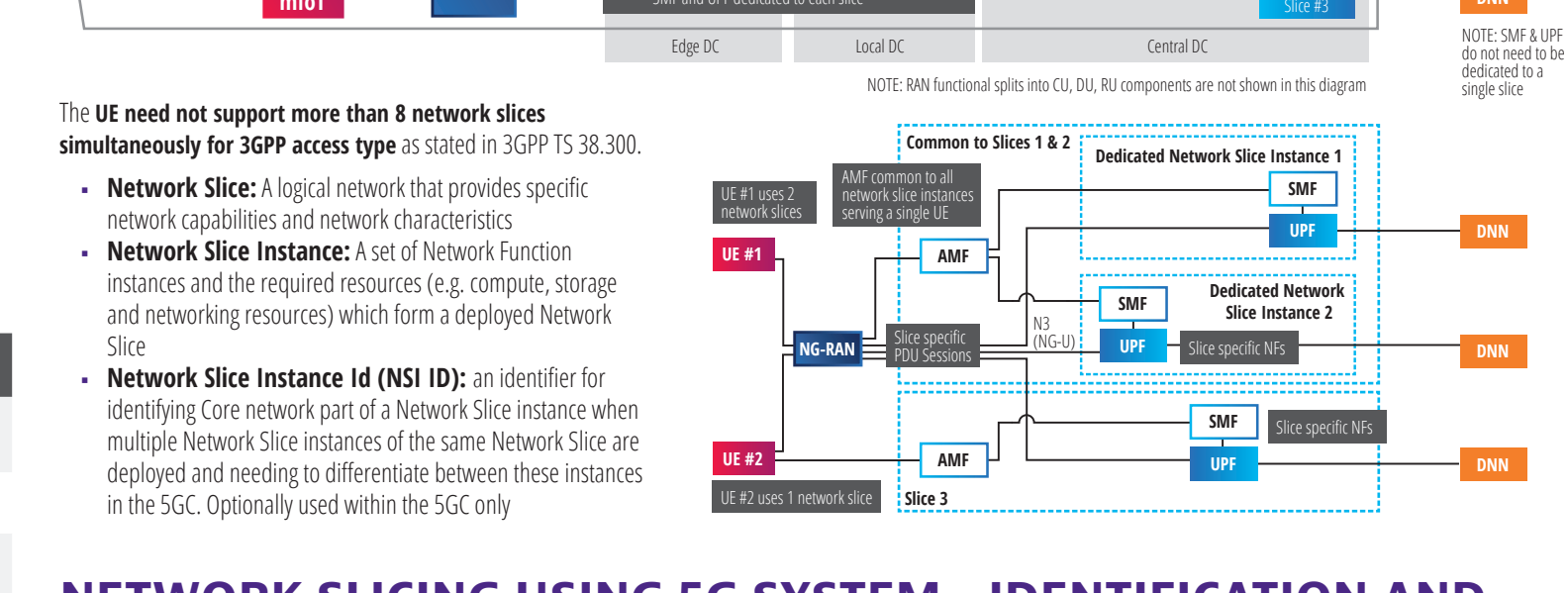
5G CORE MAPPING TO 4G CORE REFERENCE POINTS AND SPECIFICATIONS

5G Core Interface	4G Core Reference Point	5G Core Protocol	4G Core Protocol
N1 (NG-C)	S1-MME	5G NAS	EPS NAS
N2 (NG-C)	S1-M	5G NAS	EPS NAS
N3 (NG-U)	S1-U	5G NAS	EPS NAS
N4	S11	5G NAS	EPS NAS
N6	S1-M	5G NAS	EPS NAS
N9	S11	5G NAS	EPS NAS
N26	S1-M	5G NAS	EPS NAS

5G CORE NETWORK FUNCTIONS MAPPING TO 4G CORE NETWORK ELEMENTS



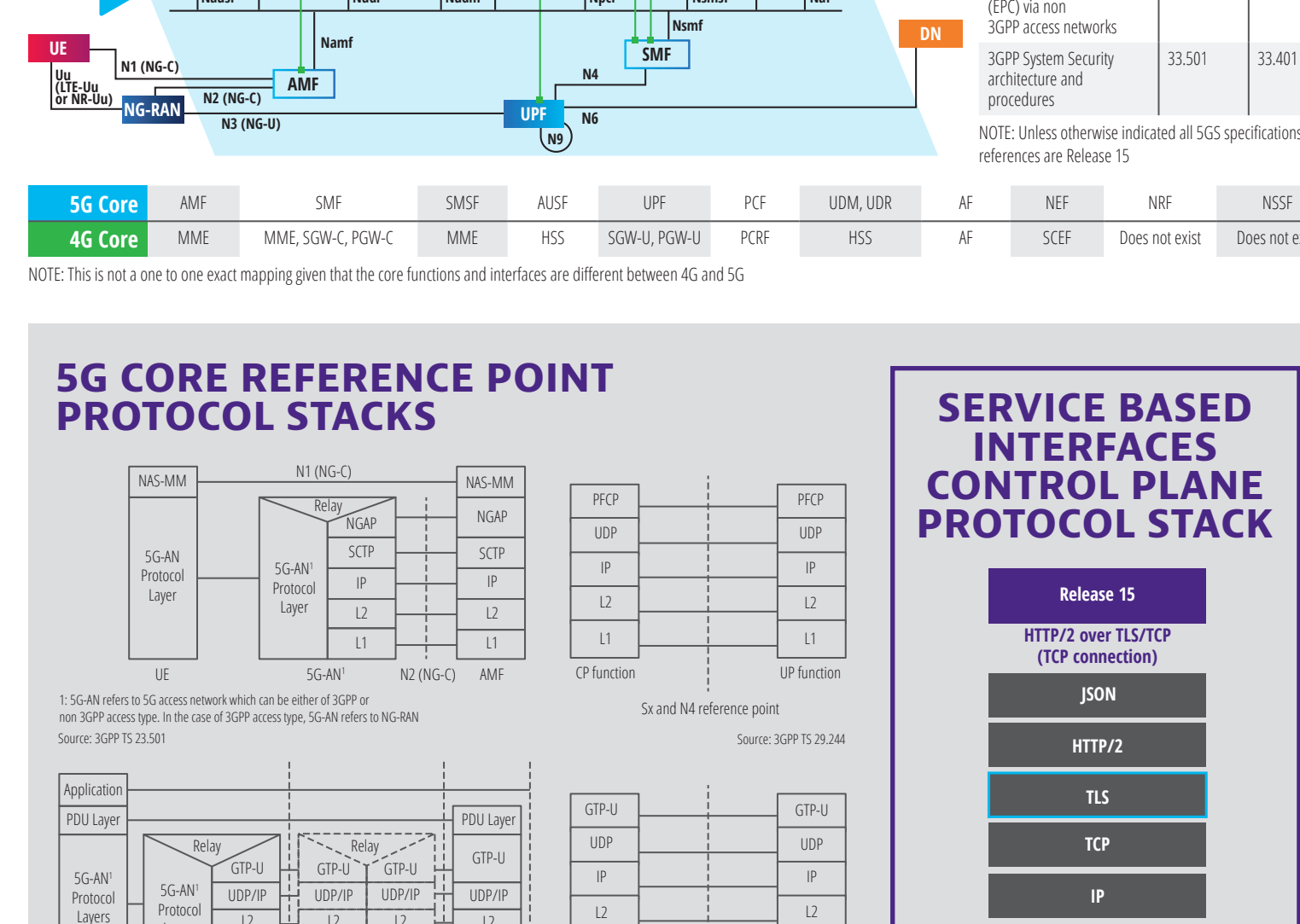
5GS NETWORK SLICING - SERVICE DEPLOYMENT EXAMPLE



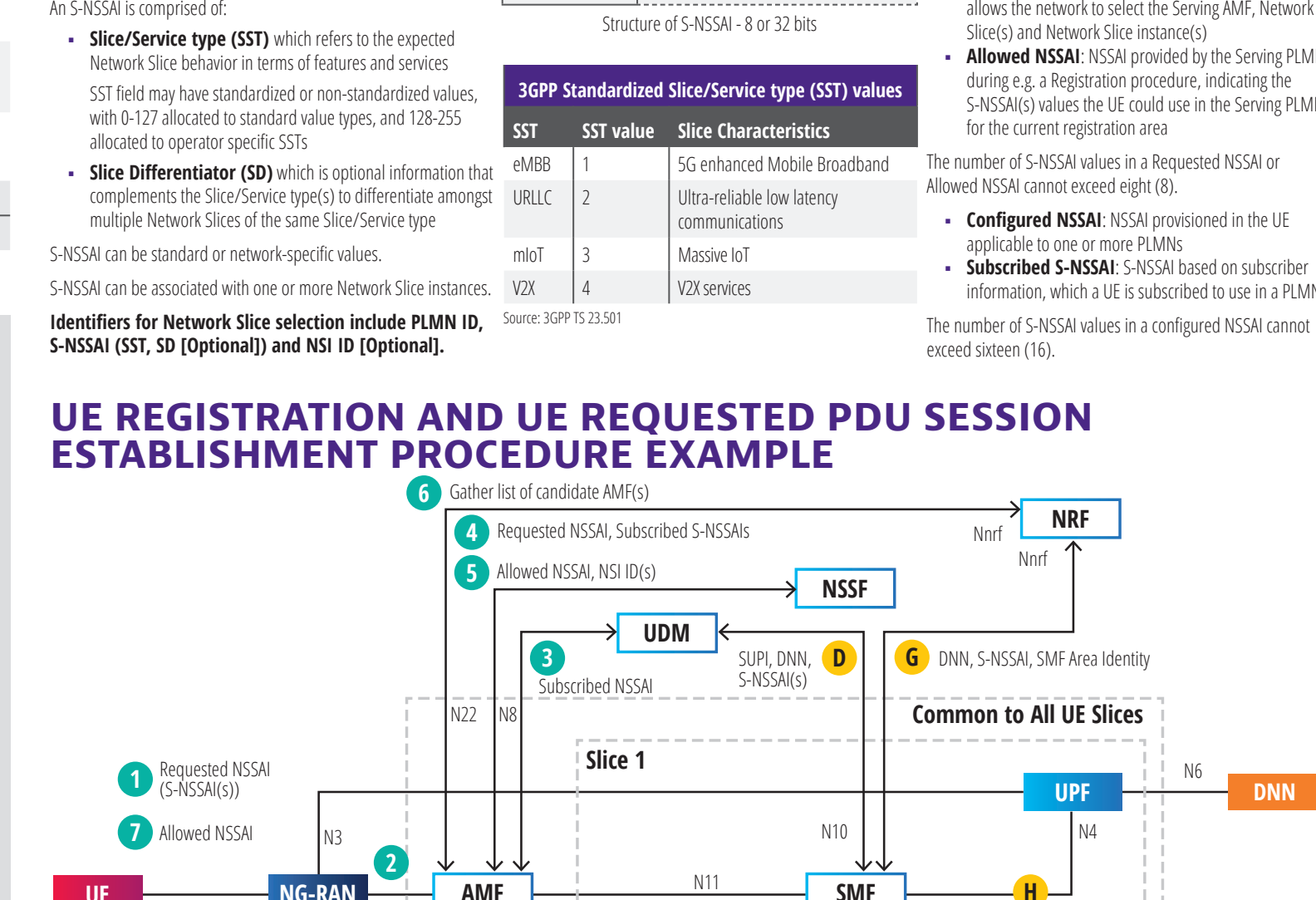
5G CORE ADDITIONAL REFERENCE POINTS LISTING

Reference Point	NF1	NF2	Reference Point	NF1	NF2
N5	PCF	AF	N16	V-SMF	H-SMF
N6	UPF	DN	N16a	SMF	I-SMF
N7	SMF	PCF	N17	AMF	V-SEPP
N8	UDM	AMF	N18	Any NF	UDSF
N9	UPF	UPF	N20	AMF	SMSF
N10	UDM	SMF	N21	SMSF	UDM
N11	AMF	SMF	N22	AMF	NSSF
N12	AMF	AUSF	N23	PCF	NWDAF
N13	UDM	AUSF	N24	V-PCF	H-PCF
N14	AMF	AMF	N27	V-NRF	H-NRF
N15	AMF	AMF	N28	PCF	CHF

5G CORE REFERENCE POINT PROTOCOL STACKS



NETWORK SLICING USING 5G SYSTEM - IDENTIFICATION AND SELECTION OF A NETWORK SLICE

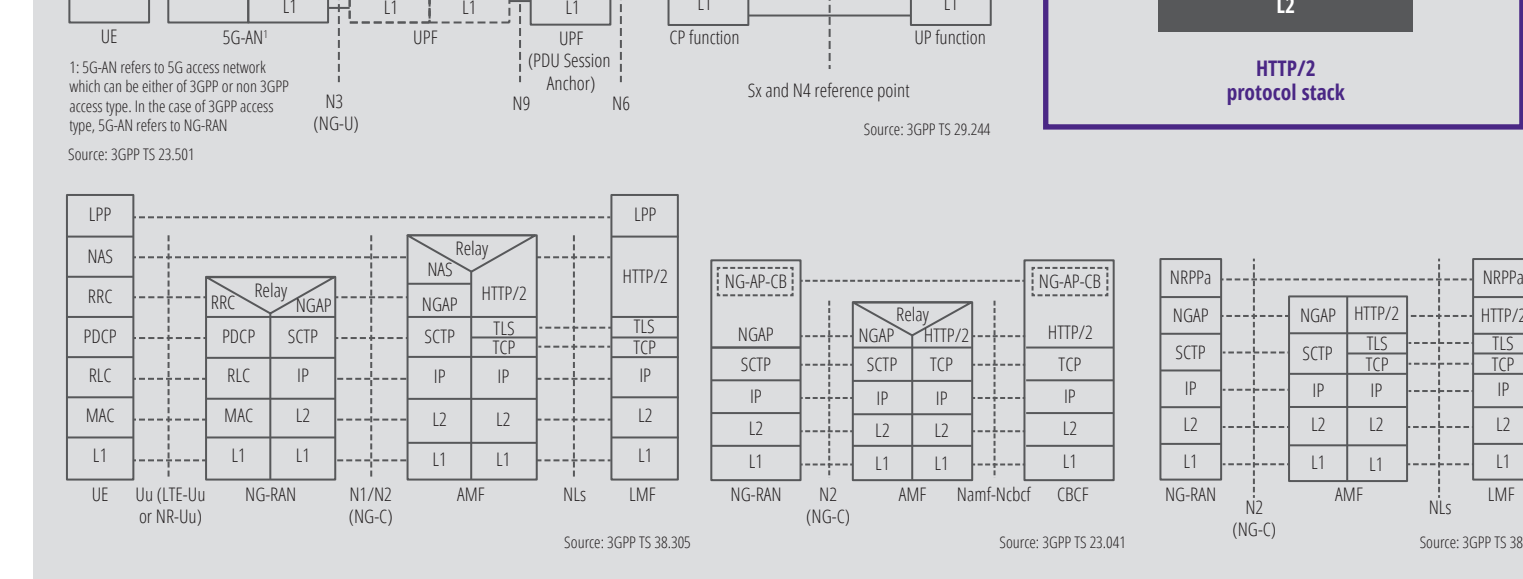


5GS IDENTIFIERS

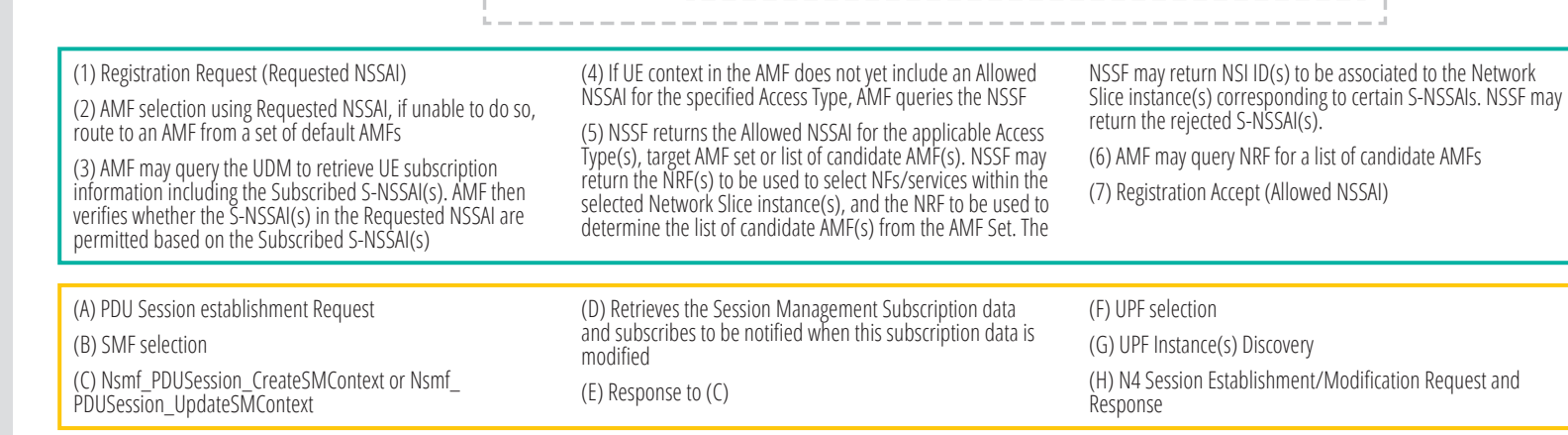
Identifier	Release 15	Purpose
Subscription Permanent Identifier (SUPI)	Network-specific identifier	Globally unique identifier allocated to each subscriber in the 5G System
Subscription Concealed Identifier (SCCI)	Network-specific identifier	Privacy preserving identifier containing the encrypted form of the SUPI using the public key of the home network
General Public Subscription Identifier (GPSI)	MSDN or an External Identifier	Public identifier used both inside and outside of the 3GPP system, needed for addressing a 3GPP subscription in different data networks outside of the 3GPP system
Permanent Equipment Identifier (PEI)	PEI: PEI Type indicating IMEI or MEISV	Identifies a UE - Type Allocation Code (TAC), Serial Number (SNR), Check Digit (CD), Spare Digit (SD), Software Version Number (SVN)
5G Globally Unique Temporary Identifier (5G-GUTI)	<CGI> ::= <GMI> -<SG-TMSI>	Allocated to the UE by the AMF that is common to both 3GPP and non-3GPP access
5G-S-TMSI	<5G-S-TMSI> ::= <AMF Set ID> -<MNC> -<AMF Region ID> -<AMF Set ID> -<AMF Pointer>	Identifies one or more AMF(s)

ACRONYMS

Acronym	Meaning
RAN	(Radio) Access Network
5G EIR	5G Equipment Identity Register
5G Core	5G Core Network
5G S-GW	5G System Architecture Element: Serving Gateway
5G MME	5G System Architecture Element: MME
5G PCF	5G System Architecture Element: Policy Control Function
5G AMF	5G System Architecture Element: Access and Mobility Management Function
5G AUSF	5G System Architecture Element: Authentication Server Function
5G BSF	5G System Architecture Element: Binding Support Function
5G CBF	5G System Architecture Element: Cell Broadcast Center Function



UE REGISTRATION AND UE REQUESTED PDU SESSION ESTABLISHMENT PROCEDURE EXAMPLE



3GP SPECIFICATIONS

- TS 22.003: Numbering, addressing and identification
- TS 22.011: Technical realization of 4G/LTE access (4G)
- TS 22.012: System architecture for the 5G System (5GS)
- TS 22.013: Procedures for the 5G System (5GS)
- TS 22.014: Policy and charging control framework for the 5G System (5GS)
- TS 22.015: Security architecture and procedures for the 5G System (5GS)
- TS 22.016: 5G System: Unstructured Data Management Services
- TS 22.017: 5G System: Unstructured Data Management Services
- TS 22.018: 5G System: Policy and Charging Control Signaling flows and QoS
- TS 22.019: 5G System: Policy Authorization Services
- TS 22.020: 5G System: Policy Control Signaling flows and QoS
- TS 22.021: 5G System: Access and Mobility Management Services
- TS 22.022: 5G System: User Equipment (UE) policies for 5G System (5GS)
- TS 22.023: 5G System: Technical Realization of Service Based Architecture
- TS 22.024: 5G System: Principles and Guidelines for Services Definitions
- TS 22.025: 5G System: Session Management Services
- TS 22.026: 5G System: Unstructured Data Management Services
- TS 22.027: 5G System: Unstructured Data Management Services
- TS 22.028: 5G System: Case code mapping between 5G interfaces
- TS 22.029: 5G System: Case code mapping between 5G interfaces
- TS 22.030: 5G System: Access and Mobility Policy Control Service
- TS 22.031: 5G System: Network Slice Selection Services
- TS 22.032: 5G System: Network Slice Selection Services
- TS 22.033: 5G System: Network Slice Selection Services
- TS 22.034: 5G System: Network Slice Selection Services
- TS 22.035: 5G System: Network Slice Selection Services
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- TS 22.100: 5G System: Network Slice Selection Services

VIAVI TEST & MEASUREMENT PRODUCTS AND SOLUTIONS FOR 5G CORE

VIAVI TeravM: 5G Core Tester and 5G Core Emulator

VIAVI NITRO Mobile: Intelligence, Assurance, and Optimization

VIAVI OneAdvisor-1000: High-Speed, Portable Test Solution

VIAVI TeravM: 5G Core Tester and 5G Core Emulator

VIAVI NITRO Mobile: Intelligence, Assurance, and Optimization

VIAVI OneAdvisor-1000: High-Speed, Portable Test Solution