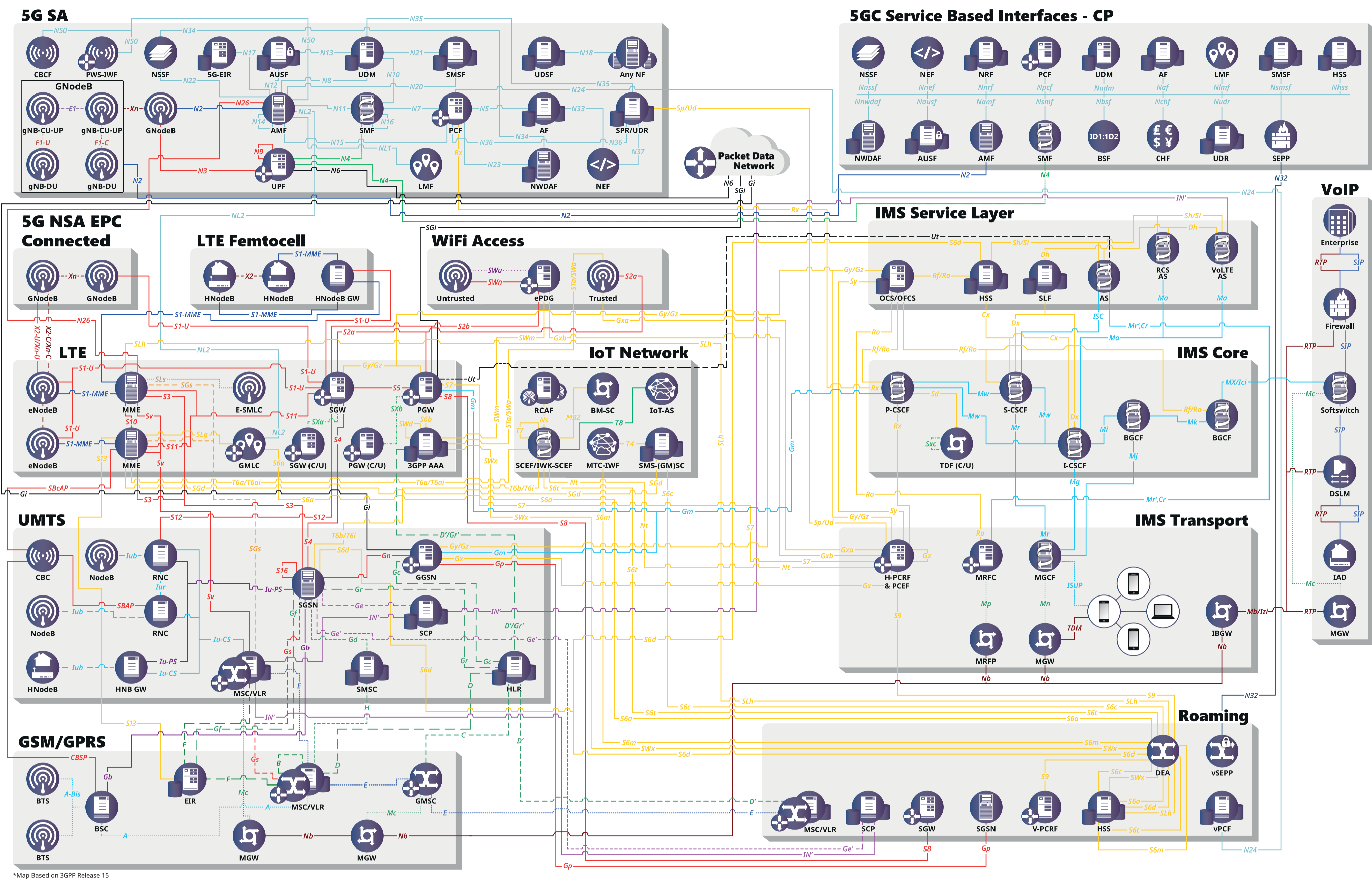


Mobile Network Architecture Reference



List of 5G Interfaces

Domain	Interface	Network Entities	Description
5G SA	E1	gNB-CU-UP, gNB-CU-CP	Interface between a gNB-CU-CP and a gNB-CU-UP, providing an interconnection point between gNB-CU-CP and gNB-CU-UP
5G SA	F1	gNB-CU, gNB-DU	Interface between a gNB-CU and a gNB-DU, providing an interconnection point between gNB-CU and gNB-DU
5G SA	N1	UE, gNB	Reference point between UE and gNB
5G SA	N2	gNB, AMF	Reference point between gNB and AMF
5G SA	N3	gNB, UPF	Reference point between gNB and UPF
5G SA	N4	SMF, UPF	Reference point between SMF and UPF
5G SA	N5	PCF, AF	Reference point between PCF and AF
5G SA	N6	UPF, PDN	Reference point between UPF and a Data Network. Only Diameter supported
5G SA	N7	SMF, PCF	Reference point between SMF and PCF
5G SA	N8	AMF, UDM	Reference point between AMF and UDM
5G SA	N9	UPF, UPF	Reference point between two UPFs
5G SA	N10	UDM, SMF	Reference point between UDM and SMF
5G SA	N11	AMF, SMF	Reference point between AMF and SMF
5G SA	N12	AMF, AUSF	Reference point between AMF and AUSF
5G SA	N13	AMF, AUSF	Reference point between AMF and AUSF
5G SA	N14	AMF, AMF	Reference point between two AMFs
5G SA	N15	PCF, AMF	Reference point between the PCF and the AMF in the case of non-roaming scenario, PCF in the visited network and AMF in the case of roaming scenario
5G SA	N16	SMF, SMF	Reference point between two SMFs, in roaming case between SMF in the visited network and the SMF in the home network
5G SA	N17	AMF, 5G-EIR	Reference point between AMF and 5G-EIR
5G SA	N18	Any NF, UDSF	Reference point between any NF and UDSF
5G SA	N20	AMF, SMF	Reference point for SMS transfer between AMF and SMF Function
5G SA	N21	UDM, SMF	Reference point for SMS Function address registration management and SMS Management
5G SA	N22	AMF, NSSF	Subscription data retrieval between SMS Function and UDM
5G SA	N23	PCF, NWDAF	Reference point between PCF and NWDAF
5G SA	N24	PCF, vPCF	Reference point between the PCF in the visited network and the PCF in the home network
5G SA	N26	AMF, MME	Inter-CN interface between the MME and 5GS AMF in order to enable interworking between EPC and 5G core
5G SA	N32	hSEPP, vSEPP	Reference point between SEPP in the visited network and the SEPP in the home network; TS29573_N32_Handshake.yamf; SEPP N32 APIS Handshake (N32-c) Service API; TS29573_OperProtectForwarding.yamf; SEPP N32 APIS Forwarding (N32-f) Service API; TS29573_SepTelescopicQdnMapping.yamf; SEPP N32 APIS Telescopic QDN Mapping Service API
5G SA	N33	NEF, AF	Reference point between NEF and AF
5G SA	N34	NSSF, NWDAF	Reference point between NSSF and NWDAF
5G SA	N35	UDM, UDR	Reference point between UDM and UDR
5G SA	N36	PCF, UDR	Reference point between PCF and UDR
5G SA	N37	NEF, UDR	Reference point between NEF and UDR
5G SA	N50	AMF	Reference point between AMF and CBCF or PWS-IWF, which then connects to CBC over Sbs interface
5G SA	NL1	AMF, LMF	Reference point between AMF and LMF to request location determination for a target UE
5G SA	NL2	AMF, GMLC	Reference point between AMF and EPC GMLC to request location determination for a target UE in 5G NR network
5G SA	Xn	gNB, gNB	Reference point between two gNBs
5G SBI CP	X2-C/U	gNB, eNB	The interface allowing to interconnect EPC connected gNB and LTE eNB. Usually based on X2AP
5G SBI CP	N5g-eir	5G-EIR	Reference point between the 5G-EIR exposing the following OpenAPIs: TS29511_N5g-eir_EquipmentIdentityCheck.yamf; 5G-EIR (5G Equipment Identity Register) Equipment Identity Check Service API
5G SBI CP	Nanf	AF	Service end-point of the AF exposing the following OpenAPIs: TS29517_Nanf_EventExposure.yamf; AF (Application Function) Event Exposure Service API
5G SBI CP	Namf	AMF	Service end-point of the AMF exposing the following OpenAPIs: TS29518_Namf_Communication.yamf; AMF (Access and Mobility Management Function) Communication Service API; TS29518_Namf_EventExposure.yamf; AMF (Access and Mobility Management Function) Event Exposure Service API; TS29518_Namf_Location.yamf; AMF (Access and Mobility Management Function) Location Service API; TS29518_Namf_MT.yamf; AMF (Access and Mobility Management Function) Mobile Termination Service API
5G SBI CP	Nausf	AUSF	Service end-point of the AUSF exposing the following OpenAPIs: TS29509_Ausf_UEAuthentication.yamf; AUSF (Authentication Server Function) UE Authentication Service API; TS29509_Ausf_SoRProtection.yamf; AUSF (Authentication Server Function) SoR (Steering of Roaming) Protection Service API; TS29509_Ausf_UPUPProtection.yamf; AUSF (Authentication Server Function) UPU (UE Parameter Update) Protection Service API
5G SBI CP	Nbsf	BSF	Service end-point of the BSF exposing the following OpenAPIs: TS29521_Nbsf_Management.yamf; BSF (Binding Support Function) Management Service API
5G SBI CP	Nchf	CHF	Service end-point of the CHF exposing the following OpenAPIs: TS29594_Nchf_SpendingLimitControl.yamf; CHF (Charging Function) Spending Limit Control Service API; TS29521_Nchf_ConvergedCharging.yamf; CHF (Charging Function) Converged Charging Service API
5G SBI CP	Nhss	HSS	Service end-point of the HSS exposing the following OpenAPIs: TS29563_Nhss_UEAU.yamf; HSS (Home Subscriber Server) UE Authentication Service API
5G SBI CP	Nlmf	LMF	Service end-point of the LMF exposing the following OpenAPIs: TS29572_Nlmf_Location.yamf; LMF (Location Management Function) Location Service API
5G SBI CP	Nnef	NEF	Service end-point of the NEF exposing the following OpenAPIs: TS29551_Nnef_PFDManagement.yamf; NEF (Network Exposure Function) Packet Flow Description (PFD) Management Service API; TS29522_TrafficInfluence.yamf; NEF (Network Exposure Function) Traffic Influence Service API; TS29522_NIDDConfigurationTrigge.yamf; NEF (Network Exposure Function) NIDD (Non-IP Data Delivery) Configuration Trigger Service API; TS29522_ApplyingBdtPolicy.yamf; NEF (Network Exposure Function) Applying BDT Policy Service API
5G SBI CP	Nnrf	NRF	Service end-point of the NRF exposing the following OpenAPIs: TS29510_Nnrf_NFManagement.yamf; NRF (NF Repository Function) NF Management Service API; TS29510_Nnrf_NFDiscovery.yamf; NRF Management NF Discovery Service API; TS29510_Nnrf_AccessToken.yamf; NF Discovery Access Token (OAuth2) Service API
5G SBI CP	Nnssf	NSSF	Service end-point of the NSSF exposing the following OpenAPIs: TS29531_Nnssf_NSASAvailability.yamf; NSSF (Network Slice Selection Function) NSAA Availability Service API
5G SBI CP	Nnwdaaf	NWDAF	Service end-point of the NWDAF exposing the following OpenAPIs: TS29531_Nnssf_NSASAvailability.yamf; NSSF (Network Slice Selection Function) NSAA Availability Service API; TS29531_Nnssf_NSASAvailability.yamf; NSSF (Network Slice Selection Function) NSAA Availability Service API; TS29531_Nnssf_NSASAvailability.yamf; NSSF (Network Slice Selection Function) NSAA Availability Service API; TS29531_Nnssf_NSASAvailability.yamf; NSSF (Network Slice Selection Function) NSAA Availability Service API
5G SBI CP	Northbound APIs	CAPIF	Northbound APIs: Common API Framework (CAPIF) TS29222_CAPIF_Discover_Service_API.yamf; Discover Service Service API; TS29222_CAPIF_Publish_Service_API.yamf; Publish Service Service API; TS29222_CAPIF_Events_Service_API.yamf; Events Service API; TS29222_CAPIF_Invoker_Management_Service_API.yamf; API Invoker Management Service API; TS29222_CAPIF_Security_Service_API.yamf; Security Service API; TS29222_CAPIF_Access_Control_Service_API.yamf; Access Control Policy Service API; TS29222_CAPIF_Logging_Service_API.yamf; Logging API Invocation Service API; TS29222_CAPIF_Auditing_Service_API.yamf; Auditing Service API; TS29222_AEF_Security_Service_API.yamf; AEF Authentication Service API
5G SBI CP	Npcf	PCF	Service end-point of the PCF exposing the following OpenAPIs: TS29514_Npcf_PolicyAuthorization.yamf; PCF (Policy Control Function) Policy Authorization Service API; TS29507_Npcf_AMPolicyControl.yamf; PCF (Policy Control Function) Access and Mobility (AM) Policy Control Service API; TS29512_Npcf_SMPolicyControl.yamf; PCF (Policy Control Function) Session Management (SM) Policy Control Service API; TS29554_Npcf_BDTPolicyControl.yamf; PCF (Policy Control Function) Background Data Transfer (BDT) Policy Control Service API; TS29523_Npcf_EventExposure.yamf; PCF (Policy Control Function) Policy Control Event Exposure Service API
5G SBI CP	Nsmf	SMF	Service end-point of the SMF exposing the following OpenAPIs: TS29525_Npcf_UEPolicyControl.yamf; PCF (Policy Control Function) UE Policy Control Service API
5G SBI CP	Nsmf	SMF	Service end-point of the SMF exposing the following OpenAPIs: TS29502_Nsmf_PDUSession.yamf; SMF (Session Management) PDU Session Service API; TS29508_Nsmf_EventExposure.yamf; SMF (Session Management) Event Exposure Service API
5G SBI CP	Nsmf	SMF	Service end-point of the SMF exposing the following OpenAPIs: TS29540_Nsmf_SMService.yamf; SMF (SM Service) SM Service Service API
5G SBI CP	Nnudm	UDM	Service end-point of the UDM exposing the following OpenAPIs: TS29503_Nnudm_SDM.yamf; UDM (Unified Data Management) Subscriber Data Management Service API; TS29503_Nnudm_UECM.yamf; UDM (Unified Data Management) UE Context Management Service API; TS29503_Nnudm_UEAU.yamf; UDM (Unified Data Management) UE Authentication Service API; TS29503_Nnudm_EE.yamf; UDM (Unified Data Management) Event Exposure Service API; TS29503_Nnudm_PP.yamf; UDM (Unified Data Management) Non-Provisioning Service API; TS29503_Nnudm_NIDD.yamf; UDM (Unified Data Management) Parameter IP Data Delivery Authorization Service API
5G SBI CP	Nnudr	UDR	Service end-point of the UDR exposing the following OpenAPIs: TS29504_Nnudr_DataRepository.yamf; UDR (Unified Data Repository) Data Repository Service API; TS29505_Nnudr_SubscriptionData.yamf; UDR (Unified Data Repository) Subscription Data Service API; TS29519_PolicyData.yamf; UDR (Unified Data Repository) Policy Data Service API; TS29519_ExposureData.yamf; UDR (Unified Data Repository) Exposure Data Service API; TS29519_ApplicationData.yamf; UDR (Unified Data Repository) Application Data Service API

