

UE

gNB

simcom-sim8262e-m2.pcap

RRC Setup Request

ID RNTI	0x4601
LCID	CCCH (48 bits)
Random	5a1cf7e12a
Cause	mo-Signalling
LCID	Padding

[Frame 1] RRC Setup Request – Msg3 over CCCH; UE asks gNB to establish RRC connection

RRC Setup

ID RNTI	0x4601
LCID	UE Contention Resolution Identity
LCID	CCCH
Trans ID	0
SRB add	1
CellGroup	0
SRB add	1
RLC mode	AM
T-PollRetx	ms45
maxRetx	t8
T-Reassembly	ms35
T-StatusProhibit	ms0
SR-TransMax	n64
periodicBSR	sf10
retxBSR	sf80...
	11 more

[Frame 2] RRC Setup – Msg4 payload carrying SRB1 config; UE moves to RRC\_CONNECTED on receipt

RRC Setup Complete

ID RNTI	0x4601
SRB	1
Trans ID	0
PLMN idx	1
NAS	7e0168d31db5577e...
NAS msg	Registration request
NAS msg	Registration request

[Frame 3] RRC Setup Complete – UE acks SRB1 and piggybacks an initial NAS message to the AMF

RRC Setup Complete

ID RNTI	0x4601
SRB	1
Trans ID	0
PLMN idx	1
NAS	7e0168d31db5577e...
NAS msg	Registration request
NAS msg	Registration request

RRC Setup Complete

ID RNTI	0x4601
SRB	1
Trans ID	0
PLMN idx	1
NAS	7e0168d31db5577e...
NAS msg	Registration request
NAS Reg type	initial registration
NAS Mobile ID	5G-GUTI
NAS MCC	Test network (001)
NAS MNC	Test network (01)
NAS 5G-TMSI	0xfa003e0f
NAS msg	Registration request
NAS Reg type	initial registration
NAS Mobile ID	5G-GUTI
NAS MCC	Test network (001)...
	2 more

Security Mode Command

ID RNTI	0x4601
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[Frame 5] Security Mode Command – gNB activates AS security; subsequent SRB/DRB traffic is ciphered and



UE

gNB

SRB	1
Trans ID	3
PDU Session	2
SDAP DL	absent
SDAP UL	absent
Default DRB	True
QFI	1
DRB add	1
PDCP-SN UL	len18bits
PDCP-SN DL	len18bits
ROHC	notUsed
LCID	4
DRB add	1
Priority	1...
	3 more

carry a piggybacked NAS message

RRC Reconfiguration Complete

RNTI	0x4601
SRB	1
Trans ID	3

[Frame 27] RRC Reconfiguration Complete – UE has applied the new bearer/PHY config

UL Information Transfer

RNTI	0x4601
SRB	1
NAS	7e02fe04f88c5c7e...

[Frame 53] UL Information Transfer – transparent NAS container from UE to AMF/SMF

UL Information Transfer

RNTI	0x4601
SRB	1
NAS	7e021fcc83065d7e...

[Frame 55] UL Information Transfer – transparent NAS container from UE to AMF/SMF

DL Information Transfer

RNTI	0x4601
SRB	1
Trans ID	0
NAS	7e02f05b8437577e...

[Frame 57] DL Information Transfer – transparent NAS container from AMF/SMF to UE

Session Result: incomplete - mid-capture (duration: 32.214s)