

UE

gNB

moto_edge_30_pro.pcap

RRC Setup Request

ID RNTI	0x4601
LCID	CCCH (48 bits)
Random	46c66e3536
Cause	mo-Data
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	7e013ed7e2ccad7e...
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	7e013ed7e2ccad7e...
NAS msg	Registration request
NAS msg	Registration request

RRC Setup Complete

ID RNTI	0x4601
SRB	1
Trans ID	0
PLMN idx	1
NAS	7e013ed7e2ccad7e...
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	0xc0002333
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

 RNTI	0x4601
 SRB	1
 Trans ID	2
 PowerClass	pc2
 PowerClass	pc2
 PowerClass	pc2
 PowerClass	pc2
 PowerClass	pc2
 PowerClass	pc2
 PowerClass	pc2
















supported bands, MIMO, modulation, ROHC profiles


 RRC Reconfiguration

 RNTI	0x4601
 SRB	1
 Trans ID	3
 PDU Session	1
 SDAP DL	absent
 SDAP UL	absent
 Default DRB	True
 QFI	1
 DRB add	1
 PDCP-SN UL	len12bits
 PDCP-SN DL	len12bits
 ROHC	notUsed
 LCID	4
 DRB add	1
 RLC mode	AM...
	7 more




 [Frame 26] RRC Reconfiguration – gNB pushes radio-bearer / measurement / PHY config; may carry a piggybacked NAS message


 RRC Reconfiguration

 RNTI	0x4601
 SRB	1
 Trans ID	3
 PDU Session	1
 SDAP DL	absent
 SDAP UL	absent
 Default DRB	True
 QFI	1
 DRB add	1
 PDCP-SN UL	len12bits
 PDCP-SN DL	len12bits
 ROHC	notUsed
 LCID	4
 DRB add	1
 RLC mode	AM...
	7 more




 [Frame 29] RRC Reconfiguration – gNB pushes radio-bearer / measurement / PHY config; may carry a piggybacked NAS message


 RRC Reconfiguration Complete

 RNTI	0x4601
 SRB	1
 Trans ID	3





 [Frame 30] RRC Reconfiguration Complete – UE has applied the new bearer/PHY config

 UL Information Transfer

 RNTI	0x4601
 SRB	1
 NAS	7e02ee57a25fb07e...



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


 DL Information Transfer

 RNTI	0x4601
 SRB	1
 Trans ID	0
 NAS	7e02c253c9158e7e...

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


 UL Information Transfer

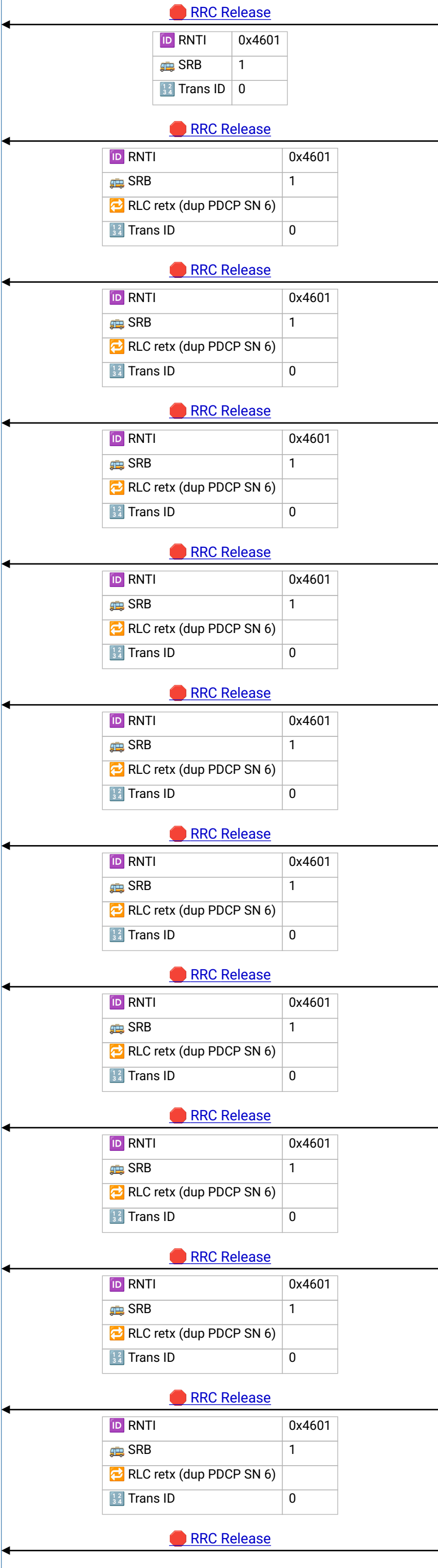
 RNTI	0x4601
 SRB	1


 [Frame 56] UL Information Transfer – transparent NAS container from UE to AMF/SMF


 UE


 gNB


 NAS 7e024b35d85fb17e...





 [Frame 58] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)


 [Frame 59] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)


 [Frame 60] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)


 [Frame 61] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)


 [Frame 62] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)


 [Frame 63] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)


 [Frame 64] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)

 [Frame 65] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)

 [Frame 66] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)





 [Frame 67] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)

 [Frame 68] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)

 [Frame 69] RRC Release – gNB sends UE to RRC_IDLE (or RRC_INACTIVE if suspendConfig is present)

 UE

 gNB

 RNTI	0x4601
 SRB	1
 RLC retx (dup PDCP SN 6)	
 Trans ID	0

RRC_INACTIVE if suspendConfig is present)

Session Result: incomplete - mid-capture (duration: 5.556s)