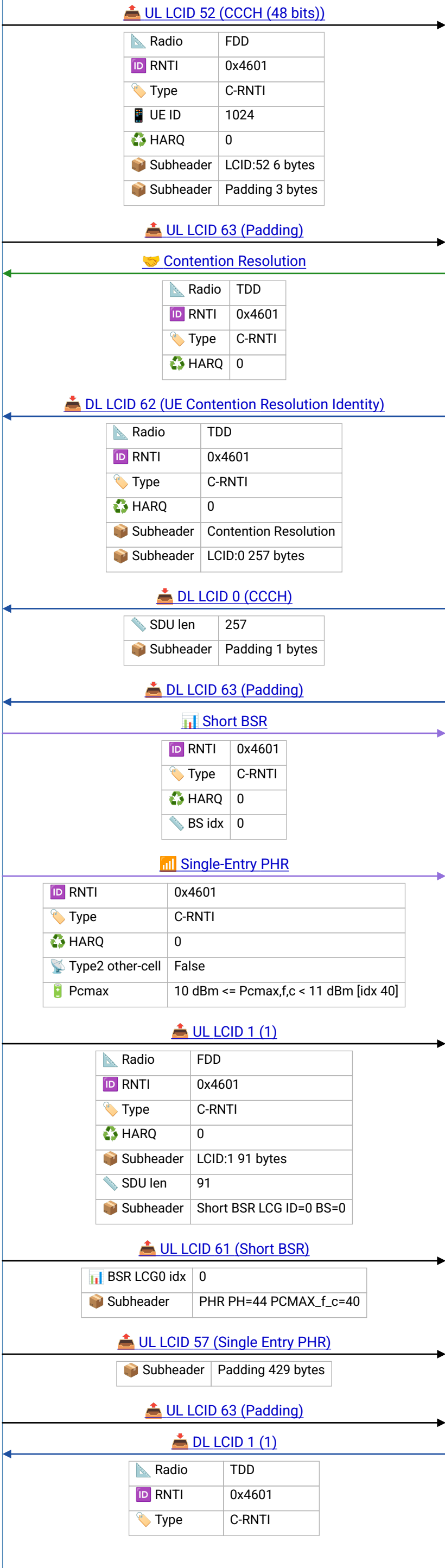


UE

gNB

simcom-sim8262e-m2.pcap

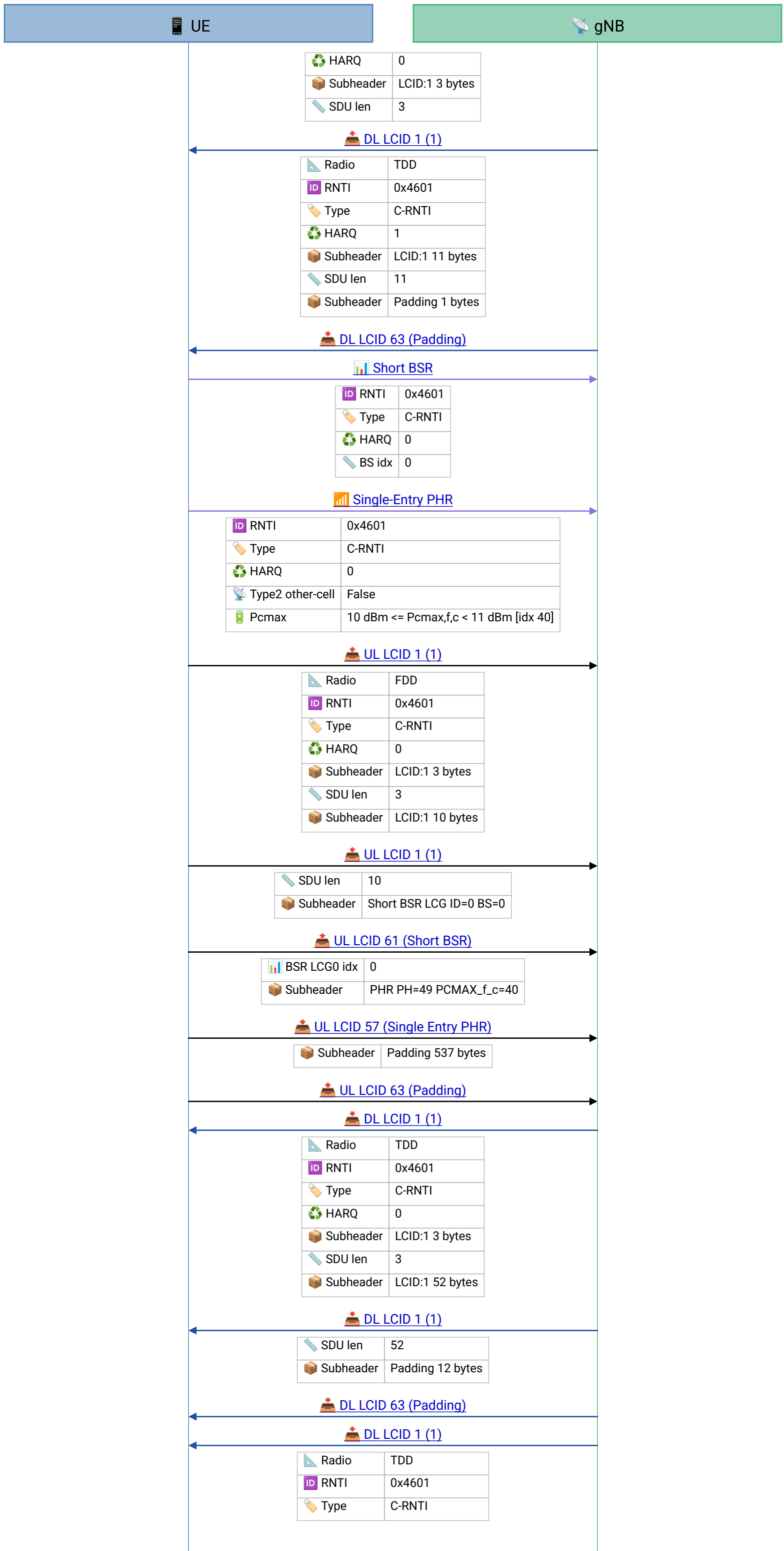


[Frame 1] UL-SCH MAC PDU – UE@gNB on PUSCH (generic fallback for LCIDs not matched by a higher-priority template)

[Frame 2] Msg4 UE Contention Resolution – gNB echoes the UE's Msg3 CCCH SDU; the matching UE wins RACH contention and promotes Temporary C-RNTI to C-RNTI

[Frame 3] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 4] DL-SCH MAC PDU – gNB@UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)



💡 [Frame 5] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

💡 [Frame 6] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

💡 [Frame 7] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

💡 [Frame 8] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

HARQ	0
Subheader	LCID:1 3 bytes
SDU len	3

DL LCID 1 (1)

Radio	TDD
RNTI	0x4601
Type	C-RNTI
HARQ	1
Subheader	LCID:1 11 bytes
SDU len	11
Subheader	Padding 1 bytes

DL LCID 63 (Padding)

Short BSR

RNTI	0x4601
Type	C-RNTI
HARQ	0
BS idx	0

Single-Entry PHR

RNTI	0x4601
Type	C-RNTI
HARQ	0
Type2 other-cell	False
Pcmax	10 dBm <= Pcmax,f,c < 11 dBm [idx 40]

UL LCID 1 (1)

Radio	FDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:1 3 bytes
SDU len	3
Subheader	LCID:1 10 bytes

UL LCID 1 (1)

SDU len	10
Subheader	Short BSR LCG ID=0 BS=0

UL LCID 61 (Short BSR)

BSR LCG0 idx	0
Subheader	PHR PH=49 PCMAX_f_c=40

UL LCID 57 (Single Entry PHR)

Subheader	Padding 537 bytes
-----------	-------------------

UL LCID 63 (Padding)

DL LCID 1 (1)

Radio	TDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:1 3 bytes
SDU len	3
Subheader	LCID:1 52 bytes

DL LCID 1 (1)

SDU len	52
Subheader	Padding 12 bytes

DL LCID 63 (Padding)

DL LCID 1 (1)

Radio	TDD
RNTI	0x4601
Type	C-RNTI

UE

gNB

HARQ	1
Subheader	LCID:1 6 bytes
SDU len	6
Subheader	Padding 63 bytes

DL LCID 63 (Padding)

Short BSR

RNTI	0x4601
Type	C-RNTI
HARQ	0
BS idx	0

Single-Entry PHR

RNTI	0x4601
Type	C-RNTI
HARQ	0
Type2 other-cell	False
Pcmax	10 dBm <= Pcmax,f,c < 11 dBm [idx 40]

UL LCID 1 (1)

Radio	FDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:1 3 bytes
SDU len	3
Subheader	LCID:1 21 bytes

UL LCID 1 (1)

SDU len	21
Subheader	Short BSR LCG ID=0 BS=0

UL LCID 61 (Short BSR)

BSR LCG0 idx	0
Subheader	PHR PH=49 PCMAX_f_c=40

UL LCID 57 (Single Entry PHR)

Subheader	Padding 558 bytes
-----------	-------------------

UL LCID 63 (Padding)

DL LCID 1 (1)

Radio	TDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:1 3 bytes
SDU len	3
Subheader	Padding 66 bytes

DL LCID 63 (Padding)

Short BSR

RNTI	0x4601
Type	C-RNTI
HARQ	0
BS idx	0

Single-Entry PHR

RNTI	0x4601
Type	C-RNTI
HARQ	0
Type2 other-cell	False
Pcmax	10 dBm <= Pcmax,f,c < 11 dBm [idx 40]

UL LCID 1 (1)

Radio	FDD
RNTI	0x4601

[Frame 9] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 10] DL-SCH MAC PDU – gNB<math>\rightarrow</math>UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

[Frame 11] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

UE

gNB

Type	C-RNTI
HARQ	0
Subheader	LCID:1 106 bytes
SDU len	106
Subheader	Short BSR LCG ID=0 BS=0

UL LCID 61 (Short BSR)

BSR LCG0 idx	0
Subheader	PHR PH=49 PCMAX_f_c=40

UL LCID 57 (Single Entry PHR)

Subheader	Padding 478 bytes
-----------	-------------------

UL LCID 63 (Padding)

DL LCID 1 (1)

Radio	TDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:1 3 bytes
SDU len	3
Subheader	Padding 66 bytes

DL LCID 63 (Padding)

DL LCID 1 (1)

Radio	TDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:1 51 bytes
SDU len	51
Subheader	LCID:1 17 bytes

DL LCID 1 (1)

SDU len	17
---------	----

DL LCID 1 (1)

Radio	TDD
RNTI	0x4601
Type	C-RNTI
HARQ	1
Subheader	LCID:1 9 bytes
SDU len	9
Subheader	Padding 60 bytes

DL LCID 63 (Padding)

Short BSR

RNTI	0x4601
Type	C-RNTI
HARQ	0
BS idx	0

Single-Entry PHR

RNTI	0x4601
Type	C-RNTI
HARQ	0
Type2 other-cell	False
Pcmax	10 dBm <= Pcmax,f,c < 11 dBm [idx 40]

UL LCID 1 (1)

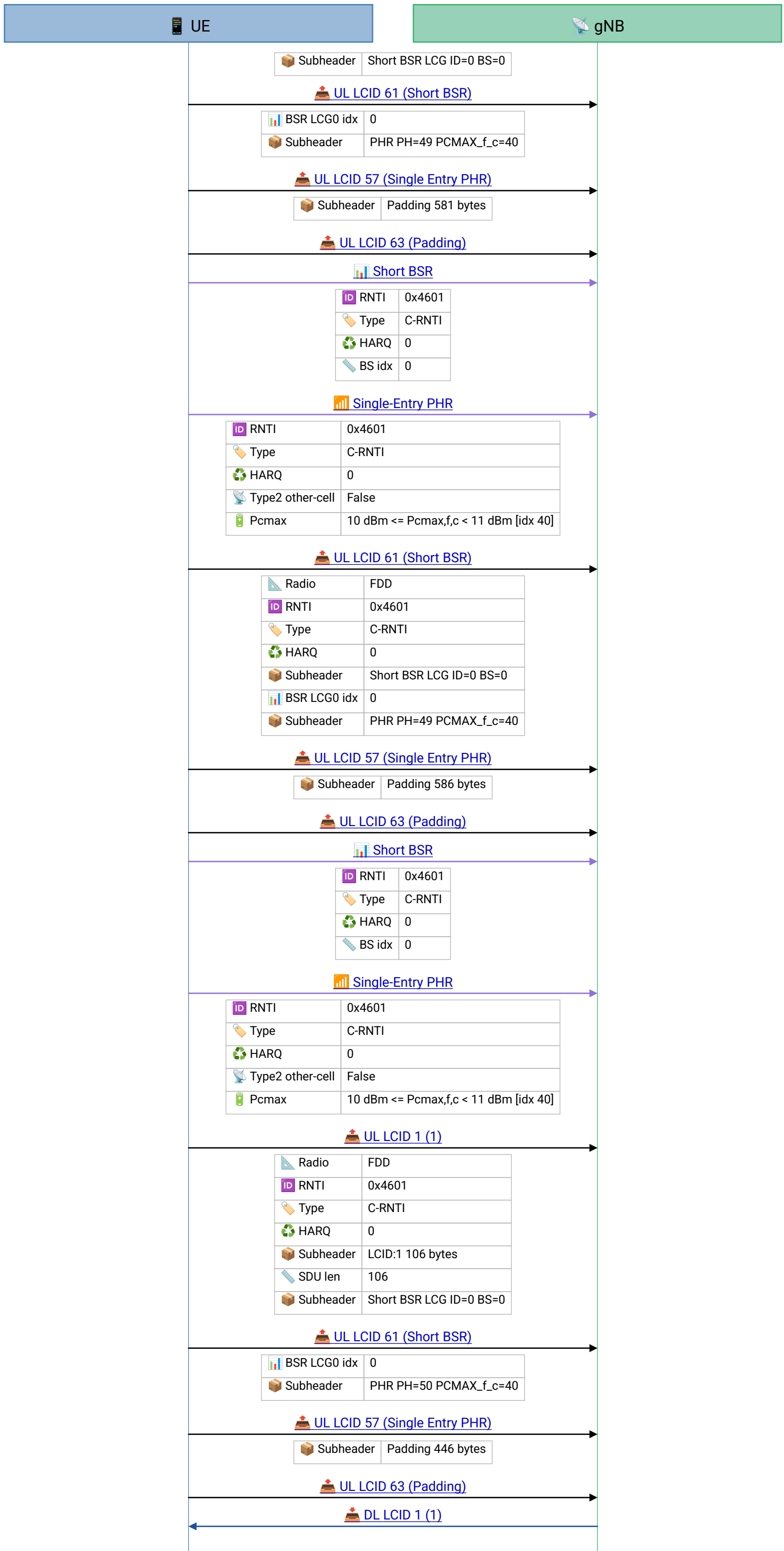
Radio	FDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:1 3 bytes
SDU len	3

[Frame 12] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

[Frame 13] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

[Frame 14] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

[Frame 15] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group



[Frame 16] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 17] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 18] DL-SCH MAC PDU – gNB to UE on PDSCH (generic)

UE

gNB

Radio	TDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:1 3 bytes
SDU len	3
Subheader	Padding 66 bytes

DL LCID 63 (Padding)

DL LCID 1 (1)

Radio	TDD
RNTI	0x4601
Type	C-RNTI
HARQ	1
Subheader	LCID:1 22 bytes
SDU len	22
Subheader	Padding 47 bytes

DL LCID 63 (Padding)

Short BSR

RNTI	0x4601
Type	C-RNTI
HARQ	0
BS idx	0

Single-Entry PHR

RNTI	0x4601
Type	C-RNTI
HARQ	0
Type2 other-cell	False
Pcmax	10 dBm <= Pcmax,f,c < 11 dBm [idx 40]

UL LCID 1 (1)

Radio	FDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:1 3 bytes
SDU len	3
Subheader	Short BSR LCG ID=0 BS=0

UL LCID 61 (Short BSR)

BSR LCG0 idx	0
Subheader	PHR PH=50 PCMAX_f_c=40

UL LCID 57 (Single Entry PHR)

Subheader	Padding 549 bytes
-----------	-------------------

UL LCID 63 (Padding)

Short BSR

RNTI	0x4601
Type	C-RNTI
HARQ	0
BS idx	0

Single-Entry PHR

RNTI	0x4601
Type	C-RNTI
HARQ	0
Type2 other-cell	False
Pcmax	10 dBm <= Pcmax,f,c < 11 dBm [idx 40]

UL LCID 1 (1)

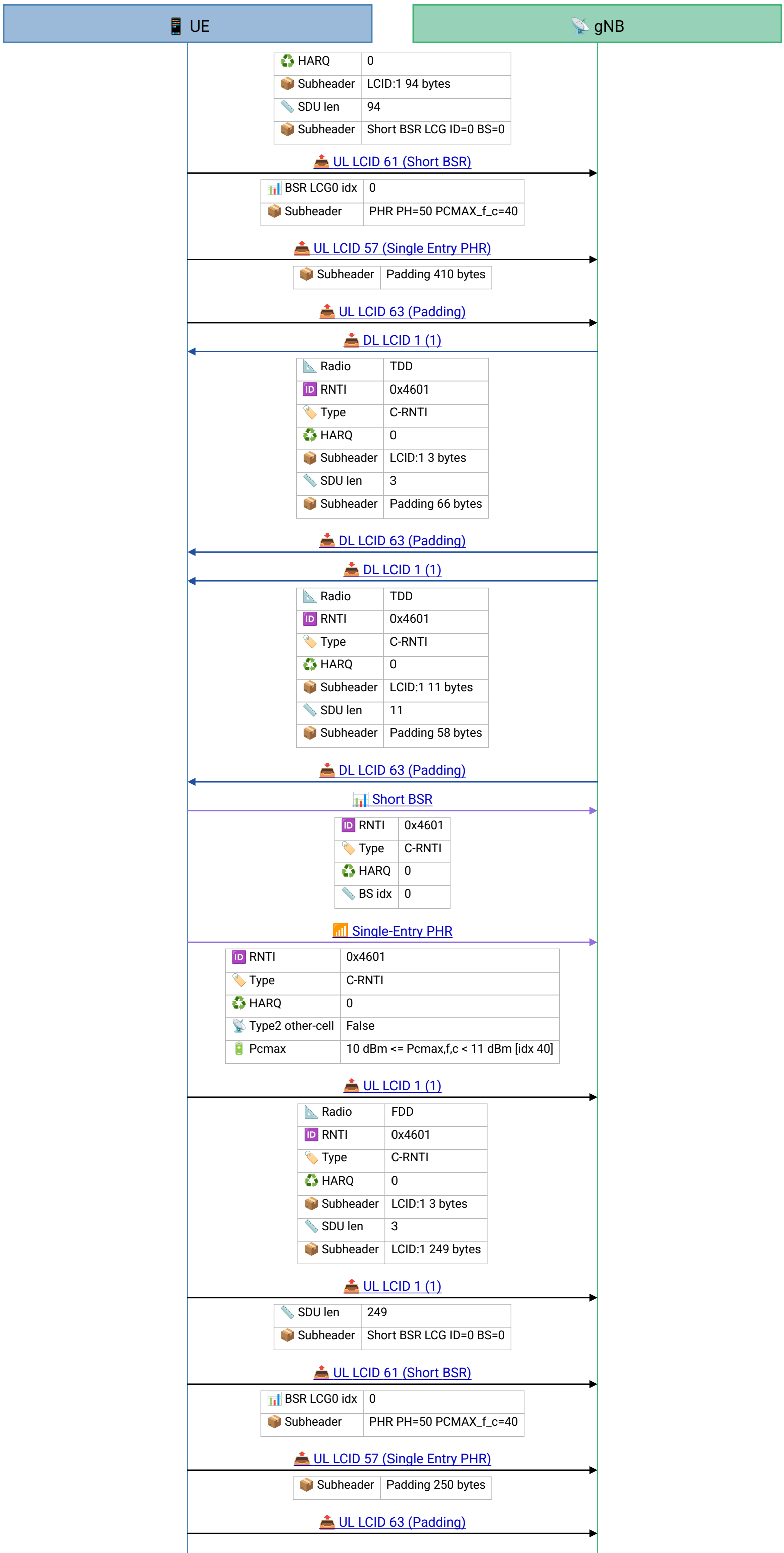
Radio	FDD
RNTI	0x4601
Type	C-RNTI

fallback for LCIDs not matched by a higher-priority template)

[Frame 19] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

[Frame 20] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 21] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group



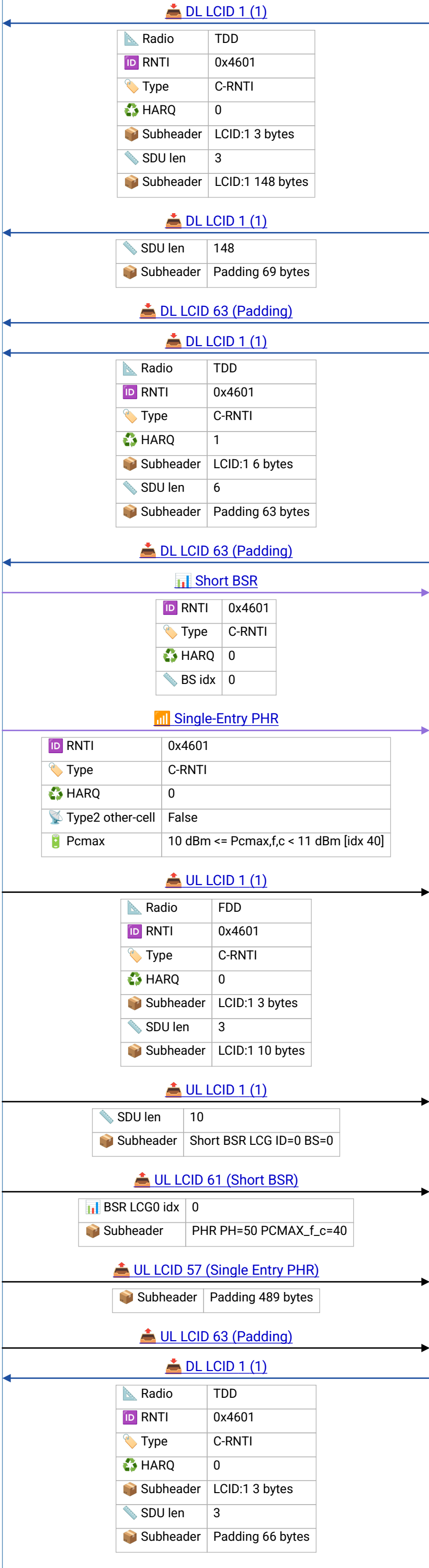
💡 [Frame 22] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

💡 [Frame 23] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

💡 [Frame 24] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

UE

gNB

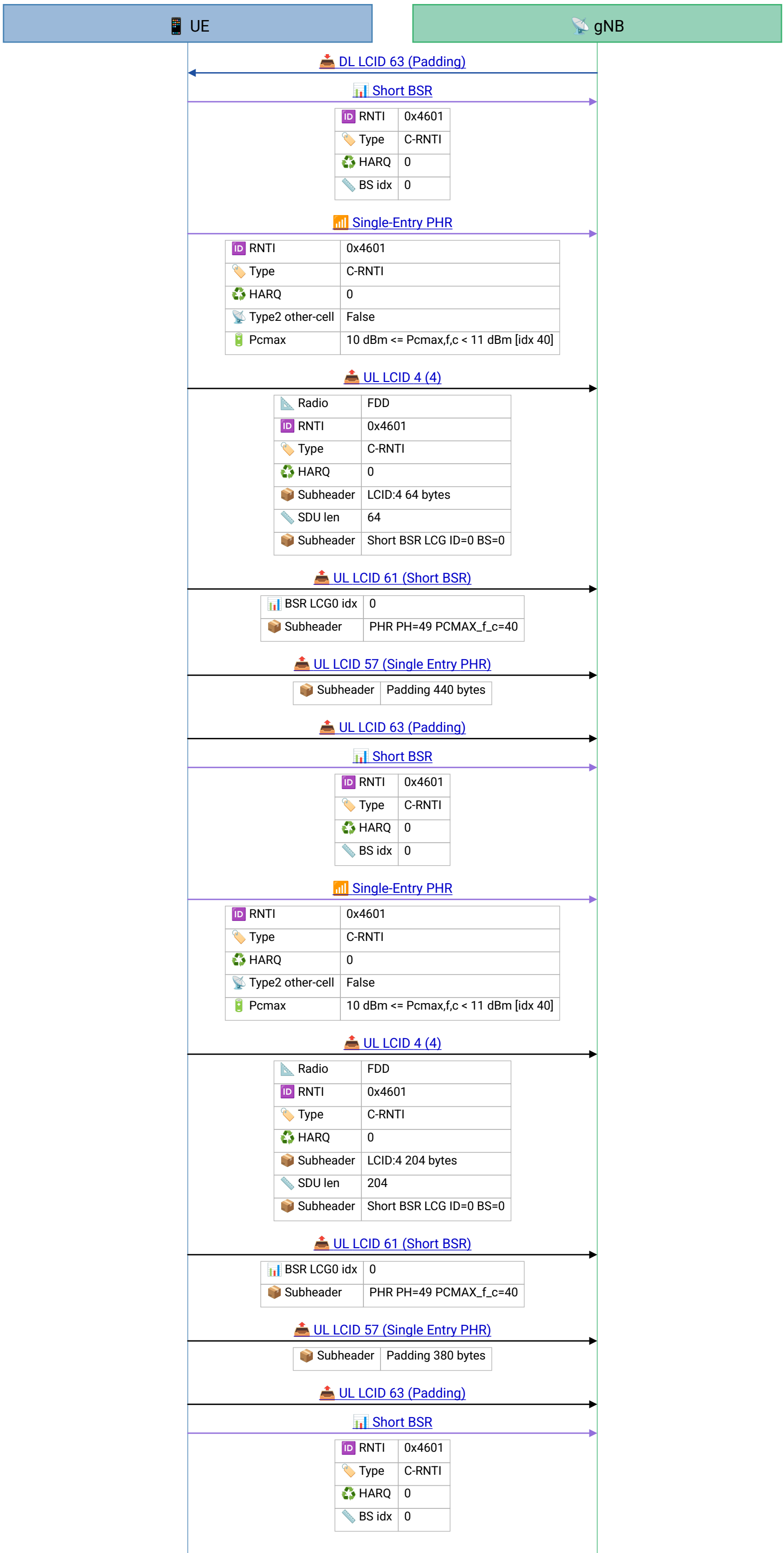


[Frame 25] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

[Frame 26] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

[Frame 27] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

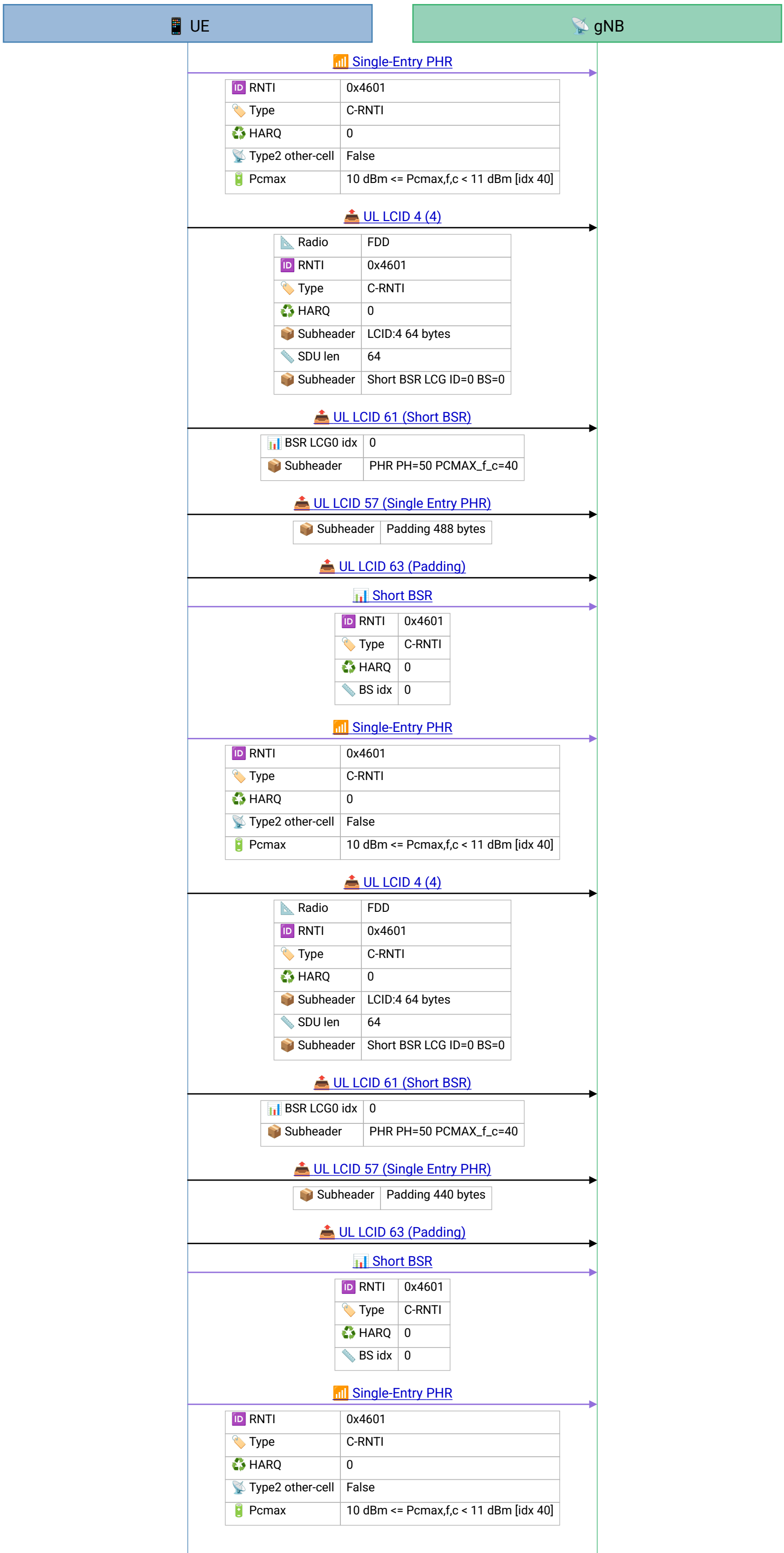
[Frame 28] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)



💡 [Frame 29] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

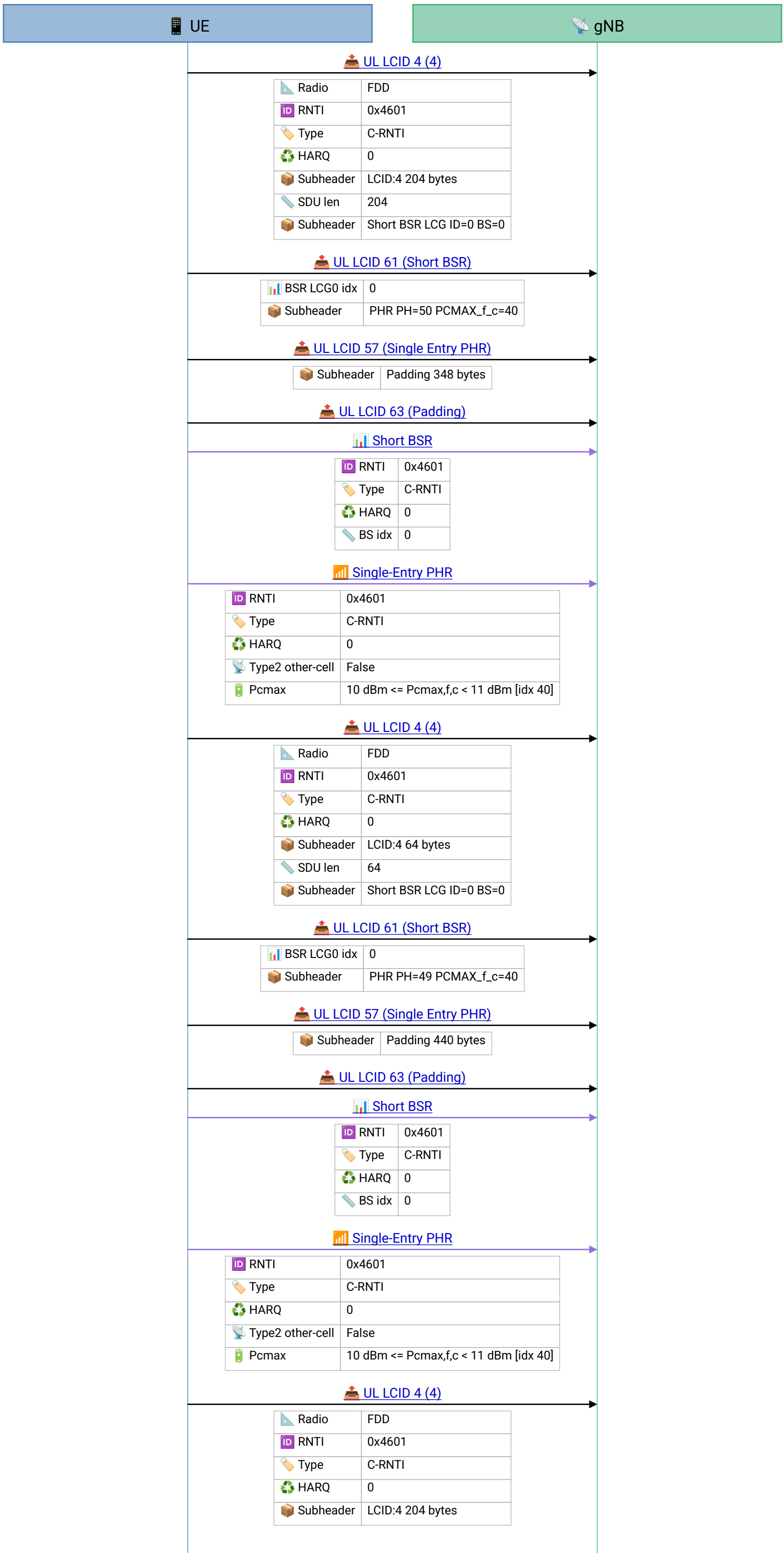
💡 [Frame 30] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

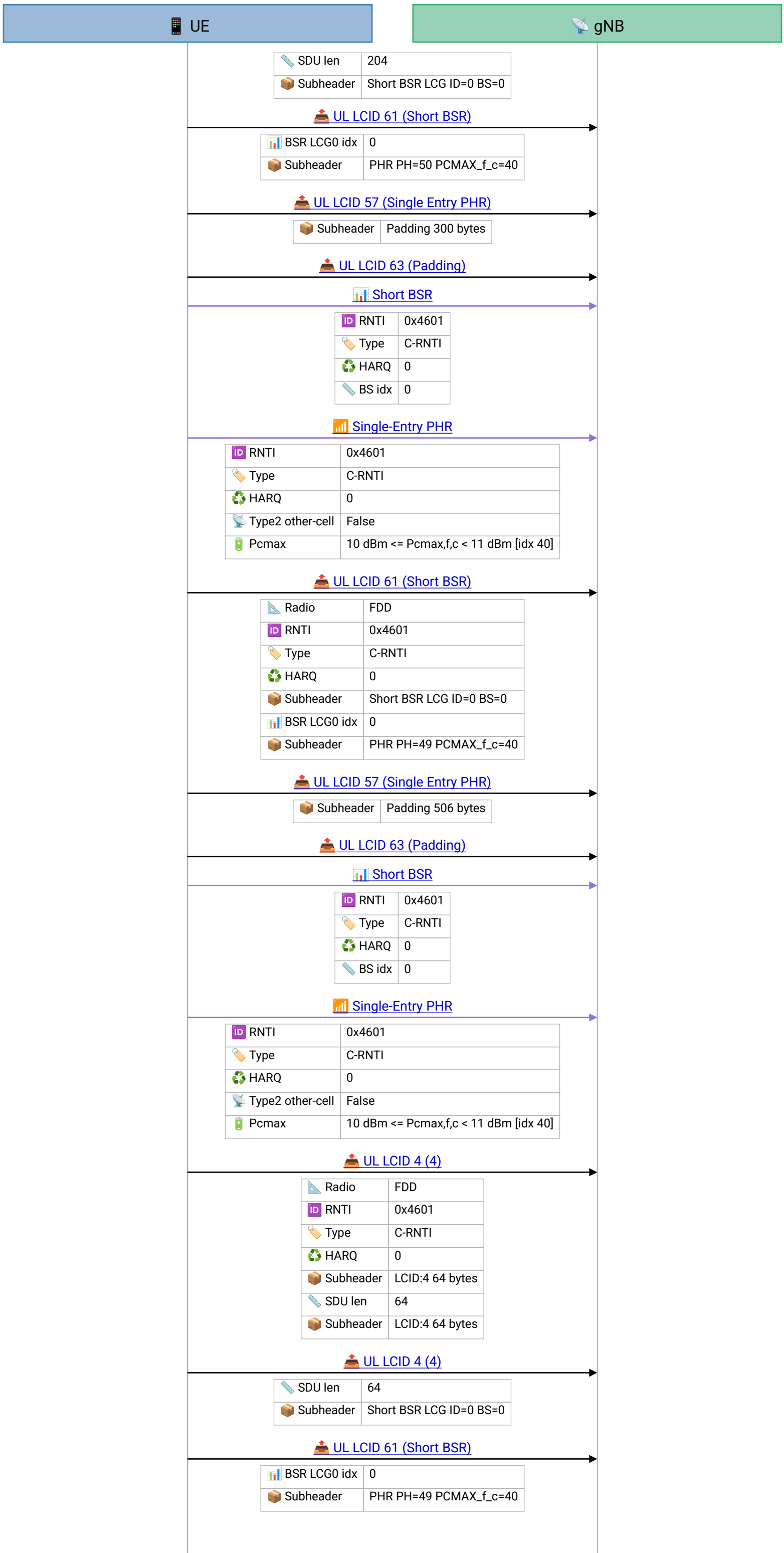
💡 [Frame 31] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group



💡 [Frame 32] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

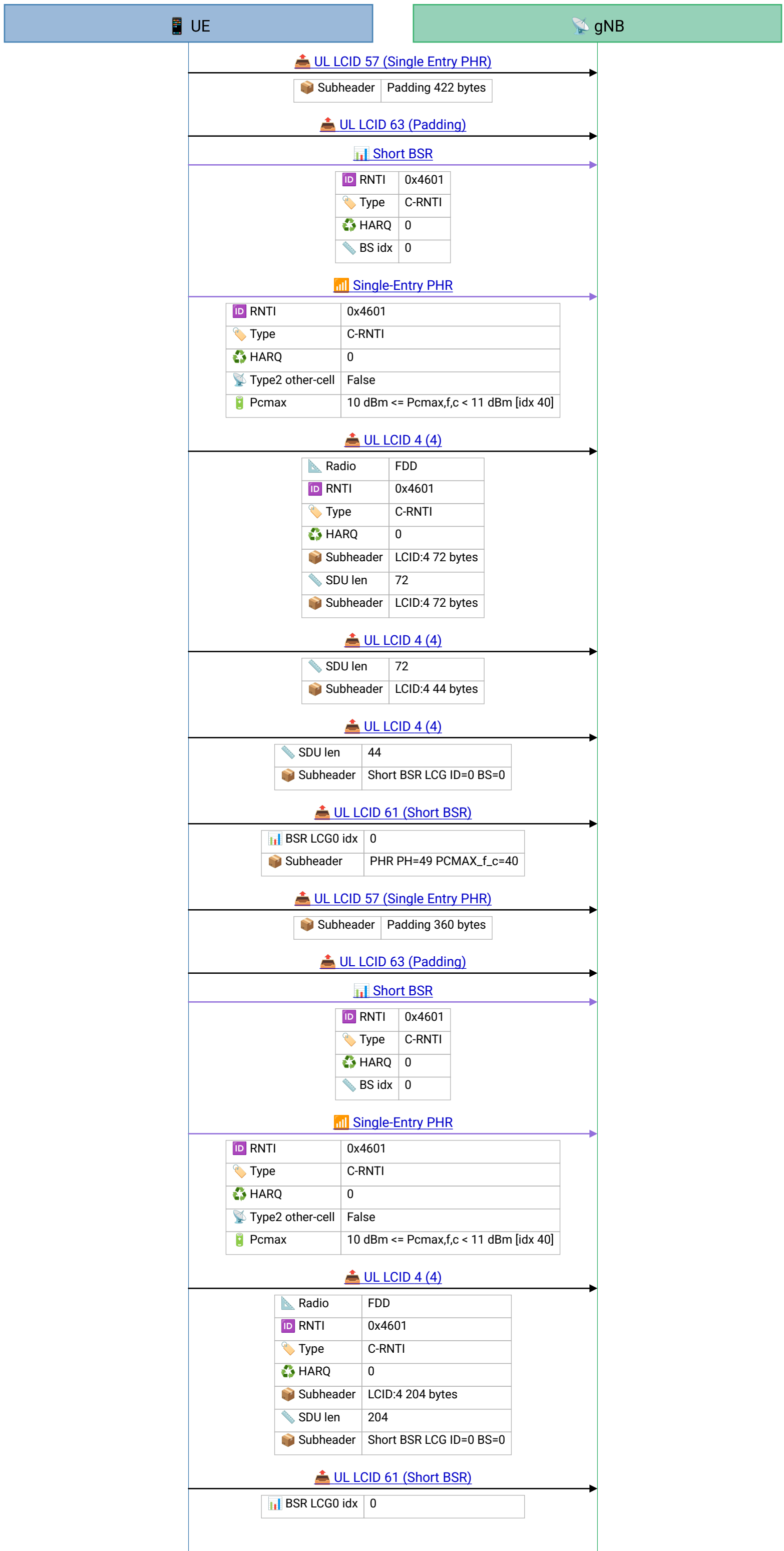
💡 [Frame 33] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group





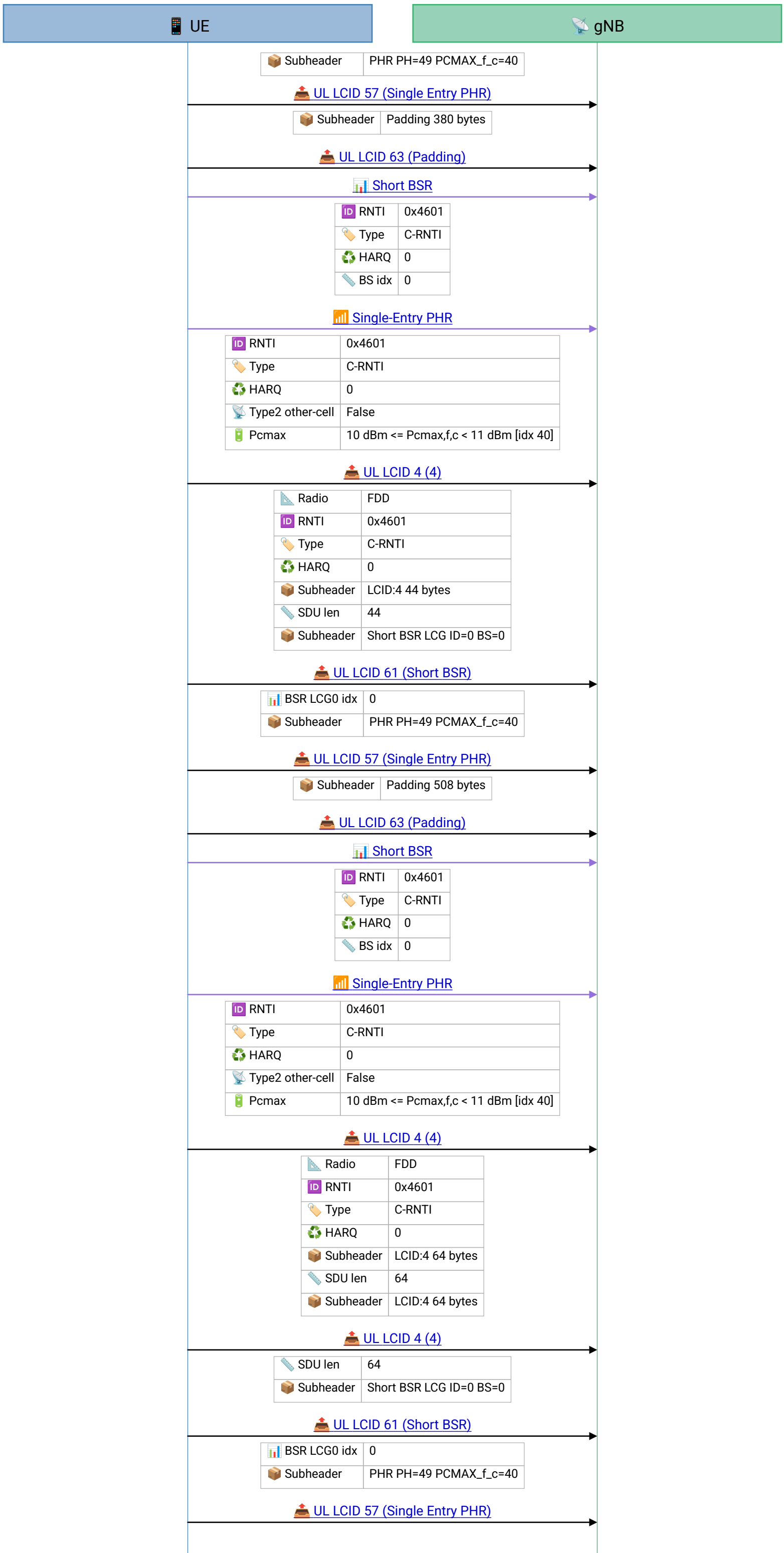
[Frame 36] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 37] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group



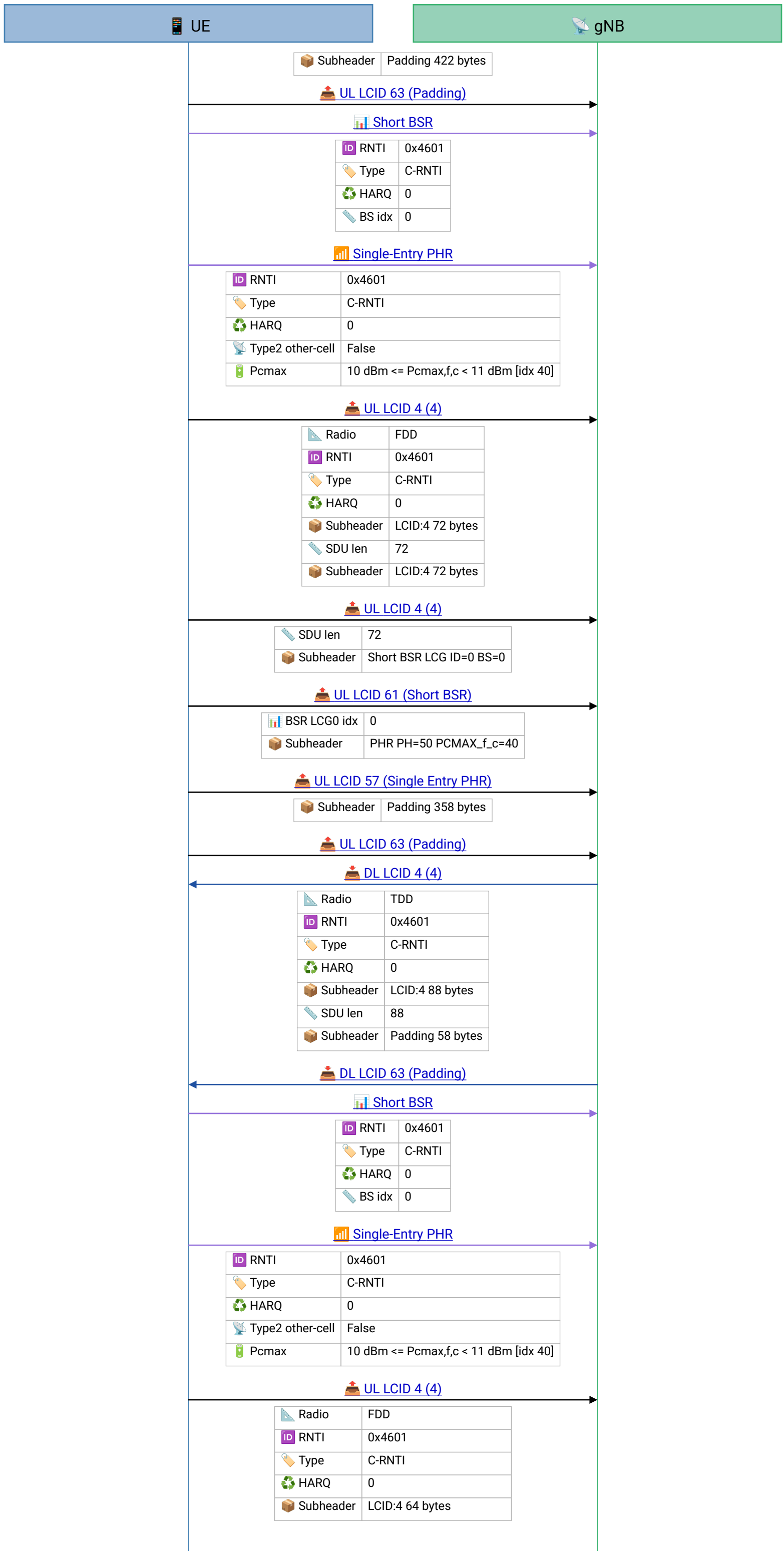
[Frame 38] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 39] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group



💡 [Frame 40] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

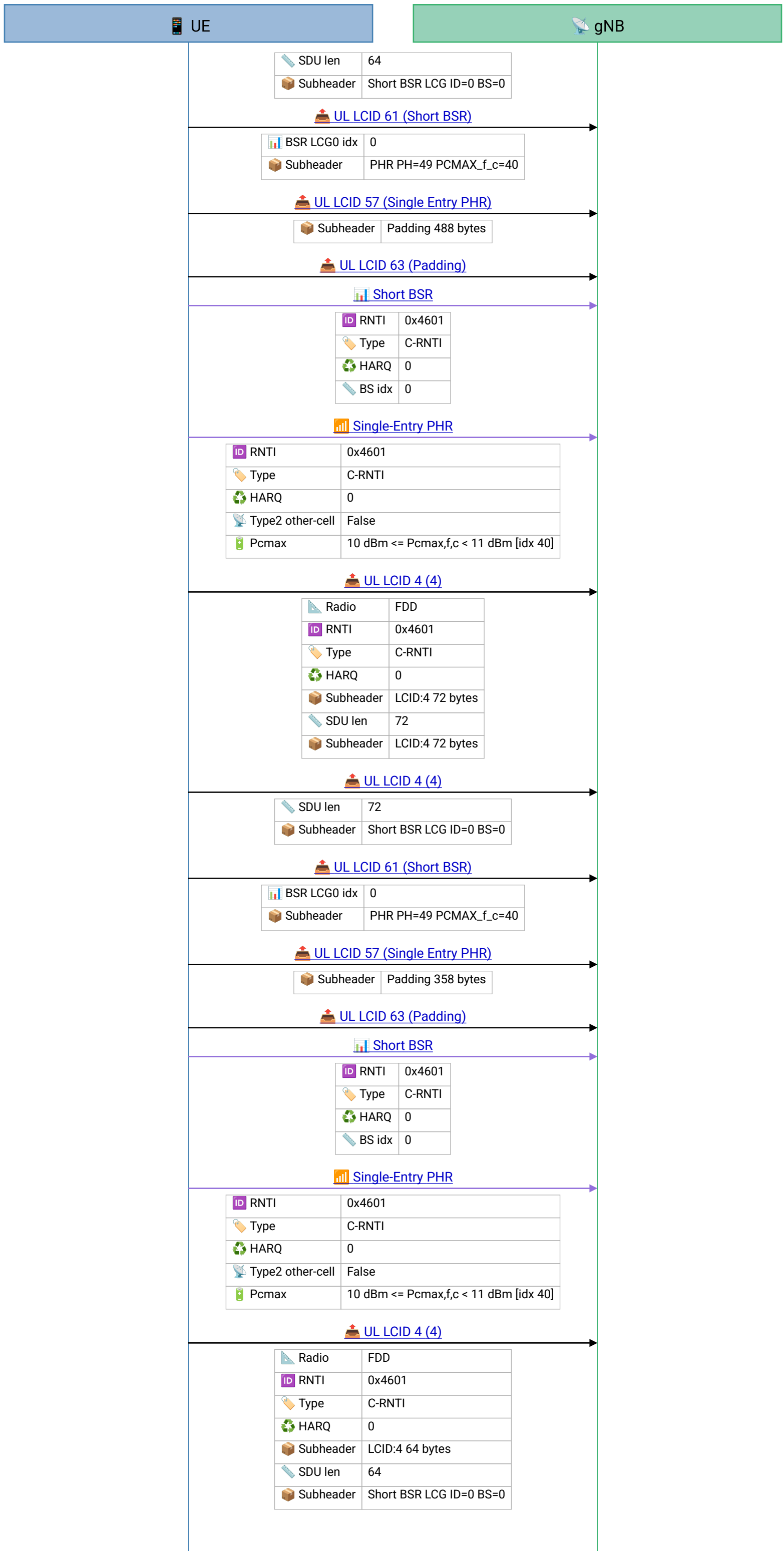
💡 [Frame 41] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group



[Frame 42] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

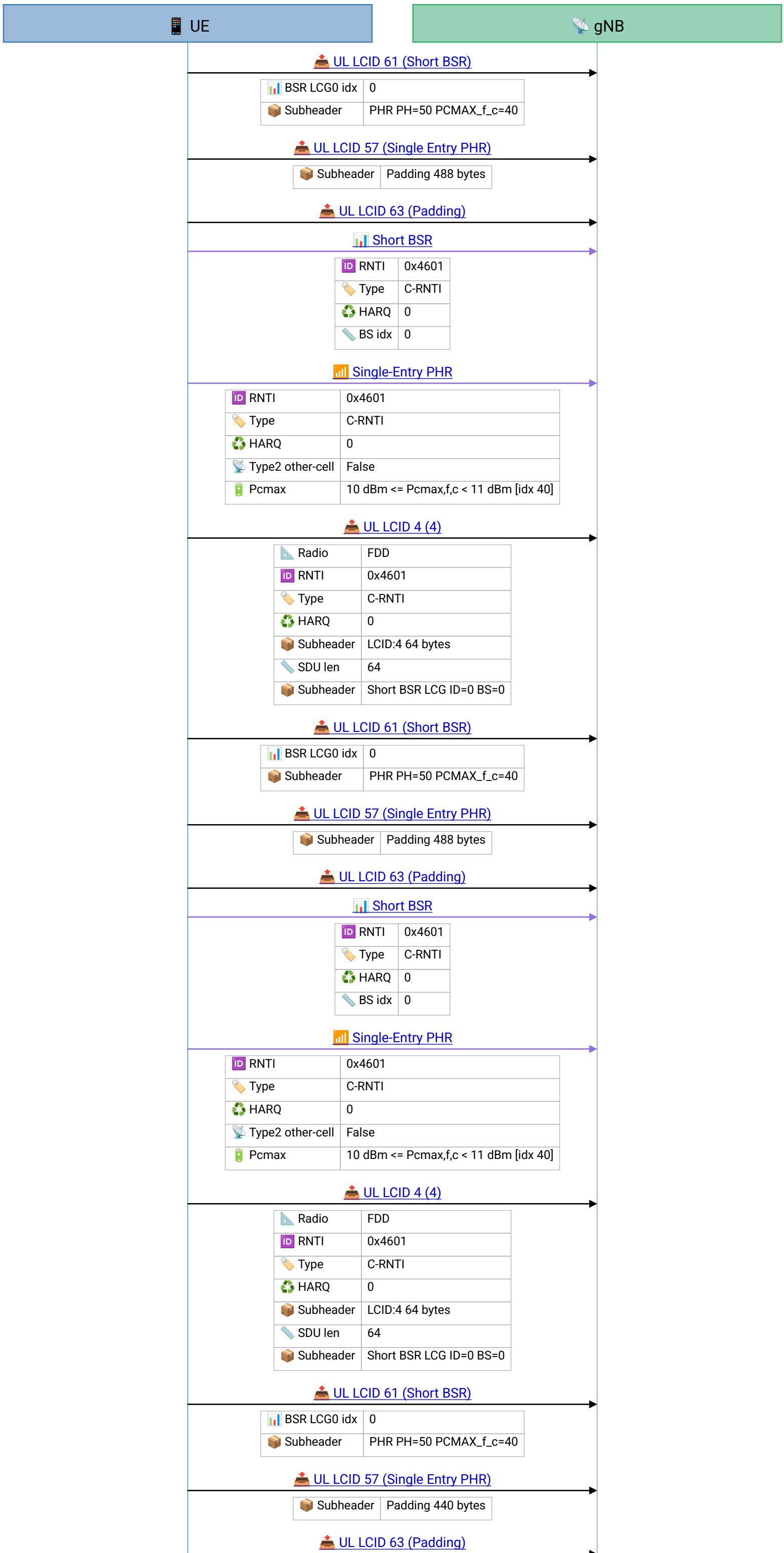
[Frame 43] DL-SCH MAC PDU – gNB to UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

[Frame 44] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group



[Frame 45] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 46] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group



[Frame 47] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 48] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

UE

gNB

Short BSR

RNTI	0x4601
Type	C-RNTI
HARQ	0
BS idx	0

[Frame 49] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

Single-Entry PHR

RNTI	0x4601
Type	C-RNTI
HARQ	0
Type2 other-cell	False
Pcmax	10 dBm <= Pcmax,f,c < 11 dBm [idx 40]

UL LCID 4 (4)

Radio	FDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:4 64 bytes
SDU len	64
Subheader	Short BSR LCG ID=0 BS=0

UL LCID 61 (Short BSR)

BSR LCG0 idx	0
Subheader	PHR PH=49 PCMAX_f_c=40

UL LCID 57 (Single Entry PHR)

Subheader	Padding 488 bytes
-----------	-------------------

UL LCID 63 (Padding)

Short BSR

RNTI	0x4601
Type	C-RNTI
HARQ	0
BS idx	0

[Frame 50] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

Single-Entry PHR

RNTI	0x4601
Type	C-RNTI
HARQ	0
Type2 other-cell	False
Pcmax	10 dBm <= Pcmax,f,c < 11 dBm [idx 40]

UL LCID 4 (4)

Radio	FDD
RNTI	0x4601
Type	C-RNTI
HARQ	0
Subheader	LCID:4 64 bytes
SDU len	64
Subheader	Short BSR LCG ID=0 BS=0

UL LCID 61 (Short BSR)

BSR LCG0 idx	0
Subheader	PHR PH=49 PCMAX_f_c=40

UL LCID 57 (Single Entry PHR)

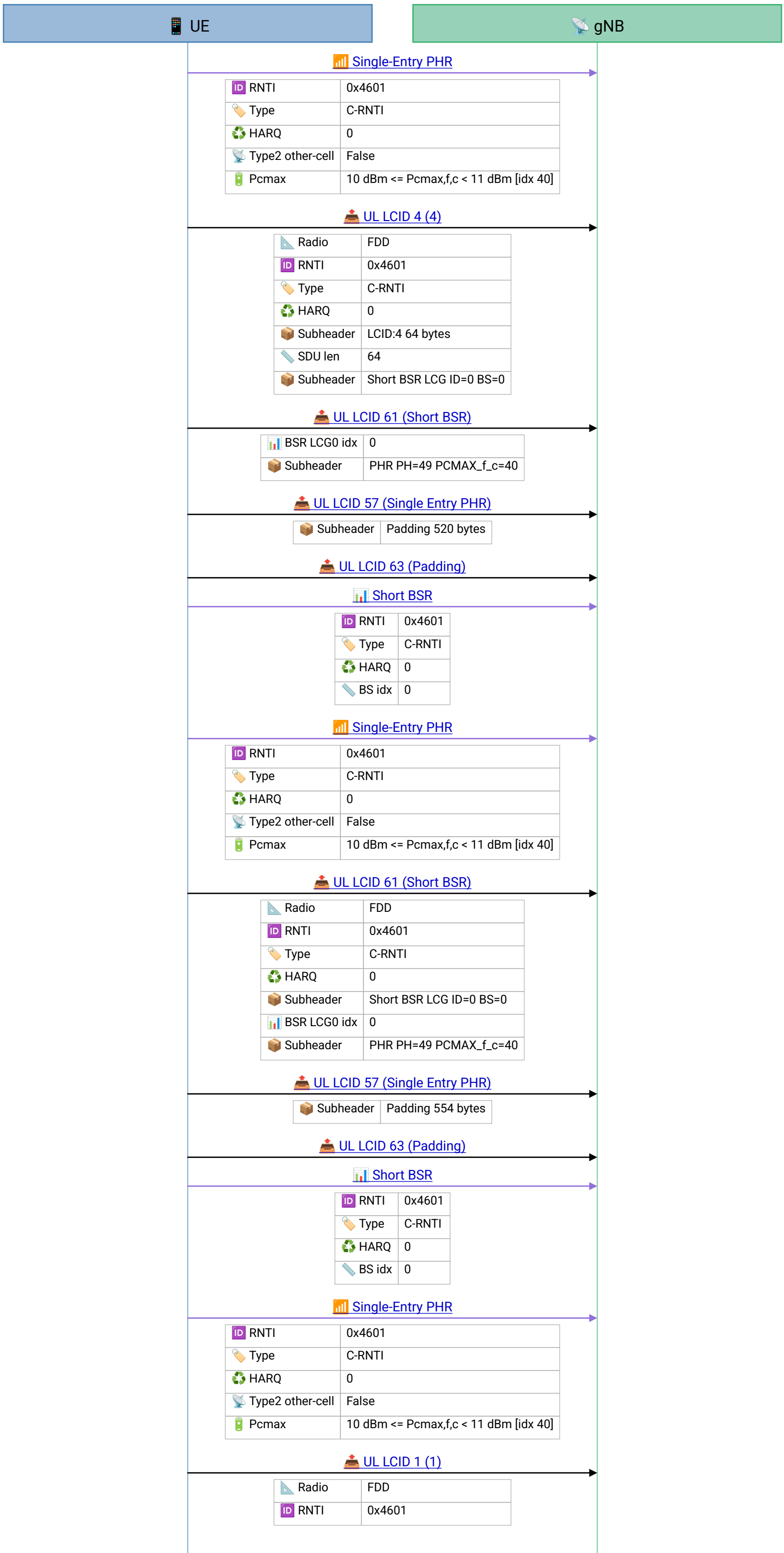
Subheader	Padding 440 bytes
-----------	-------------------

UL LCID 63 (Padding)

Short BSR

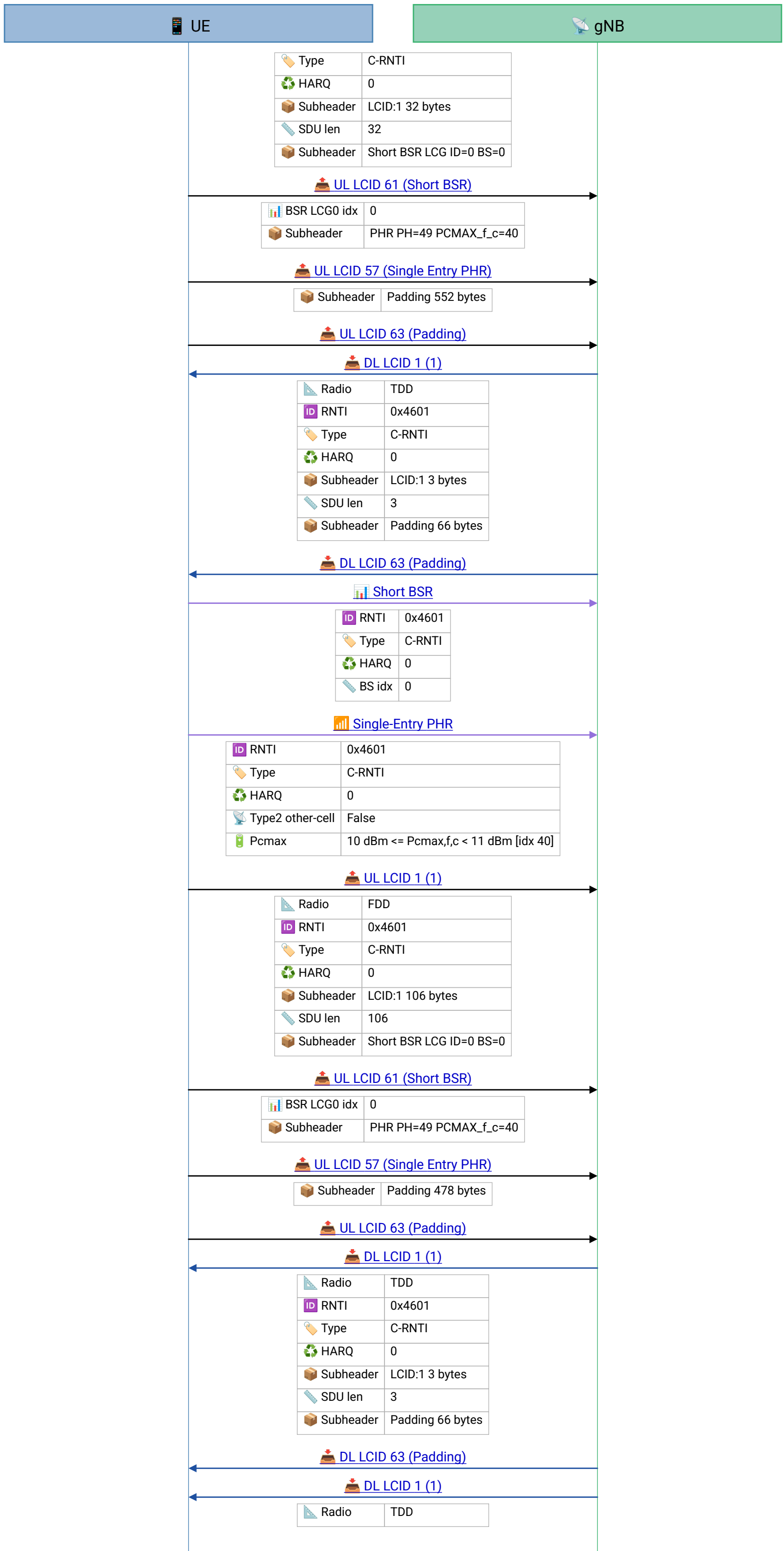
RNTI	0x4601
Type	C-RNTI
HARQ	0
BS idx	0

[Frame 51] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group



[Frame 52] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

[Frame 53] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

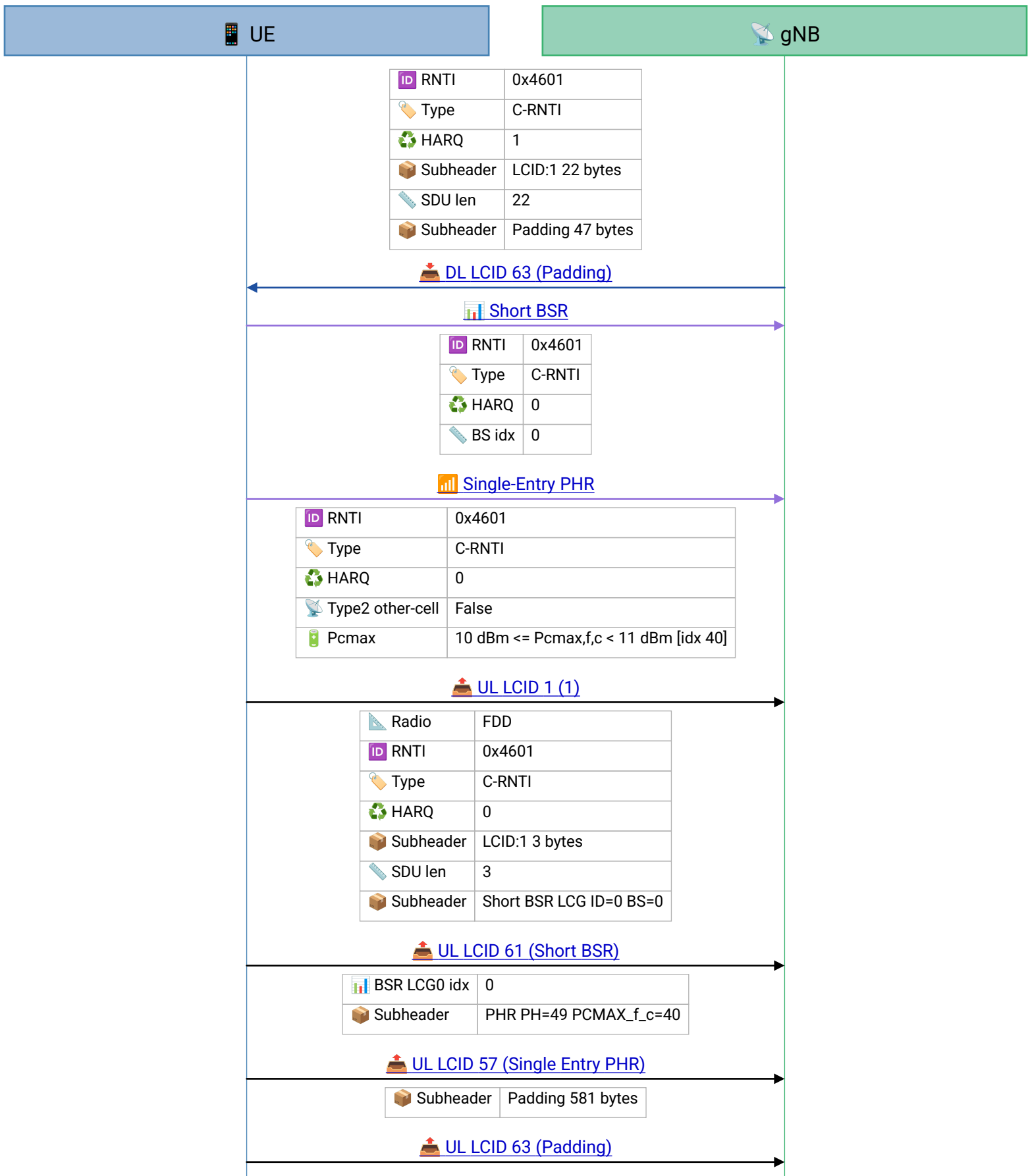


💡 [Frame 54] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

💡 [Frame 55] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

💡 [Frame 56] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)

💡 [Frame 57] DL-SCH MAC PDU – gNB→UE on PDSCH (generic fallback for LCIDs not matched by a higher-priority template)



💡 [Frame 58] Short Buffer Status Report – UE reports queued UL data for one Logical Channel Group

Session Result: incomplete - mid-capture (duration: 32.251s)