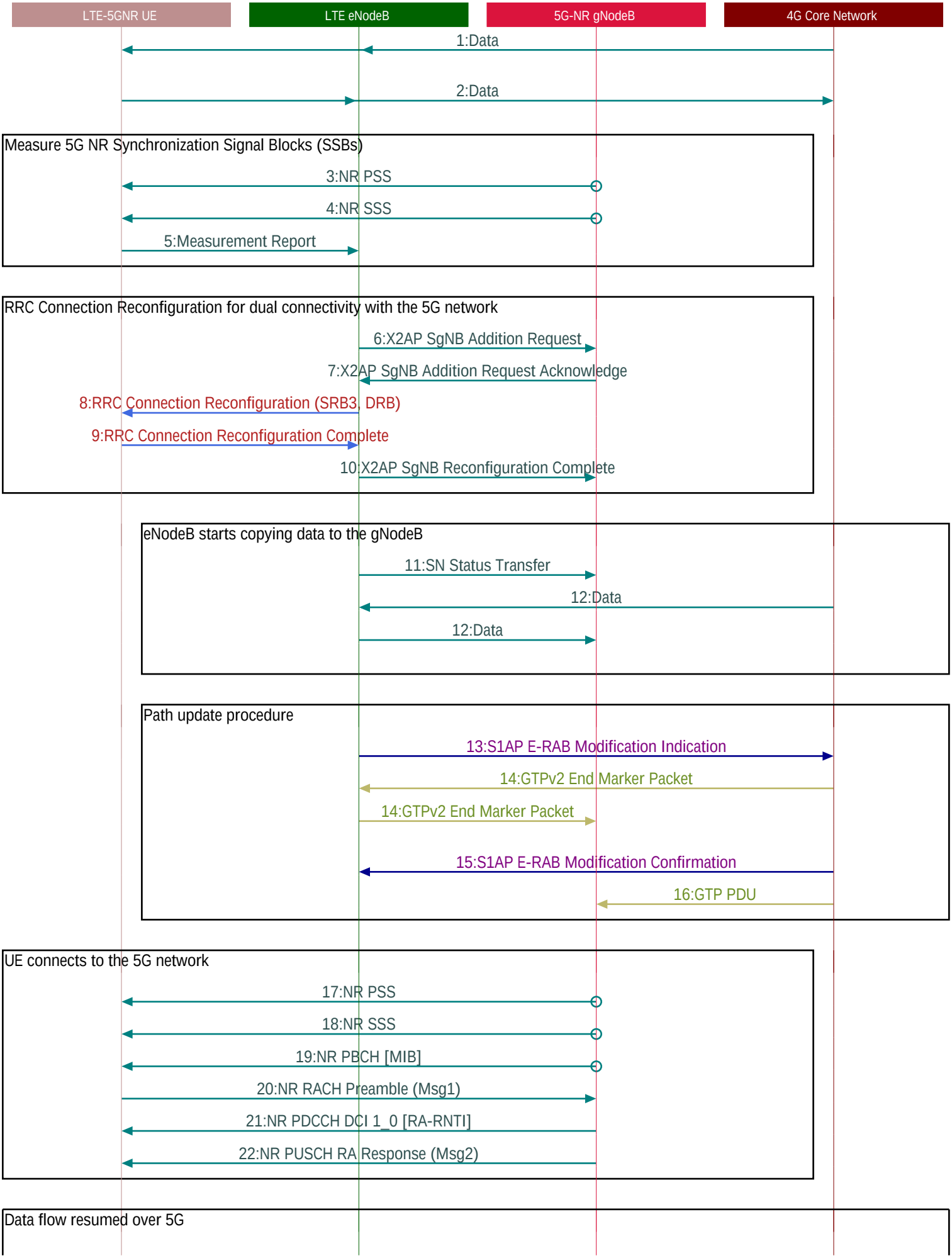
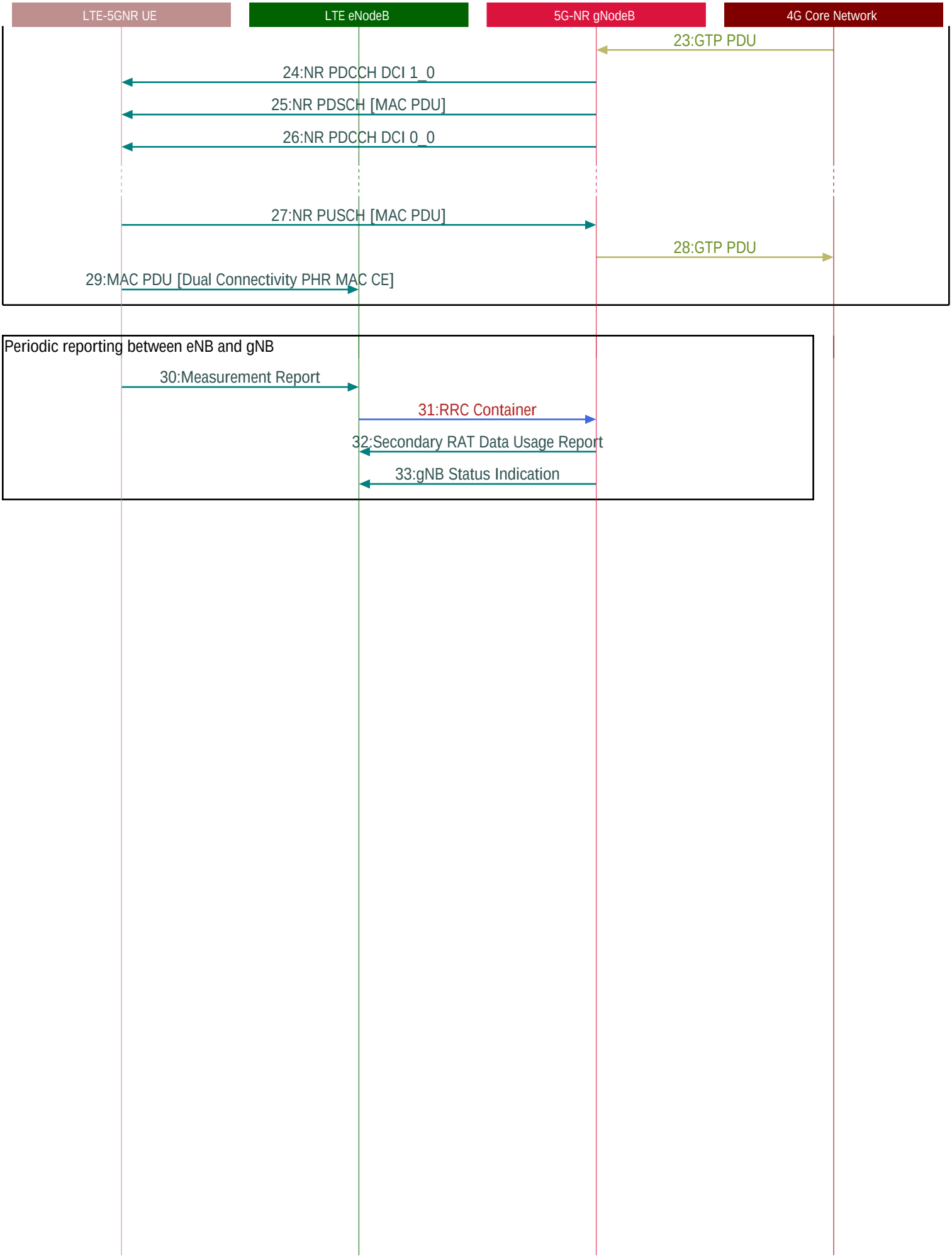

LTE-5GNR UE
LTE eNodeB
5G-NR gNodeB
4G Core Network
1:Data
2:Data
Measure 5G NR Synchronization Signal Blocks (SSBs)
3:NR PSS
4:NR SSS
5:Measurement Report
RRC Connection Reconfiguration for dual connectivity with the 5G network
6:X2AP SgNB Addition Request
7:X2AP SgNB Addition Request Acknowledge
8:RRC Connection Reconfiguration (SRB3, DRB)
9:RRC Connection Reconfiguration Complete
10:X2AP SgNB Reconfiguration Complete
eNodeB starts copying data to the gNodeB
11:SN Status Transfer
12:Data
12:Data
Path update procedure
13:S1AP E-RAB Modification Indication
14:GTPv2 End Marker Packet
14:GTPv2 End Marker Packet
15:S1AP E-RAB Modification Confirmation
16:GTP PDU
UE connects to the 5G network
17:NR PSS
18:NR SSS
19:NR PBCH [MIB]
20:NR RACH Preamble (Msg1)
21:NR PDCCH DCI 1_0 [RA-RNTI]
22:NR PUSCH RA Response (Msg2)
Data flow resumed over 5G


LTE-5GNR UE
LTE eNodeB
5G-NR gNodeB
4G Core Network
23:GTP PDU
24:NR PDCCH DCI 1_0
25:NR PDSCH [MAC PDU]
26:NR PDCCH DCI 0_0
27:NR PUSCH [MAC PDU]
28:GTP PDU
29:MAC PDU [Dual Connectivity PHR MAC CE]
Periodic reporting between eNB and gNB
30:Measurement Report
31:RRC Container
32:Secondary RAT Data Usage Report
33:gNB Status Indication