

Question: Find information about “Secondary Node Addition” procedure in EN-DC which is defined in 3GPP TS 37.340 version 15.7.0 and describe it in your own words. You can find this specification on the Internet easily.

Answer:

Secondary Node Addition Procedure in E-UTRA-NR Dual Connectivity (EN-DC) is defined by following below:

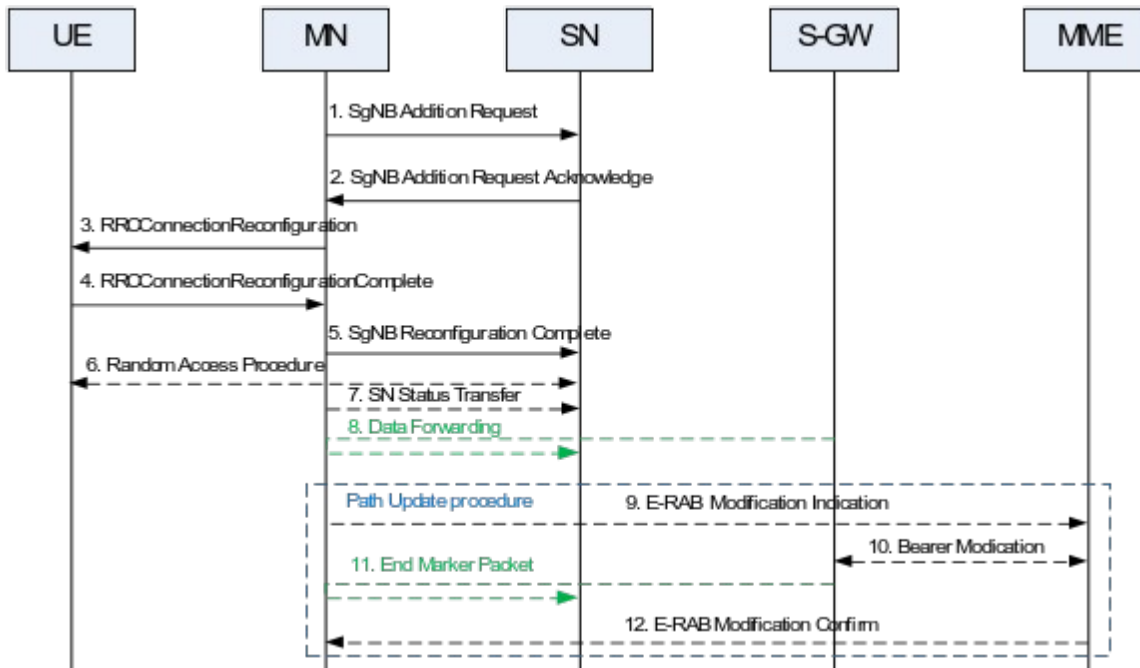


Figure 10.2.1-1: Secondary Node Addition procedure

After researching to the topic, we can think that Master Node (MN) is like 4G or LTE Radio Station, Secondary Node (SN) is like 5G Radio Station and User Equipment (UE) is like the device i.e. phone. SgNBAddition means the device can receive high signal from 5G Radio Stations and the data flow should be change from LTE to 5G,so in order to do that, the secondary node addition procedure should be started.

The flow is started to send SgNB AdditionRequest signal to Secondary Node from Master Node. If the SN is decided to accept the request, it sends SgNBAdditionRequest Acknowledge signal to MN from SN. After receiving the acknowledge signal, LTE eNB generates RRC Connection Reconfiguration signal to send user equipment. Then, if all the configuration in the message is ok, RRC Connection Reconfiguration Complete signal to MN to complete the configuration. The complete message should be sent to SN to inform. As a result, the data forwarding signal is created.

References

<https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3198>

https://www.sharetechnote.com/html/5G/5G_LTE_Interworking.html#Various_types_of_Bearer_for_LTE_NR_Interworking