switching the QoS flow.

Next generation (NG), or 5th generation (5G), wireless communication may provide a range of capabilities from downloading with fast speeds to support real-time low-latency communication. This range of capabilities may need some characteristics of quality of service (QoS), such as delay, error rate, priority level, and etc. In NG wireless communication, one or more service data flows with same QoS characteristics may be grouped together as a QoS flow. Each QoS flow may be identified by a QoS flow identifier, informing the network components the corresponding characteristics of the QoS flow.

FIG. lA shows a wireless communication system 100 including a core network 110, a wireless network base station 130, and one or more user equipment (UE) (152, 154, and 156). The wireless network base station 130 may be a NG radio access network (NG-RAN) base station or node, which may include a nodeB (NB, e.g., a gNB) in a mobile telecommunications context. Each of the UE may wirelessly communicate with the wireless network base station 130 via one or more radio channels 140. For example, a first UE 152 may wirelessly communicate with the gNB 130 via a channel including a plurality of radio channels during a certain period of time. Likewise, a second UE 154 and a third UE 156 may wirelessly communicate with the gNB 130. The wireless network base station 130 may communicate with a core network 110 through an interface 125. In one implementation, the core network 110 may include a 5G core network (5GC), and the interface 125 may include a NG interface.

A wireless network base station (e.g, gNB) may include an architecture of separating a central unit (CU) and one or more distributed units (DUs). Referring to FIG. 1B, the gNB 130 may include a gNB-CU 132, a first distributed unit 136 (gNB-DU1), and a second distributed unit 138 (gNB-DU2). The gNB-CU 132 may communicate and manage the gNB-DU1 136 and the gNB-DU2 138. The one or more DUs may communicate with one or more user equipment (e.g, the user equipment 152).

Referring to FIG. 1B, the gNB-CU 132 may include an architecture including a control plane (CP) 133 (gNB-CU-CP) and one or more user planes (UPs) (134 and 135). The gNB-CU-CP 133 may communicate and control the first UP (gNB-CU-UP1) 134 and the second UP (gNB-CU-UP2) 135.