



# Voice over New Radio

This chapter covers the following topics:

- [Feature Summary and Revision History, on page 1](#)
- [Feature Description, on page 2](#)

## Feature Summary and Revision History

### Summary Data

*Table 1: Summary Data*

Applicable Product(s) or Functional Area	5G-UPF
Applicable Platform(s)	VPC-SI SMI
Feature Default Setting	Enabled – Always-on
Related Changes in this Release	Not Applicable
Related Documentation	Not Applicable

### Revision History

*Table 2: Revision History*

Revision Details	Release
First Introduced.	2020.02.0

# Feature Description

The UPF supports Voice over New Radio (VoNR) with the existing Session Establishment and Modification procedures. In these procedures, the SMF creates the PDR for 5QI=5 Non-GBR flow for IMS signaling and PDR for 5QI=1 GBR flow for voice traffic. The UPF does not require any special handling to support mobile-originated or mobile-terminated call flows.

## How it Works

The following are the steps in the call flow in which the PDRs are created with 5QI value 5 for IMS signaling and 5QI value 1 or Voice Traffic.

### VoNR Call Flow for UPF

This section describes the steps for VoNR session and respective PDR Creation on UPF.

Figure 1: VoNR Call Flow

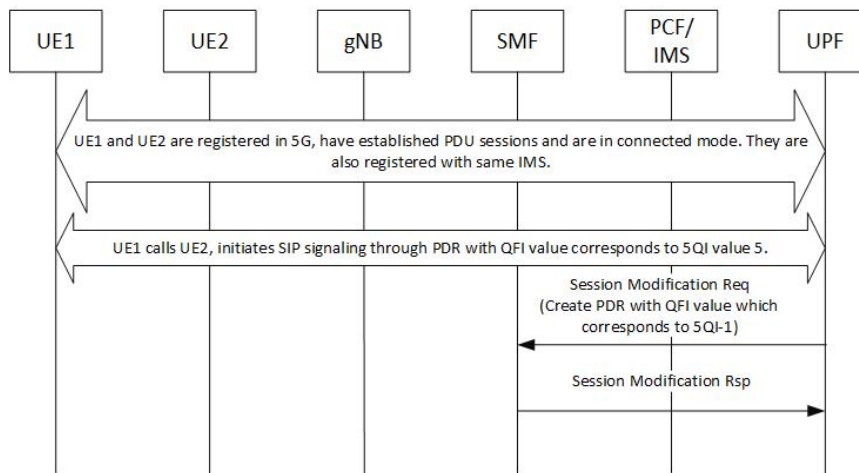


Table 3: VoNR Call Flow

Step	Description
1	UE1 and UE2 are registered on 5G network. They establish the IMS PDU session and both are registered with same IMS. Both UEs are in connected mode.
2	For IMS signaling, a non-GBR QoS PDRs (UL and DL) is created by SMF which has the QFI value that corresponds to 5QI value 5.
3	Similarly, for Conversational Voice traffic, the PDRs for GBR QoS flow is created with the QFI value that corresponds to 5QI value 1.
4	The QFI to 5QI mapping is maintained by SMF, hence the QFI does not have the values same as 5QI.

Step	Description
5	The above steps are valid for both Mobile Originated (MO) or Mobile Terminate (MT) call flows.
6	Refer to 3GPP TS 23.501, Section 5.7.4 for other types of 5QI mappings for GBR or Non-GBR flows.

