

ERAB Release if any ERAB Switch Fails

- Feature Summary and Revision History, on page 1
- Feature Description, on page 1
- How It Works, on page 2

Feature Summary and Revision History

Summary Data

Applicable Product(s) or Functional Area	MME
Applicable Platform(s)	• ASR 5500 • VPC-DI • VPC-SI
Default Setting	Enabled - Always-on
Related Changes in This Release	Not Applicable
Related Documentation	*MME Administration Guide*

Revision History

Revision Details	Release
First introduced.	21.15

Feature Description

With Release 21.15, MME includes ERAB to "To Be Released List" IE in PATH SWITCH REQUEST ACKNOWLEDGE during X2 handover collision scenarios.

How It Works

This section describes how the ERAB release if any ERAB Switch Fails.

Flows

Figure 1: X2 handover without SGW Relocation

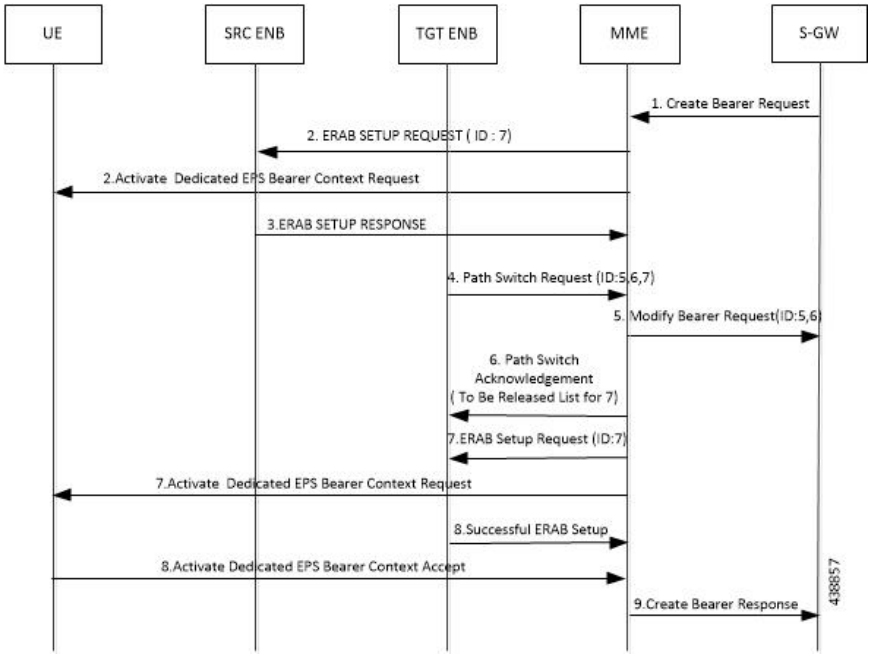


Table 1: Scenario 1

Steps	Description
1.	MME receives create bearer request for the dedicated bearer.
2.	MME sends eRAB setup and activate dedicated EPS bearer (ID: 7).
3.	ENB1 accepts eRAB setup.
4.	ENB2 sends path switch request with ID 5, 6, and 7.
5.	MME sends modify for 5 and 6, but 7 is not sent as setup is completed.
6.	MME responds with path switch acknowledge with "To Be Released List" for 7.
7.	MME sends Activate Dedicated EPS Bearer over E-RABSetup request for erab id 7.
8.	ENB2 sends E-RAB setup response.
9.	MME sends Create bearer response to S-GW.

Figure 2: X2 Handover with SGW Relocation:

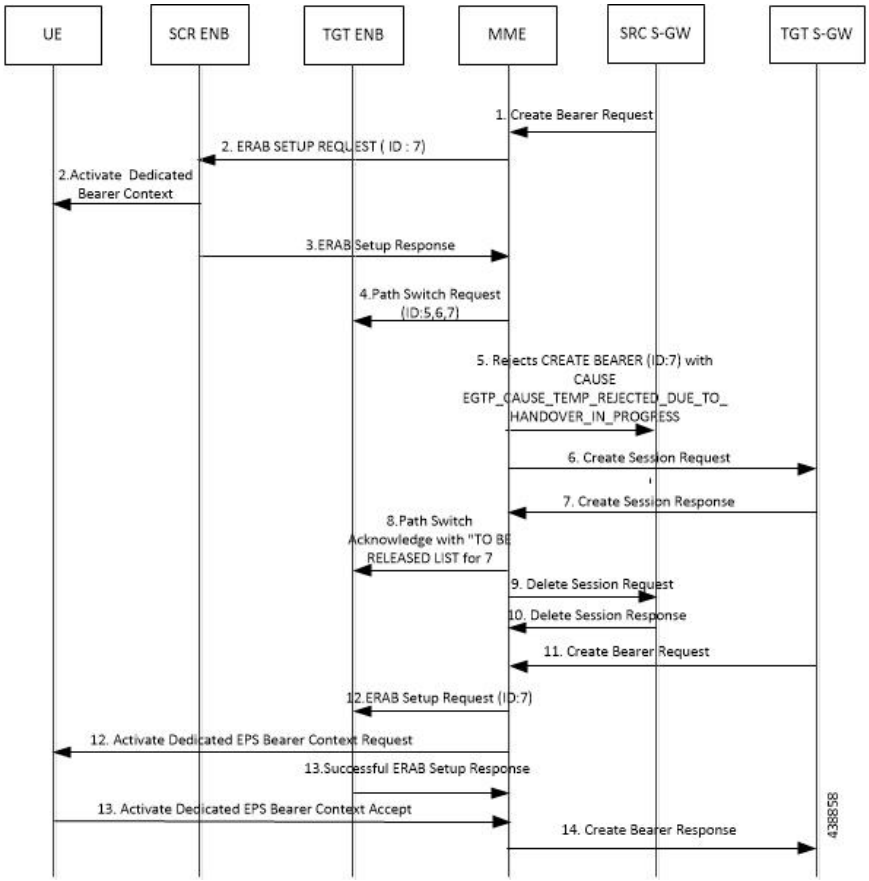


Table 2: Scenario 2

Steps	Description
1.	MME receives create bearer request for dedicated bearer.
2.	MME sends eRAB setup and activate dedicated EPS bearer (ID: 7).
3.	ENB1 accepts eRAB setup.
4.	ENB2 sends path switch request with ID 5, 6, and 7.
5.	MME rejects create bearer with cause: “EGTP_CAUSE_TEMP_REJECTED_DUE_TO_HANDOVER_IN_PROGRESS” to source S-GW (SGW1).
6.	MME sends create session request to target S-GW (SGW2).
7.	SGW2 responds with create session response.
8.	MME responds with path switch acknowledge to target enode B (ENB2), with bearer ID 5 and 6. ERAB Id 7 will be added under “To be released List”.

Steps	Description
9.	MME sends delete session request to SGW1.
10.	SGW1 responds with delete session response.
11.	If target S-GW retries to rejected bearer, then a create bearer is sent from SGW2 to MME.
12.	MME sends eRAB setup and activate dedicated EPS bearer (ID: 7).
13.	ENB ENB2 sends E-RAB setup response.
14.	Create bearer will be successful.



Note If MME did not get an acknowledgement from UE for NAS message (ACTIVATE_DEDICATED_EPS_BEARER_CONTEXT_REQUEST) or if MME has rejected that create bearer due to handover after successful ERAB establishment, then that ERAB ID is added to “To Be Released List” which is ERAB ID 7 under path switch acknowledge. When MME tries again to set up a ERAB SETUP request for ERAB ID 7, MME receives a successful response from Enode B2.