



show gmm-sm

This chapter includes the **show gmm-sm** command output tables.

- [show gmm-sm statistics, on page 1](#)
- [show gmm-sm statistics verbose, on page 29](#)

show gmm-sm statistics

Table 1: show gmm-sm statistics Command Output Descriptions

| Field | Description |
|-------------------------------|---|
| Session Statistics | |
| Attached Subscribers | Statistics for attached subscribers. |
| Total Attached | Total subscribers attached for 2G and 3G. |
| 3G Attached | Total subscribers attached for 3G only. |
| 2G Attached | Total subscribers attached for 3G only. |
| Home Subscribers | Statistics for attached home subscribers. |
| Total Home | Total home subscribers attached for 2G and 3G. |
| 3G Home | Total home subscribers attached for 3G only. |
| 2G Home | Total home subscribers attached for 3G only. |
| Visiting National Subscribers | Statistics for attached visiting national subscribers. |
| Total-Visiting-National | Total visiting national subscribers attached for 2G and 3G. |
| 3G-Visiting-National | Total visiting national subscribers attached for 3G only. |
| 2G-Visiting-National | Total visiting national subscribers attached for 3G only. |
| Visiting Foreign Subscribers | Statistics for attached visiting foreign subscribers. |
| Total-Visiting-Foreign | Total visiting foreign subscribers attached for 2G and 3G. |

| Field | Description |
|--|---|
| 3G-Visiting-Foreign | Total visiting foreign subscribers attached for 3G only. |
| 2G-Visiting-Foreign | Total visiting foreign subscribers attached for 2G only. |
| Network Sharing Subscribers | Statistics for network sharing subscribers. |
| 3G-Supporting-UE | Total number of 3G Network Sharing Supporting User Equipment currently in the system. This counter pegs when: A network sharing supporting UE connects with the 3G SGSN. |
| 3G-Non-Supporting-UE | Total number of 3G Network Sharing Non-supporting User Equipment currently in the system. This counter pegs when: A network sharing non-supporting UE connects with the 3G SGSN. |
| Subscribers in PMM-REGISTERED state | Total subscribers in PMM registered state, including connected and idle. |
| PMM-CONNECTED | Total number of subscribers in PMM connected state. |
| PMM-IDLE | Total number of subscribers in PMM idle state. |
| Activated Subscribers | Statistics for activated subscribers. |
| Total Activated | Total number of activated 2G and 3G subscriber. |
| 3G Activated | Total number of activated 3G subscribers only. |
| 2G Activated | Total number of activated 2G subscribers only. |
| Activate PDP Contexts | Statistics for activated PDP contexts. |
| Total Actv PDP Ctx | Total number of activated 2G and 3G PDP contexts. |
| 3G-Actv Pdp Ctx | Total number of activated 3G PDP contexts only. |
| 2G-Actv Pdp Ctx | Total number of activated 2G PDP contexts only. |
| Total Actv Pdp Ctx with Direct Tunnel | Total number of activated PDP contexts through direct tunnel. |
| Activated HSPA Subscribers | Displays the list of active HSPA subscribers. |
| Activated HSPA subscribers (16-32Mbps) | This counter displays the number of subscribers having: <ul style="list-style-type: none"> • One PDP context with negotiated MBR in the range 16-32 Mbps, or • One or more PDP context with negotiated MBR in the range 16-32 Mbps, or • One PDP context with negotiated MBR in the range 16-32 Mbps and rest with MBR less than 16 Mbps |

| Field | Description |
|---|--|
| Activated HSPA subscribers (32-64Mbps) | This counter displays the number of subscribers having: <ul style="list-style-type: none"> • One PDP context with negotiated MBR in the range 32-64 Mbps, or • One or more PDP context with negotiated MBR in the range 32-64 Mbps, or • One PDP context with negotiated MBR in the range 32-64 Mbps and rest with MBR less than 32 Mbps |
| Activated HSPA subscribers (64-128Mbps) | This counter displays the number of subscribers having: <ul style="list-style-type: none"> • One PDP context with negotiated MBR in the range 64-128 Mbps, or • One or more PDP context with negotiated MBR in the range 64-128 Mbps, or • One PDP context with negotiated MBR in the range 64-128 Mbps and rest with MBR less than 64 Mbps |
| Activated HSPA subscribers (128-256Mbps) | This counter displays the number of subscribers having: <ul style="list-style-type: none"> • One PDP context with negotiated MBR in the range 128-256 Mbps, or • One or more PDP context with negotiated MBR in the range 128-256 Mbps, or • One PDP context with negotiated MBR in the range 128-256 Mbps and rest with MBR less than 128 Mbps |
| Activated HSPA PDP Contexts | Displays the list of active HSPA PDP contexts. |
| Activated HSPA PDP Contexts (16-32Mbps) | Displays the number of HSPA PDP contexts with the negotiated MBR in the range 16-32 Mbps. |
| Activated HSPA PDP Contexts (32-64Mbps) | Displays the number of HSPA PDP contexts with the negotiated MBR in the range 32-64 Mbps. |
| Activated HSPA PDP Contexts (64-128Mbps) | Displays the number of HSPA PDP contexts with the negotiated MBR in the range 64-128 Mbps. |
| Activated HSPA PDP Contexts (128-256Mbps) | Displays the number of HSPA PDP contexts with the negotiated MBR in the range 128-256 Mbps. |
| Message Statistics | Indicates the statistics of messages. |
| Specific Procedures | Indicates the statistics related to specific procedures. |
| Attach Request | Total number of messages for Attach Request |
| Total-Attach | Indicates the statistics of total attach. |
| IMSI | Total attach through international mobile subscriber identity (IMSI). |

| Field | Description |
|-----------------------|--|
| Total-IMSI-Attach | Total international mobile subscriber identity (IMSI) attach including 2G and 3G. |
| 3G-IMSI-Attach | 3G-IMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total 3G-IMSI attach with GPRS only access. |
| Combined Attached | Total 3G-IMSI attach with combined (PS and CS) access. |
| 2G-IMSI-Attach | 2G-IMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total 2G-IMSI attach with GPRS only access. |
| Combined Attached | Total 2G-IMSI attach with combined (PS and CS) access. |
| PTMSI | Total attach through Packet-Temporary Mobile Subscriber Identity (P-TMSI). |
| Total-PTMSI-Attach | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) attach including 2G and 3G. |
| 3G-PTMSI-Attach | 3G-P-TMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total 3G-P-TMSI attach with GPRS only access. |
| Combined Attached | Total 3G-P-TMSI attach with combined (PS and CS) access. |
| 2G-PTMSI-Attach | 2G-P-TMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total 2G-P-TMSI attach with GPRS only access. |
| Combined Attached | Total 2G-P-TMSI attach with combined (PS and CS) access. |
| Attach Accept | Statistics of total attach accepts. |
| Total-Attach-Accept | Total attach accepts including 2G and 3G. |
| 3G-Attach-Accept | 3G-attach accept statistics for GPRS and non-GPRS. |
| Gprs-Attached | Total 3G-attach accepts with GPRS only access. |
| Comb-Attached | Total 3G-attach accepts with combined (PS and CS) access. |
| 2G-Attach-Accept | 2G-attach accept statistics for GPRS and non-GPRS. |
| Gprs-Attached | Total 2G-attach accepts with GPRS only access. |
| Comb-Attached | Total 2G-attach accepts with combined (PS and CS) access. |
| Attach Complete | Statistics of total attach completed. |
| Total-Attach-Complete | Total attach completed including 2G and 3G. |
| 3G-Attach-Complete | 3G-attach complete statistics for GPRS and non-GPRS. |

| Field | Description |
|-----------------------------|---|
| 2G-Attach-Complete | Total 2G-attach completed with GPRS only access. |
| Attach Reject | Total 2G and 3G attach rejected statistics. |
| Total-Attach-Reject | Total 2G and 3G attach rejected statistics for GPRS and non-GPRS. |
| 3G-Attach-Reject | Total 3G-attach rejected for GPRS only access. |
| 2G-Attach-Reject | Total 2G-attach rejected for combined (PS and CS) access. |
| Routing Area Update Request | RAU request statistics. |
| Total-RAU | Total RAU request messages. |
| Total-Intra-SGSN-RAU | Total intra-SGSN RAU request messages. |
| Total-Ra-Up-Intra-SGSN-RAU | Total routing area update request messages for intra-SGSN Routing Area (RA) updates. |
| 3G-Ra-Up-Intra-SGSN-RAU | Total routing area update request messages for intra-SGSN Routing Area (RA) updates for 3G. |
| 2G-Ra-Up-Intra-SGSN-RAU | Total routing area update request messages for intra-SGSN RA updates for 2G. |
| Total-Periodic-Intra-RAU | Total messages for periodic intra-RA updates. |
| 3G-Periodic-Intra-RAU | Total messages for periodic intra-RA updates for 3G. |
| 2G-Periodic-Intra-RAU | Total messages for periodic intra-RA updates for 2G. |
| Total-Comb-Intra-SGSN-RAU | Total intra-SGSN RAU request messages for combined (PS and CS) services. |
| 3G-Comb-Intra-SGSN-RAU | Total intra-SGSN RAU request messages for combined (PS and CS) 3G services. |
| 2G-Comb-Intra-SGSN-RAU | Total intra-SGSN RAU request messages for combined (PS and CS) 2G services. |
| Total-PS-Inter-SGSN-RAU | Total packet switched, inter-SGSN-RA update request messages. |
| 3G-PS-Inter-SGSN-RAU | Total packet switched inter-SGSN-RA update request messages for 3G service. |
| 2G-PS-Inter-SGSN-RAU | Total packet switched inter-SGSN-RA update request messages for 2G service. |
| Total-Comb-Inter-SGSN-RAU | Total combined (PS and CS) inter-SGSN-RA update request messages. |
| 3G-Comb-Inter-SGSN-RAU | Total combined (PS and CS) inter-SGSN-RA update request messages for 3G service. |

| Field | Description |
|------------------------------|--|
| 2G-Comb-Inter-SGSN-RAU | Total combined (PS and CS) inter-SGSN-RA update request messages for 2G service. |
| Routing Area Update Accept | Statistics of accepted routing area update messages. |
| Total-RAU-Accept | Total number of routing area update messages accepted. |
| 3G-RAU-Accept | Total number of routing area update messages accepted for 3G service. |
| 3G-Intra-SGSN-RAU-Accept | Total number of intra-SGSN routing area update messages accepted for 3G service. |
| RA-Updated | Total number of routing area information updated for 3G service. |
| Comb RA/LA-Updated | Total number of combined (PS and CS) routing area or location area information updated for 3G service. |
| 2G-RAU-Accept | Total number of routing area update messages accepted for 2G service. |
| 2G-Intra-SGSN-RAU-Accept | Total number of intra-SGSN routing area update messages accepted for 2G service. |
| RA-Updated | Total number of routing area information updated for 2G service. |
| Comb RA/LA-Updated | Total number of combined (PS and CS) routing area or location area information updated for 2G service. |
| 3G-Inter-SGSN-RAU-Accept | Total number of inter-SGSN routing area update messages accepted for 3G service. |
| RA-Updated | Total number of routing area information updated for 3G service. |
| Comb RA/LA-Updated | Total number of combined (PS and CS) routing area or location area information updated for 3G service. |
| 2G-RAU-Accept | Total number of routing area update messages accepted for 2G service. |
| 2G-Inter-SGSN-RAU-Accept | Total number of inter-SGSN routing area update messages accepted for 2G service. |
| RA-Updated | Total number of routing area information updated for 2G service. |
| Comb RA/LA-Updated | Total number of combined (PS and CS) routing area or location area information updated for 2G service. |
| Routing Area Update Complete | Routing area update complete messages statistics. |
| Total-RAU-Complete | Total number of routing area update complete messages. |
| 3G-RAU-Complete | Total number of routing area update complete messages for 3G service. |

| Field | Description |
|---|--|
| 2G-RAU-Complete | Total number of routing area update complete messages for 2G service. |
| Routing Area Update Reject | Routing Area Update (RAU) reject messages statistics. |
| Total-RAU-Reject | Total number of RAU reject messages. |
| 3G-RAU-Reject | Total number of RAU reject messages for 3G service. |
| 2G-RAU-Reject | Total number of RAU reject messages for 2G service. |
| Detach Request | Detach request message statistics. |
| Dropped-Detach-Req | Total number of dropped detach request messages. |
| 3G-MS-Init-IMSI-Detach-Req-During-actv/sms-auth-ongoing | This counter is incremented if UE-Init-IMSI-Detach-Request is dropped when it is received during ongoing authentication of Activation/SMS. |
| Total-Detach-Req | Total number of detach request messages. |
| Total-MS-Init-Detach-Req | Total number of Mobile Station (MS) initiated detach requests. |
| 3G-MS-Init-GPRS-Detach-Req | Total number of MS initiated GPRS (PS) detach requests for 3G service. |
| 3G-MS-Init-IMSI-Detach-Req | Total number of MS initiated IMSI (CS) detach requests for 3G service. |
| 3G-MS-Init-Comb-Detach-Req | Total number of MS initiated combined (IMSI and GPRS) detach requests for 3G service. |
| 2G-MS-Init-GPRS-Detach-Req | Total number of MS initiated GPRS detach requests for 2G service. |
| 2G-MS-Init-IMSI-Detach-Req | Total number of MS initiated IMSI detach requests for 2G service. |
| 2G-MS-Init-Comb-Detach-Req | Total number of MS initiated combined (PS and CS) detach requests for 2G service. |
| Total-Nw-Init-Detach-Req | Total number of network initiated detach requests. |
| 3G-Nw-Init-Reattach-Req | <p>During the network initiated detach for 3G service, the SGSN informs the MS that it has been detached by sending a detach request. This Detach Request has a detach type -Reattach required, when it wants the MS to attach to the network again for GPRS services.</p> <p>This counter pegs when: A clear subscriber detach operation is performed.</p> |

| Field | Description |
|-----------------------------|--|
| 2G-Nw-Init-Reattach-Req | <p>During the network initiated detach for 2G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - Reattach required, when it wants the MS to attach again for GPRS services.</p> <p>This counter pegs when: when a clear subscriber operation is performed.</p> |
| 3G-Nw-Init-Reattach-Not-Req | <p>During the network initiated detach for 3G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - Reattach not required, when it does not expect the MS to attach again for GPRS services.</p> <p>This counter pegs when: reception of a Cancel-Location (subscription-withdrawn) or a DSD (all-gprs-subscription withdrawn) is incremented.</p> |
| 2G-Nw-Init-Reattach-Not-Req | <p>During the network initiated detach for 2G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - Reattach not required, when it does not expect the MS to attach again for GPRS services.</p> <p>This counter pegs when: reception of a Cancel-Location (subscription-withdrawn) or a DSD (all-gprs-subscription withdrawn) is incremented.</p> |
| 3G-Nw-Init-IMSI-Detach | <p>When the SGSN loses the GS-context for the MS due to a VLR-reset indication, it notifies the MS by sending an IMSI-detach on the next signalling activity by the MS.</p> <p>This counter pegs when: VLR-reset indication and a next uplink activity from MS is incremented.</p> |
| 2G-Nw-Init-IMSI-Detach | <p>When the SGSN loses the GS-context for the MS due to a VLR-reset indication, it notifies the MS by sending an IMSI-detach on the next signalling activity by the MS.</p> <p>This counter pegs when: VLR-reset indication and a next uplink activity from MS is incremented.</p> |
| Detach Accept | Detach request accept messages statistics. |
| Total-Detach-Acc | Total number of detach request accept messages. |
| Total-MS-Init-Detach-Acc | Total number of MS initiated detach requests accepted. |
| 3G-MS-Init-Detach-Acc | Total number of MS initiated GPRS detach requests accepted for 3G service. |
| 2G-MS-Init-Detach-Acc | Total number of MS initiated IMSI detach requests accepted for 2G service. |

| Field | Description |
|----------------------------|---|
| Total-Nw-Init-Detach-Acc | Total number of network initiated detach requests accepted. |
| 3G-Nw-Init-Detach-Acc | Total number of network initiated detach requests accepted for 3G service. |
| 3G-Nw-Init-GPRS-Detach-Acc | Total number of network initiated GPRS (PS) detach requests accepted for 3G service. |
| 3G-Nw-Init-IMSI-Detach-Acc | Total number of network initiated IMSI (CS) detach request accepted for 3G service. |
| 3G-Nw-Init-Comb-Detach-Acc | Total number of network initiated combined (PS and CS) detach requests accepted for 3G service. |
| 2G-Nw-Init-Detach-Acc | Total number of network initiated detach requests accepted for 2G service. |
| 2G-Nw-Init-GPRS-Detach-Acc | Total number of network initiated GPRS (PS) detach requests accepted for 2G service. |
| 2G-Nw-Init-IMSI-Detach-Acc | Total number of network initiated IMSI (CS) detach requests accepted for 2G service. |
| 2G-Nw-Init-Comb-Detach-Acc | Total number of network initiated combined (PS and CS) detach requests accepted for 2G service. |
| Service Request | Service request messages statistics. |
| Total-Serv-Req | Total number of service request messages. |
| Total-Signalling-Serv-Req | Total signalling service requests messages. |
| 3G-Signalling-Serv-Req | Total signalling service requests messages for 3G service. |
| 2G-Signalling-Serv-Req | Total signalling service requests messages for 2G service. |
| Total-Page-Rsp-Serv-Req | Total paging responses for service requests messages. |
| 3G-Page-Rsp-Serv-Req | Total paging responses for service requests messages for 3G service. |
| 2G-Page-Rsp-Serv-Req | Total paging responses for service requests messages for 2G service. |
| Total-Data-Serv-Req | Total data service requests messages. |
| 3G-Data-Serv-Req | Total data service requests messages for 3G service. |
| 2G-Data-Serv-Req | Total data service requests messages for 2G service. |
| Service Accept | Statistics of accepted service request messages. |
| Total-Serv-Resp | Total service response messages. |

| Field | Description |
|-----------------------|---|
| 3G-Service-Resp | Total service response messages for 3G service. |
| 2G-Service-Resp | Total service response messages for 2G service. |
| Service Reject | Statistics of rejected service request messages. |
| Total-Serv-Rej | Total service rejected messages. |
| 3G-Service-Rej | Total service rejected messages for 3G service. |
| 2G-Service-Rej | Total service rejected messages for 2G service. |
| Paging Initiated | Statistics of paging initiated procedures. |
| Total-Page-Requests | Total paging request messages. |
| 3G-PS-Page-Requests | Total paging request messages in packet switching (PS) domain for 3G service. |
| 3G-CS-Page-Requests | Total paging request messages in circuit switching (CS) domain for 3G service. |
| 2G-PS-Page-Requests | Total paging request messages in packet switching (PS) domain for 2G service. |
| 2G-CS-Page-Requests | Total paging request messages in circuit switching (CS) domain for 2G service. |
| Total-Page-Responses | Total paging request response messages. |
| 3G-PS-Page-Responses | Total paging request response messages in packet switching (PS) domain for 3G service. |
| 3G-CS-Page-Responses | Total paging request response messages in circuit switching (CS) domain for 3G service. |
| 2G-PS-Page-Responses | Total paging request response messages in packet switching (PS) domain for 2G service. |
| 2G-CS-Page-Responses | Total paging request response messages in circuit switching (CS) domain for 2G service. |
| Gmm Status Message | GPRS Mobility Management (GMM) procedure status messages. |
| Total-Gmm-Status-Sent | Total GMM procedure status messages sent. |
| 3G-Gmm-Status-Sent | Total GMM procedure status messages sent for 3G service. |
| 2G-Gmm-Status-Sent | Total GMM procedure status messages sent for 2G service. |
| Total-Gmm-Status-Rcvd | Total GMM procedure status messages received. |
| 3G-Gmm-Status-Rcvd | Total GMM procedure status messages received for 3G service. |

| Field | Description |
|--|--|
| 2G-Gmm-Status-Rcvd | Total GPRS Mobility Management (GMM) procedure status messages received for 2G service. |
| Gmm Information Sent | Statistics of messages sent with GPRS mobility management information. |
| Total-Gmm-Information-Sent | Total messages sent with GMM information. |
| 3G-Gmm-Information-Sent | Total messages sent with GPRS Mobility Management (GMM) information for 3G service. |
| 2G-Gmm-Information-Sent | Total messages sent with GMM information for 2G service. |
| Common Procedures | Statistics of common procedures in GPRS mobility management. |
| Authentication And Ciphering Request | Statistics of authentication and ciphering request messages. |
| Total-Auth-Cipher-Req | Total authentication and ciphering request messages. |
| 3G-Auth-Cipher-Req | Total authentication and ciphering request messages for 3G service. |
| 2G-Auth-Cipher-Req | Total authentication and ciphering request messages for 2G service. |
| Authentication And Ciphering Response | Statistics of authentication and ciphering request response messages |
| Total-Auth-Cipher-Resp | Total authentication and ciphering request response messages. |
| 3G-Auth-Cipher-Resp | Total authentication and ciphering request response messages for 3G service. |
| 2G-Auth-Cipher-Resp | Total authentication and ciphering request response messages for 2G service. |
| Authentication And Ciphering Response With SRES Mismatch | Indicates the statistics of authentication and ciphering request response messages having Signed RESponse (SRES) mismatch. |
| Total-Auth-Cipher-Resp with Sres Mismatch | Total authentication and ciphering request response messages having Signed RESponse (SRES) mismatch. |
| 3G-Auth-Cipher-Resp with Sres Mismatch | Total authentication and ciphering request response messages having Signed RESponse (SRES) mismatch for 3G service. |
| 2G-Auth-Cipher-Resp with Sres Mismatch | Total authentication and ciphering request response messages having Signed RESponse (SRES) mismatch for 2G service. |
| Authentication And Ciphering Reject | Statistics of authentication and ciphering request reject messages. |
| Total-Auth-Cipher-Rej | Total authentication and ciphering requests rejected messages. |
| 3G-Auth-Cipher-Rej | Total authentication and ciphering requestsrejected messages for 3G service. |

| Field | Description |
|--------------------------------------|--|
| 2G-Auth-Cipher-Rej | Total authentication and ciphering requests rejected messages for 2G service. |
| Authentication And Ciphering Failure | Statistics of authentication and ciphering request failure messages. |
| Total-Auth-Cipher-Failure | Total authentication and ciphering request failures. |
| 3G-Auth-Cipher-Mac-Failure | Total authentication and ciphering failures due to Message Authentication Code (MAC) for 3G service. |
| 2G-Auth-Cipher-Mac-Failure | Total authentication and ciphering failures due to Message Authentication Code (MAC) for 2G service. |
| 3G-Auth-Cipher-Sync-Failure | Total authentication and ciphering failures due to synchronisation failure for 3G service. |
| 2G-Auth-Cipher-Syn-Failure | Total authentication and ciphering failures due to synchronisation failure for 2G service. |
| 3G-Auth-Unacceptable | Total authentication and ciphering failures due to unacceptable delay for 3G service. |
| 2G-Auth-Unacceptable | Total authentication and ciphering failures due to unacceptable delay for 2G service. |
| P-TMSI Realloc | Statistics of Packet-Temporary Mobile Subscriber Identity (P-TMSI) reallocation procedures. |
| Total-PTMSI Realloc | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) reallocation procedures. |
| 3G-PTMSI Realloc | Total Packet-Temporary Mobile Subscriber Identity reallocation procedures for 3G service. |
| 2G-PTMSI Realloc | Total Packet-Temporary Mobile Subscriber Identity reallocation procedures for 2G service. |
| P-TMSI Realloc Complete | Statistics of completed P-TMSI reallocation procedures. |
| Total-PTMSI Realloc Complete | Total Packet-Temporary Mobile Subscriber Identity reallocation procedure completed. |
| 3G-PTMSI Realloc Complete | Total Packet-Temporary Mobile Subscriber Identity reallocation procedure completed for 3G service. |
| 2G-PTMSI Realloc Complete | Total Packet-Temporary Mobile Subscriber Identity reallocation procedure completed for 2G service. |
| Identity Request | Indicates the statistics of identity request messages. |
| Total-Identity-Req | Total identity request messages. |

| Field | Description |
|----------------------------|--|
| Total-IMSI-Identity-Req | Total international mobile subscriber identity (IMSI) identity request messages. |
| 3G-IMSI-Identity-Req | Total IMSI identity request messages for 3G service. |
| 2G-IMSI-Identity-Req | Total IMSI identity request messages for 2G service. |
| Total-IMEI-Identity-Req | Total International Mobile Equipment Identity (IMEI) request messages. |
| 3G-IMEI-Identity-Req | Total IMEI identity request messages for 3G service. |
| 2G-IMEI-Identity-Req | Total IMEI identity request messages for 2G service. |
| Total-IMEISV-Identity-Req | Total International Mobile Equipment Identity-software version (IMEI-SV) identity request messages. |
| 3G-IMEISV-Identity-Req | Total IMEI-SV identity request messages for 3G service. |
| 2G-IMEISV-Identity-Req | Total IMEI-SV identity request messages for 2G service. |
| Total-(P)TMSI-Identity-Req | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) request messages. |
| 3G-(P)TMSI-Identity-Req | Total P-TMSI identity request messages for 3G service. |
| 2G-(P)TMSI-Identity-Req | Total P-TMSI identity request messages for 2G service. |
| Identity Response | Indicates the statistics of identity request messages. |
| Total-Identity-Rsp | Total identity request response messages. |
| Total-IMSI-Identity-Rsp | Total international mobile subscriber identity (IMSI) identity request response messages. |
| 3G-IMSI-Identity-Rsp | Total IMSI identity request response messages for 3G service. |
| 2G-IMSI-Identity-Rsp | Total IMSI identity request response messages for 2G service. |
| Total-IMEI-Identity-Rsp | Total International Mobile Equipment Identity (IMEI) request response messages. |
| 3G-IMEI-Identity-Rsp | Total IMEI identity request response messages for 3G service. |
| 2G-IMEI-Identity-Rsp | Total IMEI identity request response messages for 2G service. |
| Total-IMEISV-Identity-Rsp | Total International Mobile Equipment Identity-Software Version (IMEI-SV) identity request response messages. |
| 3G-IMEISV-Identity-Rsp | Total IMEI-SV identity request response messages for 3G service. |
| 2G-IMEISV-Identity-Rsp | Total IMEI-SV identity request response messages for 2G service. |

| Field | Description |
|----------------------------|--|
| Total-(P)TMSI-Identity-Rsp | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) request response messages. |
| 3G-(P)TMSI-Identity-Rsp | Total P-TMSI identity request response messages for 3G service. |
| 2G-(P)TMSI-Identity-Rsp | Total P-TMSI identity request response messages for 2G service. |
| Total-Unknown-Identity-Rsp | Total identity request response messages for unknown identity. |
| 3G-Unknown-Identity-Rsp | Total identity request response messages for unknown identity for 3G service. |
| 2G-Unknown-Identity-Rsp | Total identity request response messages for unknown identity for 2G service. |
| Timers | Message and procedure timers statistics. |
| Total-T3350-Expiry | Total number of times the T3350 timer timed-out. |
| 3G-T3350-Expiry | Total number of times the T3350 timer timed-out for 3G service. |
| 2G-T3350-Expiry | Total number of times the T3350 timer timed-out for 2G service. |
| Total-T3360-Expiry | Total number of times the T3360 timer timed-out. |
| 3G-T3360-Expiry | Total number of times the T3360 timer timed-out for 3G service. |
| 2G-T3360-Expiry | Total number of times the T3360 timer timed-out for 2G service. |
| Total-T3370-Expiry | Total number of times the T3370 timer timed-out. |
| 3G-T3370-Expiry | Total number of times the T3370 timer timed-out for 3G service. Note This counter is deprecated from release R 16.0 onwards. New counters are introduced to replace this counter. The new counters are based on Identity type. |
| 2G-T3370-Expiry | Total number of times the T3370 timer timed-out for 2G service. Note This counter is deprecated from release R 16.0 onwards. New counters are introduced to replace this counter. The new counters are based on Identity type. |
| 3G-T3370-Expiry-IMSI | Total number of times the T3370 timer timed-out for 3G IMSI identity request. |
| 2G-T3370-Expiry-IMSI | Total number of times the T3370 timer timed-out for 2G IMSI identity request. |
| 3G-T3370-Expiry-IMEI | Total number of times the T3370 timer timed-out for 3G IMEI identity request. |

| Field | Description |
|------------------------|---|
| 2G-T3370-Expiry-IMEI | Total number of times the T3370 timer timed-out for 2G IMEI identity request. |
| 3G-T3370-Expiry-IMEISV | Total number of times the T3370 timer timed-out for 3G IMEISV identity request. |
| 2G-T3370-Expiry-IMEISV | Total number of times the T3370 timer timed-out for 2G IMEISV identity request. |
| 3G-T3370-Expiry-TMSI | Total number of times the T3370 timer timed-out for 3G TMSI identity request. |
| 2G-T3370-Expiry-TMSI | Total number of times the T3370 timer timed-out for 2G TMSI identity request. |
| 3G-T3370-Expiry-Other | Total number of times the T3370 timer timed-out for 3G identity request for unknown reason. |
| 2G-T3370-Expiry-Other | Total number of times the T3370 timer timed-out for 2G identity request for unknown reason. |
| Total-T3322-Expiry | Total number of times the T3322 timer timed-out. |
| 3G-T3322-Expiry | Total number of times the T3322 timer timed-out for 3G service. |
| 2G-T3322-Expiry | Total number of times the T3322 timer timed-out for 2G service. |
| Total-T3313-Expiry | Total number of times the T3313 timer timed-out. |
| 3G-T3313-Expiry | Total number of times the T3313 timer timed-out for 3G service. |
| 2G-T3313-Expiry | Total number of times the T3313 timer timed-out for 2G service. |
| Ranap Procedures | Indicates the statistics of Radio Access Network Application Part (RANAP) procedures. |
| Initial UE Rcvd | Total number of initial User Equipment (UE) messages received. |
| Common Id sent | Total number of common identifier messages sent. |
| Direct Transfer Sent | Total number of direct transfer messages sent. |
| Direct Transfer Rcvd | Total number of direct transfer messages received. |
| Security Mode Command | Total number of security mode commands received. |
| Security Mode Complete | Total number of security mode completed. |
| Security Mode Reject | Total number of security mode commands rejected. |
| Iu Release Request | Total number of Iu interface release request received. |
| Iu Release Command | Total number of Iu interface release commands received. |

| Field | Description |
|--------------------------|--|
| Iu Release Complete | Total number of Iu interface release completed. |
| Reset Rcvd | Total number of reset requests received. |
| Retransmitted Reset Rcvd | Total number of retransmitted reset requests received. |
| Reset Ack Sent | Total number of reset request acknowledgement sent. |
| Reset Sent | Total number of reset requests sent. |
| Retransmitted Reset Sent | Total number of reset requests retransmitted. |
| Reset Ack Rcvd | Total number of reset request acknowledgements received. |
| Resource Reset Rcvd | Total number of resource reset requests received. |
| Resource Reset Dropped | Total number of resource reset requests dropped as a result of throttling mechanism which handles flurries of such messages to the MMgr. |
| Resource Reset Ack Sent | Total number of resource reset request acknowledgements sent. |
| Resource Reset Sent | Total number of resource reset requests sent. |
| Resource Reset Ack Rcvd | Total number of resource reset request acknowledgements received. |
| Overload ctrl Rcvd | Total number of resource overload control messages received. |
| PC Congested Received | Total number of Point Code (PC) congested messages received. |
| Error Indication Rcvd | Total number of error indication messages received. |
| Error Indication Sent | Total number of error indication messages sent. |
| Relocation Required | Total number of messages received for Serving Radio Network Subsystem (SRNS) relocation required. |
| Relocation Command | Total number of messages received with SRNS relocation command. |
| Relocation Request | Total number of SRNS relocation requests received. |
| Relocation Request Ack | Total number of SRNS relocation requests Ack sent. |
| Relocation Failure | Total number of SRNS relocation failure messages received. |
| Relocation Prep Failure | Total number of SRNS relocation preparation failure messages received. |
| Relocation Cancel | Total number of SRNS relocation cancel messages received. |
| Relocation Cancel Ack | Total number of SRNS relocation cancel acknowledge messages sent. |

| Field | Description |
|---------------------------|---|
| Relocation Detect | Total number of SRNS relocation detected. |
| Relocation Complete | Total number of SRNS relocation completed. |
| Forward SRNS Context | Total number of SRNS contexts forwarded. |
| NAS-PDU Stats | Protocol Data Units (PDUs) for Network Access Server (NAS) statistics. |
| Received | Indicates the total all type of PDUs received through NAS interface. |
| Sent | Indicates the total all type of PDUs sent through NAS interface. |
| Total-Received-NAS-Pdu | Total all type of Protocol Data Units received through NAS interface. |
| Total-Sent-NAS-Pdu | Total all type of PDUs sent through NAS interface. |
| GMM-Received-NAS-Pdu | Total PDUs received by GPRS mobility management (GMM) service through NAS interface. |
| GMM-Sent-NAS-Pdu | Total PDUs sent by GMM service through NAS interface. |
| SM-Received-NAS-Pdu | Total PDUs received by Service Management (SM) service through NAS interface. |
| SM-Sent-NAS-Pdu | Total PDUs sent by SM service through NAS interface. |
| UnIdentified-NAS-Pdu | Total number of unknown type PDUs received through NAS interface. |
| Dropped NAS-PDUS | Statistics of Protocol Data Units (PDUs) dropped through NAS interface. |
| Total-Dropped-NAS-Pdu | Total number of PDUs dropped through NAS interface. |
| Redirection Indication | Indicates the causes for redirection indication. |
| PLMN not allowed | <p>The Attach/RAU Reject message is sent with GMM cause -PLMN not allowed" or any other values not specifically mapped to the other causes.</p> <p>This counter pegs when: Attach-reject/RAU-reject is sent in a MOCN configuration and the RNC tries the Attach/RAU at the next SGSN with the specific cause.</p> |
| Location area not allowed | <p>The Attach/RAU Reject message is sent with GMM cause -Location Area not allowed.</p> <p>This counter pegs when: Attach-reject/RAU-reject message is sent in a MOCN configuration and the RNC tries the Attach/RAU at the next SGSN with the specific cause.</p> |

| Field | Description |
|---|---|
| Roaming not allowed in LA | The Attach/RAU Reject message is sent with GMM cause - Roaming not allowed in this location area. This counter pegs when: Attach-reject/RAU-reject message is sent in a MOCN configuration and the RNC tries the Attach/RAU at the next SGSN with the specific cause. |
| No GPRS services in PLMN | The Attach/RAU Reject message is sent with GMM cause -GPRS services not allowed in this PLMN. This counter pegs when: Attach-reject/RAU-reject message is sent in a MOCN configuration and the RNC tries the Attach/RAU at the next SGSN with the specific cause. |
| CS/PS co-ord required | SGSN while interacting with the IMSI of the MS, rejects the MS to facilitate the RNC to choose the right CN operator. This counter pegs when: Attach-reject/RAU-reject message is sent in a MOCN configuration and the RNC tries the Attach/RAU at the next SGSN with the specific cause. |
| Unknown Reasons | The RANAP message is sent with none of the valid cause values. If the value is non-zero, it reflects an error in SGSN software. This counter pegs when: Attach-reject/RAU-reject message is sent in a MOCN configuration and the RNC tries the Attach/RAU at the next SGSN with the specific cause. |
| SMS Error Stats | Statistics of errors related to Short Message Service (SMS). |
| CP-ERROR (Tx) | Total number of control program errors sent (in upload direction) for short message service (SMS). |
| Network Overload Protection | |
| Attach requests queued in the pacing queue | Total number of Attach Request messages in the pacing queue waiting to be processed. |
| Inter SGSN RAU requests queued in the pacing queue | Total number of Inter SGSN RAU Request messages that have been buffered in the pacing queue. |
| Number of Inter SGSN RAU and Attach requests in the pacing queue | Total number of Attach Request messages and Inter SGSN Routing Area Update (RAU) Request messages that have been buffered in the pacing queue. |
| Attach requests successfully dequeued from the pacing queue | Total number of Attach Request messages that have been successfully removed from the pacing queue to be sent to the Session Manager for further processing. |
| Inter SGSN RAU requests successfully dequeued from the pacing queue | Total number of Inter SGSN RAU Request messages that have successfully been removed from the pacing queue and sent to the Session Manager for further processing. |

| Field | Description |
|---|--|
| Attaches rejected | Total number of Attach Request messages that were rejected due to a network overload situation. |
| Inter SGSN RAUs rejected | Total number of Inter SGSN RAU Request messages that were rejected due to a network overload situation. |
| Attaches dropped | Total number of Attaches that were dropped due to a network overload situation. |
| Inter SGSN RAUs dropped | Total number of Inter SGSN RAU Request messages that were dropped due to a network overload situation. |
| Attaches discarded due to excess wait time in the pacing queue | Total number of Attach Request messages that were discarded because the requests waited in the pacing queue for more than the t3310 timer value, which would have resulted in a timeout at the MS. |
| Inter SGSN RAUs discarded due to excess wait time in the pacing queue | Total number of Inter SGSN RAU messages that were discarded from the pacing queue as the requests waited more than the t3315 timer value, which would have resulted in a timeout at the MS. |
| Number of valid packets processed in the last sec | Total number of valid packets processed in the last second. |
| Number of packets in Q in the last tick | Total number of packets in the queue in the last tick. |
| Packets to be dequeued in the last tick | Total number of packets dequeued in the last tick. |
| Number of new requests processed from the pacing queue in the last tick | Total number of new requests processed from the pacing queue in the last tick. |
| Number of requests dropped from the pacing queue in the last tick | Total number of requests dropped from the pacing queue in the last tick. |
| Average Number of requests processed per min (1 min) | The average number of requests processed per minute. |
| Average Number of requests processed per min (5 min) | The average number of requests processed per minute. |
| Average Number of requests processed per min (10 min) | The average number of requests processed per minute. |
| Session Management Messages Statistics | |
| Activate Context Request | Statistics related to active context request in Session Management (SM) service. |
| Total-Actv-Request | Total number of request messages received for 2G and 3G context activation including primary and secondary contexts. |
| 3G-Actv-Request | Total number of request messages received for 3G context activation including primary and secondary contexts. |
| 2G-Actv Request | Total number of request messages received for 2G context activation including primary and secondary contexts. |

| Field | Description |
|---------------------------|--|
| Primary-Actv-Request | Total number of request messages received for 2G and 3G primary context activation. |
| 3G-Primary-Actv-Request | Total number of request messages received for 3G primary context activation. |
| 2G-Primary-Actv-Request | Total number of request messages received for 2G primary context activation. |
| Secondary-Actv-Request | Total number of request messages received for 2G and 3G secondary context activation. |
| 3G-Secondary-Actv-Request | Total number of request messages received for 3G secondary context activation. |
| 2G-Secondary-Actv-Request | Total number of request messages received for 2G secondary context activation. |
| Activate Context Accept | Statistics related to active context requests accepted in Session Management service. |
| Total-Actv-Accept | Total number of request messages accepted for 2G and 3G context activation including primary and secondary type of context. |
| 3G-Actv-Accept | Total number of request messages accepted for 3G context activation including primary and secondary type of context. |
| 2G-Actv Accept | Total number of request messages accepted for 2G context activation including primary and secondary type of context. |
| Primary-Actv-Accept | Total number of request messages accepted for 2G and 3G primary context activation. |
| 3G-Primary-Actv-Accept | Total number of request messages accepted for 3G primary context activation. |
| 2G-Primary-Actv-Accept | Total number of request messages accepted for 2G primary context activation. |
| Secondary-Actv-Accept | Total number of request messages accepted for 2G and 3G secondary context activation. |
| 3G-Secondary-Actv-Accept | Total number of request messages accepted for 3G secondary context activation. |
| 2G-Secondary-Actv-Accept | Total number of request messages accepted for 2G secondary context activation. |
| Activate Context Reject | Statistics of request messages rejected for 2G and 3G context activation including primary and secondary type of contexts. |
| Total-Actv-Reject | Total number of request messages rejected for 2G and 3G context activation including primary and secondary type of contexts. |

| Field | Description |
|---------------------------|---|
| 3G-Actv-Reject | Total number of request messages rejected for 3G context activation including primary and secondary type of contexts. |
| 2G-Actv-Reject | Total number of request messages rejected for 2G context activation including primary and secondary type of contexts. |
| Primary-Actv-Reject | Total number of request messages rejected for 2G and 3G primary context activation. |
| 3G-Primary-Actv-Reject | Total number of request messages rejected for 3G primary context activation. |
| 2G-Primary-Actv-Reject | Total number of request messages rejected for 2G primary context activation. |
| Secondary-Actv-Reject | Total number of request messages rejected for 2G and 3G secondary context activation. |
| 3G-Secondary-Actv-Reject | Total number of request messages rejected for 3G secondary context activation. |
| 2G-Secondary-Actv-Reject | Total number of request messages rejected for 2G secondary context activation. |
| Actv-Reject-Nrspca | Total number of request messages rejected for Network Requested Secondary PDP Context Activation. |
| 3G-Actv-Reject-Nrspca | Total number of NRSPCA request messages rejected for 3G secondary context activation. |
| Activate Context Failure | |
| Total-Actv-Failure | Total number of context activation failures for 2G and 3G services, including primary and secondary types. |
| 3G-Actv-Failure | Total number of context activation failures for 3G services. |
| 2G-Actv Failure | Total number of context activation failures for 2G services. |
| Primary-Actv-Failure | Total number of failed primary context activations for 2G and 3G service. |
| 3G-Primary-Actv-Failure | Total number of failed primary context activations for 3G service. |
| 2G-Primary-Actv-Failure | Total number of failed primary context activations for 2G service. |
| Secondary-Actv-Failure | Total number of failed secondary context activations for 2G and 3G service. |
| 3G-Secondary-Actv-Failure | Total number of failed secondary context activations for 3G service . |

| Field | Description |
|------------------------------------|---|
| 2G-Secondary-Actv-Failure | Total number of failed secondary context activations for 2G and 3G service . |
| Duplicate Activate Request | Statistics of duplicate context activation requests for 2G and 3G service received. |
| Total-Dup-Actv Req Received | Total number of duplicate context activation requests for 2G and 3G service received. |
| Total-Dup-3G-Actv Req Received | Total number of duplicate context activation requests for 3G service received. |
| 3G-Dup Req In PDP-ACTIVE State | Statistics of duplicate context activation requests for 3G service in PDP activate state. |
| Duplicate TI | Total number of duplicate context activation requests for 3G service in PDP active state with duplicate Transaction Identifiers (TIs). |
| Duplicate NSAPI | Total number of duplicate context activation requests for 3G service in PDP active state with duplicate Network Service Access Point Identifier (NSAPI) for 3G service. |
| Duplicate PDP-Addr and APN | Total number of duplicate context activation requests for 3G service in PDP active state with duplicate PDP address and access point name for 3G service. |
| Total-Dup-2G-Actv Req Received | Total number of duplicate context activation requests for 2G service received. |
| 2G-Dup Req In PDP-ACTIVE State | Indicates the statistics of duplicate context activation requests for 2G service in PDP activate state. |
| Duplicate TI | Total number of duplicate context activation requests for 2G service in PDP active state with duplicate Transaction Identifiers (TIs). |
| Duplicate NSAPI | Total number of duplicate context activation requests for 2G service in PDP active state with duplicate Network Service Access Point Identifier (NSAPI). |
| Duplicate PDP-Addr and APN | Total number of duplicate context activation requests for 2G service in PDP active state with duplicate PDP address and access point name. |
| 3G-Dup Req In NOT PDP-ACTIVE State | Statistics of duplicate context activation requests for 3G service which are not in PDP active state. |
| Duplicate TI | Total number of duplicate context activation requests for 3G service which are not in PDP active state with duplicate transaction identifiers (TIs). |

| Field | Description |
|---------------------------------------|--|
| Duplicate NSAPI | Total number of duplicate context activation requests for 3G service which are not in PDP active state with duplicate Network Service Access Point Identifier (NSAPI). |
| Duplicate PDP-Addr and APN | Total number of duplicate context activation requests for 3G service which are not in PDP active state with duplicate PDP address and access point name. |
| 2G-Dup Req In NOT PDP-ACTIVE State | Indicates the statistics of duplicate context activation requests for 2G service which are not in PDP active state. |
| Duplicate TI | Total number of duplicate context activation requests for 2G service which are not in PDP active state with duplicate transaction identifiers (TIs). |
| Duplicate NSAPI | Total number of duplicate context activation requests for 2G service which are not in PDP active state with duplicate Network Service Access Point Identifier (NSAPI). |
| Duplicate PDP-Addr and APN | Total number of duplicate context activation requests for 2G service which are not in PDP active state with duplicate PDP address and access point name. |
| Request Pdp Context Activation | Indicates the statistics of PDP context activation requests for 2G and 3G service. |
| Total-Request-Pdp-Ctxt-Req | Total number of PDP context activation requests received for 2G and 3G service. |
| 3G-Request-Pdp-Ctxt-Req | Total number of PDP context activation requests received for 3G service. |
| 2G-Request-Pdp-Ctxt-Req | Total number of PDP context activation requests received for 2G service. |
| Request Pdp Context Activation Reject | Indicates the statistics of PDP context activation requests rejected for 2G and 3G service. |
| Total-Request-Pdp-Ctxt-Req Reject | Total number of PDP context activation requests rejected for 2G and 3G service. |
| 3G-Request-Pdp-Ctxt-Req Reject | Total number of PDP context activation requests rejected for 3G service. |
| 2G-Request-Pdp-Ctxt-Req Reject | Total number of PDP context activation requests rejected for 2G service. |
| Modify Context Request | Statistics of MS and network initiated PDP context modification requests received for 2G and 3G service. |
| Total-Modify-Request | Total number of MS and network initiated PDP context modification requests received for 2G and 3G service. |

| Field | Description |
|-----------------------|--|
| 3G-Modify-Request | Total number of MS and network initiated PDP context modification requests received for 3G service. |
| 2G-Modify Request | Total number of MS and network initiated PDP context modification requests received for 2G service. |
| MS-Modify-Request | Total number of MS initiated PDP context modification requests received for 2G and 3G service. |
| 3G-MS-Modify-Request | Total number of MS initiated PDP context modification requests received for 3G service. |
| 2G-MS-Modify-Request | Total number of MS initiated PDP context modification requests received for 2G service. |
| NW-Modify-Request | Total number of network initiated PDP context modification requests received for 2G and 3G service. |
| 3G-NW-Modify-Request | Total number of network initiated PDP context modification requests received for 3G service. |
| 2G-NW-Modify-Request | Total number of network initiated PDP context modification requests received for 2G service. |
| Modify Context Accept | Statistics of MS and network initiated PDP context modification requests accepted for 2G and 3G service. |
| Total-Modify-Accept | Total number of MS and network initiated PDP context modification requests accepted for 2G and 3G service. |
| 3G-Modify-Accept | Total number of MS and network initiated PDP context modification requests accepted for 3G service. |
| 2G-Modify-Accept | Total number of MS and network initiated PDP context modification requests accepted for 2G service. |
| MS-Modify-Accept | Total number of MS initiated PDP context modification requests accepted for 2G and 3G service. |
| 3G-MS-Modify-Accept | Total number of MS initiated PDP context modification requests accepted for 3G service. |
| 2G-MS-Modify-Accept | Total number of MS initiated PDP context modification requests accepted for 2G service. |
| NW-Modify-Accept | Total number of network initiated PDP context modification requests accepted for 2G and 3G service. |
| 3G-NW-Modify-Accept | Total number of network initiated PDP context modification requests received for 3G service. |
| 2G-NW-Modify-Accept | Total number of network initiated PDP context modification requests accepted for 2G service. |

| Field | Description |
|----------------------------|--|
| Modify Context Reject | Indicates the statistics of MS and network initiated PDP context modification requests rejected for 2G and 3G service. |
| Total-Modify-Reject | Total number of MS and network initiated PDP context modification requests rejected for 2G and 3G service. |
| 3G-Modify-Reject | Total number of MS and network initiated PDP context modification requests rejected for 3G service. |
| 2G-Modify-Reject | Total number of MS and network initiated PDP context modification requests rejected for 2G service. |
| MS-Modify-Reject | Total number of MS initiated PDP context modification requests rejected for 2G and 3G service. |
| 3G-MS-Modify-Reject | Total number of MS initiated PDP context modification requests rejected for 3G service. |
| 2G-MS-Modify-Reject | Total number of MS initiated PDP context modification requests rejected for 2G service. |
| NW-Modify-Reject | Total number of network initiated PDP context modification requests rejected for 2G and 3G service. |
| 3G-NW-Modify-Reject | Total number of network initiated PDP context modification requests rejected for 3G service. |
| 2G-NW-Modify-Reject | Total number of network initiated PDP context modification requests rejected for 2G service. |
| Deactivate Context Request | Statistics of MS and network initiated PDP context deactivation requests received for 2G and 3G service. |
| Total-Deactv-Request | Total number of MS and network initiated PDP context deactivation requests received for 2G and 3G service. |
| 3G-Deactv-Request | Total number of MS and network initiated PDP context deactivation requests received for 3G service. |
| 2G-Deactv-Request | Total number of MS and network initiated PDP context deactivation requests received for 2G service. |
| MS-Deactv-Request | Total number of MS initiated PDP context deactivation requests received for 2G and 3G service. |
| 3G-MS-Deactv-Request | Total number of MS initiated PDP context deactivation requests received for 3G service. |
| 2G-MS-Deactv-Request | Total number of MS initiated PDP context deactivation requests received for 2G service. |
| NW-Deactv-Request | Total number of network initiated PDP context deactivation requests received for 2G and 3G service. |

| Field | Description |
|---------------------------|--|
| 3G-NW-Deactiv-Request | Total number of network initiated PDP context deactivation requests received for 3G service. |
| 2G-NW-Deactiv-Request | Total number of network initiated PDP context deactivation requests received for 2G service. |
| Deactivate Context Accept | Statistics of MS and network initiated PDP context deactivation requests accepted for 2G and 3G service. |
| Total-Deactiv-Accept | Total number of MS and network initiated PDP context deactivation requests accepted for 2G and 3G service. |
| 3G-Deactiv-Accept | Total number of MS and network initiated PDP context deactivation requests accepted for 3G service. |
| 2G-Deactiv-Accept | Total number of MS and network initiated PDP context deactivation requests accepted for 2G service. |
| MS-Deactiv-Accept | Total number of MS initiated PDP context deactivation requests accepted for 2G and 3G service. |
| 3G-MS-Deactiv-Accept | Total number of MS initiated PDP context deactivation requests accepted for 3G service. |
| 2G-MS-Deactiv-Accept | Total number of MS initiated PDP context deactivation requests accepted for 2G service. |
| NW-Deactiv-Accept | Total number of network initiated PDP context deactivation requests accepted for 2G and 3G service. |
| 3G-NW-Deactiv-Accept | Total number of network initiated PDP context deactivation requests accepted for 3G service. |
| 2G-NW-Deactiv-Accept | Total number of network initiated PDP context deactivation requests accepted for 2G service. |
| SM Status Messages | Indicates the statistics of the service manager status messages for 2G and 3G service. |
| Total-SM-Status-Sent | Total number of service manager status messages sent for 2G and 3G service. |
| 3G-SM-Status-Sent | Total number of service manager status messages sent for 3G service. |
| 2G-SM-Status-Sent | Total number of service manager status messages sent for 2G service. |
| Total-SM-Status-Rcvd | Total number of service manager status messages received for 2G and 3G service. |
| 3G-SM-Status-Rcvd | Total number of service manager status messages received for 3G service. |

| Field | Description |
|-----------------------------|---|
| 2G-SM-Status-Rcvd | Total number of service manager status messages received for 2G service. |
| RNC Initiated RAB Messages | Statistics of the Radio Network Controller (RNC) initiated Radio Access Bearer (RAB) messages for 2G and 3G service. |
| Total Rab Mod Requested | Total number of requests for Radio Access Bearer (RAB) modification initiated by Radio Network Controller (RNC). |
| Num Rab Mod | Total number of RABs modified on request for modification initiated by RNC. |
| Total Rab Rel Requested | Total number of requests for RAB release initiated by RNC. |
| Num Rab Rel | Total number of RABs modified on request for release initiated by RNC. |
| SGSN Initiated RAB Messages | Indicates the statistics of the SGSN initiated radio access bearer (RAB) messages for 2G and 3G service. |
| Total Rab Assign Requested | Total number of SGSN initiated RAB assign requests messages received. |
| Total Rab Assign Rsp Rcvd | Total number of SGSN initiated RAB assign response messages received. |
| Rab Setup/Mod Attempted | Total number of SGSN initiated setup and modification attempted for RAB. |
| Rab Setup/Mod Accepted | Total number of SGSN initiated setup and modifications accepted for RAB. |
| Rab Setup Attempted | This proprietary counter tracks the number of RAB Setup Request messages initiated by the SGSN. |
| Rab Setup Accepted | This proprietary counter tracks the number of successful RAB Setup Request messages. The SGSN initiates RAB Setup Request towards the RNC to setup a RAB. |
| Rab Modify Attempted | This proprietary counter tracks the number of RAB Modify Request messages initiated by the SGSN. |
| Rab Modify Accepted | This proprietary counter tracks the number of successful RAB Modify Request messages. The SGSN initiates RAB Modify Request towards the RNC to modify a RAB |
| Rab Setup/Mod Timer Expired | Total number of SGSN initiated RAB setup and modification events where procedure timer was exhausted. |
| Rab Setup/Mod Failed | Total number of SGSN initiated RAB setup and modification events failed. |

| Field | Description |
|---------------------------------|--|
| Rab Setup Timer Expired | This proprietary counter tracks the number of RAB Setup Request messages that timeout. The SGSN initiates RAB Setup Request towards the RNC and starts a timer. When no response is received within a certain time, the SGSN performs an action appropriate to the procedure – during activation, the SGSN sends Activation Reject. For other procedures, the PDP context is preserved. |
| Rab Setup Failed | This proprietary counter tracks the number of unsuccessful RAB Setup Request messages. The SGSN initiates RAB Setup Request towards the RNC to setup a RAB. |
| Rab Modify Timer Expired | This proprietary counter tracks the number of RAB Modify Request messages that timeout. The SGSN initiates RAB Modify Request towards the RNC and starts a timer. When no response is received within a certain time, the SGSN performs an action appropriate to the procedure – during activation, the SGSN sends Activation Reject. For other procedures, the PDP context is preserved. |
| Rab Modify Failed | This proprietary counter tracks the number of unsuccessful RAB Modify Request messages. The SGSN initiates RAB Modify Request towards the RNC to modify a RAB. |
| Rab Rel Attempted | Total number of SGSN initiated RAB release procedure attempted. |
| Rab Rel Accepted | Total number of SGSN initiated RAB release procedure accepted. |
| Rab Rel Timer Expired | Total number of SGSN initiated RAB release procedure where procedure timer exhausted. |
| Rab Rel Failed | Total number of SGSN initiated RAB release procedure failed. |
| Rab Queued | Total number of SGSN initiated RAB messages in queue. |
| Rab Setup Reattempted (Diff IP) | Total number of SGSN initiated RAB setup reattempted with different IP address. |
| Total Set/Mod/Rel Rab Rejected | Total number of SGSN initiated RAB setup, modification/release rejected. |
| SRNS Context Transfer Messages | Statistics of SGSN Radio Network Subsystem (SRNS) context transfer messages. |
| SRNS Context Req Send | Total number of SRNS context transfer request messages sent. |
| SRNS Context Rsp Rcvd | Total number of SGSN Radio Network Subsystem (SRNS) context transfer response messages received. |
| SRNS Context Req Timer Expired | Total number of events when timer exhausted for SRNS context transfer request messages. |

| Field | Description |
|-------------------------|--|
| Total PDP-Ctxt Accepted | Total number of PDP context accepted for SRNS. |
| Total PDP-Ctxt Rejected | Total number of PDP context rejected for SRNS. |
| SRNS Data Fwd Cmd Send | Total number of SRNS data forward commands sent. |

show gmm-sm statistics verbose

Table 2: show gmm-sm statistics verbose Command Output Descriptions

| Field | Description |
|-------------------------------|---|
| Session Statistics | |
| Attached Subscribers | Statistics for attached subscribers. |
| Total Attached | Total subscribers attached for 2G and 3G. |
| 3G Attached | Total subscribers attached for 3G only. |
| 2G Attached | Total subscribers attached for 3G only. |
| Home Subscribers | Statistics for attached home subscribers. |
| Total Home | Total home subscribers attached for 2G and 3G. |
| 3G Home | Total home subscribers attached for 3G only. |
| 2G Home | Total home subscribers attached for 3G only. |
| Visiting National Subscribers | Statistics for attached visiting national subscribers. |
| Total-Visiting-National | Total visiting national subscribers attached for 2G and 3G. |
| 3G-Visiting-National | Total visiting national subscribers attached for 3G only. |
| 2G-Visiting-National | Total visiting national subscribers attached for 3G only. |
| Visiting Foreign Subscribers | Statistics for attached visiting foreign subscribers. |
| Total-Visiting-Foreign | Total visiting foreign subscribers attached for 2G and 3G. |
| 3G-Visiting-Foreign | Total visiting foreign subscribers attached for 3G only. |
| 2G-Visiting-Foreign | Total visiting foreign subscribers attached for 2G only. |
| Network Sharing Subscribers | Statistics for network sharing subscribers. |

| Field | Description |
|---------------------------------------|--|
| 3G-Supporting-UE | Total number of 3G Network Sharing Supporting User Equipment currently in the system. This counter pegs when: Increments when a network sharing supporting UE connects with the 3G SGSN. |
| 3G-Non-Supporting-UE | Total number of 3G Network Sharing Non Supporting User Equipment currently in the system. This counter pegs when: A network sharing non-supporting UE connects with the 3G SGSN. |
| Subscribers in PMM-REGISTERED state | Total subscribers in Packet Mobility Management-registered (PMM-REGISTERED) state, including connected and idle. |
| PMM-CONNECTED | Total subscribers in PMM connected state. |
| PMM-IDLE | Total subscribers in PMM idle state. |
| Subscribers in GPRS-CONNECTED state | Total number of subscribers in GPRS-CONNECTED state. It is a Gauge type of counter. |
| GPRS-STANDBY | Total number of subscribers in GPRS-STANDBY state. It is a Gauge type of counter. |
| GPRS-READY | Total number of subscribers in GPRS-READY state. It is a Gauge type of counter. |
| Activated Subscribers | Statistics of activated subscribers. |
| Total Activated | Total number of activated 2G and 3G subscribers. |
| 3G Activated | Total number of activated 3G subscribers only. |
| 2G Activated | Total number of activated 2G subscribers only. |
| Activate PDP Contexts | Statistics of activated PDP contexts. |
| Total Actv PDP Ctx | Total number of activated 2G and 3G PDP contexts. |
| 3G-Actv Pdp Ctx | Total number of activated 3G PDP contexts only. |
| 2G-Actv Pdp Ctx | Total number of activated 2G PDP contexts only. |
| Total Actv Pdp Ctx with Direct Tunnel | Total number of activated PDP contexts through direct tunnel. |
| Message Statistics | Statistics of messages. |
| Specific Procedures | Indicates the statistics related to specific procedures. |
| Attach Request | Total number of messages for Attach Request. |
| Total-Attach | Statistics of total attach messages. |

| Field | Description |
|------------------------|---|
| IMSI | Indicates the statistics of total attach through international mobile subscriber identity (IMSI). |
| Total-IMSI-Attach | Total international mobile subscriber identity (IMSI) attach including 2G and 3G. |
| 3G-IMSI-Attach | 3G-IMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total 3G-IMSI attach with GPRS only access. |
| Combined Attached | Total 3G-IMSI attach with combined (PS and CS) access. |
| 2G-IMSI-Attach | 2G-IMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total 2G-IMSI attach with GPRS only access. |
| Combined Attached | Total 2G-IMSI attach with combined (PS and CS) access. |
| PTMSI | Statistics of total attach through Packet-Temporary Mobile Subscriber Identity (P-TMSI). |
| Total-PTMSI-Attach | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) attach including 2G and 3G. |
| 3G-PTMSI-Attach | 3G-P-TMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total 3G-P-TMSI attach with GPRS only access. |
| Combined Attached | Total 3G-P-TMSI attach with combined (PS and CS) access. |
| 2G-PTMSI-Attach | Indicates the 2G-P-TMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total 2G-P-TMSI attach with GPRS only access. |
| Combined Attached | Total 2G-P-TMSI attach with combined (PS and CS) access. |
| Local-PTMSI | Statistics of total attach through local Packet-Temporary Mobile Subscriber Identity (P-TMSI). |
| Total-loc-PTMSI-Attach | Total local Packet-Temporary Mobile Subscriber Identity (P-TMSI) attach including 2G and 3G. |
| 3G-loc-PTMSI-Attach | Local 3G-P-TMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total local 3G-P-TMSI attach with GPRS only access. |
| Combined Attached | Total local 3G-P-TMSI attach with combined (PS and CS) access. |
| 2G-loc-PTMSI-Attach | Indicates the local 2G-P-TMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total local 2G-P-TMSI attach with GPRS only access. |

| Field | Description |
|-------------------------|---|
| Combined Attached | Total local 2G-P-TMSI attach with combined (PS and CS) access. |
| Remote-PTMSI | Statistics of total attach through remote Packet-Temporary Mobile Subscriber Identity (P-TMSI). |
| Total-remo-PTMSI-Attach | Total remote Packet-Temporary Mobile Subscriber Identity (P-TMSI) attach including 2G and 3G. |
| 3G-remote-PTMSI-Attach | 3G-P-TMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total remote 3G-P-TMSI attach with GPRS only access. |
| Combined Attached | Total remote 3G-P-TMSI attach with combined (PS and CS) access. |
| 2G-remote-PTMSI-Attach | Remote 2G-P-TMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total remote 2G-P-TMSI attach with GPRS only access. |
| Combined Attached | Total remote 2G-P-TMSI attach with combined (PS and CS) access. |
| Retransmission | Statistics of retransmitted messages. |
| Ret-Total-Attach | Statistics of total retransmitted attach requests. |
| IMSI | Statistics of total attach through retransmitted International Mobile Subscriber Identity (IMSI) . |
| Ret-Total-IMSI-Attach | Total IMSI attach including retransmitted 2G and 3G . |
| Ret-3G-IMSI-Attach | 3G-IMSI attach statistics for retransmitted GPRS and non-GPRS. |
| GPRS-only Attached | Total 3G-IMSI attach retransmitted with GPRS only access . |
| Combined Attached | Total 3G-IMSI attach with combined (PS and CS) access messages. |
| Ret-2G-IMSI-Attach | Indicates the retransmitted 2G-IMSI attach statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total 2G-IMSI attach retransmitted with GPRS only access . |
| Combined Attached | Total 2G-IMSI attach retransmitted with combined (PS and CS) access . |
| PTMSI | Statistics of total attach through retransmitted Packet-Temporary Mobile Subscriber Identity (P-TMSI) . |
| Ret-Total-PTMSI-Attach | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) attachretransmitted including 2G and 3G. |
| Ret-3G-PTMSI-Attach | 3G-P-TMSI attach retransmitted statistics for GPRS and non-GPRS . |

| Field | Description |
|-----------------------------|---|
| GPRS-only Attached | Total 3G-P-TMSI attach retransmitted with GPRS only access. |
| Combined Attached | Total 3G-P-TMSI attach retransmitted with combined (PS and CS) access . |
| Ret-2G-PTMSI-Attach | 2G-P-TMSI attach retransmitted statistics for GPRS and non-GPRS . |
| GPRS-only Attached | Total 2G-P-TMSI attach retransmitted with GPRS only access . |
| Combined Attached | Total 2G-P-TMSI attach with combined (PS and CS) access retransmitted. |
| Local-PTMSI | Statistics of total attach through retransmitted local Packet-Temporary Mobile Subscriber Identity (P-TMSI). |
| Ret-Total-loc-PTMSI-Attach | Total retransmitted local Packet-Temporary Mobile Subscriber Identity (P-TMSI) attach including 2G and 3G. |
| Ret-3G-loc-PTMSI-Attach | Local 3G-P-TMSI attach retransmitted statistics for GPRS and non-GPRS. |
| GPRS-only Attached | Total local 3G-P-TMSI attach retransmitted with GPRS only access . |
| Combined Attached | Total local 3G-P-TMSI attach retransmitted with combined (PS and CS) access . |
| Ret-2G-loc-PTMSI-Attach | Statistics for local 2G-P-TMSI attach retransmitted for GPRS and non-GPRS . |
| GPRS-only Attached | Total local 2G-P-TMSI attach retransmitted with GPRS only access . |
| Combined Attached | Total local 2G-P-TMSI attach retransmitted with combined (PS and CS) access. |
| Remote-PTMSI | Statistics of total attach through retransmitted remote Packet-Temporary Mobile Subscriber Identity (P-TMSI). |
| Ret-Total-remo-PTMSI-Attach | Total remote Packet-Temporary Mobile Subscriber Identity (P-TMSI) attach retransmitted for 2G and 3G . |
| Ret-3G-remote-PTMSI-Attach | Statistics for remote 3G-P-TMSI attach for GPRS and non-GPRS retransmitted. |
| GPRS-only Attached | Total remote 3G-P-TMSI attach with GPRS only access retransmitted. |
| Combined Attached | Total remote 3G-P-TMSI attach with combined (PS and CS) access retransmitted. |

| Field | Description |
|----------------------------|---|
| Ret-2G-remote-PTMSI-Attach | Indicates the remote 2G-P-TMSI attach statistics for GPRS and non-GPRS retransmitted. |
| GPRS-only Attached | Total remote 2G-P-TMSI attach with GPRS only access retransmitted. |
| Combined Attached | Total remote 2G-P-TMSI attach with combined (PS and CS) access retransmitted. |
| Attach Accept | Indicates the statistics of total attach accepts. |
| Total-Attach-Accept | Total attach accepts including 2G and 3G. |
| 3G-Attach-Accept | Indicates the 3G-attach accept statistics for GPRS and non-GPRS. |
| Gprs-Attached | Total 3G-attach accepts with GPRS only access. |
| Comb-Attached | Total 3G-attach accepts with combined (PS and CS) access. |
| 2G-Attach-Accept | Indicates the 2G-attach accept statistics for GPRS and non-GPRS. |
| Gprs-Attached | Total 2G-attach accepts with GPRS only access. |
| Comb-Attached | Total 2G-attach accepts with combined (PS and CS) access. |
| Retransmission | Indicates the statistics of total attach accepts retransmitted. |
| Ret-Total-Attach-Accept | Total attach accepts including 2G and 3G retransmitted. |
| Ret-3G-Attach-Accept | Indicates the 3G-attach accept retransmitted statistics for GPRS and non-GPRS. |
| Gprs-Attached | Total 3G-attach accepts with GPRS only access retransmitted. |
| Comb-Attached | Total 3G-attach accepts with combined (PS and CS) access retransmitted. |
| Ret-2G-Attach-Accept | Indicates the 2G-attach accept statistics for GPRS and non-GPRS retransmitted. |
| Gprs-Attached | Total 2G-attach accepts with GPRS only access retransmitted. |
| Comb-Attached | Total 2G-attach accepts with combined (PS and CS) access retransmitted. |
| Attach Complete | Indicates the statistics of total attach completed. |
| Total-Attach-Complete | Total attach completed including 2G and 3G. |
| 3G-Attach-Complete | Indicates the 3G-attach complete statistics for GPRS and non-GPRS. |
| 2G-Attach-Complete | Total 3G-attach completed with GPRS only access. |

| Field | Description |
|--|--|
| Attach Reject | Total 3G-attach completed with combined (PS and CS) access. |
| Total-Attach-Reject | Indicates the 2G-attach complete statistics for GPRS and non-GPRS. |
| 3G-Attach-Reject | Total 2G-attach completed with GPRS only access. |
| 2G-Attach-Reject | Total 2G-attach completed with combined (PS and CS) access. |
| Gprs-Attach Reject Causes | Indicates the statistics of causes for GPRS attach rejected for 2G and 3G service. |
| 3G-IMSI Unknown in HLR | Total number of GPRS attach rejected for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of GPRS attach rejected for 2G service due to unknown IMSI in HLR. |
| 3G-Illegal MS | Total number of GPRS attach rejected for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of GPRS attach rejected for 2G service due to illegal mobile subscriber. |
| 3G-Illegal ME | Total number of GPRS attach rejected for 3G service due to illegal mobile equipment. |
| 2G-Illegal ME | Total number of GPRS attach rejected for 2G service due to illegal mobile equipment. |
| 3G-GPRS service not allowed | Total number of GPRS attach rejected for 3G service due to GPRS service not allowed for subscriber. |
| 2G-GPRS service not allowed | Total number of GPRS attach rejected for 2G service due to GPRS service not allowed for subscriber. |
| 3G-GPRS and Non-GPRS service not allowed | Total number of GPRS attach rejected for 3G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 2G-GPRS and Non-GPRS service not allowed | Total number of GPRS attach rejected for 2G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 3G-MSId not derived by Nw | Total number of GPRS attach rejected for 3G service due to network failed to derive MSID from attach message. |
| 2G-MSId not derived by Nw | Total number of GPRS attach rejected for 2G service due to network failed to derive MSID from attach message. |
| 3G-Implicitly detached | Total number of GPRS attach rejected for 3G service due to implicitly detach. |
| 2G-Implicitly detached | Total number of GPRS attach rejected for 2G service due to implicitly detach. |

| Field | Description |
|--|---|
| 3G-PLMN not allowed | Total number of GPRS attach rejected for 3G service due to specific PLMN not allowed. |
| 2G-PLMN not allowed | Total number of GPRS attach rejected for 2G service due to specific PLMN not allowed. |
| 3G-Location Area not allowed | Total number of GPRS attach rejected for 3G service due to specific location area not allowed. |
| 2G-Location Area not allowed | Total number of GPRS attach rejected for 2G service due to specific location area not allowed. |
| 3G-Roaming not allowed in this Location Area | Total number of GPRS attach rejected for 3G service due to roaming not allowed in specific location area. |
| 2G-Roaming not allowed in this Location Area | Total number of GPRS attach rejected for 2G service due to roaming not allowed in specific location area. |
| 3G-GPRS service not allowed in this PLMN | Total number of GPRS attach rejected for 3G service due to GPRS service not allowed in specific PLMN. |
| 2G-GPRS service not allowed in this PLMN | Total number of GPRS attach rejected for 2G service due to GPRS service not allowed in specific PLMN. |
| 3G-No suitable cells in this Location Area | Total number of GPRS attach rejected for 3G service due to non availability of suitable cell in specific location area. |
| 2G-No suitable cells in this Location Area | Total number of GPRS attach rejected for 2G service due to non availability of suitable cell in specific location area. |
| 3G-MSC not reachable | Total number of GPRS attach rejected for 3G service as MSC not reachable. |
| 2G-MSC not reachable | Total number of GPRS attach rejected for 2G service as MSC not reachable. |
| 3G-Network Failure | Total number of GPRS attach rejected for 3G service due to network failure. |
| 2G-Network Failure | Total number of GPRS attach rejected for 2G service due to network failure. |
| 3G-MAC Failure | Total number of GPRS attach rejected for 3G service due to message authenticate code (MAC) failure. |
| 2G-MAC Failure | Total number of GPRS attach rejected for 2G service due to MAC failure. |
| 3G-SYNC Failure | Total number of GPRS attach rejected for 3G service due to context synchronization failure. |
| 2G-SYNC Failure | Total number of GPRS attach rejected for 2G service due to context synchronization failure. |

| Field | Description |
|--|---|
| 3G-Congestion | Total number of GPRS attach rejected for 3G service due to network congestion. |
| 2G-Congestion | Total number of GPRS attach rejected for 2G service due to network congestion. |
| 3G-GSM Auth Unacceptable | Total number of GPRS attach rejected for 3G service due to unacceptable authentication from GSM network. |
| 2G-GSM Auth Unacceptable | Total number of GPRS attach rejected for 2G service due to unacceptable authentication from GSM network. |
| 3G-No PDP contexts activated | Total number of GPRS attach rejected for 3G service as PDP context is not activated. |
| 2G-No PDP contexts activated | Total number of GPRS attach rejected for 2G service as PDP context is not activated. |
| 3G-Retry from new cell | Total number of GPRS attach rejected for 3G service as PDP context activation was tried from new mobile cell. |
| 2G-Retry from new cell | Total number of GPRS attach rejected for 2G service as PDP context activation was tried from new mobile cell. |
| 3G-Semantically Wrong Msg | Total number of GPRS attach rejected for 3G service as attach request message is semantically wrong. |
| 2G-Semantically Wrong Msg | Total number of GPRS attach rejected for 2G service as attach request message is semantically wrong. |
| 3G-Invalid Mandatory Info | Total number of GPRS attach rejected for 3G service as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of GPRS attach rejected for 2G service as mandatory information in message is invalid. |
| 3G-MSG type Non Existent | Total number of GPRS attach rejected for 3G service due to non-existent type of message. |
| 2G-MSG type Non Existent | Total number of GPRS attach rejected for 2G service due to non-existent type of message. |
| 3G-MSG type not compatible with protocol state | Total number of GPRS attach rejected for 3G service as message type is not compatible with protocol state. |
| 2G-MSG type not compatible with protocol state | Total number of GPRS attach rejected for 2G service as message type is not compatible with protocol state. |
| 3G-IE Non Existent | Total number of GPRS attach rejected for 3G service rejected due to non-existence of information element. |
| 2G-IE Non Existent | Total number of GPRS attach rejected for 2G service rejected due to non-existence of information element. |

| Field | Description |
|---|--|
| 3G-Conditional IE Error | Total number of GPRS attach rejected for 3G service due to error in conditional information element. |
| 2G-conditional IE Error | Total number of GPRS attach rejected for 2G service due to error in conditional information element. |
| 3G-Message not compatible with protocol state | Total number of GPRS attach rejected for 3G service as message is not compatible with protocol state. |
| 2G-Message not compatible with protocol state | Total number of GPRS attach rejected for 2G service as message is not compatible with protocol state. |
| 3G-protocol Error | Total number of GPRS attach rejected for 3G service due to protocol error in message. |
| 2G-protocol Error | Total number of GPRS attach rejected for 2G service due to protocol error in message. |
| 3G-Unknown cause | Total number of GPRS attach rejected for 3G service where cause is unknown or not specified here. |
| 2G-Unknown cause | Total number of GPRS attach rejected for 2G service where cause is unknown or not specified here. |
| Comb-Attach Reject Causes | Indicates the statistics of causes for combined GPRS (PS and CS) attach rejected for 2G and 3G service. |
| 3G-IMSI Unknown in HLR | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to unknown IMSI in HLR. |
| 3G-Illegal MS | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to illegal mobile subscriber. |
| 3G-Illegal ME | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to illegal mobile equipment. |
| 2G-Illegal ME | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to illegal mobile equipment. |
| 3G-GPRS service not allowed | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to GPRS service not allowed for subscriber. |
| 2G-GPRS service not allowed | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to GPRS service not allowed for subscriber. |

| Field | Description |
|--|--|
| 3G-GPRS and Non-GPRS service not allowed | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 2G-GPRS and Non-GPRS service not allowed | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 3G-MSId not derived by Nw | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to network failed to derive MSID from attach message. |
| 2G-MSId not derived by Nw | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to network failed to derive MSID from attach message. |
| 3G-Implicitly detached | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to implicitly detach. |
| 2G-Implicitly detached | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to implicitly detach. |
| 3G-PLMN not allowed | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to specific PLMN not allowed. |
| 2G-PLMN not allowed | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to specific PLMN not allowed. |
| 3G-Location Area not allowed | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to specific location area not allowed. |
| 2G-Location Area not allowed | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to specific location area not allowed. |
| 3G-Roaming not allowed in this Location Area | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to roaming not allowed in specific location area. |
| 2G-Roaming not allowed in this Location Area | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to roaming not allowed in specific location area. |
| 3G-GPRS service not allowed in this PLMN | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to GPRS service not allowed in specific PLMN. |
| 2G-GPRS service not allowed in this PLMN | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to GPRS service not allowed in specific PLMN. |
| 3G-No suitable cells in this Location Area | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to non availability of suitable cell in specific location area. |
| 2G-No suitable cells in this Location Area | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to non availability of suitable cell in specific location area. |

| Field | Description |
|------------------------------|--|
| 3G-MSC not reachable | Total number of combined GPRS (PS and CS) attach rejected for 3G service as MSC not reachable. |
| 2G-MSC not reachable | Total number of combined GPRS (PS and CS) attach rejected for 2G service as MSC not reachable. |
| 3G-Network Failure | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to network failure. |
| 2G-Network Failure | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to network failure. |
| 3G-MAC Failure | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to message authenticate code (MAC) failure. |
| 2G-MAC Failure | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to MAC failure. |
| 3G-SYNC Failure | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to context synchronization failure. |
| 2G-SYNC Failure | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to context synchronization failure. |
| 3G-Congestion | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to network congestion. |
| 2G-Congestion | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to network congestion. |
| 3G-GSM Auth Unacceptable | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to unacceptable authentication from GSM network. |
| 2G-GSM Auth Unacceptable | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to unacceptable authentication from GSM network. |
| 3G-No PDP contexts activated | Total number of combined GPRS (PS and CS) attach rejected for 3G service as PDP context is not activated. |
| 2G-No PDP contexts activated | Total number of combined GPRS (PS and CS) attach rejected for 2G service as PDP context is not activated. |
| 3G-Retry from new cell | Total number of combined GPRS (PS and CS) attach rejected for 3G service as PDP context activation was tried from new mobile cell. |
| 2G-Retry from new cell | Total number of combined GPRS (PS and CS) attach rejected for 2G service as PDP context activation was tried from new mobile cell. |
| 3G-Semantically Wrong Msg | Total number of combined GPRS (PS and CS) attach rejected for 3G service as attach request message is semantically wrong. |

| Field | Description |
|--|--|
| 2G-Semantically Wrong Msg | Total number of combined GPRS (PS and CS) attach rejected for 2G service as attach request message is semantically wrong. |
| 3G-Invalid Mandatory Info | Total number of combined GPRS (PS and CS) attach rejected for 3G service as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of combined GPRS (PS and CS) attach rejected for 2G service as mandatory information in message is invalid. |
| 3G-MSG type Non Existent | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to non-existent type of message. |
| 2G-MSG type Non Existent | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to non-existent type of message. |
| 3G-MSG type not compatible with protocol state | Total number of combined GPRS (PS and CS) attach rejected for 3G service as message type is not compatible with protocol state. |
| 2G-MSG type not compatible with protocol state | Total number of combined GPRS (PS and CS) attach rejected for 2G service as message type is not compatible with protocol state. |
| 3G-IE Non Existent | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to inclusion of non-existent information element (IE) in message. |
| 2G-IE Non Existent | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to inclusion of non-existent information element (IE) in message. |
| 3G-Conditional IE Error | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to error in conditional information element. |
| 2G-Conditional IE Error | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to error in conditional information element. |
| 3G-Message not compatible with protocol state | Total number of combined GPRS (PS and CS) attach rejected for 3G service as message is not compatible with protocol state. |
| 2G-Message not compatible with protocol state | Total number of combined GPRS (PS and CS) attach rejected for 2G service as message is not compatible with protocol state. |
| 3G-protocol Error | Total number of combined GPRS (PS and CS) attach rejected for 3G service due to protocol error in message. |
| 2G-protocol Error | Total number of combined GPRS (PS and CS) attach rejected for 2G service due to protocol error in message. |
| 3G-Unknown cause | Total number of combined GPRS (PS and CS) attach rejected for 3G service where cause is unknown or not specified here. |
| 2G-Unknown cause | Total number of combined GPRS (PS and CS) attach rejected for 2G service where cause is unknown or not specified here. |

| Field | Description |
|---|--|
| Attach Failure | This group displays the statistics for failures occurred during attach procedure. |
| Total Attach Failure | This group displays the statistics for total failures occurred during 2G and 3G attach procedure. |
| 3G-Attach-Failure | Total number of failures occurred during attach procedure for 3G service. |
| Gprs-Attach-Failure | Total number of failures occurred during GPRS attach procedure for 3G service. |
| Comb-Attach-Failure | Total number of failures occurred during combined (PS and CS) service attach procedure for 3G service. |
| 2G-Attach-Failure | Total number of failures occurred during attach procedure for 2G service. |
| Gprs-Attach-Failure | Total number of failures occurred during GPRS attach procedure for 2G service. |
| Comb-Attach-Failure | Total number of failures occurred during combined (PS and CS) service attach procedure for 2G service. |
| Gprs-Attach Failure Causes | This group displays the causes for failure occurred during GPRS attach procedure. |
| 3G-Iu release before Attach over | Total number of 3G GPRS attach procedure failures due to 3G Iu interface release happened before attach procedure completed. |
| 3G-Failure due to Other Ongoing Procedure | Total number of 3G GPRS attach procedure failed due to other procedure was in process while attach requested. |
| 2G-Failure due to Other Ongoing Procedure | Total number of 2G attach procedure failed due to other procedure was in process while attach requested. |
| Comb-Attach Failure Causes | This group displays the causes for failure occurred during combined (PS and CS) service attach procedure. |
| 3G-Iu release before Attach over | Total number of combined attach procedure failed due to 3G Iu interface release happened before completion of attach procedure |
| 3G-Failure due to Other Ongoing Procedure | Total number of combined 3G attach procedure failed due to other procedure was in process while attach requested. |
| 2G-Failure due to Other Ongoing Procedure | Total number of combined 2G attach procedure failed due to other procedure was in process while attach requested. |
| Routing Area Update Request | Indicates the statistics of RAU request. |
| Total-RAU | Indicates the total RAU request. |
| Total-Intra-SGSN-RAU | Total intra-SGSN RAU request messages. |

| Field | Description |
|----------------------------|--|
| Total-Ra-Up-Intra-SGSN-RAU | Total routing area update request messages for intra-SGSN RA updates. |
| 3G-Ra-Up-Intra-SGSN-RAU | Total routing area update request messages for intra-SGSN RA updates for 3G. |
| 2G-Ra-Up-Intra-SGSN-RAU | Total routing area update request messages for intra-SGSN RA updates for 2G. |
| Total-Periodic-Intra-RAU | Total periodic intra-RA update messages. |
| 3G-Periodic-Intra-RAU | Total periodic intra-RA update messages for 3G. |
| 2G-Periodic-Intra-RAU | Total periodic intra-RA update messages for 2G. |
| Total-Comb-Intra-SGSN-RAU | Total intra-SGSN RAU request messages for combined (PS and CS) services. |
| 3G-Comb-Intra-SGSN-RAU | Total intra-SGSN RAU request messages for combined (PS and CS) 3G services. |
| 2G-Comb-Intra-SGSN-RAU | Total intra-SGSN RAU request messages for combined (PS and CS) 2G services. |
| Total-PS-Inter-SGSN-RAU | Total packet switching inter-SGSN-RA update request messages. |
| 3G-PS-Inter-SGSN-RAU | Total packet switched inter-SGSN-RA update request messages for 3G service. |
| 2G-PS-Inter-SGSN-RAU | Total packet switched inter-SGSN-RA update request messages for 2G service. |
| Total-Comb-Inter-SGSN-RAU | Total combined (PS and CS) inter-SGSN-RA update request messages. |
| 3G-Comb-Inter-SGSN-RAU | Total combined (PS and CS) inter-SGSN-RA update request messages for 3G service. |
| 2G-Comb-Inter-SGSN-RAU | Total combined (PS and CS) inter-SGSN-RA update request messages for 2G service. |
| Total-Ps-Inter-Rat-RAU | Description: Total number of GPRS only Inter RAT RAU Requests received in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| 3G-Ps-Inter-Rat-RAU | Description: Total number of GPRS only Inter RAT RAU Requests received in a 3G service from a 2G service. Availability: per RA, per RNC, per SGSN service |

| Field | Description |
|---------------------------|---|
| 2G-Ps-Inter-Rat-RAU | Description: Total number of GPRS only Inter RAT RAU Requests received in a 2G service from a 3G service. Availability: per RA, per GPRS service |
| Total-Comb-Inter-Rat-RAU | Description: Total number of Combined Inter RAT RAU Requests received in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| 3G-Comb-Inter-Rat-RAU | Description: Total number of Combined Inter RAT RAU Requests received in a 3G service from a 2G service. Availability: per RA, per RNC, per SGSN service |
| 2G-Comb-Inter-Rat-RAU | Description: Total number of Combined Inter RAT RAU Requests received in a 2G service from a 3G service. Availability: per RA, per GPRS service |
| Total-Ps-Inter-Serv-RAU | Description: Total number of GPRS only Inter Service RAU Requests received in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| 3G-Ps-Inter-Serv-RAU | Description: Total number of GPRS only Inter Service RAU Requests from one 3G service to another 3G service. Availability: per RA, per RNC, per SGSN service |
| 2G-Ps-Inter-Serv-RAU | Description: Total number of GPRS only Inter Service RAU Requests from one 2G service to another 2G service. Availability: per RA, per GPRS service |
| Total-Comb-Inter-Serv-RAU | Description: Total number of Combined Inter Service RAU Requests received in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| 3G-Comb-Inter-Serv-RAU | Description: Total number of Combined Inter Service RAU Requests from one 3G service to another 3G service. Availability: per RA, per RNC, per SGSN service |
| 2G-Comb-Inter-Serv-RAU | Description: Total number of Combined Inter Service RAU Requests from one 2G service to another 2G service. Availability: per RA, per GPRS service |
| Retransmission | Indicates the statistics of RAU requests retransmitted. |
| Ret-Total-RAU | Indicates the total RAU requests retransmitted. |
| Ret-Total-Intra-SGSN-RAU | Total intra-SGSN RAU request messages retransmitted. |

| Field | Description |
|-----------------------------|--|
| Ret-Total-Ra-Up-Intra-SGSN | Total routing area update request messages retransmitted for intra-SGSN RA updates. |
| Ret-3G-Ra-Up-Intra-SGSN | Total routing area update request messages retransmitted for intra-SGSN RA updates for 3G. |
| Ret-2G-Ra-Up-Intra-SGSN | Total routing area update request messages retransmitted for intra-SGSN RA updates for 2G. |
| Ret-Total-Perio-Intra-RAU | Total periodic intra-RA update messages retransmitted. |
| Ret-3G-Perio-Intra-RAU | Total periodic intra-RA update messages retransmitted for 3G. |
| Ret-2G-Perio-Intra-RAU | Total periodic intra-RA update messages retransmitted for 2G. |
| Ret-Total-Comb-Intra-RAU | Total intra-SGSN RAU request messages retransmitted for combined (PS and CS) services. |
| Ret-3G-Comb-Intra-RAU | Total intra-RAU request messages retransmitted for combined (PS and CS) 3G services. |
| Ret-2G-Comb-Intra-RAU | Total intra-RAU request messages retransmitted for combined (PS and CS) 2G services. |
| Ret-Total-PS-Inter-SGSN-RAU | Total packet switching inter-SGSN-RA update request messages retransmitted. |
| Ret-3G-PS-Inter-SGSN-RAU | Total packet switched inter-SGSN-RA update request messages retransmitted for 3G service. |
| Ret-2G-PS-Inter-SGSN-RAU | Total packet switched inter-SGSN-RA update request messages retransmitted for 2G service. |
| Ret-Total-Comb-Inter-RAU | Total combined (PS and CS) inter-SGSN-RA update request messages retransmitted. |
| Ret-3G-Comb-Inter-RAU | Total combined (PS and CS) inter-SGSN-RA update request messages retransmitted for 3G service. |
| Ret-2G-Comb-Inter-RAU | Total combined (PS and CS) inter-SGSN-RA update request messages retransmitted for 2G service. |
| Ret-Total-Ps-Inter-Rat-RAU | Description: Total number of retransmitted GPRS only Inter RAT RAU Requests received in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| Ret-3G-Ps-Inter-Rat-RAU | Description: Total number of retransmitted GPRS only Inter RAT RAU Requests received in a 3G service from a 2G service. Availability: per RA, per RNC, per SGSN service |

| Field | Description |
|-------------------------------|---|
| Ret-2G-Ps-Inter-Rat-RAU | Description: Total number of retransmitted GPRS only Inter RAT RAU Requests received in a 2G service from a 3G service. Availability: per RA, per GPRS service |
| Ret-Total-Comb-Inter-Rat-RAU | Description: Total number of retransmitted Combined Inter RAT RAU Requests received in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| Ret-3G-Comb-Inter-Rat-RAU | Description: Total number of retransmitted Combined Inter RAT RAU Requests received in a 3G service from a 2G service. Availability: per RA, per RNC, per SGSN service |
| Ret-2G-Comb-Inter-Rat-RAU | Description: Total number of retransmitted Combined Inter RAT RAU Requests received in a 2G service from a 3G service. Availability: per RA, per GPRS service |
| Ret-Total-Ps-Inter-Serv-RAU | Description: Total number of retransmitted GPRS only Inter Service RAU Requests received in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| Ret-3G-Ps-Inter-Serv-RAU | Description: Total number of retransmitted GPRS only Inter Service RAU Requests from one 3G service to another 3G service. Availability: per RA, per RNC, per SGSN service |
| Ret-2G-Ps-Inter-Serv-RAU | Description: Total number of retransmitted GPRS only Inter Service RAU Requests from one 2G service to another 2G service. Availability: per RA, per GPRS service |
| Ret-Total-Comb-Inter-Serv-RAU | Description: Total number of retransmitted Combined Inter Service RAU Requests received in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| Ret-3G-Comb-Inter-Serv-RAU | Description: Total number of retransmitted Combined Inter Service RAU Requests from one 3G service to another 3G service. Availability: per RA, per RNC, per SGSN service |
| Ret-2G-Comb-Inter-Serv-RAU | Description: Total number of retransmitted Combined Inter Service RAU Requests from one 2G service to another 2G service. Availability: per RA, per GPRS service |
| Routing Area Update Accept | Indicates the statistics of routing area update accept messages on system. |
| Total-RAU-Accept | Total number of routing area update accept messages sent by SGSN. |

| Field | Description |
|---------------------------|---|
| Total-Intra-RAU-Accept | Total number of intra-SGSN routing area update accept messages sent by SGSN. |
| Total-Ra-Up-Intra-RAU-Acc | Total number of intra-SGSN RAU accept messages sent by SGSN for 2G and 3G service. |
| 3G-Ra-Up-Intra-RAU-Accept | Total number of intra-SGSN RAU accept messages sent by SGSN for 3G service. |
| 2G-Ra-Up-Intra-RAU-Accept | Total number of intra-SGSN RAU accept messages sent by SGSN for 2G service. |
| Total-Periodic-RAU-Accept | Total number of periodic RAU accept messages sent by SGSN for 2G and 3G service. |
| 3G-Periodic-RAU-Accept | Total number of periodic RAU accept messages sent by SGSN for 3G service. |
| 2G-Periodic-RAU-Accept | Total number of periodic RAU accept messages sent by SGSN for 2G service. |
| Total-Comb-Intra-RAU-Acc | Total number of combined (PS and CS) intra-RAU accept messages sent by SGSN for 2G and 3G service. |
| 3G-Comb-Intra-RAU-Acc | Total number of combined (PS and CS) intra-RAU accept messages sent by SGSN for 3G service. |
| 2G-Comb-Intra-RAU-Acc | Total number of combined (PS and CS) intra-RAU accept messages sent by SGSN for 2G service. |
| Total-Inter-SGSN-RAU-Acc | This group displays inter SGSN RAU Accept message statistics on SGSN. |
| Total-PS-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in PS network for 2G and 3G services sent by SGSN. |
| 3G-PS-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in PS network for 3G service sent by SGSN. |
| 2G-PS-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in PS network for 2G service sent by SGSN. |
| Total-Comb-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in combined (PS and CS) network for 2G and 3G services sent by SGSN. |
| 3G-Comb-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in combined (PS and CS) network for 3G services sent by SGSN. |
| 2G-Comb-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in combined (PS and CS) network for 2G services sent by SGSN. |

| Field | Description |
|-------------------------------|--|
| Total-Ps-Inter-Rat-RAU-Acc | Description: Total number of GPRS only Inter RAT RAU Accepts sent in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| 3G-Ps-Inter-Rat-RAU-Acc | Description: Total number of GPRS only Inter RAT RAU Accepts sent against RAU Requests from subscribers moving from a 2G service to a 3G service. Availability: per RA, per RNC, per SGSN service |
| 2G-Ps-Inter-Rat-Acc | Description: Total number of GPRS only Inter RAT RAU Accepts sent against RAU Requests from subscribers moving from a 3G service to a 2G service. Availability: per RA, per GPRS service |
| Total-Comb-Inter-Rat-RAU-Acc | Description: Total number of Combined Inter RAT RAU Accepts sent in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| 3G-Comb-Inter-Rat-RAU-Acc | Description: Total number of Combined Inter RAT RAU Accepts sent against RAU Requests from subscribers moving from a 2G service to a 3G service. Availability: per RA, per RNC, per SGSN service |
| 2G-Comb-Inter-Rat-Acc | Description: Total number of Combined Inter RAT RAU Accepts sent against RAU Requests from subscribers moving from a 3G service to a 2G service. Availability: per RA, per GPRS service |
| Total-Ps-Inter-Serv-RAU-Acc | Description: Total number of GPRS only Inter Service RAU Accepts sent in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| 3G-Ps-Inter-Serv-RAU-Acc | Description: Total number of GPRS only Inter Service RAU Accepts sent against RAU Requests from subscribers moving from one 3G service to another 3G service. Availability: per RA, per RNC, per SGSN service |
| 2G-Ps-Inter-Serv-RAU-Acc | Description: Total number of GPRS only Inter Service RAU Accepts sent against RAU Requests from subscribers moving from one 2G service to another 2G service. Availability: per RA, per GPRS service |
| Total-Comb-Inter-Serv-RAU-Acc | Description: Total number of Combined Inter Service RAU Accepts sent in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |

| Field | Description |
|-------------------------------|---|
| 3G-Comb-Inter-Serv-RAU-Acc | Description: Total number of Combined Inter Service RAU Accepts sent against RAU Requests from subscribers moving from one 3G service to another 3G service. Availability: per RA, per RNC, per SGSN service |
| 2G-Comb-Inter-Serv-RAU-Acc | Description: Total number of Combined Inter Service RAU Accepts sent against RAU Requests from subscribers moving from one 2G service to another 2G service. Availability: per RA, per GPRS service |
| Retransmission | Indicates the statistics of routing area update messages retransmitted. |
| Ret-Total-RAU-Accept | Total number of routing area update accept messages retransmitted by SGSN. |
| Ret-Total-Intra-RAU-Accept | Total number of intra-SGSN routing area update accept messages retransmitted by SGSN. |
| Ret-Total-Ra-Up-Intra-RAU-Acc | Total number of intra-SGSN RAU accept messages retransmitted by SGSN for 2G and 3G service. |
| Ret-3G-Ra-Up-Intra-RAU-Acc | Total number of intra-SGSN RAU accept messages retransmitted by SGSN for 3G service. |
| Ret-2G-Ra-Up-Intra-RAU-Acc | Total number of intra-SGSN RAU accept messages retransmitted by SGSN for 2G service. |
| Ret-Total-Periodic-RAU-Acc | Total number of periodic RAU accept messages retransmitted by SGSN for 2G and 3G service. |
| Ret-3G-Periodic-RAU-Acc | Total number of periodic RAU accept messages retransmitted by SGSN for 3G service. |
| Ret-2G-Periodic-RAU-Acc | Total number of periodic RAU accept messages retransmitted by SGSN for 2G service. |
| Ret-Total-Comb-Intra-RAU-Acc | Total number of combined (PS and CS) intra-RAU accept messages retransmitted by SGSN for 2G and 3G service. |
| Ret-3G-Comb-Intra-RAU-Acc | Total number of combined (PS and CS) intra-RAU accept messages retransmitted by SGSN for 3G service. |
| Ret-2G-Comb-Intra-RAU-Acc | Total number of combined (PS and CS) intra-RAU accept messages retransmitted by SGSN for 2G service. |
| Ret-Total-Inter-SGSN-RAU-Acc | This group displays inter SGSN RAU Accept message statistics on SGSN. |
| Ret-Total-PS-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in PS network for 2G and 3G services retransmitted by SGSN. |

| Field | Description |
|----------------------------------|--|
| Ret-3G-PS-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in PS network for 3G service retransmitted by SGSN. |
| Ret-2G-PS-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in PS network for 2G service retransmitted by SGSN. |
| Ret-Total-Comb-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in combined (PS and CS) network for 2G and 3G services retransmitted by SGSN. |
| Ret-3G-Comb-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in combined (PS and CS) network for 3G services retransmitted by SGSN. |
| Ret-2G-Comb-Inter-RAU-Acc | Total number of inter SGSN RAU accept messages in combined (PS and CS) network for 2G services retransmitted by SGSN. |
| Ret-Total-Ps-Inter-Rat-RAU-Acc | Description: Total number of retransmitted GPRS only Inter RAT RAU Accepts sent in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| Ret-3G-Ps-Inter-Rat-RAU-Acc | Description: Total number of retransmitted GPRS only Inter RAT RAU Accepts sent against RAU Requests from subscribers moving from a 2G service to a 3G service. Availability: per RA, per RNC, per SGSN service |
| Ret-2G-Ps-Inter-Rat-Acc | Description: Total number of retransmitted GPRS only Inter RAT RAU Accepts sent against RAU Requests from subscribers moving from a 3G service to a 2G service. Availability: per RA, per GPRS service |
| Ret-Total-Comb-Inter-Rat-RAU-Acc | Description: Total number of retransmitted Combined Inter RAT RAU Accepts sent in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| Ret-3G-Comb-Inter-Rat-RAU-Acc | Description: Total number of retransmitted Combined Inter RAT RAU Accepts sent against RAU Requests from subscribers moving from a 3G service to a 2G service. Availability: per RA, per RNC, per SGSN service |
| Ret-2G-Comb-Inter-Rat-Acc | Description: Total number of retransmitted Combined Inter RAT RAU Accepts sent against RAU Requests from subscribers moving from a 2G service to a 3G service. Availability: per RA, per GPRS service |
| Ret-Total-Ps-Inter-Serv-RAU-Acc | Description: Total number of retransmitted GPRS only Inter Service RAU Accepts sent in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |

| Field | Description |
|-----------------------------------|--|
| Ret-3G-Ps-Inter-Serv-RAU-Acc | Description: Total number of retransmitted GPRS only Inter Service RAU Accepts sent against RAU Requests from subscribers moving from one 3G service to another 3G service. Availability: per RA, per RNC, per SGSN service |
| Ret-2G-Ps-Inter-Serv-RAU-Acc | Description: Total number of retransmitted GPRS only Inter Service RAU Accepts sent against RAU Requests from subscribers moving from one 2G service to another 2G service. Availability: per RA, per GPRS service |
| Ret-Total-Comb-Inter-Serv-RAU-Acc | Description: Total number of retransmitted Combined Inter Service RAU Accepts sent in both 2G and 3G services. Availability: per RA, per RNC, per GPRS/SGSN service |
| Ret-3G-Comb-Inter-Serv-RAU-Acc | Description: Total number of retransmitted Combined Inter Service RAU Accepts sent against RAU Requests from subscribers moving from one 3G service to another 3G service. Availability: per RA, per RNC, per SGSN service |
| Ret-2G-Comb-Inter-Serv-RAU-Acc | Description: Total number of retransmitted Combined Inter Service RAU Accepts sent against RAU Requests from subscribers moving from one 2G service to another 2G service. Availability: per RA, per GPRS service |
| Routing Area Update Complete | Indicates the statistics of routing area update complete messages. |
| Total-RAU-Complete | Total number of routing area update complete messages. |
| 3G-RAU-Complete | Total number of routing area update complete messages for 3G service. |
| 2G-RAU-Complete | Total number of routing area update complete messages for 2G service. |
| Routing Area Update Reject | Indicates the statistics of routing area update reject messages. |
| Total-RAU-Reject | Total number of routing area update reject messages. |
| Total-Intra-RAU-Reject | Total number of intra-SGSN routing area update reject messages sent by SGSN. |
| Total-Ra-up-Intra-RAU-Rej | Total number of intra-SGSN RAU reject messages reject by SGSN for 2G and 3G service. |
| 3G-Ra-Up-Intra-RAU-Reject | Total number of intra-SGSN RAU reject messages sent by SGSN for 3G service. |
| 2G-Ra-Up-Intra-RAU-Reject | Total number of intra-SGSN RAU reject messages sent by SGSN for 2G service. |

| Field | Description |
|------------------------------|---|
| Total-Periodic-RAU-Reject | Total number of periodic RAU reject messages sent by SGSN for 2G and 3G service. |
| 3G-Periodic-RAU-Reject | Total number of periodic RAU reject messages sent by SGSN for 3G service. |
| 2G-Periodic-RAU-Reject | Total number of periodic RAU reject messages sent by SGSN for 2G service. |
| Total-Comb-Intra-RAU-Rej | Total number of combined (PS and CS) intra-RAU reject messages sent by SGSN for 2G and 3G service. |
| 3G-Comb-Intra-RAU-Reject | Total number of combined (PS and CS) intra-RAU reject messages sent by SGSN for 3G service. |
| 2G-Comb-Intra-RAU-Reject | Total number of combined (PS and CS) intra-RAU reject messages sent by SGSN for 2G service. |
| Total-Inter-SGSN-RAU-Rej | This group displays inter SGSN RAU reject message statistics on SGSN. |
| Total-PS-Inter-RAU-Rej | Total number of inter SGSN RAU reject messages in PS network for 2G and 3G services sent by SGSN. |
| 3G-PS-Inter-RAU-Rej | Total number of inter SGSN RAU reject messages in PS network for 3G service sent by SGSN. |
| 2G-PS-Inter-RAU-Rej | Total number of inter SGSN RAU reject messages in PS network for 2G service sent by SGSN. |
| Total-Comb-Inter-RAU-Rej | Total number of inter SGSN RAU reject messages in combined (PS and CS) network for 2G and 3G services sent by SGSN. |
| 3G-Comb-Inter-RAU-Rej | Total number of inter SGSN RAU reject messages in combined (PS and CS) network for 3G services sent by SGSN. |
| 2G-Comb-Inter-RAU-Rej | Total number of inter SGSN RAU reject messages in combined (PS and CS) network for 2G services sent by SGSN. |
| Total-Inter-RAT-RAU-Rej | This group displays inter Radio Access Technology (RAT) RAU reject message statistics on SGSN. |
| Total-PS-Inter-RAT-RAU-Rej | Total number of inter RAT RAU reject messages in PS network for 2G and 3G services sent by SGSN. |
| 3G-PS-Inter-RAT-RAU-Rej | Total number of inter RAT RAU reject messages in PS network for 3G service sent by SGSN. |
| 2G-PS-Inter-RAT-RAU-Rej | Total number of inter RAT RAU reject messages in PS network for 2G service sent by SGSN. |
| Total-Comb-Inter-RAT-RAU-Rej | Total number of inter RAT RAU reject messages in combined (PS and CS) network for 2G and 3G services sent by SGSN. |

| Field | Description |
|--|--|
| 3G-Comb-Inter-RAT-RAU-Rej | Total number of inter RAT RAU reject messages in combined (PS and CS) network for 3G services sent by SGSN. |
| 2G-Comb-Inter-RAT-RAU-Rej | Total number of inter RAT RAU reject messages in combined (PS and CS) network for 2G services sent by SGSN. |
| Total-Inter-SRV-RAU-Rej | This group displays inter-SRV RAU reject message statistics on SGSN. |
| Total-PS-Inter-SRV-RAU-Rej | Total number of inter SRV RAU reject messages in PS network for 2G and 3G services sent by SGSN. |
| 3G-PS-Inter-SRV-RAU-Rej | Total number of inter SRV RAU reject messages in PS network for 3G service sent by SGSN. |
| 2G-PS-Inter-SRV-RAU-Rej | Total number of inter SRV RAU reject messages in PS network for 2G service sent by SGSN. |
| Total-Comb-Inter-SRV-RAU-Rej | Total number of inter SRV RAU reject messages in combined (PS and CS) network for 2G and 3G services sent by SGSN. |
| 3G-Comb-Inter-SRV-RAU-Rej | Total number of inter SRV RAU reject messages in combined (PS and CS) network for 3G services sent by SGSN. |
| 2G-Comb-Inter-SRV-RAU-Rej | Total number of inter SRV RAU reject messages in combined (PS and CS) network for 2G services sent by SGSN. |
| Intra Ra-Updated Routing Area Update Reject Causes | This group displays the causes for intra-RAT routing area update reject messages. |
| 3G-IMSI Unknown in HLR | Total number of intra RAT routing area update requests rejected for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of intra RAT routing area update requests rejected for 2G service due to unknown IMSI in HLR. |
| 3G-Illegal MS | Total number of intra RAT routing area update requests rejected for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of intra RAT routing area update requests rejected for 2G service due to illegal mobile subscriber. |
| 3G-Illegal ME | Total number of intra RAT routing area update requests rejected for 3G service due to illegal mobile equipment. |
| 2G-Illegal ME | Total number of intra RAT routing area update requests rejected for 2G service due to illegal mobile equipment. |
| 3G-GPRS service not allowed | Total number of intra RAT routing area update requests rejected for 3G service due to GPRS service not allowed for subscriber. |
| 2G-GPRS service not allowed | Total number of intra RAT routing area update requests rejected for 2G service due to GPRS service not allowed for subscriber. |

| Field | Description |
|--|--|
| 3G-GPRS and Non-GPRS service not allowed | Total number of intra RAT routing area update requests rejected for 3G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 2G-GPRS and Non-GPRS service not allowed | Total number of intra RAT routing area update requests rejected for 2G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 3G-MSId not derived by Nw | Total number of intra RAT routing area update requests rejected for 3G service due to network failed to derive MSID from attach message. |
| 2G-MSId not derived by Nw | Total number of intra RAT routing area update requests rejected for 2G service due to network failed to derive MSID from attach message. |
| 3G-Implicitly detached | Total number of intra RAT routing area update requests rejected for 3G service due to implicitly detach. |
| 2G-Implicitly detached | Total number of intra RAT routing area update requests rejected for 2G service due to implicitly detach. |
| 3G-PLMN not allowed | Total number of intra RAT routing area update requests rejected for 3G service due to specific PLMN not allowed. |
| 2G-PLMN not allowed | Total number of intra RAT routing area update requests rejected for 2G service due to specific PLMN not allowed. |
| 3G-Location Area not allowed | Total number of intra RAT routing area update requests rejected for 3G service due to specific location area not allowed. |
| 2G-Location Area not allowed | Total number of intra RAT routing area update requests rejected for 2G service due to specific location area not allowed. |
| 3G-Roaming not allowed in this location area | Total number of intra RAT routing area update requests rejected for 3G service due to roaming not allowed in specific location area. |
| 2G-Roaming not allowed in this location area | Total number of intra RAT routing area update requests rejected for 2G service due to roaming not allowed in specific location area. |
| 3G-GPRS service not allowed in this PLMN | Total number of intra RAT routing area update requests rejected for 3G service due to GPRS service not allowed in specific PLMN. |
| 2G-GPRS service not allowed in this PLMN | Total number of intra RAT routing area update requests rejected for 2G service due to GPRS service not allowed in specific PLMN. |
| 3G-No suitable cells in this Location Area | Total number of intra RAT routing area update requests rejected for 3G service due to non availability of suitable cell in specific location area. |

| Field | Description |
|--|--|
| 2G-No suitable cells in this Location Area | Total number of intra RAT routing area update requests rejected for 2G service due to non availability of suitable cell in specific location area. |
| 3G-MSR not reachable | Total number of intra RAT routing area update requests rejected for 3G service as MSR not reachable. |
| 2G-MSR not reachable | Total number of intra RAT routing area update requests rejected for 2G service as MSR not reachable. |
| 3G-Network Failure | Total number of intra RAT routing area update requests rejected for 3G service due to network failure. |
| 2G-Network Failure | Total number of intra RAT routing area update requests rejected for 2G service due to network failure. |
| 3G-MAC Failure | Total number of intra RAT routing area update requests rejected for 3G service due to message authenticate code (MAC) failure. |
| 2G-MAC Failure | Total number of intra RAT routing area update requests rejected for 2G service due to MAC failure. |
| 3G-SYNC Failure | Total number of intra RAT routing area update requests rejected for 3G service due to context synchronization failure. |
| 2G-SYNC Failure | Total number of intra RAT routing area update requests rejected for 2G service due to context synchronization failure. |
| 3G-Congestion | Total number of intra RAT routing area update requests rejected for 3G service due to network congestion. |
| 2G-Congestion | Total number of intra RAT routing area update requests rejected for 2G service due to network congestion. |
| 3G-GSM Auth Unacceptable | Total number of intra RAT routing area update requests rejected for 3G service due to unacceptable authentication from GSM network. |
| 2G-GSM Auth Unacceptable | Total number of intra RAT routing area update requests rejected for 2G service due to unacceptable authentication from GSM network. |
| 3G-No PDP contexts activated | Total number of intra RAT routing area update requests rejected for 3G service as PDP context is not activated. |
| 2G-No PDP contexts activated | Total number of intra RAT routing area update requests rejected for 2G service as PDP context is not activated. |
| 3G-Retry from new cell | Total number of intra RAT routing area update requests rejected for 3G service as UE retried the update from new cell. |
| 2G-Retry from new cell | Total number of intra RAT routing area update requests rejected for 2G service as UE retried the update from new cell. |

| Field | Description |
|--|---|
| 3G-Semantically Wrong Msg | Total number of intra RAT routing area update request rejected for 3G service as attach request message is semantically wrong. |
| 2G-Semantically Wrg Msg | Total number of intra RAT routing area update request rejected for 2G service as attach request message is semantically wrong. |
| 3G-Invalid Mandatory Info | Total number of intra RAT routing area update request rejected for 3G service as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of intra RAT routing area update request rejected for 2G service as mandatory information in message is invalid. |
| 3G-MSG type Non Existent | Total number of intra RAT routing area update request rejected for 3G service due to non-existent type of message. |
| 2G-MSG type Non Existent | Total number of intra RAT routing area update request rejected for 2G service due to non-existent type of message. |
| 3G-MSG type not compatible with protocol state | Total number of intra RAT routing area update request rejected for 3G service as message type is not compatible with protocol state. |
| 2G-MSG type not compatible with protocol state | Total number of intra RAT routing area update request rejected for 2G service as message type is not compatible with protocol state. |
| 3G-IE Non Existent | Total number of intra RAT routing area update request rejected for 3G service due to inclusion of non-existent information element (IE) in message. |
| 2G-IE Non Existent | Total number of intra RAT routing area update request rejected for 2G service due to inclusion of non-existent information element (IE) in message. |
| 3G-Conditional IE Error | Total number of intra RAT routing area update request rejected for 3G service due to error in conditional informational element. |
| 2G-Conditional IE Error | Total number of intra RAT routing area update request rejected for 2G service due to error in conditional informational element. |
| 3G-Message not compatible with protocol state | Total number of intra RAT routing area update request rejected for 3G service due to incompatible protocol state in message. |
| 2G-Message not compatible with protocol state | Total number of intra RAT routing area update request rejected for 2G service due to incompatible protocol state in message |
| 3G-Protocol Error | Total number of intra RAT routing area update request rejected for 3G service due to protocol error in message. |
| 2G-Protocol Error | Total number of intra RAT routing area update request rejected for 2G service due to protocol error in message |

| Field | Description |
|--|--|
| 3G-Unknown cause | Total number of intra RAT routing area update request rejected for 3G service due to reasons other than listed here in message. |
| 2G-Unknown cause | Total number of intra RAT routing area update request rejected for 2G service due to reasons other than listed here in message. |
| Intra Periodic Routing Area Update Reject Causes | This group displays the intra RAT periodic RAU reject causes on SGSN. |
| 3G-IMSI Unknown in HLR | Total number of intra RAT periodic RAU requests rejected for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of intra RAT periodic RAU requests rejected for 2G service due to unknown IMSI in HLR. |
| 3G-Illegal MS | Total number of intra RAT periodic RAU requests rejected for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of intra RAT periodic RAU requests rejected for 2G service due to illegal mobile subscriber. |
| 3G-Illegal ME | Total number of intra RAT periodic RAU requests rejected for 3G service due to illegal mobile equipment. |
| 2G-Illegal ME | Total number of intra RAT periodic RAU requests rejected for 2G service due to illegal mobile equipment. |
| 3G-GPRS service not allowed | Total number of intra RAT periodic RAU requests rejected for 3G service due to GPRS service not allowed for subscriber. |
| 2G-GPRS service not allowed | Total number of intra RAT periodic RAU requests rejected for 2G service due to GPRS service not allowed for subscriber. |
| 3G-GPRS and Non-GPRS service not allowed | Total number of intra RAT periodic RAU requests rejected for 3G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 2G-GPRS and Non-GPRS service not allowed | Total number of intra RAT periodic RAU requests rejected for 2G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 3G-MSId not derived by Nw | Total number of intra RAT periodic RAU requests rejected for 3G service due to network failed to derive MSID from attach message. |
| 2G-MSId not derived by Nw | Total number of intra RAT periodic RAU requests rejected for 2G service due to network failed to derive MSID from attach message. |
| 3G-Implicitly Detached | Total number of intra RAT periodic RAU requests rejected for 3G service due to implicitly detach. |

| Field | Description |
|--|---|
| 2G-Implicitly Detached | Total number of intra RAT periodic RAU requests rejected for 2G service due to implicitly detach. |
| 3G-PLMN not allowed | Total number of intra RAT periodic RAU requests rejected for 3G service due to specific PLMN not allowed. |
| 2G-PLMN not allowed | Total number of intra RAT periodic RAU requests rejected for 2G service due to specific PLMN not allowed. |
| 3G-Location Area not allowed | Total number of intra RAT periodic RAU requests rejected for 3G service due to specific location area not allowed. |
| 2G-Location Area not allowed | Total number of intra RAT periodic RAU requests rejected for 2G service due to specific location area not allowed. |
| 3G-Roaming not allowed in this Location Area | Total number of intra RAT periodic RAU requests rejected for 3G service due to roaming not allowed in specific location area. |
| 2G-Roaming not allowed in this Location Area | Total number of intra RAT periodic RAU requests rejected for 2G service due to roaming not allowed in specific location area. |
| 3G-GPRS service not allowed in this PLMN | Total number of intra RAT periodic RAU requests rejected for 3G service due to GPRS service not allowed in specific PLMN. |
| 2G-GPRS service not allowed in this PLMN | Total number of intra RAT periodic RAU requests rejected for 2G service due to GPRS service not allowed in specific PLMN. |
| 3G-No suitable cells in this Location Area | Total number of intra RAT periodic RAU requests rejected for 3G service due to non availability of suitable cell in specific location area. |
| 2G-No suitable cells in this Location Area | Total number of intra RAT periodic RAU requests rejected for 2G service due to non availability of suitable cell in specific location area. |
| 3G-MS-C not reachable | Total number of intra RAT periodic RAU requests rejected for 3G service as MS-C not reachable. |
| 2G-MS-C not reachable | Total number of intra RAT periodic RAU requests rejected for 2G service as MS-C not reachable. |
| 3G-Network Failure | Total number of intra RAT periodic RAU requests rejected for 3G service due to network failure. |
| 2G-Network Failure | Total number of intra RAT periodic RAU requests rejected for 2G service due to network failure. |
| 3G-MAC Failure | Total number of intra RAT periodic RAU requests rejected for 3G service due to message authenticate code (MAC) failure. |
| 2G-MAC Failure | Total number of intra RAT periodic RAU requests rejected for 2G service due to MAC failure. |

| Field | Description |
|--|--|
| 3G-SYNC Failure | Total number of intra RAT periodic RAU requests rejected for 3G service due to context synchronization failure. |
| 2G-SYNC Failure | Total number of intra RAT periodic RAU requests rejected for 2G service due to context synchronization failure. |
| 3G-Congestion | Total number of intra RAT periodic RAU requests rejected for 3G service due to network congestion. |
| 2G-Congestion | Total number of intra RAT periodic RAU requests rejected for 2G service due to network congestion. |
| 3G-GSM Auth Unacceptable | Total number of intra RAT periodic RAU requests rejected for 3G service due to unacceptable authentication from GSM network. |
| 2G-GSM Auth Unacceptable | Total number of intra RAT periodic RAU requests rejected for 2G service due to unacceptable authentication from GSM network. |
| 3G-No PDP contexts activated | Total number of intra RAT periodic RAU requests rejected for 3G service as PDP context is not activated. |
| 2G-No PDP contexts activated | Total number of intra RAT periodic RAU requests rejected for 2G service as PDP context is not activated. |
| 3G-Retry from new cell | Total number of intra RAT periodic RAU requests rejected for 3G service as UE retried the update from new cell. |
| 2G-Retry from new cell | Total number of intra RAT periodic RAU requests rejected for 2G service as UE retried the update from new cell. |
| 3G-Semantically Wrong Msg | Total number of intra RAT periodic RAU requests rejected for 3G service as attach request message is semantically wrong. |
| 2G-Semantically Wrg Msg | Total number of intra RAT periodic RAU requests rejected for 2G service as attach request message is semantically wrong. |
| 3G-Invalid Mandatory Info | Total number of intra RAT periodic RAU requests rejected for 3G service as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of intra RAT periodic RAU requests rejected for 2G service as mandatory information in message is invalid. |
| 3G-MSG type Non Existent | Total number of intra RAT periodic RAU requests rejected for 3G service due to non-existent type of message. |
| 2G-MSG type Non Existent | Total number of intra RAT periodic RAU requests rejected for 2G service due to non-existent type of message. |
| 3G-MSG type not compatible with protocol state | Total number of intra RAT periodic RAU requests rejected for 3G service as message type is not compatible with protocol state. |
| 2G-MSG type not compatible with protocol state | Total number of intra RAT periodic RAU requests rejected for 2G service as message type is not compatible with protocol state. |

| Field | Description |
|--|---|
| 3G-IE Non Existent | Total number of intra RAT periodic RAU requests rejected for 3G service due to inclusion of non-existent information element (IE) in message. |
| 2G-IE Non Existent | Total number of intra RAT periodic RAU requests rejected for 2G service due to inclusion of non-existent information element (IE) in message. |
| 3G-Conditional IE Error | Total number of intra RAT periodic RAU requests rejected for 3G service due to error in conditional informational element. |
| 2G-Conditionanl IE Error | Total number of intra RAT periodic RAU requests rejected for 2G service due to error in conditional informational element. |
| 3G-Message not compatible with protocol state | Total number of intra RAT periodic RAU requests rejected for 3G service due to incompatible protocol state in message. |
| 2G-Message not compatible with protocol state | Total number of intra RAT periodic RAU requests rejected for 2G service due to incompatible protocol state in message |
| 3G-Protocol Error | Total number of intra RAT periodic RAU requests rejected for 3G service due to protocol error in message. |
| 2G-Protocol Error | Total number of intra RAT periodic RAU requests rejected for 2G service due to protocol error in message |
| 3G-Unknown cause | Total number of intra RAT periodic RAU requests rejected for 3G service due to reasons other than listed here in message. |
| 2G-Unknown cause | Total number of intra RAT periodic RAU requests rejected for 2G service due to reasons other than listed here in message. |
| Intra Combo. Routing Area Update Reject Causes | This group displays the intra RAT combined (PS and CS) RAU request reject causes on SGSN. |
| 3G-IMSI Unknown in HLR | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to unknown IMSI in HLR. |
| 3G-Illegal MS | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to illegal mobile subscriber. |
| 3G-Illegal ME | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to illegal mobile equipment. |
| 2G-Illegal ME | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to illegal mobile equipment. |

| Field | Description |
|--|--|
| 3G-GPRS service not allowed | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to GPRS service not allowed for subscriber. |
| 2G-GPRS service not allowed | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to GPRS service not allowed for subscriber. |
| 3G-GPRS and Non-GPRS service not allowed | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 2G-GPRS and Non-GPRS service not allowed | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 3G-MSId not derived by Nw | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to network failed to derive MSID from attach message. |
| 2G-MSId not derived by Nw | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to network failed to derive MSID from attach message. |
| 3G-Implicitly Detached | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to implicitly detach. |
| 2G-Implicitly Detached | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to implicitly detach. |
| 3G-PLMN not allowed | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to specific PLMN not allowed. |
| 2G-PLMN not allowed | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to specific PLMN not allowed. |
| 3G-Location Area not allowed | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to specific location area not allowed. |
| 2G-Location Area not allowed | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to specific location area not allowed. |
| 3G-Roaming not allowed in this Location Area | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to roaming not allowed in specific location area. |
| 2G-Roaming not allowed in this Location Area | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to roaming not allowed in specific location area. |

| Field | Description |
|--|---|
| 3G-GPRS service not allowed in this PLMN | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to GPRS service not allowed in specific PLMN. |
| 2G-GPRS service not allowed in this PLMN | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to GPRS service not allowed in specific PLMN. |
| 3G-No suitable cells in this Location Area | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to non availability of suitable cell in specific location area. |
| 2G-No suitable cells in this Location Area | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to non availability of suitable cell in specific location area. |
| 3G-MSC not reachable | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service as MSC not reachable. |
| 2G-MSC not reachable | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service as MSC not reachable. |
| 3G-Network Failure | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to network failure. |
| 2G-Network Failure | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to network failure. |
| 3G-MAC Failure | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to message authenticate code (MAC) failure. |
| 2G-MAC Failure | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to MAC failure. |
| 3G-SYNC Failure | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to context synchronization failure. |
| 2G-SYNC Failure | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to context synchronization failure. |
| 3G-Congestion | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to network congestion. |
| 2G-Congestion | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to network congestion. |
| 3G-GSM Auth Unacceptable | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to unacceptable authentication from GSM network. |

| Field | Description |
|--|---|
| 2G-GSM Auth Unacceptable | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to unacceptable authentication from GSM network. |
| 3G-No PDP contexts activated | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service as PDP context is not activated. |
| 2G-No PDP contexts activated | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service as PDP context is not activated. |
| 3G-Retry from new cell | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service as UE retried the update from new cell. |
| 2G-Retry from new cell | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service as UE retried the update from new cell. |
| 3G-Semantically Wrong Msg | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service as attach request message is semantically wrong. |
| 2G-Semantically Wrg Msg | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service as attach request message is semantically wrong. |
| 3G-Invalid Mandatory Info | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service as mandatory information in message is invalid. |
| 3G-MSG type Non Existent | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to non-existent type of message. |
| 2G-MSG type Non Existent | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to non-existent type of message. |
| 3G-MSG type not compatible with protocol state | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service as message type is not compatible with protocol state. |
| 2G-MSG type not compatible with protocol state | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service as message type is not compatible with protocol state. |
| 3G-IE Non Existent | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to inclusion of non-existent information element (IE) in message. |

| Field | Description |
|--|---|
| 2G-IE Non Existent | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to inclusion of non-existent information element (IE) in message. |
| 3G-Conditional IE Error | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to error in conditional informational element. |
| 2G-Conditional IE Error | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to error in conditional informational element. |
| 3G-Message not compatible with protocol state | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to incompatible protocol state in message. |
| 2G-Message not compatible with protocol state | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to incompatible protocol state in message |
| 3G-protocol Error | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to protocol error in message. |
| 2G-protocol Error | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to protocol error in message |
| 3G-Unknown cause | Total number of intra RAT combined (PS and CS) RAU requests rejected for 3G service due to reasons other than listed here in message. |
| 2G-Unknown cause | Total number of intra RAT combined (PS and CS) RAU requests rejected for 2G service due to reasons other than listed here in message. |
| Inter SGSN PS Only Routing Area Update Reject Causes | This group displays the inter SGSN PS-only RAU request reject causes on SGSN. |
| 3G-IMSI Unknown in HLR | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to unknown IMSI in HLR. |
| 3G-Illegal MS | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to illegal mobile subscriber. |
| 3G-Illegal ME | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to illegal mobile equipment. |

| Field | Description |
|--|--|
| 2G-Illegal ME | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to illegal mobile equipment. |
| 3G-GPRS service not allowed | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to GPRS service not allowed for subscriber. |
| 2G-GPRS service not allowed | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to GPRS service not allowed for subscriber. |
| 3G-GPRS and Non-GPRS service not allowed | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 2G-GPRS and Non-GPRS service not allowed | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 3G-MSId not derived by Nw | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to network failed to derive MSID from attach message. |
| 2G-MSId not derived by Nw | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to network failed to derive MSID from attach message. |
| 3G-Implicitly Detached | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to implicitly detach. |
| 2G-Implicitly Detached | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to implicitly detach. |
| 3G-PLMN not allowed | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to specific PLMN not allowed. |
| 2G-PLMN not allowed | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to specific PLMN not allowed. |
| 3G-Location Area not allowed | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to specific location area not allowed. |
| 2G-Location Area not allowed | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to specific location area not allowed. |
| 3G-Roaming not allowed in this Location Area | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to roaming not allowed in specific location area. |
| 2G-Roaming not allowed in this Location Area | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to roaming not allowed in specific location area. |
| 3G-GPRS service not allowed in this PLMN | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to GPRS service not allowed in specific PLMN. |

| Field | Description |
|--|---|
| 2G-GPRS service not allowed in this PLMN | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to GPRS service not allowed in specific PLMN. |
| 3G-No suitable cells in this Location Area | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to non availability of suitable cell in specific location area. |
| 2G-No suitable cells in this Location Area | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to non availability of suitable cell in specific location area. |
| 3G-MSR not reachable | Total number of inter SGSN PS-only RAU requests rejected for 3G service as MSR not reachable. |
| 2G-MSR not reachable | Total number of inter SGSN PS-only RAU requests rejected for 2G service as MSR not reachable. |
| 3G-Network Failure | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to network failure. |
| 2G-Network Failure | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to network failure. |
| 3G-MAC Failure | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to message authenticate code (MAC) failure. |
| 2G-MAC Failure | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to MAC failure. |
| 3G-SYNC Failure | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to context synchronization failure. |
| 2G-SYNC Failure | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to context synchronization failure. |
| 3G-Congestion | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to network congestion. |
| 2G-Congestion | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to network congestion. |
| 3G-GSM Auth Unacceptable | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to unacceptable authentication from GSM network. |
| 2G-GSM Auth Unacceptable | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to unacceptable authentication from GSM network. |
| 3G-No PDP contexts activated | Total number of inter SGSN PS-only RAU requests rejected for 3G service as PDP context is not activated. |
| 2G-No PDP contexts activated | Total number of inter SGSN PS-only RAU requests rejected for 2G service as PDP context is not activated. |

| Field | Description |
|--|---|
| 3G-Retry from new cell | Total number of inter SGSN PS-only RAU requests rejected for 3G service as UE retried the update from new cell. |
| 2G-Retry from new cell | Total number of inter SGSN PS-only RAU requests rejected for 2G service as UE retried the update from new cell. |
| 3G-Semantically Wrong Msg | Total number of inter SGSN PS-only RAU requests rejected for 3G service as attach request message is semantically wrong. |
| 2G-Semantically Wrg Msg | Total number of inter SGSN PS-only RAU requests rejected for 2G service as attach request message is semantically wrong. |
| 3G-Invalid Mandatory Info | Total number of inter SGSN PS-only RAU requests rejected for 3G service as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of inter SGSN PS-only RAU requests rejected for 2G service as mandatory information in message is invalid. |
| 3G-MSG type Non Existent | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to non-existent type of message. |
| 2G-MSG type Non Existent | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to non-existent type of message. |
| 3G-MSG type not compatible with protocol state | Total number of inter SGSN PS-only RAU requests rejected for 3G service as message type is not compatible with protocol state. |
| 2G-MSG type not compatible with protocol state | Total number of inter SGSN PS-only RAU requests rejected for 2G service as message type is not compatible with protocol state. |
| 3G-IE Non Existent | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to inclusion of non-existent information element (IE) in message. |
| 2G-IE Non Existent | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to inclusion of non-existent information element (IE) in message. |
| 3G-Conditional IE Error | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to error in conditional informational element. |
| 2G-Conditional IE Error | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to error in conditional informational element. |
| 3G-Message not compatible with protocol state | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to incompatible protocol state in message. |
| 2G-Message not compatible with protocol state | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to incompatible protocol state in message. |
| 3G-Protocol Error | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to protocol error in message. |

| Field | Description |
|--|---|
| 2G-Protocol Error | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to protocol error in message |
| 3G-Unknown cause | Total number of inter SGSN PS-only RAU requests rejected for 3G service due to reasons other than listed here in message. |
| 2G-Unknown cause | Total number of inter SGSN PS-only RAU requests rejected for 2G service due to reasons other than listed here in message. |
| Inter SGSN Comb. Routing Area Update Reject Causes | This group displays the combined (PS and CS) inter-SGSN RAU request reject causes on SGSN. |
| 3G-IMSI Unknown in HLR | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to unknown IMSI in HLR. |
| 3G-Illegal MS | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to illegal mobile subscriber. |
| 3G-Illegal ME | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to illegal mobile equipment. |
| 2G-Illegal ME | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to illegal mobile equipment. |
| 3G-GPRS service not allowed | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to GPRS service not allowed for subscriber. |
| 2G-GPRS service not allowed | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to GPRS service not allowed for subscriber. |
| 3G-GPRS and Non-GPRS service not allowed | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 2G-GPRS and Non-GPRS service not allowed | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to GPRS and non-GPRS service not allowed for subscriber. |

| Field | Description |
|--|--|
| 3G-MSId not derived by Nw | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to network failed to derive MSID from attach message. |
| 2G-MSId not derived by Nw | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to network failed to derive MSID from attach message. |
| 3G-Implicitly detached | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to implicitly detach. |
| 2G-Implicitly detached | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to implicitly detach. |
| 3G-PLMN not allowed | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to specific PLMN not allowed. |
| 2G-PLMN not allowed | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to specific PLMN not allowed. |
| 3G-Location Area not allowed | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to specific location area not allowed. |
| 2G-Location Area not allowed | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to specific location area not allowed. |
| 3G-Roaming not allowed in this location area | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to roaming not allowed in specific location area. |
| 2G-Roaming not allowed in this location area | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to roaming not allowed in specific location area. |
| 3G-GPRS service not allowed in this PLMN | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to GPRS service not allowed in specific PLMN. |
| 2G-GPRS service not allowed in this PLMN | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to GPRS service not allowed in specific PLMN. |
| 3G-No suitable cells in this Location Area | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to non availability of suitable cell in specific location area. |

| Field | Description |
|--|--|
| 2G-No suitable cells in this Location Area | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to non availability of suitable cell in specific location area. |
| 3G-MSC not reachable | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service as MSC not reachable. |
| 2G-MSC not reachable | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service as MSC not reachable. |
| 3G-Network Failure | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to network failure. |
| 2G-Network Failure | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to network failure. |
| 3G-MAC Failure | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to message authenticate code (MAC) failure. |
| 2G-MAC Failure | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to MAC failure. |
| 3G-SYNC Failure | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to context synchronization failure. |
| 2G-SYNC Failure | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to context synchronization failure. |
| 3G-Congestion | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to network congestion. |
| 2G-Congestion | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to network congestion. |
| 3G-GSM Auth Unacceptable | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to unacceptable authentication from GSM network. |
| 2G-GSM Auth Unacceptable | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to unacceptable authentication from GSM network. |
| 3G-No PDP contexts activated | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service as PDP context is not activated. |
| 2G-No PDP contexts activated | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service as PDP context is not activated. |

| Field | Description |
|--|---|
| 3G-Retry from new cell | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service as update was retried from different cell than original RAU request by MS. |
| 2G-Retry from new cell | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service as update was retried from different cell than original RAU request by MS. |
| 3G-Semantically Wrong Msg | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service as attach request message is semantically wrong. |
| 2G-Semantically Wrg Msg | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service as attach request message is semantically wrong. |
| 3G-Invalid Mandatory Info | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service as mandatory information in message is invalid. |
| 3G-MSG type Non Existent | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to non-existent type of message. |
| 2G-MSG type Non Existent | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to non-existent type of message. |
| 3G-MSG type not compatible with protocol state | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service as message type is not compatible with protocol state. |
| 2G-MSG type not compatible with protocol state | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service as message type is not compatible with protocol state. |
| 3G-IE Non Existent | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to inclusion of non-existent information element (IE) in message. |
| 2G-IE Non Existent | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to inclusion of non-existent information element (IE) in message. |
| 3G-Conditional IE Error | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to error in conditional information element. |

| Field | Description |
|---|---|
| 2G-Conditional IE Error | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to error in conditional information element. |
| 3G-Message not compatible with protocol state | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service as message is not compatible with protocol state. |
| 2G-Message not compatible with protocol state | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service as message is not compatible with protocol state. |
| 3G-protocol Error | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 3G service due to protocol error in message. |
| 2G-protocol Error | Total number of combined (PS and CS) inter-SGSN routing area update requests rejected for 2G service due to protocol error in message. |
| 3G-Unknown cause | Total number of combined (PS and CS) inter-SGSN attach rejected for 3G service where cause is unknown or not specified here. |
| 2G-Unknown cause | Total number of combined (PS and CS) inter-SGSN attach rejected for 2G service where cause is unknown or not specified here. |
| Inter RAT PS Only Routing Area Update Reject Causes | |
| 3G-IMSI Unknown in HLR | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "IMSI unknown at HLR".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On HLR sending a bad response to SAI-Req/GLU-Req • On getting zero auth vectors for HLR for a SAI-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-IMSI Unknown in HLR | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "IMSI unknown at HLR".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On HLR sending a bad response to SAI-Req/GLU-Req • On getting zero auth vectors for HLR for a SAI-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|---------------|--|
| 3G-Illegal MS | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Illegal MS".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On HLR sending a bad response to SAI-Req/GLU-Req • On getting zero auth vectors for HLR for a SAI-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Illegal MS | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Illegal MS".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Illegal ME | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Illegal ME".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • Unable to retrieve IMEI/IMEISV from MS • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Illegal ME | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Illegal ME".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--|---|
| 3G-GPRS service not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects sent with cause "GPRS services not allowed in this PLMN" against Inter-service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting a cl (subs-with) while an attach/RAU is in progress • On getting "Subscriber Unknown" failure from HLR for SAI-Req/GLU-Req • For rejecting attaches due to subscriber control inactivity • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GPRS service not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects sent with cause "GPRS services not allowed in this PLMN" against Inter-service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting a cl (subs-with) while an attach/RAU is in progress • On getting "Subscriber Unknown" failure from HLR for SAI-Req/GLU-Req • For rejecting attaches due to subscriber control inactivity • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-GPRS and Non-GPRS service not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects sent with cause "GPRS and non-GPRS service not allowed for subscriber" against Inter-service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "IMSI unknown" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--|---|
| 2G-GPRS and Non-GPRS service not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects sent with cause "GPRS and non-GPRS service not allowed for subscriber" against Inter-service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "IMSI unknown" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MSId not derived by Nw | <p>Description: Total number of GPRS only inter-service routing area update request rejects sent with cause "MSID not derived by network" against Inter-Service-RAU requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting periodic RAU with old RAI as a non-local RAI • When PTMSI-IE is missing in RAU • When old RAI has invalid location area values (0x0000 or 0xfffe) for PTMSI-attaches/RAUs • When getting a RAU with old RAI in 2G and PTMSI is unknown • When getting PTMSI-SIG-MISMATCH for a SGSN Context Request sent with IMSI Validated • When getting a RAU Request while an attach with the same peer-SGSN-PTMSI is in progress • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|---------------------------|---|
| 2G-MSId not derived by Nw | <p>Description: Total number of GPRS only inter-service routing area update request rejects sent with cause "MSID not derived by network" against Inter-Service-RAU requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When SGSN-Context-Resp arrives with any cause other than "accepted" • When GMM-Identity-Req with MS fails • When GTP-Identity-Req with MS fails • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Implicitly Detached | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Implicitly detached".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • RAU at 3G when subscriber was detached from 2G • When we get a different IMSI in SGSN Context Response for an SGSN Context Request sent with IMSI validated • When we get RAU while awaiting a Detach Accept • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Implicitly Detached | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Implicitly detached".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When we get an RAU from an unknown MS • On T3350 expiry for the Attach-accept • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-PLMN not allowed | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "PLMN not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--|--|
| 2G-PLMN not allowed | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "PLMN not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Location Area not allowed | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Location area not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Location Area not allowed | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Location area not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Roaming not allowed in this Location Area | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Roaming area not allowed in the given location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When rejecting as a shared SGSN due to no operator accepting the given IMSI • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Roaming not allowed in this Location Area | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Roaming area not allowed in the given location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When rejecting as a shared SGSN due to no operator accepting the given IMSI • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--|--|
| 3G-GPRS service not allowed in this PLMN | <p>Description: Total number of GPRS only RAU Rejects sent with cause "GPRS service not allowed in this PLMN" against Inter-Service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "Roaming not allowed" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GPRS service not allowed in this PLMN | <p>Description: Total number of GPRS only RAU Rejects sent with cause "GPRS service not allowed in this PLMN" against Inter-Service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "Roaming not allowed" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-No suitable cells in this Location Area | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "No cells in location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "UMTS access control" from Siemens HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-No suitable cells in this Location Area | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "No cells in location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "UMTS access control" from Siemens HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|----------------------|---|
| 3G-MSC not reachable | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "MSC not reachable".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On sending an attach/RAU Accept with cause "GPRS only attached" or "RA updated" for a combined CS/PS request either because: <ul style="list-style-type: none"> • the request is timed out • inability to send to VLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSC not reachable | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "MSC not reachable".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On sending an attach/RAU Accept with cause "GPRS only attached" or "RA updated" for a combined CS/PS request either because: <ul style="list-style-type: none"> • the request is timed out • inability to send to VLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--------------------|--|
| 3G-Network Failure | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Network Failure".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • RNC is overloaded • Not enough credits at session manager • On getting cause "data missing from HLR" in SAI-Req/GLU-Req • Too many IUs for the same IMSI • On getting a RAU with a peer SGSN PTMSI when another Attach is ongoing with the same PTMSI • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Network Failure | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Network Failure".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting cause "data missing from HLR" in SAI-Req/GLU-Req • On XID failure for RAU • Inability to send an SGSN-Ctx-Req out for an RAU. • Inability to send a Check-IMEI Request out • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MAC Failure | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Message Authenticate Code (MAC) Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--------------------------|--|
| 2G-MAC Failure | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Message Authenticate Code (MAC) Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-SYNC Failure | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Context Synchronization Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-SYNC Failure | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Context Synchronization Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Congestion | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Network Congestion".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Congestion | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Network Congestion".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-GSM Auth Unacceptable | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "GSM Authentication unacceptable".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|------------------------------|---|
| 2G-GSM Auth Unacceptable | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "GSM Authentication unacceptable".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-No PDP contexts activated | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "PDP context not activated".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-No PDP contexts activated | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "PDP context not activated".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Retry from new cell | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Subscriber retried from a new cell".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Retry from new cell | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Subscriber retried from a new cell".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Semantically Wrong Msg | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Semantically wrong message".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|---------------------------|--|
| 2G-Semantically Wrong Msg | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Semantically wrong message".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Invalid Mandatory Info | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Invalid Mandatory Info".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Invalid Mandatory Info | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Invalid Mandatory Info".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MSG type Non Existent | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Message type does not exist".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--|--|
| 2G-MSG type Non Existent | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Message type does not exist".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MSG type not compatible with protocol state | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Message type not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSG type not compatible with protocol state | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Message type not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-IE Non Existent | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "Information element not existent".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|---|---|
| 2G-IE Non Existent | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "Information element not existent".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Conditional IE Error | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "error in conditional informational element".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Conditional IE Error | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "error in conditional informational element".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Message not compatible with protocol state | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "message not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When getting an Attach Request before getting Relocation-complete during SRNS • When getting periodic RAU in a direct transfer message • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|---|--|
| 2G-Message not compatible with protocol state | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "message not compatible with protocol state".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Protocol Error | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "protocol error".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Protocol Error | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "protocol error".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When the PLMN ID in BSSGP message does not match the configured PLMN at GPRS service • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Unknown cause | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 3G service with cause "unknown error".</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Unknown cause | <p>Description: Total number of GPRS only Inter RAT RAU Rejects in 2G service with cause "unknown error".</p> <p>Availability: per RA, per GPRS service</p> |
| Inter RAT Comb. Routing Area Update Reject Causes | |
| 3G-IMSI Unknown in HLR | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "IMSI unknown at HLR".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On HLR sending a bad response to a SAI-Req/GLU-Req • On getting zero auth vectors for HLR for a SAI-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|------------------------|---|
| 2G-IMSI Unknown in HLR | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "IMSI unknown at HLR".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Illegal MS | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Illegal MS".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • Unable to retrieve IMEI/IMEISV from MS • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Illegal MS | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Illegal MS".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Illegal ME | <p>Description: Total number of Combined Inter RAT RAU rejects in 3G service with cause "Illegal ME".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • Unable to retrieve IMEI/IMEISV from MS • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|-----------------------------|--|
| 2G-Illegal ME | <p>Description: Total number of Combined Inter RAT RAU rejects in 3G service with cause "Illegal ME".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-GPRS service not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects sent with cause "GPRS services not allowed in this PLMN" against Inter-service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting a cl (subs-with) while an attach/RAU is in progress • On getting "Subscriber Unknown" failure from HLR for SAI-Req/GLU-Req • For rejecting attaches due to subscriber control inactivity • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GPRS service not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects sent with cause "GPRS services not allowed in this PLMN" against Inter-service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting a cl (subs-with) while an attach/RAU is in progress • On getting "Subscriber Unknown" failure from HLR for SAI-Req/GLU-Req • For rejecting attaches due to subscriber control inactivity • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--|--|
| 3G-GPRS and Non-GPRS service not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects sent with cause "GPRS and non-GPRS service not allowed for subscriber" against Inter-service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "IMSI unknown" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GPRS and Non-GPRS service not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects sent with cause "GPRS and non-GPRS service not allowed for subscriber" against Inter-service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "IMSI unknown" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MSId not derived by Nw | <p>Description: Total number of Combined Inter Service RAU Request Rejects sent with cause "MSID not derived by network" against Inter-Service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting periodic RAU with old RAI as a non-local RAI • When PTMSI-IE is missing in RAU • When old RAI has invalid location area values (0x0000 or 0xfffe) for PTMSI-attaches/RAUs • When getting a RAU with old RAI in 2G and PTMSI is unknown • When getting PTMSI-SIG-MISMATCH for a SGSN Context Request sent with IMSI Validated • When getting a RAU Request while an attach with the same peer-SGSN-PTMSI is in progress • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|---------------------------|--|
| 2G-MSId not derived by Nw | <p>Description: Total number of Combined Inter Service RAU Request Rejects sent with cause "MSID not derived by network" against Inter-Service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When SGSN-Context-Resp arrives with any cause other than "accepted" • When GMM-Identity-Req with MS fails • When GTP-Identity-Req with MS fails • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Implicitly Detached | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Implicitly detached".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • RAU at 3G when subscriber was detached from 2G • When we get a different IMSI in SGSN Context Response for an SGSN Context Request sent with IMSI validated • When we get RAU while awaiting a Detach Accept • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Implicitly Detached | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Implicitly detached".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When we get an RAU from an unknown MS • On T3350 expiry for the attach-accept • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-PLMN not allowed | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "PLMN not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--|---|
| 2G-PLMN not allowed | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "PLMN not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Location Area not allowed | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Location area not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Location Area not allowed | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Location area not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Roaming not allowed in this Location Area | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Roaming area not allowed in the given location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When rejecting as a shared SGSN due to no operator accepting the given IMSI • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Roaming not allowed in this Location Area | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Roaming area not allowed in the given location area".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--|---|
| 3G-GPRS service not allowed in this PLMN | <p>Description: Total number of Combined RAU Rejects sent with cause "GPRS service not allowed in this PLMN" against Inter-Service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "Roaming not allowed" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GPRS service not allowed in this PLMN | <p>Description: Total number of Combined RAU Rejects sent with cause "GPRS service not allowed in this PLMN" against Inter-Service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "Roaming not allowed" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-No suitable cells in this Location Area | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "No cells in location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "UMTS access control" from Siemens HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-No suitable cells in this Location Area | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "No cells in location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "UMTS access control" from Siemens HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|----------------------|--|
| 3G-MSR not reachable | <p>Description: Total number of Combined Inter RAT RAU rejects in 3G service with cause "MSR not reachable".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On sending an attach/RAU Accept with cause "GPRS only attached" or "RA updated" for a combined CS/PS request either because: <ul style="list-style-type: none"> • the request is timed out • inability to send to VLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSR not reachable | <p>Description: Total number of Combined Inter RAT RAU rejects in 2G service with cause "MSR not reachable".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On sending an attach/RAU Accept with cause "GPRS only attached" or "RA updated" for a combined CS/PS request either because: <ul style="list-style-type: none"> • the request is timed out • inability to send to VLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--------------------|---|
| 3G-Network Failure | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Network Failure".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • RNC is overloaded • Not enough credits at session manager • On getting cause "data missing from HLR" in SAI-Req/GLU-Req • Too many IUs for the same IMSI • On getting a RAU with a peer SGSN PTMSI when another Attach is ongoing with the same PTMSI • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Network Failure | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Network Failure".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting cause "data missing from HLR" in SAI-Req/GLU-Req • On XID failure for RAU • Inability to send an SGSN-Ctx-Req out for an RAU • Inability to send a Check-IMEI Request out • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MAC Failure | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Message Authenticate Code (MAC) Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--------------------------|---|
| 2G-MAC Failure | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Message Authenticate Code (MAC) Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-SYNC Failure | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Context Synchronization Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-SYNC Failure | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Context Synchronization Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Congestion | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Network Congestion".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Congestion | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Network Congestion".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-GSM Auth Unacceptable | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "GSM Authentication unacceptable".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|------------------------------|--|
| 2G-GSM Auth Unacceptable | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "GSM Authentication unacceptable".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-No PDP contexts activated | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "PDP context not activated".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-No PDP contexts activated | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "PDP context not activated".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Retry from new cell | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Subscriber retried from a new cell".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Retry from new cell | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Subscriber retried from a new cell".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Semantically Wrong Msg | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Semantically wrong message".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|---------------------------|---|
| 2G-Semantically Wrong Msg | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Semantically wrong message".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Invalid Mandatory Info | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Invalid Mandatory Info".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Invalid Mandatory Info | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Invalid Mandatory Info".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MSG type Non Existent | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Message type does not exist".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--|---|
| 2G-MSG type Non Existent | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Message type does not exist".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MSG type not compatible with protocol state | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Message type not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSG type not compatible with protocol state | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Message type not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-IE Non Existent | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "Information element not existent".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|---|--|
| 2G-IE Non Existent | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "Information element not existent".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Conditional IE Error | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "error in conditional informational element".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Conditional IE Error | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "error in conditional informational element".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Message not compatible with protocol state | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "message not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When getting an Attach Request before getting Relocation-complete during SRNS • When getting periodic RAU in a direct transfer message • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|---|--|
| 2G-Message not compatible with protocol state | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "message not compatible with protocol state".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Protocol Error | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "protocol error".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Protocol Error | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "protocol error".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When the PLMN ID in BSSGP message does not match the configured PLMN at GPRS service • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Unknown cause | <p>Description: Total number of Combined Inter RAT RAU Rejects in 3G service with cause "unknown error".</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Unknown cause | <p>Description: Total number of Combined Inter RAT RAU Rejects in 2G service with cause "unknown error".</p> <p>Availability: per RA, per GPRS service</p> |
| Inter Service PS Only Routing Area Update Reject Causes | |
| 3G-IMSI Unknown in HLR | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "IMSI unknown at HLR".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On HLR sending a bad response to a SAI-Req or GLU-Req • On getting zero auth vectors for HLR for a SAI-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|------------------------|--|
| 2G-IMSI Unknown in HLR | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "IMSI unknown at HLR".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On HLR sending a bad response to a SAI-Req or GLU-Req • On getting zero auth vectors for HLR for a SAI-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Illegal MS | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Illegal M".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On HLR sending a bad response to a SAI-Req or GLU-Req • On getting zero auth vectors for HLR for a SAI-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Illegal MS | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Illegal MS".</p> <ul style="list-style-type: none"> • Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs. <p>Availability: per RA, per GPRS service</p> |
| 3G-Illegal ME | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Illegal ME".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • Unable to retrieve IMEI/IMEISV from MS • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|-----------------------------|---|
| 2G-Illegal ME | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Illegal ME".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-GPRS service not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects sent with cause "GPRS services not allowed in this PLMN" against Inter-service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting a cl (subs-with) while an attach/RAU is in progress • On getting "Subscriber Unknown" failure from HLR for SAI-Req/GLU-Req • For rejecting attaches due to subscriber control inactivity • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GPRS service not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects sent with cause "GPRS services not allowed in this PLMN" against Inter-service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting a cl (subs-with) while an attach/RAU is in progress • On getting "Subscriber Unknown" failure from HLR for SAI-Req/GLU-Req • For rejecting attaches due to subscriber control inactivity • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--|---|
| 3G-GPRS and Non-GPRS service not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects sent with cause "GPRS and non-GPRS service not allowed for subscriber" against Inter-service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "IMSI unknown" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GPRS and Non-GPRS service not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects sent with cause "GPRS and non-GPRS service not allowed for subscriber" against Inter-service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "IMSI unknown" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MSId not derived by Nw | <p>Description: Total number of GPRS only Inter Service RAU Request Rejects sent with cause "MSID not derived by network" against Inter-Service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting periodic RAU with old RAI as a non-local RAI • When PTMSI-IE is missing in RAU • When old RAI has invalid location area values (0x0000 or 0xfffe) for PTMSI-attaches/RAUs • When getting a RAU with old RAI in 2G and PTMSI is unknown • When getting PTMSI-SIG-MISMATCH for a SGSN Context Request sent with IMSI Validated • When getting a RAU Request while an attach with the same peer-SGSN-PTMSI is in progress • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|---------------------------|---|
| 2G-MSId not derived by Nw | <p>Description: Total number of GPRS only Inter Service RAU Request Rejects sent with cause "MSID not derived by network" against Inter-Service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When SGSN-Context-Resp arrives with any cause other than "accepted" • When GMM-Identity-Req with MS fails • When GTP-Identity-Req with MS fails • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Implicitly Detached | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Implicitly detached".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • RAU at 3G when subscriber was detached from 2G • When we get a different IMSI in SGSN Context Response for an SGSN Context Request sent with IMSI validated • When we get RAU while awaiting a Detach Accept • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Implicitly Detached | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Implicitly detached".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When we get an RAU from an unknown MS • On T3350 expiry for the attach-accept • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-PLMN not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "PLMN not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--|--|
| 2G-PLMN not allowed | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "PLMN not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Location Area not allowed | <p>Description: Total number of GPRS only Inter Service RAU rejects in 3G service with cause "Location area not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Location Area not allowed | <p>Description: Total number of GPRS only Inter Service RAU rejects in 2G service with cause "Location area not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Roaming not allowed in this Location Area | <p>Description: Total number of GPRS only Inter Service RAU rejects in 3G service with cause "Roaming area not allowed in the given location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When rejecting as a shared SGSN due to no operator accepting the given IMSI • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Roaming not allowed in this Location Area | <p>Description: Total number of GPRS only Inter Service RAU rejects in 2G service with cause "Roaming area not allowed in the given location area".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--|--|
| 3G-GPRS service not allowed in this PLMN | <p>Description: Total number of GPRS only RAU Rejects sent with cause "GPRS service not allowed in this PLMN" against Inter-Service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "Roaming not allowed" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GPRS service not allowed in this PLMN | <p>Description: Total number of GPRS only RAU Rejects sent with cause "GPRS service not allowed in this PLMN" against Inter-Service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "Roaming not allowed" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-No suitable cells in this Location Area | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "No cells in location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "UMTS access control" from Siemens HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-No suitable cells in this Location Area | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "No cells in location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "UMTS access control" from Siemens HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|----------------------|---|
| 3G-MSC not reachable | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "MSC not reachable".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On sending an attach/RAU Accept with cause "GPRS only attached" or "RA updated" for a combined CS/PS request either because: <ul style="list-style-type: none"> • the request is timed out • inability to send to VLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSC not reachable | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "MSC not reachable".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On sending an attach/RAU Accept with cause "GPRS only attached" or "RA updated" for a combined CS/PS request either because: <ul style="list-style-type: none"> • the request is timed out • inability to send to VLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--------------------|--|
| 3G-Network Failure | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Network Failure".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • RNC is overloaded • Not enough credits at session manager • On getting cause "data missing from HLR" in SAI-Req/GLU-Req • Too many IUs for the same IMSI • On getting a RAU with a peer SGSN PTMSI when another Attach is ongoing with the same PTMSI • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Network Failure | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Network Failure".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting cause "data missing from HLR" in SAI-Req/GLU-Req • On XID failure for RAU • Inability to send an SGSN-Ctx-Req out for an RAU. • Inability to send a Check-IMEI Request out • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MAC Failure | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Message Authenticate Code (MAC) Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|-----------------|--|
| 2G-MAC Failure | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Message Authenticate Code (MAC) Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-SYNC Failure | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Context Synchronization Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-SYNC Failure | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Context Synchronization Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Congestion | <p>Description: Total number of GPRS Only Inter Service RAU Rejects in 3G service with cause "Network Congestion".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Congestion | <p>Description: Total number of GPRS Only Inter Service RAU Rejects in 2G service with cause "Network Congestion".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|------------------------------|--|
| 3G-GSM Auth Unacceptable | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "GSM Authentication unacceptable".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GSM Auth Unacceptable | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "GSM Authentication unacceptable".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-No PDP contexts activated | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "PDP context not activated".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-No PDP contexts activated | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "PDP context not activated".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Retry from new cell | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Subscriber retried from a new cell".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Retry from new cell | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Subscriber retried from a new cell".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|---------------------------|---|
| 3G-Semantically Wrong Msg | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Semantically wrong message".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Semantically Wrong Msg | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Semantically wrong message".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Invalid Mandatory Info | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Invalid Mandatory Info".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Invalid Mandatory Info | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Invalid Mandatory Info".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--|--|
| 3G-MSG type Non Existent | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Message type does not exist".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSG type Non Existent | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Message type does not exist".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MSG type not compatible with protocol state | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Message type not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSG type not compatible with protocol state | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Message type not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|-------------------------|---|
| 3G-IE Non Existent | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "Information element not existent".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-IE Non Existent | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "Information element not existent".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Conditional IE Error | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "error in conditional informational element".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Conditional IE Error | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "error in conditional informational element".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|---|---|
| 3G-Message not compatible with protocol state | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "message not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When getting an Attach Request before getting Relocation-complete during SRNS • When getting periodic RAU in a direct transfer message • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Message not compatible with protocol state | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "message not compatible with protocol state".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Protocol Error | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "message not compatible with protocol state".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per GPRS service</p> |
| 2G-Protocol Error | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "protocol error".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per SGSN service</p> |
| 3G-Unknown cause | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 3G service with cause "unknown error".</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Unknown cause | <p>Description: Total number of GPRS only Inter Service RAU Rejects in 2G service with cause "unknown error".</p> <p>Availability: per RA, per GPRS service</p> |
| Inter Service Comb. Routing Area Update Reject Causes | |

| Field | Description |
|------------------------|---|
| 3G-IMSI Unknown in HLR | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "IMSI unknown at HLR".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On HLR sending a bad response to a SAI-Req/GLU-Req • On getting zero auth vectors for HLR for a SAI-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-IMSI Unknown in HLR | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "IMSI unknown at HLR".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Illegal MS | <p>Description: Total number of Combined Inter Service RAU rejects in 3G service with cause "Illegal MS".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • Unable to retrieve IMEI/IMEISV from MS • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Illegal MS | <p>Description: Total number of Combined Inter Service RAU rejects in 2G service with cause "Illegal MS".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|-----------------------------|--|
| 3G-Illegal ME | <p>Description: Total number of Combined Inter Service RAU rejects in 3G service with cause "Illegal ME".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • Unable to retrieve IMEI/IMEISV from MS • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Illegal ME | <p>Description: Total number of Combined Inter Service RAU rejects in 2G service with cause "Illegal ME".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On IMEI verification failure with EIR • On getting unknown equipment failure from EIR/HLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-GPRS service not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects sent with cause "GPRS services not allowed in this PLMN" against Inter-service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting a cl (subs-with) while an attach/RAU is in progress • On getting "Subscriber Unknown" failure from HLR for SAI-Req/GLU-Req • For rejecting attaches due to subscriber control inactivity • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--|---|
| 2G-GPRS service not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects sent with cause "GPRS services not allowed in this PLMN" against Inter-service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting a cl (subs-with) while an attach/RAU is in progress • On getting "Subscriber Unknown" failure from HLR for SAI-Req/GLU-Req • For rejecting attaches due to subscriber control inactivity • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-GPRS and Non-GPRS service not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects sent with cause "GPRS and non-GPRS service not allowed for subscriber" against Inter-service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "IMSI unknown" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GPRS and Non-GPRS service not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects sent with cause "GPRS and non-GPRS service not allowed for subscriber" against Inter-service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "IMSI unknown" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|---------------------------|--|
| 3G-MSID not derived by Nw | <p>Description: Total number of Combined Inter Service RAU Request Rejects sent with cause "MSID not derived by network" against Inter-Service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting periodic RAU with old RAI as a non-local RAI • When PTMSI-IE is missing in RAU • When old RAI has invalid location area values (0x0000 or 0xffff) for PTMSI-attaches/RAUs • When getting a RAU with old RAI in 2G and PTMSI is unknown • When getting PTMSI-SIG-MISMATCH for a SGSN Context Request sent with IMSI Validated • When getting a RAU Request while an attach with the same peer-SGSN-PTMSI is in progress • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSID not derived by Nw | <p>Description: Total number of Combined Inter Service RAU Request Rejects sent with cause "MSID not derived by network" against Inter-Service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When SGSN-Context-Resp arrives with any cause other than "accepted" • When GMM-Identity-Req with MS fails • When GTP-Identity-Req with MS fails • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|------------------------------|--|
| 3G-Implicitly Detached | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Implicitly detached".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • RAU at 3G when subscriber was detached from 2G • When we get a different IMSI in SGSN Context Response for an SGSN Context Request sent with IMSI validated • When we get RAU while awaiting a Detach Accept • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Implicitly Detached | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Implicitly detached".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When we get an RAU from an unknown MS • On T3350 expiry for the attach-accept • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-PLMN not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "PLMN not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-PLMN not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "PLMN not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Location Area not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Location area not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--|---|
| 2G-Location Area not allowed | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Location area not allowed".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Roaming not allowed in this Location Area | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Roaming area not allowed in the given location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When rejecting as a shared SGSN due to no operator accepting the given IMSI • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Roaming not allowed in this Location Area | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Roaming area not allowed in the given location area".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-GPRS service not allowed in this PLMN | <p>Description: Total number of Combined RAU Rejects sent with cause "GPRS service not allowed in this PLMN" against Inter-Service-RAU Requests in 3G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "Roaming not allowed" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|--|--|
| 2G-GPRS service not allowed in this PLMN | <p>Description: Total number of Combined RAU Rejects sent with cause "GPRS service not allowed in this PLMN" against Inter-Service-RAU Requests in 2G service.</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "Roaming not allowed" from HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-No suitable cells in this Location Area | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "No cells in location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "UMTS access control" from Siemens HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-No suitable cells in this Location Area | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "No cells in location area".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting "UMTS access control" from Siemens HLR for SAI-Req/GLU-Req • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|----------------------|--|
| 3G-MSR not reachable | <p>Description: Total number of Combined Inter Service RAU rejects in 3G service with cause "MSR not reachable".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On sending an attach/RAU Accept with cause "GPRS only attached" or "RA updated" for a combined CS/PS request either because: <ul style="list-style-type: none"> • the request is timed out • inability to send to VLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSR not reachable | <p>Description: Total number of Combined Inter Service RAU rejects in 2G service with cause "MSR not reachable".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On sending an attach/RAU Accept with cause "GPRS only attached" or "RA updated" for a combined CS/PS request either because: <ul style="list-style-type: none"> • the request is timed out • inability to send to VLR • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--------------------|---|
| 3G-Network Failure | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Network Failure".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • RNC is overloaded • Not enough credits at session manager • On getting cause "data missing from HLR" in SAI-Req/GLU-Req • Too many IUs for the same IMSI • On getting a RAU with a peer SGSN PTMSI when another Attach is ongoing with the same PTMSI • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Network Failure | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Network Failure".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On getting cause "data missing from HLR" in SAI-Req/GLU-Req • On XID failure for RAU • Inability to send an SGSN-Ctx-Req out for an RAU • Inability to send a Check-IMEI Request out • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MAC Failure | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Message Authenticate Code (MAC) Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|-----------------|---|
| 2G-MAC Failure | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Message Authenticate Code (MAC) Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-SYNC Failure | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Context Synchronization Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-SYNC Failure | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Context Synchronization Failure".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Congestion | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Network Congestion".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Congestion | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Network Congestion".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On congestion, if configured for attach-throttling • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|------------------------------|---|
| 3G-GSM Auth Unacceptable | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "GSM Authentication unacceptable".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-GSM Auth Unacceptable | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "GSM Authentication unacceptable".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-No PDP contexts activated | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "PDP context not activated".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-No PDP contexts activated | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "PDP context not activated".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Retry from new cell | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Subscriber retried from a new cell".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Retry from new cell | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Subscriber retried from a new cell".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|---------------------------|--|
| 3G-Semantically Wrong Msg | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Semantically wrong message".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Semantically Wrong Msg | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Semantically wrong message".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Invalid Mandatory Info | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Invalid Mandatory Info".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Invalid Mandatory Info | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Invalid Mandatory Info".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|--|---|
| 3G-MSG type Non Existent | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Message type does not exist".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSG type Non Existent | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Message type does not exist".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-MSG type not compatible with protocol state | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Message type not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-MSG type not compatible with protocol state | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Message type not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|-------------------------|--|
| 3G-IE Non Existent | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "Information element not existent".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-IE Non Existent | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "Information element not existent".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Conditional IE Error | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "error in conditional informational element".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Conditional IE Error | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "error in conditional informational element".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • On decode failure of messages • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |

| Field | Description |
|---|--|
| 3G-Message not compatible with protocol state | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "message not compatible with protocol state".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When getting an Attach Request before getting Relocation-complete during SRNS • When getting periodic RAU in a direct transfer message • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Message not compatible with protocol state | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "message not compatible with protocol state".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per GPRS service</p> |
| 3G-Protocol Error | <p>Description: Total number of Combined Inter Service RAU rejects in 3G service with cause "protocol error".</p> <p>Triggers: Increments when operator policy is configured with this value as the reject cause for attaches/RAUs.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Protocol Error | <p>Description: Total number of Combined Inter Service RAU rejects in 2G service with cause "protocol error".</p> <p>Triggers:</p> <ul style="list-style-type: none"> • When the PLMN ID in BSSGP message does not match the configured PLMN at GPRS service • When operator policy is configured with this value as the reject cause for attaches/RAUs <p>Availability: per RA, per GPRS service</p> |
| 3G-Unknown cause | <p>Description: Total number of Combined Inter Service RAU Rejects in 3G service with cause "unknown error".</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Unknown cause | <p>Description: Total number of Combined Inter Service RAU Rejects in 2G service with cause "unknown error".</p> <p>Availability: per RA, per GPRS service</p> |
| Routing Area Update Failure | This group displays the statistics of total RAU failures on SGSN. |

| Field | Description |
|----------------------------|--|
| Total-RAU-Failure | This subgroup indicates all type of Routing Area Update message failures including 2G and 3G occurred on SGSN. |
| Total-Intra-RAU-Failure | Total all type of intra-routing area RAU failures including 2G and 3G occurred on SGSN. |
| Total-Ra-Up-Intra-RAU-Fail | Total intra-routing area RAU failures including 2G and 3G occurred on SGSN. |
| 3G-Ra-Up-Intra-RAU-Failure | Total intra-routing area RAU failures occurred on SGSN for 3G service. |
| 2G-Ra-Up-Intra-RAU-Failure | Total intra-routing area RAU failures occurred on SGSN for 2G service. |
| Total-Periodic-RAU-Failure | Total periodic RAU failures including 2G and 3G occurred on SGSN. |
| 3G-Periodic-RAU-Failure | Total periodic RAU failures occurred on SGSN for 3G service. |
| 2G-Periodic-RAU-Failure | Total periodic RAU failures occurred on SGSN for 2G service. |
| Total-Comb-Intra-RAU-Fail | Total combined (PS and CS) RAU failures including 2G and 3G occurred on SGSN. |
| 3G-Comb-Intra-RAU-Failure | Total combined (PS and CS) RAU failures occurred on SGSN for 3G service. |
| 2G-Comb-Intra-RAU-Failure | Total combined (PS and CS) RAU failures occurred on SGSN for 2G service. |
| Total-Inter-SGSN-RAU-Fail | Total all type of inter-SGSN RAU failures including 2G and 3G occurred on SGSN. |
| Total-PS-Inter-RAU-Failure | Total inter-SGSN RAU failures including 2G and 3G occurred on SGSN for PS-only service. |
| 3G-PS-Inter-RAU-Failure | Total inter-SGSN RAU failures for 3G occurred on SGSN for PS-only service. |
| 2G-PS-Inter-RAU-Failure | Total inter-SGSN RAU failures for 2G occurred on SGSN for PS-only service. |
| Total-Comb-Inter-RAU-Fail | Total inter-SGSN RAU failures including 2G and 3G occurred on SGSN for combined (PS and CS) service. |
| 3G-Comb-Inter-RAU-Failure | Total inter-SGSN RAU failures for 3G occurred on SGSN for combined (PS and CS) service. |
| 2G-Comb-Inter-RAU-Failure | Total inter-SGSN RAU failures for 2G occurred on SGSN for combined (PS and CS) service. |

| Field | Description |
|---|---|
| Total-Ps-Inter-Rat-RAU-Fail | Total PS-only inter-RAT RAU failures including 2G and 3G services occurred on SGSN. |
| 3G-Ps-Inter-Rat-RAU-Fail | Total PS-only inter-RAT RAU failures for 3G service occurred on SGSN. |
| 2G-Ps-Inter-Rat-Fail | Total PS-only inter-RAT RAU failures for 2G service occurred on SGSN. |
| Total-Comb-Inter-Rat-RAU-Fai | Total combined (PS and CS) inter-RAT RAU failures including 2G and 3G services occurred on SGSN. |
| 3G-Comb-Inter-Rat-RAU-Fail | Total combined (PS and CS) inter-RAT RAU failures for 3G service occurred on SGSN. |
| 2G-Comb-Inter-Rat-Fail | Total combined (PS and CS) inter-RAT RAU failures for 2G service occurred on SGSN. |
| Total-Ps-Inter-Serv-RAU-Fail | Total PS-only inter-service RAU failures including 2G and 3G services occurred on SGSN. |
| 3G-Ps-Inter-Serv-RAU-Fail | Total PS-only inter-service RAU failures for 3G service occurred on SGSN. |
| 2G-Ps-Inter-Serv-RAU-Fail | Total PS-only inter-service RAU failures for 2G service occurred on SGSN. |
| Total-Comb-Inter-Ser-RAU-Fai | Total combined (PS and CS) inter-service RAU failures including 2G and 3G services occurred on SGSN. |
| 3G-Comb-Inter-Ser-RAU-Fai | Total combined (PS and CS) inter-service RAU failures for 3G service occurred on SGSN. |
| 2G-Comb-Inter-Ser-RAU-Fai | Total combined (PS and CS) inter-service RAU failures for 2G service occurred on SGSN. |
| Intra Ra-Upd Routing Area Update Failure Causes | This group displays the failure causes for intra-routing area RAU request failures on SGSN. |
| 3G-Iu release before RAU over | Total number of intra-routing area RAU request failures occurred due to 3G Iu released before RAU procedure was over. |
| 3G-Failure due to Other Ongoing Procedure | Total number of intra-routing area RAU request failures occurred as another procedure was ongoing in 3G service. |
| 2G-Failure due to Other Ongoing Procedure | Total number of intra-routing area RAU request failures occurred as another procedure was ongoing in 2G service. |
| Intra Periodic Routing Area Update Failure Causes | This group displays the failure causes for periodic area RAU request failures on SGSN. |
| 3G-Iu release before RAU over | Total number of periodic RAU request failures occurred due to 3G Iu released before RAU procedure was over. |

| Field | Description |
|---|--|
| 3G-Failure due to Other Ongoing Procedure | Total number of periodic RAU request failures occurred as another procedure was ongoing in 3G service. |
| 2G-Failure due to Other Ongoing Procedure | Total number of periodic RAU request failures occurred as another procedure was ongoing in 2G service. |
| Intra Combo. Routing Area Update Failure Causes | This group displays the failure causes for combined (PS and CS) RAU request failures on SGSN. |
| 3G-Iu release before RAU over | Total number of combined (PS and CS) RAU request failures occurred due to 3G Iu released before RAU procedure was over. |
| 3G-Failure due to Other Ongoing Procedure | Total number of combined (PS and CS) RAU request failures occurred as another procedure was ongoing in 3G service. |
| 2G-Failure due to Other Ongoing Procedure | Total number of combined (PS and CS) RAU request failures occurred as another procedure was ongoing in 2G service. |
| Inter SGSN PS Only Routing Area Update Failure Causes | This group displays the failure causes for PS-only RAU request failures on SGSN. |
| 3G-Iu release before RAU over | Total number of PS-only RAU request failures occurred due to 3G Iu released before RAU procedure was over. |
| 3G-Failure due to Other Ongoing Procedure | Total number of PS-only RAU request failures occurred as another procedure was ongoing in 3G service. |
| 2G-Failure due to Other Ongoing Procedure | Total number of PS-only RAU request failures occurred as another procedure was ongoing in 2G service. |
| Inter SGSN Comb. Routing Area Update Failure Causes | This group displays the failure causes for inter-SGSN combined (PS and CS) RAU request failures on SGSN. |
| 3G-Iu release before RAU over | Total number of inter-SGSN combined (PS and CS) RAU request failures occurred due to 3G Iu released before RAU procedure was over. |
| 3G-Failure due to Other Ongoing Procedure | Total number of inter-SGSN combined (PS and CS) RAU request failures occurred as another procedure was ongoing in 3G service. |
| 2G-Failure due to Other Ongoing Procedure | Total number of inter-SGSN combined (PS and CS) RAU request failures occurred as another procedure was ongoing in 2G service. |
| Detach Request | Indicates the statistics of detach request messages. |
| Total-Detach-Req | Total number of detach request messages. |
| Total-MS-Init-Detach-Req | Total number of MS initiated detach request. |
| 3G-MS-Init-GPRS-Detach-Req | Total number of MS initiated GPRS (PS) detach request for 3G service. |
| 2G-MS-Init-GPRS-Detach-Req | Total number of MS initiated GPRS detach request for 2G service. |

| Field | Description |
|-----------------------------|--|
| 3G-MS-Init-IMSI-Detach-Req | Total number of MS initiated IMSI (CS) detach request for 3G service. |
| 2G-MS-Init-IMSI-Detach-Req | Total number of MS initiated IMSI detach request for 2G service. |
| 3G-MS-Init-Comb-Detach-Req | Total number of MS initiated combined (IMSI and GPRS) detach request for 3G service. |
| 2G-MS-Init-Comb-Detach-Req | Total number of MS initiated combined (PS and CS) detach request for 2G service. |
| Total-Nw-Init-Detach-Req | Total number of network initiated detach request. |
| 3G-Nw-Init-Reattach-Req | <p>Description: During the network initiated detach for 3G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - "Reattach required" when it wants the MS to attach again for GPRS services.</p> <p>Triggers: Increments when a clear subscriber is performed.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Nw-Init-Reattach-Req | <p>Description: During the network initiated detach for 2G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - "Reattach required" when it wants the MS to attach again for GPRS services.</p> <p>Triggers: Increments when a clear subscriber is performed.</p> <p>Availability: per RA, per RNC, per GPRS service</p> |
| 3G-Nw-Init-Reattach-Not-Req | <p>Description: During the network initiated detach for 3G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - "Reattach not required" when it does not expect the MS to attach again for GPRS services.</p> <p>Triggers: Increments upon reception of a Cancel-Location (subscription-withdrawn) or a DSD (all-gprs-subscription withdrawn).</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Nw-Init-Reattach-Not-Req | <p>Description: During the network initiated detach for 2G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - "Reattach not required" when it does not expect the MS to attach again for GPRS services.</p> <p>Triggers: Increments upon reception of a Cancel-Location (subscription-withdrawn) or a DSD (all-gprs-subscription withdrawn).</p> <p>Availability: per RA, per RNC, per GPRS service</p> |

| Field | Description |
|-----------------------------|--|
| 3G-Nw-Init-IMSI-Detach | <p>Description: When the SGSN loses the GS-context for the MS due to a VLR-reset indication, it notifies the MS by sending an IMSI-detach on the next signalling activity by the MS.</p> <p>Triggers: Increments upon VLR-reset indication and a next uplink activity from MS.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Nw-Init-IMSI-Detach | <p>Description: When the SGSN loses the GS-context for the MS due to a VLR-reset indication, it notifies the MS by sending an IMSI-detach on the next signalling activity by the MS.</p> <p>Triggers: Increments upon VLR-reset indication and a next uplink activity from MS.</p> <p>Availability: per RA, per RNC, per GPRS service</p> |
| Retransmission | Indicates the statistics of detach request messages retransmitted. |
| Ret-Total-Detach-Req | Total number of detach request messages retransmitted. |
| Ret-Total-MS-Init-Det-Req | Total number of MS initiated detach request messages retransmitted. |
| Ret-3G-MS-Init-GPRS-Det-Re | Total number of MS initiated GPRS (PS) detach request messages retransmitted for 3G service. |
| Ret-3G-MS-Init-IMSI-Det-Re | Total number of MS initiated IMSI (CS) detach request messages retransmitted for 3G service. |
| Ret-3G-MS-Init-Comb-Det-Re | Total number of MS initiated combined (IMSI and GPRS) detach request messages retransmitted for 3G service. |
| Ret-2G-MS-Init-GPRS-Det-Re | Total number of MS initiated GPRS detach request messages retransmitted for 2G service. |
| Ret-2G-MS-Init-IMSI-Det-Re | Total number of MS initiated IMSI detach request messages retransmitted for 2G service. |
| Ret-2G-MS-Init-Comb-Det-Re | Total number of MS initiated combined (PS and CS) detach request messages retransmitted for 2G service. |
| Ret-Total-Nw-Init-Det-Req | Total number of network initiated detach request messages retransmitted. |
| Ret-3G-Nw-Init-Reattach-Req | <p>Description: During the network initiated detach for 3G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - "Reattach required" when it wants the MS to attach again for GPRS services.</p> <p>Triggers: Increments upon the 1st, 2nd, 3rd and 4th expiry of T3322 for a detach of type "Reattach Required".</p> <p>Availability: per RA, per RNC, per SGSN service</p> |

| Field | Description |
|----------------------------|--|
| Ret-2G-Nw-Init-Reatch-Req | <p>Description: During the network initiated detach for 2G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - "Reattach required" when it wants the MS to attach again for GPRS services.</p> <p>Triggers: Increments upon the 1st, 2nd, 3rd and 4th expiry of T3322 for a detach of type "Reattach Required".</p> <p>Availability: per RA, per RNC, per GPRS service</p> |
| Ret-3G-Nw-Init-Reatch-Not | <p>Description: During the network initiated detach for 3G service, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - "Reattach not required" when it does not expect the MS to attach again for GPRS services.</p> <p>Triggers: Increments upon the 1st, 2nd, 3rd and 4th expiry of T3322 for a detach of type "Reattach Not Required".</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| Ret-2G-Nw-Init-Reatch-Not | <p>Description: During the network initiated detach, the SGSN informs the MS that it has been detached by sending a detach request. The Detach Request has a detach type - "Reattach not required" when it does not expect the MS to attach again for GPRS services.</p> <p>Triggers: Increments upon the 1st, 2nd, 3rd and 4th expiry of T3322 for a detach of type "Reattach Not Required".</p> <p>Availability: per RA, per RNC, per GPRS service</p> |
| Ret-3G-Nw-Init-IMSI-Detach | <p>Description: When the SGSN loses the GS-context for the MS due to a VLR-reset indication, it notifies the MS by sending an IMSI-detach on the next signalling activity by the MS in a 3G service.</p> <p>Triggers: Increments upon the 1st, 2nd, 3rd and 4th expiry of T3322 for a detach of type "IMSI Detach".</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| Ret-2G-Nw-Init-IMSI-Detach | <p>Description: When the SGSN loses the GS-context for the MS due to a VLR-reset indication, it notifies the MS by sending an IMSI-detach on the next signalling activity by the MS in a 2G service.</p> <p>Triggers: Increments upon the 1st, 2nd, 3rd and 4th expiry of T3322 for a detach of type "IMSI Detach".</p> <p>Availability: per RA, per RNC, per GPRS service</p> |
| Detach Accept | Indicates the statistics of detach request accept messages. |
| Total-Detach-Acc | Total number of detach request accept messages. |

| Field | Description |
|----------------------------|--|
| Total-MS-Init-Detach-Acc | Total number of MS initiated detach request accepted. |
| 3G-MS-Init-Detach-Acc | Total number of MS initiated GPRS detach request accepted for 3G service. |
| 2G-MS-Init-Detach-Acc | Total number of MS initiated IMSI detach request accepted for 2G service. |
| Total-Nw-Init-Detach-Acc | Total number of network initiated detach request accepted. |
| 3G-Nw-Init-Detach-Acc | Total number of network initiated detach request for 3G service. |
| 2G-Nw-Init-Detach-Acc | Total number of network initiated detach request for 2G service. |
| 3G-Nw-Init-GPRS-Detach-Acc | Total number of network initiated GPRS (PS) detach request accepted for 3G service. |
| 2G-Nw-Init-GPRS-Detach-Acc | Total number of network initiated GPRS (PS) detach request accepted for 2G service. |
| 3G-Nw-Init-IMSI-Detach-Acc | Total number of network initiated IMSI (CS) detach request accepted for 3G service. |
| 2G-Nw-Init-IMSI-Detach-Acc | Total number of network initiated IMSI (CS) detach request accepted for 2G service. |
| 3G-Nw-Init-Comb-Detach-Acc | Total number of network initiated combined (PS and CS) detach request accepted for 3G service. |
| 2G-Nw-Init-Comb-Detach-Acc | Total number of network initiated combined (PS and CS) detach request accepted for 2G service. |
| Service Request | Indicates the statistics of service request messages. |
| Total-Serv-Req | Indicates the statistics of total service request messages. |
| Total-Signalling-Serv-Req | Total signalling service requests messages. |
| 3G-Signalling-Serv-Req | Total signalling service requests messages for 3G service. |
| 2G-Signalling-Serv-Req | Total signalling service requests messages for 2G service. |
| Total-Page-Rsp-Serv-Req | Total paging response for service requests messages. |
| 3G-Page-Rsp-Serv-Req | Total paging response for service requests messages for 3G service. |
| 2G-Page-Rsp-Serv-Req | Total paging response for service requests messages for 2G service. |
| Total-Data-Serv-Req | Total data service requests messages. |
| 3G-Data-Serv-Req | Total data service requests messages for 3G service. |

| Field | Description |
|----------------------------|--|
| 2G-Data-Serv-Req | Total data service requests messages for 2G service. |
| Retransmission | Indicates the statistics of service request messages retransmitted. |
| Ret-Total-Serv-Req | Indicates the statistics of total service request messages retransmitted. |
| Ret-Total-Sig-Serv-Req | Total signalling service requests messages retransmitted. |
| Ret-3G-Sig-Serv-Req | Total signalling service requests messages retransmitted for 3G service. |
| Ret-2G-Signalling-Serv-Req | Total signalling service requests messages retransmitted for 2G service. |
| Ret-Total-PageRsp-Serv-Req | Total paging response for service requests messages retransmitted. |
| Ret-3G-PageRsp-Serv-Req | Total paging response for service requests messages retransmitted for 3G service. |
| Ret-2G-Page-Rsp-Serv-Req | Total paging response for service requests messages retransmitted for 2G service. |
| Ret-Total-Data-Serv-Req | Total data service requests messages retransmitted. |
| Ret-3G-Data-Serv-Req | Total data service requests messages retransmitted for 3G service. |
| Ret-2G-Data-Serv-Req | Total data service requests messages retransmitted for 2G service. |
| Service Accept | Indicates the statistics of service request messages. |
| Total-Serv-Resp | Total service response messages. |
| 3G-Service-Resp | Total service response messages for 3G service. |
| 2G-Service-Resp | Total service response messages for 2G service. |
| Service Reject | Total paging response for service requests messages. |
| Total-Serv-Rej | Total service reject messages. |
| 3G-Service-Rej | Total service reject messages for 3G service. |
| 2G-Service-Rej | Total service reject messages for 2G service. |
| Service Reject Causes | Indicates the statistics of causes for service request reject for 2G and 3G service. |
| 3G-Network Failure | Total number of service request rejected for 3G service due to network failure. |
| 2G-Network Failure | Total number of service request rejected for 2G service due to network failure. |

| Field | Description |
|---|--|
| 3G-IMSI Unknown in HLR | Total number of service request rejected for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of service request rejected for 2G service due to unknown IMSI in HLR. |
| 3G-MsId can not derived by Nw | Total number of service request rejected for 3G service as MSID can not derived by network from message. |
| 2G-MsId can not derived by Nw | Total number of service request rejected for 3G service as MSID can not derived by network from message. |
| 3G-Implicitly detached | Total number of service request rejected for 3G service due to implicitly detach. |
| 2G-Implicitly detached | Total number of service request rejected for 2G service due to implicitly detach. |
| 3G-Illegal MS | Total number of service request rejected for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of service request rejected for 2G service due to illegal mobile subscriber. |
| 3G-Message not compatible with protocol state | Total number of service request rejected for 3G service as message is not compatible with protocol state. |
| 2G-Message not compatible with protocol state | Total number of service request rejected for 2G service as message is not compatible with protocol state. |
| 3G-No PDP contexts activated | Total number of service request rejected for 3G service as no PDP context is activated. |
| 2G-No PDP contexts activated | Total number of service request rejected for 2G service as no PDP context is activated. |
| 3G-Semantically Wrong Msg | Total number of service request rejected for 3G service as request message is semantically wrong. |
| 2G-Semantically Wrong Msg | Total number of service request rejected for 2G service as request message is semantically wrong. |
| 3G-Unknown cause | Total number of service request rejected for 3G service due to unknown cause or reason not specified here. |
| 2G-Unknown cause | Total number of service request rejected for 3G service due to unknown cause or reason not specified here. |
| Paging Initiated | Indicates the statistics of paging initiated procedure. |
| Total-Page-Requests | Total paging request messages. |

| Field | Description |
|-------------------------|---|
| 3G-PS-Page-Requests | Total paging request messages in packet switching (PS) domain for 3G service. |
| 3G-CS-Page-Requests | Total paging request messages in circuit switching (CS) domain for 3G service. |
| 2G-PS-Page-Requests | Total paging request messages in packet switching (PS) domain for 2G service. |
| 2G-CS-Page-Requests | Total paging request messages in circuit switching (CS) domain for 2G service. |
| Total-Page-Responses | Total paging request response messages. |
| 3G-PS-Page-Responses | Total paging request response messages in packet switching (PS) domain for 3G service. |
| 3G-CS-Page-Responses | Total paging request response messages in circuit switching (CS) domain for 3G service. |
| 2G-PS-Page-Responses | Total paging request response messages in packet switching (PS) domain for 2G service. |
| 2G-CS-Page-Responses | Total paging request response messages in circuit switching (CS) domain for 2G service. |
| Retransmission | Indicates the statistics of paging initiated procedure retransmitted. |
| Ret-Total-Page-Requests | Total paging request messages. |
| Ret-3G-Page-Requests | Total paging request messages retransmitted in for 3G service. |
| Ret-2G-Page-Requests | Total paging request messages retransmitted in for 2G service. |
| Gmm Status Message | Indicates the statistics of GPRS mobility management procedure status messages. |
| Total-Gmm-Status-Sent | Total GPRS mobility management procedure status messages sent. |
| 3G-Gmm-Status-Sent | Total GPRS mobility management procedure status messages sent for 3G service. |
| 2G-Gmm-Status-Sent | Total GPRS mobility management procedure status messages sent for 2G service. |
| Total-Gmm-Status-Rcvd | Total GPRS mobility management procedure status messages received. |
| 3G-Gmm-Status-Rcvd | Total GPRS mobility management procedure status messages received for 3G service. |

| Field | Description |
|---|--|
| 2G-Gmm-Status-Rcvd | Total GPRS mobility management procedure status messages received for 2G service. |
| GMM Status Sent Causes | Indicates the statistics of causes for GPRS mobility management status messages sent for 2G and 3G service. |
| 3G-IMSI Unknown in HLR | Total number of GMM status messages sent for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of GMM status messages sent for 2G service due to unknown IMSI in HLR. |
| 3G-Illegal MS | Total number of GMM status messages sent for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of GMM status messages sent for 2G service due to illegal mobile subscriber. |
| 3G-Illegal ME | Total number of GMM status messages sent for 3G service due to illegal mobile equipment. |
| 2G-Illegal ME | Total number of GMM status messages sent for 2G service due to illegal mobile equipment. |
| 3G-GPRS service not allowed | Total number of GMM status messages sent for 3G service due to GPRS service not allowed for subscriber. |
| 2G-GPRS service not allowed | Total number of GMM status messages sent for 2G service due to GPRS service not allowed for subscriber. |
| 3G-GPRS & Non-GPRS services not allowed | Total number of GMM status messages sent for 3G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 2G-GPRS & Non-GPRS services not allowed | Total number of GMM status messages sent for 2G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 3G-MsId not derived by Nw | Total number of GMM status messages sent for 3G service due to network failed to derive MSID from attach message. |
| 2G-MsId not derived by Nw | Total number of GMM status messages sent for 2G service due to network failed to derive MSID from attach message. |
| 3G-Implicitly detached | Total number of GMM status messages sent for 3G service due to implicitly detach. |
| 2G-Implicitly detached | Total number of GMM status messages sent for 2G service due to implicitly detach. |
| 3G-PLMN not allowed | Total number of GMM status messages sent for 3G service due to specific PLMN not allowed. |
| 2G-PLMN not allowed | Total number of GMM status messages sent for 2G service due to specific PLMN not allowed. |

| Field | Description |
|--|---|
| 3G-Location Area not allowed | Total number of GMM status messages sent for 3G service due to specific location area not allowed. |
| 2G-Location Area not allowed | Total number of GMM status messages sent for 2G service due to specific location area not allowed. |
| 3G-Roaming not allowed in this Location Area | Total number of GMM status messages sent for 3G service due to roaming not allowed in specific location area. |
| 2G-Roaming not allowed in this Location Area | Total number of GMM status messages sent for 2G service due to roaming not allowed in specific location area. |
| 3G-GPRS service not allowed in this PLMN | Total number of GMM status messages sent for 3G service due to GPRS service not allowed in specific PLMN. |
| 2G-GPRS service not allowed in this PLMN | Total number of GMM status messages sent for 2G service due to GPRS service not allowed in specific PLMN. |
| 3G-No suitable cells in this Location Area | Total number of GMM status messages sent for 3G service due to non availability of suitable cell in specific location area. |
| 2G-No suitable cells in this Location Area | Total number of GMM status messages sent for 2G service due to non availability of suitable cell in specific location area. |
| 3G-MSC not reachable | Total number of GMM status messages sent for 3G service as MSC not reachable. |
| 2G-MSC not reachable | Total number of GMM status messages sent for 2G service as MSC not reachable. |
| 3G-Network Failure | Total number of GMM status messages sent for 3G service due to network failure. |
| 2G-Network Failure | Total number of GMM status messages sent for 2G service due to network failure. |
| 3G-MAC Failure | Total number of GMM status messages sent for 3G service due to message authenticate code (MAC) failure. |
| 2G-MAC Failure | Total number of GMM status messages sent for 2G service due to MAC failure. |
| 3G-SYNC Failure | Total number of GMM status messages sent for 3G service due to context synchronization failure. |
| 2G-SYNC Failure | Total number of GMM status messages sent for 2G service due to context synchronization failure. |
| 3G-Congestion | Total number of GMM status messages sent for 3G service due to network congestion. |
| 2G-Congestion | Total number of GMM status messages sent for 2G service due to network congestion. |

| Field | Description |
|--|--|
| 3G-GSM Auth Unacceptable | Total number of GMM status messages sent for 3G service due to unacceptable authentication from GSM network. |
| 2G-GSM Auth Unacceptable | Total number of GMM status messages sent for 2G service due to unacceptable authentication from GSM network. |
| 3G-No PDP contexts activated | Total number of GMM status messages sent for 3G service as PDP context is not activated. |
| 2G-No PDP contexts activated | Total number of GMM status messages sent for 2G service as PDP context is not activated. |
| 3G-Semantically Wrong Msg | Total number of GMM status messages sent for 3G service as attach request message is semantically wrong. |
| 2G-Semantically Wrg Msg | Total number of GMM status messages sent for 2G service as attach request message is semantically wrong. |
| 3G-Invalid Mandatory Info | Total number of GMM status messages sent for 3G service as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of GMM status messages sent for 2G service as mandatory information in message is invalid. |
| 3G-MSG type Non Existent | Total number of GMM status messages sent for 3G service due to non-existent type of message. |
| 2G-MSG type Non Existent | Total number of GMM status messages sent for 2G service due to non-existent type of message. |
| 3G-MSG type not compatible with protocol state | Total number of GMM status messages sent for 3G service as message type is not compatible with protocol state. |
| 2G-MSG type not compatible with protocol state | Total number of GMM status messages sent for 2G service as message type is not compatible with protocol state. |
| 3G-Conditional IE Error | Total number of GMM status messages sent for 3G service due to error in conditional information element. |
| 2G-conditional IE Error | Total number of GMM status messages sent for 2G service due to error in conditional information element. |
| 3G-Message not compatible with protocol state | Total number of GMM status messages sent for 3G service as message is not compatible with protocol state. |
| 2G-Message not compatible with protocol state | Total number of GMM status messages sent for 2G service as message is not compatible with protocol state. |
| 3G-protocol Error | Total number of GMM status messages sent for 3G service due to protocol error in message. |
| 2G-protocol Error | Total number of GMM status messages sent for 2G service due to protocol error in message. |

| Field | Description |
|---|--|
| GMM Status Rcvd Causes | Indicates the statistics of causes for GPRS mobility management status messages received for 2G and 3G service. |
| 3G-IMSI Unknown in HLR | Total number of GMM status messages received for 3G service due to unknown IMSI in HLR. |
| 2G-IMSI Unknown in HLR | Total number of GMM status messages received for 2G service due to unknown IMSI in HLR. |
| 3G-Illegal MS | Total number of GMM status messages received for 3G service due to illegal mobile subscriber. |
| 2G-Illegal MS | Total number of GMM status messages received for 2G service due to illegal mobile subscriber. |
| 3G-Illegal ME | Total number of GMM status messages received for 3G service due to illegal mobile equipment. |
| 2G-Illegal ME | Total number of GMM status messages received for 2G service due to illegal mobile equipment. |
| 3G-GPRS service not allowed | Total number of GMM status messages received for 3G service due to GPRS service not allowed for subscriber. |
| 2G-GPRS service not allowed | Total number of GMM status messages received for 2G service due to GPRS service not allowed for subscriber. |
| 3G-GPRS & Non-GPRS services not allowed | Total number of GMM status messages received for 3G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 2G-GPRS & Non-GPRS services not allowed | Total number of GMM status messages received for 2G service due to GPRS and non-GPRS service not allowed for subscriber. |
| 3G-MSId not derived by Nw | Total number of GMM status messages received for 3G service due to network failed to derive MSID from attach message. |
| 2G-MSId not derived by Nw | Total number of GMM status messages received for 2G service due to network failed to derive MSID from attach message. |
| 3G-Implicitly detached | Total number of GMM status messages received for 3G service due to implicitly detach. |
| 2G-Implicitly detached | Total number of GMM status messages received for 2G service due to implicitly detach. |
| 3G-PLMN not allowed | Total number of GMM status messages received for 3G service due to specific PLMN not allowed. |
| 2G-PLMN not allowed | Total number of GMM status messages received for 2G service due to specific PLMN not allowed. |
| 3G-Location Area not allowed | Total number of GMM status messages received for 3G service due to specific location area not allowed. |

| Field | Description |
|--|---|
| 2G-Location Area not allowed | Total number of GMM status messages received for 2G service due to specific location area not allowed. |
| 3G-Roaming not allowed in this Location Area | Total number of GMM status messages received for 3G service due to roaming not allowed in specific location area. |
| 2G-Roaming not allowed in this Location Area | Total number of GMM status messages received for 2G service due to roaming not allowed in specific location area. |
| 3G-GPRS service not allowed in this PLMN | Total number of GMM status messages received for 3G service due to GPRS service not allowed in specific PLMN. |
| 2G-GPRS service not allowed in this PLMN | Total number of GMM status messages received for 2G service due to GPRS service not allowed in specific PLMN. |
| 3G-No suitable cells in this Location Area | Total number of GMM status messages received for 3G service due to non availability of suitable cell in specific location area. |
| 2G-No suitable cells in this Location Area | Total number of GMM status messages received for 2G service due to non availability of suitable cell in specific location area. |
| 3G-MS-C not reachable | Total number of GMM status messages received for 3G service as MS-C not reachable. |
| 2G-MS-C not reachable | Total number of GMM status messages received for 2G service as MS-C not reachable. |
| 3G-Network Failure | Total number of GMM status messages received for 3G service due to network failure. |
| 2G-Network Failure | Total number of GMM status messages received for 2G service due to network failure. |
| 3G-MAC Failure | Total number of GMM status messages received for 3G service due to message authenticate code (MAC) failure. |
| 2G-MAC Failure | Total number of GMM status messages received for 2G service due to MAC failure. |
| 3G-SYNC Failure | Total number of GMM status messages received for 3G service due to context synchronization failure. |
| 2G-SYNC Failure | Total number of GMM status messages received for 2G service due to context synchronization failure. |
| 3G-Congestion | Total number of GMM status messages received for 3G service due to network congestion. |
| 2G-Congestion | Total number of GMM status messages received for 2G service due to network congestion. |
| 3G-GSM Auth Unacceptable | Total number of GMM status messages received for 3G service due to unacceptable authentication from GSM network. |

| Field | Description |
|--|--|
| 2G-GSM Auth Unacceptable | Total number of GMM status messages received for 2G service due to unacceptable authentication from GSM network. |
| 3G-No PDP contexts activated | Total number of GMM status messages received for 3G service as PDP context is not activated. |
| 2G-No PDP contexts activated | Total number of GMM status messages received for 2G service as PDP context is not activated. |
| 3G-Semantically Wrong Msg | Total number of GMM status messages received for 3G service as attach request message is semantically wrong. |
| 2G-Semantically Wrong Msg | Total number of GMM status messages received for 2G service as attach request message is semantically wrong. |
| 3G-Invalid Mandatory Info | Total number of GMM status messages received for 3G service as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of GMM status messages received for 2G service as mandatory information in message is invalid. |
| 3G-MSG type Non Existent | Total number of GMM status messages received for 3G service due to non-existent type of message. |
| 2G-MSG type Non Existent | Total number of GMM status messages received for 2G service due to non-existent type of message. |
| 3G-MSG type not compatible with protocol state | Total number of GMM status messages received for 3G service as message type is not compatible with protocol state. |
| 2G-MSG type not compatible with protocol state | Total number of GMM status messages received for 2G service as message type is not compatible with protocol state. |
| 3G-Conditional IE Error | Total number of GMM status messages received for 3G service due to error in conditional information element. |
| 2G-conditional IE Error | Total number of GMM status messages received for 2G service due to error in conditional information element. |
| 3G-Message not compatible with protocol state | Total number of GMM status messages received for 3G service as message is not compatible with protocol state. |
| 2G-Message not compatible with protocol state | Total number of GMM status messages received for 2G service as message is not compatible with protocol state. |
| 3G-protocol Error | Total number of GMM status messages received for 3G service due to protocol error in message. |
| 2G-protocol Error | Total number of GMM status messages received for 2G service due to protocol error in message. |
| Gmm Information Sent | Indicates the statistics of messages sent with GPRS mobility management information. |

| Field | Description |
|----------------------------|---|
| Total-Gmm-Information-Sent | Total messages sent with GPRS mobility management information. |
| 3G-Gmm-Information-Sent | Total messages sent with GPRS mobility management information for 3G service. |
| 2G-Gmm-Information-Sent | Total messages sent with GPRS mobility management information for 2G service. |
| Inter-System Procedures | This group displays the statistics of inter-system procedures. |
| 3G-Ra-Up-RAU | Total numbers of RAU messages (Accept+Reject) sent for 3G routing area update procedure. |
| 2G-Ra-Up-RAU | Total numbers of RAU messages (Accept+Reject) sent for 2G routing area update procedure. |
| 3G-Comb-RAU | Total numbers of combined (PS and CS) RAU messages (Accept+Reject) sent for 3G routing area update procedure. |
| 2G-Comb-RAU | Total numbers of combined (PS and CS) RAU messages (Accept+Reject) sent for 2G routing area update procedure. |
| 3G-Ra-Up-RAU-Rej | Total numbers of RAU Reject messages sent for 3G routing area update procedure. |
| 2G-Ra-Up-RAU-Rej | Total numbers of RAU Reject messages sent for 2G routing area update procedure. |
| 3G-Comb-RAU-Rej | Total numbers of combined (PS and CS) RAU Reject messages sent for 3G routing area update procedure. |
| 2G-Comb-RAU-Rej | Total numbers of combined (PS and CS) RAU Reject messages sent for 2G routing area update procedure. |
| 3G-Ra-Up-RAU-Acc | Total numbers of RAU Accept messages sent for 3G routing area update procedure. |
| 2G-Ra-Up-RAU-Acc | Total numbers of RAU Accept messages sent for 2G routing area update procedure. |
| 3G-Comb-RAU-Acc | Total numbers of combined (PS and CS) RAU Accept messages sent for 3G routing area update procedure. |
| 2G-Comb-RAU-Acc | Total numbers of combined (PS and CS) RAU Accept messages sent for 2G routing area update procedure. |
| 3G-Attach | Total numbers of Attach messages (Accept+Reject) sent for 3G subscriber attach procedure. |
| 2G-Attach | Total numbers of Attach messages (Accept+Reject) sent for 2G subscriber attach procedure. |

| Field | Description |
|--------------------------------------|--|
| 3G-Comb-Attach | Total numbers of combined (PS and CS) Attach messages (Accept+Reject) sent for 3G subscriber attach procedure. |
| 2G-Comb-Attach | Total numbers of combined (PS and CS) Attach messages (Accept+Reject) sent for 3G subscriber attach procedure. |
| 3G-Attach-Rej | Total numbers of Attach Reject messages sent for 3G subscriber attach procedure. |
| 2G-Attach-Rej | Total numbers of Attach Reject messages sent for 2G subscriber attach procedure. |
| 3G-Comb-Attach-Rej | Total numbers of combined (PS and CS) Attach Reject messages sent for 3G subscriber attach procedure. |
| 2G-Comb-Attach-Rej | Total numbers of combined (PS and CS) Attach Reject messages sent for 2G subscriber attach procedure. |
| 3G-Attach-Acc | Total numbers of Attach Accept messages sent for 3G subscriber attach procedure. |
| 2G-Attach-Acc | Total numbers of Attach Accept messages sent for 2G subscriber attach procedure. |
| 3G-Comb-Attach-Acc | Total numbers of combined (PS and CS) Attach Accept messages sent for 3G subscriber attach procedure. |
| 2G-Comb-Attach-Acc | Total numbers of combined (PS and CS) Attach Accept messages sent for 2G subscriber attach procedure. |
| Common Procedures | Indicates the statistics of common procedures in GPRS mobility management procedure. |
| Authentication And Ciphering Request | Indicates the statistics of authentication and ciphering request messages. |
| Total-Auth-Cipher-Req | Total authentication and ciphering request messages. |
| 3G-Auth-Cipher-Req | Total authentication and ciphering request messages for 3G service. |
| 2G-Auth-Cipher-Req | Total authentication and ciphering request messages for 2G service. |
| Retransmission | Indicates the statistics of authentication and ciphering request messages retransmitted. |
| Ret-Total-Auth-Cipher-Req | Total authentication and ciphering request messages retransmitted. |
| Ret-3G-Auth-Cipher-Req | Total authentication and ciphering request messages retransmitted for 3G service. |

| Field | Description |
|--|--|
| Ret-2G-Auth-Cipher-Req | Total authentication and ciphering request messages retransmitted for 2G service. |
| Authentication And Ciphering Response | Indicates the statistics of authentication and ciphering request response messages. |
| Total-Auth-Cipher-Resp | Total authentication and ciphering request response messages. |
| 3G-Auth-Cipher-Resp | Total authentication and ciphering request response messages for 3G service. |
| 2G-Auth-Cipher-Resp | Total authentication and ciphering request response messages for 2G service. |
| Authentication And Ciphering Response With SRES Mismatch | Indicates the statistics of authentication and ciphering request response messages having Signed RESponse (SRES) mismatch. |
| Total-Auth-Cipher-Resp with Sres Mismatch | Total authentication and ciphering request response messages having Signed RESponse (SRES) mismatch. |
| 3G-Auth-Cipher-Resp with Sres Mismatch | Total authentication and ciphering request response messages having Signed RESponse (SRES) mismatch for 3G service. |
| 2G-Auth-Cipher-Resp with Sres Mismatch | Total authentication and ciphering request response messages having Signed RESponse (SRES) mismatch for 2G service. |
| Authentication And Ciphering Reject | Indicates the statistics of authentication and ciphering request reject messages. |
| Total-Auth-Cipher-Rej | Total authentication and ciphering request reject messages. |
| 3G-Auth-Cipher-Rej | Total authentication and ciphering request reject messages for 3G service. |
| 2G-Auth-Cipher-Rej | Total authentication and ciphering request reject messages for 2G service. |
| Authentication And Ciphering Reject Reasons | Indicates the statistics of reasons for authentication and ciphering request rejects. |
| 3G-XRes Mismatch | Total authentication and ciphering requests rejected for 3G service due to mismatch in expected authentication response (XRES) from subscriber. |
| 2G-XRes Mismatch | Total authentication and ciphering requests rejected for 2G service due to mismatch in expected authentication response (XRES) from subscriber |
| 3G-SYNC does not have AUTS | Total authentication and ciphering requests rejected for 3G service where synchronization is missing Authentication Token for Re-synchronization (AUTS). |

| Field | Description |
|--------------------------------------|--|
| 2G-SYNC does not have AUTS | Total authentication and ciphering requests rejected for 2G service where synchronization is missing Authentication Token for Re-synchronization (AUTS). |
| 3G-Too many SYNC Failures | Total authentication and ciphering requests rejected for 3G service due to synchronization failure beyond allowed number of time. |
| 2G-Too many SYNC Failures | Total authentication and ciphering requests rejected for 3G service due to synchronization failure beyond allowed number of time. |
| 3G-Too many MAC Failures | Total authentication and ciphering requests rejected for 3G service due to message authentication code failure beyond allowed number of time. |
| 2G-Too many MAC Failures | Total authentication and ciphering requests rejected for 2G service due to message authentication code failure beyond allowed number of time. |
| 3G-Gsm Auth Unacc | Total GSM authentication and ciphering requests rejected for 3G service due to unacceptable GSM network failure in procedure. |
| 2G-Gsm Auth Unacc | Total GSM authentication and ciphering requests rejected for 2G service due to unacceptable GSM network failure in procedure. |
| 3G-Other cause | Total authentication and ciphering requests rejected for 3G service due reasons not already listed as "Authentication and Ciphering Reject Reasons". |
| 2G-Other cause | Total authentication and ciphering requests rejected for 2G service due reasons not already listed as "Authentication and Ciphering Reject Reasons". |
| Authentication And Ciphering Failure | Indicates the statistics of authentication and ciphering request failures. |
| Total-Auth-Cipher-Failure | Total authentication and ciphering request failures. |
| 3G-Auth-Cipher-Mac-Failure | Total authentication and ciphering failures due to message authentication code (MAC) for 3G service. |
| 2G-Auth-Cipher-Mac-Failure | Total authentication and ciphering failures due to message authentication code (MAC) for 2G service. |
| 3G-Auth-Cipher-Sync-Failure | Total authentication and ciphering failures due to synchronisation for 3G service. |
| 2G-Auth-Cipher-Syn-Failure | Total authentication and ciphering failures due to synchronisation for 2G service. |
| 3G-Auth-Unacceptable | Total authentication and ciphering failures due to unacceptable delay for 3G service. |

| Field | Description |
|------------------------------|---|
| 2G-Auth-Unacceptable | Total authentication and ciphering failures due to unacceptable delay for 2G service. |
| P-TMSI Realloc | Indicates the statistics of Packet-Temporary Mobile Subscriber Identity (P-TMSI) reallocation procedure. |
| Total-PTMSI Realloc | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) reallocation procedure. |
| 3G-PTMSI Realloc | Total Packet-Temporary Mobile Subscriber Identity reallocation procedure for 3G service. |
| 2G-PTMSI Realloc | Total Packet-Temporary Mobile Subscriber Identity reallocation procedure for 2G service. |
| Retransmission | Indicates the statistics of Packet-Temporary Mobile Subscriber Identity (P-TMSI) reallocation messages retransmitted. |
| Ret-Total-PTMSI Realloc | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) reallocation procedure messages retransmitted. |
| Ret-3G-PTMSI Realloc | Total Packet-Temporary Mobile Subscriber Identity reallocation messages retransmitted for 3G service. |
| Ret-2G-PTMSI Realloc | Total Packet-Temporary Mobile Subscriber Identity reallocation procedure messages retransmitted for 2G service. |
| P-TMSI Realloc Complete | Statistics related to completed Packet-Temporary Mobile Subscriber Identity (P-TMSI) reallocation procedures. |
| Total-PTMSI Realloc Complete | Total (P-TMSI) reallocation procedures completed. |
| 3G-PTMSI Realloc Complete | Total (P-TMSI) reallocation procedures completed for 3G service. |
| 2G-PTMSI Realloc Complete | Total (P-TMSI) reallocation procedures completed for 2G service. |
| Identity Request | Identity request messages statistics. |
| Total-Identity-Req | Total identity request messages. |
| Total-IMSI-Identity-Req | Total International Mobile Subscriber Identity (IMSI) identity request messages |
| 3G-IMSI-Identity-Req | Total IMSI identity request messages for 3G service. |
| 2G-IMSI-Identity-Req | Total IMSI identity request messages for 2G service. |
| Total-IMEI-Identity-Req | Total International Mobile Equipment Identity (IMEI) request messages. |
| 3G-IMEI-Identity-Req | Total IMEI identity request messages for 3G service. |
| 2G-IMEI-Identity-Req | Total IMEI identity request messages for 2G service. |

| Field | Description |
|-----------------------------|---|
| Total-IMEISV-Identity-Req | Total International Mobile Equipment Identity-Software Version (IMEI-SV) identity request messages. |
| 3G-IMEISV-Identity-Req | Total IMEI-SV identity request messages for 3G service. |
| 2G-IMEISV-Identity-Req | Total IMEI-SV identity request messages for 2G service. |
| Total-(P)TMSI-Identity-Req | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) request messages. |
| 3G-(P)TMSI-Identity-Req | Total P-TMSI identity request messages for 3G service. |
| 2G-(P)TMSI-Identity-Req | Total P-TMSI identity request messages for 2G service. |
| Retransmission | Identity request messages retransmission statistics. |
| Ret-Tot-Identity-Req | Total identity request messages. |
| Ret-Tot-IMSI-Identity-Req | Total international mobile subscriber identity (IMSI) identity request messages retransmitted. |
| Ret-3G-IMSI-Identity-Req | Total IMSI identity request messages retransmitted for 3G service. |
| Ret-2G-IMSI-Identity-Req | Total IMSI identity request messages retransmitted for 2G service. |
| Ret-Tot-IMEI-Identity-Req | Total international mobile equipment identity (IMEI) request messages retransmitted. |
| Ret-3G-IMEI-Identity-Req | Total IMEI identity request messages retransmitted for 3G service. |
| Ret-2G-IMEI-Identity-Req | Total IMEI identity request messages retransmitted for 2G service. |
| Ret-Tot-IMEISV-Identity-Req | Total international mobile equipment identity-software version (IMEI-SV) identity request messages retransmitted. |
| Ret-3G-IMEISV-Identity-Req | Total IMEI-SV identity request messages retransmitted for 3G service. |
| Ret-2G-IMEISV-Identity-Req | Total IMEI-SV identity request messages retransmitted for 2G service. |
| Ret-Tot-(P)TMSI-Ident-Req | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) request messages retransmitted. |
| Ret-3G-(P)TMSI-Ident-Req | Total P-TMSI identity request messages retransmitted for 3G service. |
| Ret-2G-(P)TMSI-Ident-Req | Total P-TMSI identity request messages retransmitted for 2G service. |
| Identity Response | Indicates the statistics of identity request messages. |
| Total-Identity-Rsp | Total identity request response messages. |

| Field | Description |
|----------------------------|--|
| Total-IMSI-Identity-Rsp | Total international mobile subscriber identity (IMSI) identity request response messages. |
| 3G-IMSI-Identity-Rsp | Total IMSI identity request response messages for 3G service. |
| 2G-IMSI-Identity-Rsp | Total IMSI identity request response messages for 2G service. |
| Total-IMEI-Identity-Rsp | Total international mobile equipment identity (IMEI) request response messages. |
| 3G-IMEI-Identity-Rsp | Total IMEI identity request response messages for 3G service. |
| 2G-IMEI-Identity-Rsp | Total IMEI identity request response messages for 2G service. |
| Total-IMEISV-Identity-Rsp | Total international mobile equipment identity-software version (IMEI-SV) identity request response messages. |
| 3G-IMEISV-Identity-Rsp | Total IMEI-SV identity request response messages for 3G service. |
| 2G-IMEISV-Identity-Rsp | Total IMEI-SV identity request response messages for 2G service. |
| Total-(P)TMSI-Identity-Rsp | Total Packet-Temporary Mobile Subscriber Identity (P-TMSI) request response messages. |
| 3G-(P)TMSI-Identity-Rsp | Total P-TMSI identity request response messages for 3G service. |
| 2G-(P)TMSI-Identity-Rsp | Total P-TMSI identity request response messages for 2G service. |
| Total-Unknown-Identity-Rsp | Total identity response messages for unknown identity. |
| 3G-Unknown-Identity-Rsp | Total identity response messages for unknown identity for 3G service. |
| 2G-Unknown-Identity-Rsp | Total identity response messages for unknown identity for 2G service. |
| Timers | Indicates the statistics of different message and procedure timers. |
| Total-T3350-Expiry | Total number of times the T3350 timer timed-out. |
| 3G-T3350-Expiry | Total number of times the T3350 timer timed-out for 3G service. |
| 2G-T3350-Expiry | Total number of times the T3350 timer timed-out for 2G service. |
| Total-T3360-Expiry | Total number of times the T3360 timer timed-out. |
| 3G-T3360-Expiry | Total number of times the T3360 timer timed-out for 3G service. |
| 2G-T3360-Expiry | Total number of times the T3360 timer timed-out for 2G service. |
| Total-T3370-Expiry | Total number of times the T3370 timer timed-out. |
| 3G-T3370-Expiry | Total number of times the T3370 timer timed-out for 3G service. |

| Field | Description |
|---------------------------|---|
| 2G-T3370-Expiry | Total number of times the T3370 timer timed-out for 2G service. |
| Total-T3322-Expiry | Total number of times the T3322 timer timed-out. |
| 3G-T3322-Expiry | Total number of times the T3322 timer timed-out for 3G service. |
| 2G-T3322-Expiry | Total number of times the T3322 timer timed-out for 2G service. |
| Total-T3313-Expiry | Total number of times the T3313 timer timed-out. |
| 3G-T3313-Expiry | Total number of times the T3313 timer timed-out for 3G service. |
| 2G-T3313-Expiry | Total number of times the T3313 timer timed-out for 2G service. |
| 2G Specific Timers | Indicates the statistics of 2G specific timers timeout events. |
| T3314-Expiry(Ready Timer) | Total number of times the 2G specific ready timer timed-out for 2G service. |
| Ranap Procedures | Indicates the statistics of Radio Access Network Application Part (RANAP) procedures. |
| Initial UE Rcvd | Total number of initial user equipment (UE) messages received. |
| Common Id sent | Total number of common identifier messages sent. |
| Direct Transfer Sent | Total number of direct transfer messages sent. |
| Direct Transfer Rcvd | Total number of direct transfer messages received. |
| Security Mode Command | Total number of security mode commands received. |
| Security Mode Complete | Total number of security mode completed. |
| Security Mode Reject | Total number of security mode commands rejected. |
| Iu Release Request | Total number of Iu interface release request received. |
| Iu Release Command | Total number of Iu interface release commands received. |
| Iu Release Complete | Total number of Iu interface release completed. |
| Reset Rcvd | Total number of reset requests received. |
| Retransmitted Reset Rcvd | Total number of retransmitted reset requests received. |
| Reset Ack Sent | Total number of reset request acknowledgement sent. |
| Reset Sent | Total number of reset requests sent. |
| Retransmitted Reset Sent | Total number of reset requests retransmitted. |
| Reset Ack Rcvd | Total number of reset request acknowledgement received. |
| Resource Reset Rcvd | Total number of resource reset requests received. |

| Field | Description |
|----------------------------|--|
| Resource Reset Dropped | Total number of resource reset requests dropped as a result of throttling mechanism which handles flurries of such messages to the MMgr. |
| Resource Reset Ack Sent | Total number of resource reset request acknowledgement sent. |
| Resource Reset Sent | Total number of resource reset request sent. |
| Resource Reset Ack Rcvd | Total number of resource reset request acknowledgement received. |
| Overload ctrl Rcvd | Total number of resource overload control message received. |
| PC Congested Received | Total number of point code (PC) congested message received. |
| Error Indication Rcvd | Total number of error indication message received. |
| Error Indication Sent | Total number of error indication message sent. |
| Location Reporting Control | Total number of Location Reporting Control procedure messages sent from SGSN. |
| Location Report | Total number of messages sent with Location Report from SGSN. |
| Relocation Required | Total number of message received for Serving Radio Network Subsystem (SRNS) relocation required. |
| Relocation Command | Total number of message received with SRNS relocation command. |
| Relocation Request | Total number of SRNS relocation requests received. |
| Relocation Request Ack | Total number of SRNS relocation requests Ack sent. |
| Relocation Failure | Total number of SRNS relocation failure messages received. |
| Relocation Prep Failure | Total number of SRNS relocation preparation failure messages received. |
| Relocation Cancel | Total number of SRNS relocation cancel messages received. |
| Relocation Cancel Ack | Total number of SRNS relocation cancel acknowledge messages sent. |
| Relocation Detect | Total number of SRNS relocation detected. |
| Relocation Complete | Total number of SRNS relocation completed. |
| Forward SRNS Context Rcvd | Total number of SRNS contexts forward messages received. |
| Forward SRNS Context Sent | Total number of SRNS contexts forward messages sent. |
| NAS-PDU Stats | Indicates the statistics of PDUs for Non-Access Stratum (NAS) signalling procedure. |

| Field | Description |
|---------------------------|--|
| Received | Indicates the total all type of protocol data units received for NAS procedure. |
| Sent | Indicates the total all type of protocol data units sent for NAS procedure. |
| Total-Received-NAS-Pdu | Total all type of protocol data units received for NAS procedure. |
| Total-Sent-NAS-Pdu | Total all type of protocol data units sent for NAS signalling procedure. |
| GMM-Received-NAS-Pdu | Total protocol data units received by GPRS mobility management (GMM) service through NAS signalling procedure. |
| GMM-Sent-NAS-Pdu | Total protocol data units sent by GMM service through NAS signalling procedure. |
| SM-Recieved-NAS-Pdu | Total protocol data units received by Service Management (SM) service through NAS procedure. |
| SM-Sent-NAS-Pdu | Total protocol data units sent by SM service for NAS procedure. |
| SMS-Recieved-NAS-Pdu | Total number of SMS messages received by SGSN with NAS packet data unit (PDU). |
| SMS-Sent-NAS-Pdu | Total number of SMS messages sent by SGSN with NAS packet data unit (PDU). |
| UnIdentified-NAS-Pdu | Total number of unknown type PDUs received for NAS procedure. |
| Dropped NAS-PDUS | Indicates the statistics of protocol data units dropped for NAS procedure. |
| Total-Dropped-NAS-Pdu | Total number of PDUs dropped for NAS procedure. |
| Redirection Indication | This group indicates the statistics of counters related to Redirection indication reasons. |
| PLMN not allowed | Total number of redirections occurred due to requested PLMN not allowed for specific session. |
| Location area not allowed | Total number of redirections occurred due to requested Location Area not allowed for specific session. |
| Roaming not allowed in LA | Total number of redirections occurred due to roaming was not allowed in a location area for specific session. |
| No GPRS services in PLMN | Total number of redirections occurred due to non-availability of GPRS service in PLMN for specific session. |
| CS/PS co-ord required | Total number of redirections occurred as co-ordination between CS and PS service was missing for specific session. |

| Field | Description |
|-----------------------------|--|
| Unknown Reasons | Total number of redirections occurred for specific session due to reasons other than listed in this table. |
| Drop Reason | Indicates the statistics of NAS protocol data unit drop reasons. |
| Nas-Un-identified type | Total number of NAS-PDUs dropped due to unidentified type of PDU. |
| Nas-Invalid Remote Address | Total number of NAS-PDUs dropped due to invalid remote address in PDU. |
| Nas-NAS-PDU not present | Total number of NAS-PDUs dropped due to missing NAS information. |
| Nas-Invalid Local Address | Total number of NAS-PDUs dropped due to invalid local address in PDU. |
| Nas-From unknown RNC | Total number of NAS-PDUs dropped as PDU from unknown RNC. |
| Nas-From unknown RA | Total number of NAS-PDUs dropped as PDU from unknown routing area. |
| Nas-From unknown Subscriber | Total number of NAS-PDUs dropped as PDU from unknown subscriber. |
| Duplicate-iu-con-id | Total number of NAS-PDUs dropped as PDU contains duplicate Iu control identifier. |
| Iu-Con-id processing failed | The total number of PDUs dropped for NAS procedure as Iu connection id processing failed in procedure. |
| Nas-From unknown PLMN | The total number of PDUs dropped for NAS procedures as NAS signalling was requested from unknown PLMN. |
| Another iu or 2g available | The total number of PDUs dropped for NAS procedures as another Iu interface of 2G session was available for specific NAS signalling procedure. |
| Internal Errors | Indicates the statistics of NAS protocol data unit dropped due to internal errors. |
| Total-Internal-Errors | Total number of NAS PDU dropped due to internal errors. |
| Attach Requests Drops | Indicates the statistics of NAS PDU dropped due to attach request errors. |
| Memory Failures | Total number of NAS PDU dropped due to memory failures. |
| Decode Failures | Total number of NAS PDU dropped due to decoding failures. |
| Msg in Invalid state | Total number of NAS PDU dropped due to invalid state of message. |

| Field | Description |
|------------------------------------|--|
| Another Proc in Progress | Total number of NAS PDU dropped as another procedure is in progress. |
| Sent Msg Unavailable | Total number of NAS PDU dropped due to unavailability of sent messages. |
| Other Failures | Total number of NAS PDU dropped due to failures other than listed in this table. |
| Routing Area Update Requests Drops | Indicates the statistics of NAS PDU dropped due to routing area update request drops. |
| Memory Failures | Total number of NAS PDUs dropped due to routing area update request drops by memory failures. |
| Decode Failures | Total number of NAS PDUs dropped due to routing area update request drops by decoding failures. |
| Msg in Invalid state | Total number of NAS PDUs dropped due to routing area update request drops where message is not in valid state. |
| Another Proc in Progress | Total number of NAS PDUs dropped due to routing area update request drops where another procedure is in progress. |
| Sent Msg Unavailable | Total number of NAS PDUs dropped due to routing area update request drops where sent messages are not available. |
| Other Failures | Total number of NAS PDUs dropped due to routing area update request drops where reasons are other than listed in this table. |
| Detach Requests Drops | Indicates the statistics of NAS PDU dropped due to detach request drops. |
| Memory Failures | Total number of NAS PDUs dropped due to detach request drops by memory failures. |
| Decode Failures | Total number of NAS PDUs dropped due to detach request drops by decoding failures. |
| Msg in Invalid state | Total number of NAS PDUs dropped due to detach request drops where message is not in valid state. |
| Another Proc in Progress | Total number of NAS PDUs dropped due to detach request drops where another procedure is in progress. |
| Sent Msg Unavailable | Total number of NAS PDUs dropped due to detach request drops where sent messages are not available. |
| Other Failures | Total number of NAS PDUs dropped due to detach request drops where reasons are other than listed in this table. |
| Service Requests Drops | Indicates the statistics of NAS PDU dropped due to service request drops. |

| Field | Description |
|----------------------------------|--|
| Memory Failures | Total number of NAS PDUs dropped due to service request drops by memory failures. |
| Decode Failures | Total number of NAS PDUs dropped due to service request drops by decoding failures. |
| Msg in Invalid state | Total number of NAS PDUs dropped due to service request drops where message is not in valid state. |
| Another Proc in Progress | Total number of NAS PDUs dropped due to service request drops where another procedure is in progress. |
| Sent Msg Unavailable | Total number of NAS PDUs dropped due to service request drops where sent messages are not available. |
| Other Failures | Total number of NAS PDUs dropped due to service request drops where reasons are other than listed in this table. |
| SMS Message Drops | Indicates the statistics of NAS PDU dropped due to SMS Message drops. |
| Memory Failures | Total number of NAS PDUs dropped due to SMS Message drops by memory failures. |
| Decode Failures | Total number of NAS PDUs dropped due to SMS Message drops by decoding failures. |
| Msg in Invalid state | Total number of NAS PDUs dropped due to SMS Message drops where message is not in valid state. |
| Unexpected Message | Total number of NAS PDUs dropped due to SMS Message drops where reason as unexpected message arrived. |
| Other Drops | Indicates the statistics of NAS PDU dropped due to other drops. |
| Memory Failures | Total number of NAS PDUs dropped due to other drops by memory failures. |
| Decode Failures | Total number of NAS PDUs dropped due to other drops by decoding failures. |
| Msg in Invalid state | Total number of NAS PDUs dropped due to other drops where message is not in valid state. |
| Other Failures | Total number of NAS PDUs dropped due to other drops where reasons are other than listed in this table. |
| Iu cleared due to other failures | Indicates the statistics of causes for NAS PDU dropped due to Iu interface cleared by other failures. |
| Reset-received | Total number of NAS PDU dropped due to Iu interface cleared when reset message received. |

| Field | Description |
|----------------------------|--|
| Reset-resource-received | Total number of NAS PDU dropped due to Iu interface cleared when reset resource message received. |
| RNC-PC-Down | Total number of NAS PDU dropped due to Iu interface cleared by RNC and/or PC down. |
| Total Relocation Failure | This group displays the statistics of total relocation procedure failures. |
| Relocation Failure Causes | This group displays the statistics of relocation procedure failure causes. |
| RAB Preempted | Total number of relocation procedure failure occurred due to RAB Preempted cause. |
| Trelocoverall Expiry | Total number of relocation procedure failure occurred due to expiry of Relocation Overall timer. |
| Trelocprep Expiry | Total number of relocation procedure failure occurred due to expiry of Relocation Preparation timer. |
| Treloc complete Expiry | Total number of relocation procedure failure occurred due to expiry of Relocation Complete timer. |
| Tqueuing Expiry | Total number of relocation procedure failure occurred due to expiry of Relocation Queuing timer. |
| Relocation Triggered | Total number of relocation procedures failed due to triggering of another relocation procedure. |
| Unable to establ dur reloc | Total number of relocation procedures failed due to unable to establish the connection during relocation procedure. |
| Unknown Target RNC | Total number of relocation procedures failed due to unknown target RNC. |
| Relocation Cancelled | Total number of relocation procedures failed due to cancellation of relocation procedures. |
| Successful Relocation | Total number of relocation procedures failed due to successful completion of relocation procedure. |
| Req integ protec algo NS | Total number of relocation procedures failed due to required integrity protection algorithms in name server (NS) system. |
| Conflict with integ proc | Total number of relocation procedures failed due to conflict with integrity procedure. |
| Failure in Radio Intf Proc | Total number of relocation procedures failed due to failure in radio interface procedure. |
| Release due to UTRAN | Total number of relocation procedures failed due to RELEASE command from UTRAN. |

| Field | Description |
|----------------------------|--|
| User Inactivity | Total number of relocation procedures failed due to inactivity at user level. |
| Time Critical Relocation | Total number of relocation procedures failed due to time critical relocation procedure happened or triggered. |
| Requested Traffic Class NA | Total number of relocation procedures failed due to non-availability to requested traffic class for user session. |
| Invalid RAB Params value | Total number of relocation procedures failed due to invalid value in RAB parameters. |
| Requested Max Bit Rate NA | Total number of relocation procedures failed due to non-availability to requested MBR for user session in uplink and downlink direction. |
| Req Max Bit Rate NA for DL | Total number of relocation procedures failed due to non-availability to requested MBR for user session in downlink direction. |
| Req Max Bit Rate NA for UL | Total number of relocation procedures failed due to non-availability to requested MBR for user session in uplink direction. |
| Req Guaran Bit Rate NA | Total number of relocation procedures failed due to non-availability to requested GBR for user session in uplink and downlink direction. |
| Req Guaran Bit Rate NA DL | Total number of relocation procedures failed due to non-availability to requested GBR for user session in downlink direction. |
| Req Guaran Bit Rate NA UL | Total number of relocation procedures failed due to non-availability to requested GBR for user session in uplink direction. |
| Req Trans-delay not achiev | Total number of relocation procedures failed as requested transmission delay was not achieved. |
| Invalid RAB params comb | Total number of relocation procedures failed due to invalid combination in RAB parameters. |
| Cond violation for SDU | Total number of relocation procedures failed due to condition violation for service data unit (SDU). |
| Cond viol traff handling | Total number of relocation procedures failed due to condition violation in traffic handling. |
| Cond viol guaran bit rate | Total number of relocation procedures failed due to condition violation in GBR. |
| User plane vers no support | Total number of relocation procedures failed as user plan version is not supported. |

| Field | Description |
|--|---|
| Iu UP Failure | Total number of relocation procedures failed due to user plan failure in Iu interface. |
| TRELOCalloc Expiry | Total number of relocation procedures failed due to expiry to relocation timer. |
| Reloc Fail in Tgt system | Total number of relocation procedures failed due to relocation procedure failure in target system. |
| Invalid RAB ID | Total number of relocation procedures failed due to invalid RAB identifier. |
| No Remaining RAB | Total number of relocation procedures failed as no RAB was available for this procedure. |
| Interact with other proc | Total number of relocation procedures failed as system was interacting with other system procedures at the time of relocation trigger. |
| Repeated Integ Check Fail | Total number of relocation procedures failed due to repeated failure in integrity check. |
| Requested Req type not sup | Total number of relocation procedures failed as request type was not supported. |
| Request superseded | Total number of relocation procedures failed as relocation procedure request was superseded by another request. |
| UE gen signal conn release | Total number of relocation procedures failed as signal connection was released by UE. |
| Resource opt relocation | Total number of relocation procedures failed due to optimization of resource during relocation procedure. |
| Requested info not avail | Total number of relocation procedures failed as requested information for this procedure was not available. |
| Relocation desirable for radio reasons | Total number of relocation procedures failed as relocation was desirable for radio reasons and now not required. |
| Relocation no sup in tgt | Total number of relocation procedures failed as relocation procedure was not supported in target system. |
| Directed Retry | Total number of relocation procedures failed because system directed the Retry command. |
| Radio conn with UE lost | Total number of relocation procedures failed due to radio connection lost with UE. |
| RNC unabl to establish RFC | Total number of relocation procedures failed as RNC couldn't establish all RAB subflow combinations indicated within the RAB Parameters IE. |

| Field | Description |
|---|---|
| Deciphering keys not avail | Total number of relocation procedures failed due to non-availability of de-ciphering keys. |
| Dedicated Assist data NA | Total number of relocation procedures failed because RNC is not able to successfully deliver the requested dedicated assistance data to the UE. |
| Relocation tgt not allow | Total number of relocation procedures failed as relocation is not allowed on the target system. |
| Location report congestion | Total number of relocation procedures failed due to congestion status in location report. |
| Reduce load in serving cel | Total number of relocation procedures failed as system was reducing load in service cell. |
| No radio res in tgt cell | Total number of relocation procedures failed due to no radio resource was available in target cell. |
| GERAN Iu-mode failure | Total number of relocation procedures failed as the GERAN cannot provide an appropriate RAB due to limited capabilities within GERAN. |
| Access restricted due to shared nws | Total number of relocation procedures failed as access to target system restricted due to shared networks. |
| Incoming relocation no support due to PUESBINE | Total number of relocation procedures failed as the incoming relocation cannot be accepted by the target RNC because of the Provision of UE Specific Behavior Information to Network Entities (PUESBINE) feature. |
| Load in tgt great than src | Total number of relocation procedures failed because the target cell's traffic load is higher than that in the source cell. |
| MBMS-No multicast for UE | Total number of relocation procedures failed because the UE does not have any active multicast service. |
| MBMS-Unknown UE ID | Total number of relocation procedures failed because the CN does not know the UE or unknown UE identifier. |
| MBMS session start success no data bearer necessary | Total number of relocation procedures failed because the MBMS Session Start procedure was successfully performed, but the RNC does not have any interested UE. |
| MBMS-supersede due to NNSF | Total number of relocation procedures failed as the MBMS Session Start procedure was rejected because NAS Node Selection Function (NNSF) towards another CN node. |
| MBMS-UE link already done | Total number of relocation procedures failed because the UE has already been linked to the given Multicast service |
| MBMS-UE delink failure | Total number of relocation procedures failed because the UE had not been linked to the given Multicast service. |

| Field | Description |
|---|---|
| TMGI Unknown | Total number of relocation procedures failed due to requested MBMS action failure because of the indicated Temporary Mobile Group Identity (TMGI) is unknown. |
| IP Multicast addr & APN invalid | Total number of relocation procedures failed due to requested MBMS registration failed as the IP Multicast Address and APN are not valid. |
| MBMS deregistration reject | Total number of relocation procedures failed as the MBMS De-registration was rejected because of implicit registration. |
| MBMS-Request superseded | Total number of relocation procedures failed as MBMS Registration or De-registration was superseded due to another ongoing procedure. |
| MBMS Dereg during sess nal | Total number of relocation procedures failed as MBMS De-registration is not allowed during the MBMS session. |
| MBMS-No data bearer necess | Total number of relocation procedures failed as the RNC no longer have any UEs interested in the MBMS data bearer. |
| Periodic Loc info no avail | Total number of relocation procedures failed as no UE position estimate or location information was available when the periodic report was triggered. |
| GTP resources unavailable | Total number of relocation procedures failed as the RNC initiates RAB Release Request procedure when GTP resource was not available and error cause value, if it received, with a GTP-U error indication. |
| TMGI in use and overlap MBMS srvc in area | Total number of relocation procedures failed as the RNC has an MBMS Session up and running with that Temporary Mobile Group Identity (TMGI) and a parallel MBMS session with the same TMGI in another overlapping MBMS Service Area is not allowed. |
| MBMS-no cell in MBMS area | Total number of relocation procedures failed as the RNC does not have any cell of the indicated MBMS Service Area. |
| No Iu CS UP relocation | Total number of relocation procedures failed as the relocation is triggered by CS call and the source RNC has no Iu CS user plane. |
| Successful MBMS sess start IP MC bearer established | Total number of relocation procedures failed because the MBMS Session Start procedure was successfully performed and IP multicast bearer already established. |
| CS Fallback triggered | Total number of relocation procedures failed as CS fallback to support earlier version of service triggered. |
| Unknown | Total number of relocation procedures failed due to reasons not listed in this table or unknown to system. |

| Field | Description |
|------------------------------|---|
| Miscellaneous Statistics | Indicates the miscellaneous statistics of causes for NAS PDU dropped. |
| Mismatching PTMSI signatures | Indicates the statistics of number of NAS PDU dropped due to mismatch in P-TMSI signatures. |
| Total-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures for attach and detach procedures. |
| Total-Att-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures in attach procedures for 2G and 3G service. |
| 3G-Att-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures in attach procedures for 3G service. |
| 2G-Att-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures in attach procedures for 2G service. |
| Total-Det-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures in detach procedures for 2G and 3G service. |
| 3G-Det-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures in detach procedures for 3G service. |
| 2G-Det-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures in detach procedures for 2G service. |
| Total-Rau-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures in routing area update procedures for 2G and 3G service. |
| 3G-Rau-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures in routing area update procedures for 3G service. |
| 2G-Rau-PTMSI-Sig-Mismatch | Total number of NAS PDU dropped due to mismatch in P-TMSI signatures in routing area update procedures for 2G service. |
| Auth Triplets Reuse Counter | <p>Description: Total authentication triplet reuse by SGSN.</p> <p>SGSN tries to get authentication vectors from HLR; when it does not receive response/vectors from HLR, SGSN authenticates MS successfully using existing/locally stored vectors provided reuse of the triplet vector is enabled in configuration.</p> <p>Triggers: Increments when the SGSN sends Auth Request to MS with total triplet reuse of vectors (2G and 3G) for the above condition.</p> <p>Availability: per RA, per RNC, per GPRS/SGSN service</p> |

| Field | Description |
|---|---|
| 3G-Auth Triplets Reuse | <p>Description: Total authentication triplet reuse for 3G service.</p> <p>SGSN tries to get authentication vectors from HLR; when it does not receive response/vectors from HLR, SGSN authenticates MS successfully using existing/locally stored vectors provided reuse of the triplet vector is enabled in configuration.</p> <p>Triggers: Increments when the SGSN sends Auth Request to MS with 3G triplet reuse of vector for the above condition.</p> <p>Availability: per RA, per RNC, per SGSN service</p> |
| 2G-Auth Triplets Reuse | <p>Description: Total authentication triplet reuse for 2G service.</p> <p>SGSN tries to get authentication vectors from HLR; when it does not receive response/vectors from HLR, SGSN authenticates MS successfully using existing/locally stored vectors provided reuse of the triplet vector is enabled in configuration.</p> <p>Triggers: Increments when the SGSN sends Auth Request to MS with 2G triplet reuse of vector for the above condition.</p> <p>Availability: per RA, per RNC, per GPRS service</p> |
| New Connection rejected due to overload | Total number of NAS PDU dropped as new connection rejected due to overload. |
| Rnc Overload Statistics | Indicates the RNC overload statistics. |
| Total Procedures Rejected due to overload | Total number of procedures rejected due to overload at RNC. |
| Dropped Attaches | Total number of attach procedures dropped due to overload at RNC. |
| Dropped Serv-req(data) | Total number of service request procedures dropped due to overload at RNC. |
| Skipped Ptmsi reallocations | Total number of P-TMSI reallocation requests skipped due to overload at RNC. |
| Skipped Authentication | Total number of authentication procedures skipped due to overload at RNC. |
| GPRS MOCN Attach Statistics | |
| Total Redirection Attempts Rcvd: | |
| Redirection attempts rcvd with bssgp imsi: | |
| Redirection attempts rcvd without bssgp imsi: | |
| Total Redirection Completes Sent | |
| Successful Redirection completes sent | |
| Failure Redirection completes sent | |

| Field | Description |
|---|--|
| Total Redirection Indications Sent | |
| Illegal LA | |
| No roamin | |
| No gprs PLMN | |
| No cell in LA | |
| CS/PS Coord Rqrd | |
| Others | |
| GPRS MOCN RAU Statistics | |
| Total Redirection Attempts Rcvd | |
| Redirection attempts rcvd with bssgp imsi: | |
| Redirection attempts rcvd without bssgp imsi: | |
| Total Redirection Completes Sent: | |
| Successful Redirection completes sent | |
| Failure Redirection completes sent | |
| Total Redirection Indications Sent | |
| Illegal PLMN | |
| Illegal LA | |
| No roaming | |
| No gprs PLMN | |
| No cell in LA | |
| CS/PS Coord Rqrd | |
| Others | |
| SMS Error Stats | |
| CP-ERROR (Tx) | Total number of control program errors sent (in upload direction) for short message service (SMS). |
| Congestion | Total number of control program errors sent (in upload direction) for short message service (SMS) due to congestion. |

| Field | Description |
|---|--|
| Invalid Mandatory Info | Total number of control program errors sent (in upload direction) for short message service (SMS) due to invalid information in mandatory field. |
| Invalid Message Type | Total number of control program errors sent (in upload direction) for short message service (SMS) due to invalid message type. |
| Invalid semantic | Total number of control program errors sent (in upload direction) for short message service (SMS) due to invalid semantic in message. |
| Invalid Protocol State | Total number of control program errors sent (in upload direction) for short message service (SMS) due to invalid state of protocol in message. |
| Invalid IE | Total number of control program errors sent (in upload direction) for short message service (SMS) due to invalid information element in message. |
| Protocol Error | Total number of control program errors sent (in upload direction) for short message service (SMS) due to invalid protocol error. |
| Network Overload Protection | |
| Attach requests queued in the pacing queue | Total number of attach requests queued in the pacing queue by network overload protection function. |
| Inter SGSN RAU requests queued in the pacing queue | Total number of Inter SGSN RAU requests queued in the pacing queue by network overload protection function. |
| Number of Inter SGSN RAU and Attach requests in the pacing queue | Total number of Inter SGSN RAU and attach requests queued in the pacing queue by network overload protection function. |
| Attach requests successfully dequeued from the pacing queue | Total number of attach requests successfully removed from the pacing queue by network overload protection function. |
| Inter SGSN RAU requests successfully dequeued from the pacing queue | Total number of Inter SGSN RAU requests successfully removed from the pacing queue by network overload protection function. |
| Attaches rejected | Total number of attach requests rejected by network overload protection function. |
| Inter SGSN RAUs rejected | Total number of Inter SGSN RAUs requests rejected by network overload protection function. |
| Attaches dropped | Total number of attach requests dropped by network overload protection function. |
| Inter SGSN RAUs dropped | Total number of Inter SGSN RAUs requests dropped by network overload protection function. |
| Attaches discarded due to excess wait time in the pacing queue | Total number of attach requests discarded by network overload protection function due to excess wait time in the pacing queue. |

| Field | Description |
|---|--|
| Inter SGSN RAUs discarded due to excess wait time in the pacing queue | Total number of Inter SGSN RAUs requests discarded by network overload protection function due to excess wait time in the pacing queue. |
| Session Management Messages Statistics | |
| Activate Context Request | Indicates the statistics of context activate request in session management service. |
| Total-Actv-Request | Total number of request messages received for 2G and 3G context activation including primary and secondary. |
| 3G-Actv-Request | Total number of request messages received for 3G context activation including primary and secondary. |
| 2G-Actv Request | Total number of request messages received for 2G context activation including primary and secondary. |
| Primary-Actv-Request | Total number of request messages received for 2G and 3G primary context activation. |
| 3G-Primary-Actv-Request | Total number of request messages received for 3G primary context activation. |
| 2G-Primary-Actv-Request | Total number of request messages received for 2G primary context activation. |
| Secondary-Actv-Request | Total number of request messages received for 2G and 3G secondary context activation. |
| 3G-Secondary-Actv-Request | Total number of request messages received for 3G secondary context activation. |
| 2G-Secondary-Actv-Request | Total number of request messages received for 2G secondary context activation. |
| Actv-Request-Nrpca | Total number of Network Requested PDP Context Activation request messages received from GGSN. |
| Active-Request-Nrspca | Total number of Secondary Activate PDP Context Request messages from MS with Ti flag = 1. |
| 3G-Actv-Request-Nrspca | Total number of Secondary Activate PDP Context Request messages from MS with Ti flag = 1 (in UMTS access). |
| 2G-Actv-Request-Nrspca: | Total number of "Secondary Activate PDP Context Request" from MS with Ti flag = 1 (in GPRS access). |
| Activate Context Request Retransmitted | These counters indicates the retransmitted (received message as same as previous) Activate Secondary PDP Context Requests received from MS with Ti flag = 1. Retransmitted messages are dropped by SGSN. |

| Field | Description |
|-------------------------------|--|
| 3G-Primary-Actv-drop | Total number of Activate Primary PDP Context Requests that were dropped (in UMTS access). |
| 2G-Primary-Actv-Drop | Total number of Activate Primary PDP Context Requests that were dropped (in GPRS access). |
| 3G-Secondary-Actv-Drop | Total number of Activate Secondary PDP Context Requests that were dropped (in UMTS access). |
| 2G-Secondary-Actv-Drop | Total number of Activate Secondary PDP Context Requests that were dropped (in GPRS access). |
| 3G-Secondary-Actv-Drop-Nrspca | Total number of Network Requested Secondary PDP Context Requests that were dropped (in UMTS access). |
| 2G-Secondary-Actv-Drop-Nrspca | Total number of Network Requested Secondary PDP Context Requests that were dropped (in GPRS access) |
| Activate Context Accept | Indicates the statistics of context activate request accepted in session management service. |
| Total-Actv-Accept | Total number of request messages accepted for 2G and 3G context activation including primary and secondary type. |
| 3G-Actv-Accept | Total number of request messages accepted for 3G context activation including primary and secondary type. |
| 2G-Actv Accept | Total number of request messages accepted for 2G context activation including primary and secondary type. |
| Primary-Actv-Accept | Total number of request messages accepted for 2G and 3G primary context activation. |
| 3G-Primary-Actv-Accept | Total number of request messages accepted for 3G primary context activation. |
| 2G-Primary-Actv-Accept | Total number of request messages accepted for 2G primary context activation. |
| Secondary-Actv-Accept | Total number of request messages accepted for 2G and 3G secondary context activation. |
| 3G-Secondary-Actv-Accept | Total number of request messages accepted for 3G secondary context activation. |
| 2G-Secondary-Actv-Accept | Total number of request messages accepted for 2G secondary context activation. |
| Actv-Accept-Nrspca | Total number of Secondary Activate PDP Context Accept messages to MS with Ti flag = 1. |
| 3G-Act-Accept-Nrspca | Total number of Secondary Activate PDP Context Accept messages sent to MS with Ti flag = 1 (in UMTS access) |

| Field | Description |
|--------------------------|--|
| 2G-Actv-Accept-Nrspca | Total number of Secondary Activate PDP Context Accept messages sent to MS with Ti flag = 1 (in GPRS access) |
| Activate Context Reject | Indicates the statistics of request messages rejected for 2G and 3G context activation including primary and secondary type. |
| Total-Actv-Reject | Total number of request messages rejected for 2G and 3G context activation including primary and secondary type. |
| 3G-Actv-Reject | Total number of request messages rejected for 3G context activation including primary and secondary type. |
| 2G-Actv-Reject | Total number of request messages rejected for 2G context activation including primary and secondary type. |
| Primary-Actv-Reject | Total number of request messages rejected for 2G and 3G primary context activation. |
| 3G-Primary-Actv-Reject | Total number of request messages rejected for 3G primary context activation. |
| 2G-Primary-Actv-Reject | Total number of request messages rejected for 2G primary context activation. |
| Secondary-Actv-Reject | Total number of request messages rejected for 2G and 3G secondary context activation. |
| 3G-Secondary-Actv-Reject | Total number of request messages rejected for 3G secondary context activation. |
| Actv-Reject-Nrspca | Total number of Secondary Activate PDP Context Reject messages sent to MS with Ti flag = 1. |
| 3G-Actv-Reject-Nrspca | Total number of Secondary Activate PDP Context Reject messages sent to MS with Ti flag = 1 (in UMTS access) |
| 2G-Actv-Reject-Nrspca | Total number of Secondary Activate PDP Context Reject messages sent to MS with Ti flag = 1 (in GPRS access) |
| 2G-Secondary-Actv-Reject | Total number of request messages rejected for 2G secondary context activation. |
| Activate Context Failure | |
| Total-Actv-Failure | Total number of combined primary and secondary PDP context activation failures for 2G and 3G services. |
| 3G-Actv-Failure | Total number of PDP context activation failures for 3G services. |
| 2G-Actv Failure | Total number of PDP context activation failures for 2G services. |
| Internal Failure | Total number of PDP context activation failures for 2G services due to internal failures. |

| Field | Description |
|--|---|
| Ongoing Procedure | Total number of PDP context activation failures for 2G services due to ongoing procedure collisions. |
| Primary-Actv-Failure | Total number of primary PDP context activation failures for 2G and 3G services. |
| 3G-Primary-Actv-Failure | Total number of primary PDP context activation failures for 3G services. |
| 2G-Primary-Actv-Failure | Total number of primary PDP context activation failures for 2G services. |
| Internal Failure | Total number of primary PDP context activation failures for 2G services due to internal failures. |
| Ongoing Procedure | Total number of primary PDP context activation failures for 2G services due to ongoing procedure collisions. |
| Secondary-Actv-Failure | Total number of secondary PDP context activation failures for 2G and 3G services. |
| 3G-Secondary-Actv-Failure | Total number of secondary PDP context activation for 3G service failed. |
| 2G-Secondary-Actv-Failure | Total number of secondary PDP context activation failures for 2G services. |
| Internal Failure | Total number of secondary PDP context activation failures for 2G services due to internal failures. |
| Ongoing Procedure | Total number of secondary PDP context activation failures for 2G services due to ongoing procedure collisions. |
| 2G-Activation-Internal-Failure-Causes | |
| Resource Alloc Fail | Total number of 2G context activation failures due to internal failures of cause type 'resource allocation failure'. |
| CPC Send Fail | Total number of 2G context activation failures due to internal failures of cause type 'CPC send failure'. |
| Secondary Pdp Context Activation Request Ignored | Total number of Secondary PDP Context Activation Requests that were ignored. (verbose mode only) |
| Total-Actv-Request-Nrspca-Ignored | Total number of Network Requested Secondary PDP Context Activation Requests that were ignored. |
| 3G-Actv-Request-Nrspca-Ignored | Total number of NRSPCA 3G context activation failures due to internal failures of cause type 'resource allocation failure'. |
| Activate Primary PDP Context Denied | |

| Field | Description |
|--------------------------------|--|
| 3G-Operator Determined Barring | Total number of requests to activate primary PDP context for 3G service rejected due to operator determined barring. |
| 2G-Operator Determined Barring | Total number of requests to activate primary PDP context for 2G service rejected due to operator determined barring. |
| 3G-Insufficient Resources | Total number of requests to activate primary PDP context for 3G service rejected due to insufficient resources. |
| 2G-Insufficient Resources | Total number of requests to activate primary PDP context for 2G service rejected due to insufficient resources. |
| 3G-Network Failure | Total number of requests to activate primary PDP context for 3G service rejected due to network failure. |
| 2G-Network Failure | Total number of requests to activate primary PDP context for 2G service rejected due to network failure. |
| 3G-Mising or Unknow APN | Total number of requests to activate primary PDP context for 3G service rejected due to missing or unknown APN in request message. |
| 2G-Mising or Unknow APN | Total number of requests to activate primary PDP context for 2G service rejected due to missing or unknown APN in request message. |
| 3G-Unknown PDP Addr/type | Total number of requests to activate primary PDP context for 3G service rejected due to unknown type/address in request. |
| 2G-Unknown PDP Addr/type | Total number of requests to activate primary PDP context for 2G service rejected due to unknown type/address in request. |
| 3G-User Auth Failed | Total number of requests to activate primary PDP context for 3G service rejected due to failure in user authentication. |
| 2G-User Auth Failed | Total number of requests to activate primary PDP context for 2G service rejected due to failure in user authentication. |
| 3G-Rejected By GGSN | Total number of requests to activate primary PDP context for 3G service rejected as request rejected by the GGSN. |
| 2G-Rejected By GGSN | Total number of requests to activate primary PDP context for 2G service rejected as request rejected by the GGSN. |
| 3G-Unspecified Error | Total number of requests to activate primary PDP context for 3G service rejected due to error which is not specified in this table or unknown. |
| 2G-Unspecified Error | Total number of requests to activate primary PDP context for 2G service rejected due to error which is not specified in this table or unknown. |

| Field | Description |
|---------------------------------|---|
| 3G-Svc Option Not Supported | Total number of requests to activate primary PDP context for 3G service rejected as requested service is not supported. |
| 2G-Svc Option Not Supported | Total number of requests to activate primary PDP context for 2G service rejected as requested service is not supported. |
| 3G-Svc Opt Not Subscribed | Total number of requests to activate primary PDP context for 3G service rejected as subscriber is not subscriber to requested service. |
| 2G-Svc Opt Not Subscribed | Total number of requests to activate primary PDP context for 2G service rejected as subscriber is not subscriber to requested service. |
| 3G-Svc Opt Tmp Out of Order | Total number of requests to activate primary PDP context for 3G service rejected as requested service option is temporarily out of order. |
| 2G-Svc Opt Tmp Out of Order | Total number of requests to activate primary PDP context for 2G service rejected as requested service option is temporarily out of order. |
| 3G-APN-Restriction Incompatible | Total number of requests to activate primary PDP context for 3G service rejected due to restriction of aPN or incompatibility of APN for service. |
| 2G-APN-Restriction Incompatible | Total number of requests to activate primary PDP context for 2G service rejected due to restriction of aPN or incompatibility of APN for service. |
| 3G-Semantically Incorrect | Total number of requests to activate primary PDP context for 3G service rejected due to semantically incorrect message. |
| 2G-Semantically Incorrect | Total number of requests to activate primary PDP context for 2G service rejected due to semantically incorrect message. |
| 3G-Invalid Mandatory Info | Total number of requests to activate primary PDP context for 3G service rejected as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of requests to activate primary PDP context for 2G service rejected as mandatory information in message is invalid. |
| 3G-Msg Non Existent | Total number of requests to activate primary PDP context for 3G service rejected due to non-existent type of message. |
| 2G-Msg Non Existent | Total number of requests to activate primary PDP context for 2G service rejected due to non-existent type of message. |
| 3G-IE Non Existent | Total number of requests to activate primary PDP context for 3G service rejected due to non-existence of information element. |
| 2G-IE Non Existent | Total number of requests to activate primary PDP context for 2G service rejected due to non-existence of information element. |

| Field | Description |
|---------------------------------------|--|
| 3G-Conditional IE Error | Total number of requests to activate primary PDP context for 3G service rejected due to error in conditional information element. |
| 2G-Conditional IE Error | Total number of requests to activate primary PDP context for 2G service rejected due to error in conditional information element. |
| 3G-Msg Not Compatible with State | Total number of requests to activate primary PDP context for 3G service rejected as message type is not compatible with protocol state. |
| 2G-Msg Not Compatible with State | Total number of requests to activate primary PDP context for 2G service rejected as message type is not compatible with protocol state. |
| 3G-Recovery on Timer Expiry | Total number of requests to activate primary PDP context for 3G service rejected as timer expired for recovery. |
| 2G-Recovery on Timer Expiry | Total number of requests to activate primary PDP context for 2G service rejected as timer expired for recovery. |
| 3G-Proto Err Unspecified | Total number of requests to activate primary PDP context for 3G service rejected due to unspecified protocol error. |
| 2G-Proto Err Unspecified | Total number of requests to activate primary PDP context for 2G service rejected due to unspecified protocol error. |
| Activate Secondary PDP Context Denied | Indicates the statistics of reason to deny secondary PDP context activation for 2G and 3G service denied. |
| 3G-Operator Determined Barring | Total number of requests to activate primary PDP context for 3G service rejected due to operator determined barring. |
| 2G-Operator Determined Barring | Total number of requests to activate primary PDP context for 2G service rejected due to operator determined barring. |
| 3G-Insufficient Resources | Total number of requests to activate secondary PDP context for 3G service rejected due to insufficient resources. |
| 2G-Insufficient Resources | Total number of requests to activate secondary PDP context for 2G service rejected due to insufficient resources. |
| 3G-Rej By Ggsn | Total number of requests to activate secondary PDP context for 3G service rejected as request rejected by the GGSN. |
| 2G-Rej By Ggsn | Total number of requests to activate secondary PDP context for 2G service rejected as request rejected by the GGSN. |
| 3G-Actv Rej Unspecified | Total number of requests to activate secondary PDP context for 3G service rejected due to error which is not specified in this table or unknown. |

| Field | Description |
|--------------------------------|---|
| 2G-Actv Rej Unspecified | Total number of requests to activate secondary PDP context for 2G service rejected due to error which is not specified in this table or unknown. |
| 3G-Svc Opt Not Supported | Total number of requests to activate secondary PDP context for 3G service rejected as requested service option is not supported. |
| 2G-Svc Opt Not Supported | Total number of requests to activate secondary PDP context for 2G service rejected as requested service option is not supported. |
| 3G-Svc Opt Not Subscribed | Total number of requests to activate secondary PDP context for 3G service rejected as subscriber is not subscriber to requested service. |
| 2G-Svc Opt Not Subscribed | Total number of requests to activate secondary PDP context for 2G service rejected as subscriber is not subscriber to requested service. |
| 3G-Svc Option Tmp Out Of Order | Total number of requests to activate secondary PDP context for 3G service rejected as requested service option is temporarily out of order. |
| 2G-Svc Option Tmp Out Of Order | Total number of requests to activate secondary PDP context for 2G service rejected as requested service option is temporarily out of order. |
| 3G-Sem Error In TFT Op | Total number of requests to activate secondary PDP context for 3G service rejected due to semantic error in subscriber traffic flow template operation. |
| 2G-Sem Error In TFT Op | Total number of requests to activate secondary PDP context for 2G service rejected due to semantic error in subscriber traffic flow template operation. |
| 3G-Syn Error In TFT Op | Total number of requests to activate secondary PDP context for 3G service rejected due to syntax error in subscriber traffic flow template operation. |
| 2G-Syn Error In TFT Op | Total number of requests to activate secondary PDP context for 2G service rejected due to syntax error in subscriber traffic flow template operation. |
| 3G-Unknown Ctx | Total number of requests to activate secondary PDP context for 3G service rejected due to unknown PDP context name in request message. |
| 2G-Unknown Ctx | Total number of requests to activate secondary PDP context for 2G service rejected due to unknown PDP context name in request message. |
| 3G-Sem Error In Pkt Filter | Total number of requests to activate secondary PDP context for 3G service rejected due to semantic error in packet filter. |

| Field | Description |
|----------------------------------|---|
| 2G-Sem Error In Pkt Filter | Total number of requests to activate secondary PDP context for 2G service rejected due to semantic error in packet filter. |
| 3G-Syn Errors In Pkt Filter | Total number of requests to activate secondary PDP context for 3G service rejected due to syntax error in packet filter. |
| 2G-Syn Errors In Pkt Filter | Total number of requests to activate secondary PDP context for 2G service rejected due to syntax error in packet filter. |
| 3G-Ctx No-TFT Already Actv | Total number of requests to activate secondary PDP context for 3G service rejected as no TFT is active for subscriber. |
| 2G-Ctx No-TFT Already Actv | Total number of requests to activate secondary PDP context for 2G service rejected as no TFT is active for subscriber. |
| 3G-Sem Incorrect Msg | Total number of requests to activate secondary PDP context for 3G service rejected due to semantically incorrect message. |
| 2G-Sem Incorrect Msg | Total number of requests to activate secondary PDP context for 2G service rejected due to semantically incorrect message. |
| 3G-Invalid Mandatory Info | Total number of requests to activate secondary PDP context for 3G service rejected as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of requests to activate secondary PDP context for 2G service rejected as mandatory information in message is invalid. |
| 3G-Msg Non Existent | Total number of requests to activate secondary PDP context for 3G service rejected due to non-existent type of message. |
| 2G-Msg Non Existent | Total number of requests to activate secondary PDP context for 2G service rejected due to non-existent type of message. |
| 3G-IE Non Existent | Total number of requests to activate secondary PDP context for 3G service rejected due to non-existence of information element. |
| 2G-IE Non Existent | Total number of requests to activate secondary PDP context for 2G service rejected due to non-existence of information element. |
| 3G-Conditional IE error | Total number of requests to activate secondary PDP context for 3G service rejected due to error in conditional information element. |
| 2G-Conditional IE error | Total number of requests to activate secondary PDP context for 2G service rejected due to error in conditional information element. |
| 3G-Msg Not Compatible with State | Total number of requests to activate secondary PDP context for 3G service rejected as message type is not compatible with protocol state. |

| Field | Description |
|---|---|
| 2G-Msg Not Compatible with State | Total number of requests to activate secondary PDP context for 2G service rejected as message type is not compatible with protocol state. |
| 3G-Recovery on Timer Expiry | Total number of requests to activate secondary PDP context for 3G service rejected as timer expired for recovery. |
| 2G-Recovery on Timer Expiry | Total number of requests to activate secondary PDP context for 2G service rejected as timer expired for recovery. |
| 3G-Proto Err Unspecified | Total number of requests to activate secondary PDP context for 3G service rejected due to unspecified protocol error. |
| 2G-Proto Err Unspecified | Total number of requests to activate secondary PDP context for 2G service rejected due to unspecified protocol error. |
| Activate Context Failure Causes | Indicates the statistics of reasons for context activation procedures for 2G and 3G service. |
| 3G-Iu release before Activate over | Total number of context activation procedures rejected for 3G service due to Iu released before completion of activation procedure. |
| 3G-Guard Timer Expiry | Total number of PDP context activation for 3G failed due to guard timer expiry. |
| 2G-Guard Timer Expiry | Total number of PDP context activation for 2G failed due to guard timer expiry. |
| 3G-Duplicate Activation | Total number of PDP context activation for 3G failed due to duplicate request for activation. |
| 2G-Duplicate Activation | Total number of PDP context activation for 2G failed due to duplicate request for activation. |
| 3G-Failure due to Other Ongoing Procedure | Total number of PDP context activation for 3G failed as other activation procedure for same request is in progress. |
| 2G-Failure due to Other Ongoing Procedure | Total number of PDP context activation for 2G failed as other activation procedure for same request is in progress. |
| 3G-Tunnel Deactivation | Total number of PDP context activation for 3G failed as session tunnel deactivated. |
| 2G-Tunnel Deactivation | Total number of PDP context activation for 2G failed as session tunnel deactivated. |
| 3G-HandOff before Activate over | Total number of PDP context activation for 3G failed as handoff happened before activation procedure completed. |
| 2G-HandOff before Activate over | Total number of PDP context activation for 2G failed as handoff happened before activation procedure completed. |

| Field | Description |
|--------------------------------|---|
| 3G-Detach before Activate over | Total number of PDP context activation for 2G failed as detach procedure started before activation procedure completed. |
| 2G-Detach before Activate over | Total number of PDP context activation for 2G failed as detach procedure started before activation procedure completed. |
| 3G-Phase-2-Offload Failures | Description: This proprietary counter indicates the total number of PDP Activation failures due to Phase 2 offloading in 3G service. Triggers: Increments when PDP Activation fails due to Phase 2 offloading. Availability: per SGSN service, per RA, per RNC |
| 2G-Phase-2-Offload Failures | Description: This proprietary counter indicates the total number of PDP Activation failures due to Phase 2 offloading in 2G service. Triggers: Increments when PDP Activation fails due to Phase 2 offloading. Availability: per GPRS service, per RA |
| 3G-Invalid Msg Content | Total number of PDP context activation for 3G failed as request message contains invalid information. |
| 2G-Invalid Msg Content | Total number of PDP context activation for 2G failed as request message contains invalid information. |
| Duplicate Activate Request | Indicates the statistics of duplicate context activation requests for 2G and 3G service received. |
| Total-Dup-Actv Req Received | Total number of duplicate context activation requests for 2G and 3G service received. |
| Total-Dup-3G-Actv Req Received | Total number of duplicate context activation requests for 3G service received. |
| Total-Dup-2G-Actv Req Received | Total number of duplicate context activation requests for 2G service received. |
| 3G-Dup Req In PDP-ACTIVE State | Indicates the statistics of duplicate context activation requests for 3G service in PDP activate state. |
| Duplicate TI | Total number of duplicate context activation requests for 3G service in PDP active state with duplicate transaction identifiers (TIs). |
| Duplicate NSAPI | Total number of duplicate context activation requests for 3G service in PDP active state with duplicate Network Service Access Point Identifier (NSAPI) for 3G service. |
| Duplicate PDP-Addr and APN | Total number of duplicate context activation requests for 3G service in PDP active state with duplicate PDP address and access point name for 3G service. |

| Field | Description |
|------------------------------------|--|
| 2G-Dup Req In PDP-ACTIVE State | Indicates the statistics of duplicate context activation requests for 2G service in PDP activate state. |
| Duplicate TI | Total number of duplicate context activation requests for 2G service in PDP active state with duplicate transaction identifiers (TIs). |
| Duplicate NSAPI | Total number of duplicate context activation requests for 2G service in PDP active state with duplicate Network Service Access Point Identifier (NSAPI). |
| Duplicate PDP-Addr and APN | Total number of duplicate context activation requests for 2G service in PDP active state with duplicate PDP address and access point name. |
| 3G-Dup Req In NOT PDP-ACTIVE State | Indicates the statistics of duplicate context activation requests for 3G service which are not in PDP active state. |
| Duplicate TI | Total number of duplicate context activation requests for 3G service which are not in PDP active state with duplicate transaction identifiers (TIs). |
| Duplicate NSAPI | Total number of duplicate context activation requests for 3G service which are not in PDP active state with duplicate Network Service Access Point Identifier (NSAPI). |
| Duplicate PDP-Addr and APN | Total number of duplicate context activation requests for 3G service which are not in PDP active state with duplicate PDP address and access point name. |
| 2G-Dup Req In NOT PDP-ACTIVE State | Indicates the statistics of duplicate context activation requests for 2G service which are not in PDP active state. |
| Duplicate TI | Total number of duplicate context activation requests for 2G service which are not in PDP active state with duplicate transaction identifiers (TIs). |
| Duplicate NSAPI | Total number of duplicate context activation requests for 2G service which are not in PDP active state with duplicate Network Service Access Point Identifier (NSAPI). |
| Duplicate PDP-Addr and APN | Total number of duplicate context activation requests for 2G service which are not in PDP active state with duplicate PDP address and access point name. |
| Request Pdp Context Activation | Indicates the statistics of PDP context activation requests for 2G and 3G service. |
| Total-Request-Pdp-Ctxt-Req | Total number of PDP context activation requests received for 2G and 3G service. |

| Field | Description |
|---------------------------------------|--|
| 3G-Request-Pdp-Ctxt-Req | Total number of PDP context activation requests received for 3G service. |
| 2G-Request-Pdp-Ctxt-Req | Total number of PDP context activation requests received for 2G service. |
| Retransmission | Indicates the statistics of PDP context activation requests retransmitted for 2G and 3G service. |
| Total-Request-Pdp-Ctxt-Req | Total number of PDP context activation requests retransmitted for 2G and 3G service. |
| 3G-Request-Pdp-Ctxt-Req | Total number of PDP context activation requests retransmitted for 3G service. |
| 2G-Request-Pdp-Ctxt-Req | Total number of PDP context activation requests retransmitted for 2G service. |
| Request Pdp Context Activation Reject | Indicates the statistics of PDP context activation requests rejected for 2G and 3G service. |
| Total-Request-Pdp-Ctxt-Reject | Total number of PDP context activation requests rejected for 2G and 3G service. |
| 3G-Request-Pdp-Ctxt-Reject | Total number of PDP context activation requests rejected for 3G service. |
| 2G-Request-Pdp-Ctxt-Reject | Total number of PDP context activation requests rejected for 2G service. |
| Request Pdp Context Activation Denied | Indicates the statistics of PDP context activation requests Denied for 2G and 3G service. |
| 3G-Insufficient Resources | Total PDP context activation requests denied due to insufficient resources in 3G service. |
| 2G-Insufficient Resources | Total PDP context activation requests denied due to insufficient resources in 2G service. |
| 3G-Actv Rej Unspecified | Total PDP context activation requests denied due to unspecified reasons in 3G service. |
| 2G-Actv Rej Unspecified | Total PDP context activation requests denied due to unspecified reasons in 2G service. |
| 3G-Feature Not Supported | Total PDP context activation requests denied due to requested feature not supported in 3G service. |
| 2G-Feature Not Supported | Total PDP context activation requests denied due to requested feature not supported in 2G service. |
| 3G-Svc Opt Tmp Out of Order | Total PDP context activation requests denied due to service option was temporarily out of order in 3G service. |

| Field | Description |
|---|---|
| 2G-Svc Opt Tmp Out of Order | Total PDP context activation requests denied due to service option was temporarily out of order in 2G service. |
| Request Secondary Pdp Context Activation | This group of counters indicates the number of Request Secondary Context Activation messages sent to MS. The indicated count does include retransmissions. (verbose mode only). |
| Total-Request-Sec-Pdp-Ctxt-Req | Total number of Request Secondary PDP Context Activation messages sent to MS. |
| 3G-Request-Sec-Pdp-Ctxt-Req | Total number of Request Secondary PDP Context Activation messages sent to MS (UMTS access). |
| 2G-Request-Sec-Pdp-Ctxt-Req | Total number of Request Secondary PDP Context Activation messages sent to MS (GPRS access). |
| Retransmission | This group of counters indicate the number of Request Secondary Context Activation messages retransmitted to MS. |
| Total-Request-Sec-Pdp-Ctxt-Req | Total number of Request Secondary PDP Context Activation messages retransmitted to MS. |
| 3G-Request-Sec-Pdp-Ctxt-Req | Total number of Request Secondary PDP Context Activation messages retransmitted to MS (UMTS access). |
| 2G-Request-Sec-Pdp-Ctxt-Req | Total number of Request Secondary PDP Context Activation messages retransmitted to MS (GPRS access). |
| Request Secondary PDP Context Activation Reject | This group of counters indicate the number of Request Secondary Context Activation Reject messages received from MS. |
| Total-Request-Sec-Pdp-Ctxt-Reject | Total number of Request Secondary PDP Context Activation Reject messages from MS. |
| 3G-Total-Request-Sec-Pdp-Ctxt-Reject | Total number of Request Secondary PDP Context Activation Reject messages from MS (UMTS access). |
| 2G-Total-Request-Sec-Pdp-Ctxt-Reject | Total number of Request Secondary PDP Context Activation Reject messages from MS (GPRS access). |
| Request Secondary PDP Context Activation Denied | This group of counters indicates the number of Request Secondary Context Activation Reject messages received from MS categorized under different SM causes. |
| 3G-Insufficient Resources | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "insufficient resources (26)" in UMTS access. |
| 3G-Actv Rej Unspecified | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "actv rejected, unspecified (31)" in UMTS access. |

| Field | Description |
|-----------------------------|--|
| 3G-Feature Not Supported | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "feature not supported (40)" in UMTS access. |
| 3G-Sem Error In TFT Op | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "Semantic Errors In TFT operation (44)" in UMTS access. |
| 3G-Syn Error In TFT Op | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "Syntactical Errors In TFT operation (41)" in UMTS access |
| 3G-Unknown Ctx | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "unknown PDP context (43)" in UMTS access. |
| 3G-Sem Error In Pkt Filter | Total number of Request Secondary PDP Context Activation Reject from MS with cause "Semantic Errors In Pkt Filter(s) (44)" in UMTS access. |
| 3G-Syn Errors In Pkt Filter | Total number of Request Secondary PDP Context Activation Reject from MS with cause "Syntactical Errors In Pkt Filter(s) (45)" in UMTS access. |
| 3G-Ctx No-TFT Already Actv | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "PDP Ctx without TFT already activated (46)" in UMTS access. |
| 3G-Actv Rej BCM violation | Total number Request Secondary PDP Context Activation Reject messages from MS with cause "actv rejected, BCM violation (48)" in UMTS access. |
| 3G-Proto Err | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "protocol errors (95-111)" in UMTS access. |
| 2G-Insufficient Resources | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "insufficient resources (26)" in GPRS access. |
| 2G-Actv Rej Unspecified | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "actv rejected, unspecified (31)" in GPRS access. |
| 2G-Feature Not Supported | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "feature not supported (40)" in GPRS access. |
| 2G-Sem Error In TFT Op | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "Semantic Errors In TFT operation (44)" in GPRS access. |

| Field | Description |
|--|---|
| 2G-Syn Error In TFT Op | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "Syntactical Errors In TFT operation (41)" in GPRS access |
| 2G-Unknown Ctx | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "unknown PDP context (43)" in GPRS access. |
| 2G-Sem Error In Pkt Filter | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "Semantic Errors In Pkt Filter(s) (44)" in GPRS access. |
| 2G-Syn Errors In Pkt Filter | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "Syntactical Errors In Pkt Filter(s) (45)" in GPRS access. |
| 2G-Ctx No-TFT Already | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "PDP Ctx without TFT already activated (46)" in GPRS access |
| 2G-Actv Rej BCM violation | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "actv rejected, BCM violoation (48)" in GPRS access. |
| 2G-Proto Err | Total number of Request Secondary PDP Context Activation Reject messages from MS with cause "protocol errors (95-111)" in GPRS access |
| Secondary PDP Context Activation Request Ignored | This group of counters indicate the number of Activate Secondary PDP Context Requests messages (from MS with Ti flag = 1) ignored by SGSN. (verbose mode only) |
| Total-Actv-Request-Nrspca-Ignored | Total number of Secondary Activate PDP Context Request messages from MS with Ti flag = 1 and PDP not in activation in progress state. |
| 3G-Actv-Request-Nrspca-Ignored | Total number of Secondary Activate PDP Context Request messages from MS with Ti flag = 1 (in UMTS access) and PDP not in activation in progress state. |
| 2G-Actv-Request-Nrspca-Ignored | Total number of Secondary Activate PDP Context Request messages from MS with Ti flag = 1 (in GPRS access) and PDP not in activation in progress state. |
| Network Initiated Secondary Activation Aborted | This group of counters indicates the number of NRSPCA procedures aborted/rejected by SGSN for various GMM/SM procedure collisions, before receiving any response from MS in response to a Request Secondary PDP Context Activation. |

| Field | Description |
|------------------------------------|---|
| 3G-NRSPCA-Abort-GTP-Suspend | Total number of NRSPCA procedures aborted in UMTS access due to GTP Suspend from peer SGSN or Suspend from BSC in GPRS access. IPCA Response with cause "MS is GPRS Suspended" is sent in this case. For S4-SGSN, CBR Response with cause "Unable to page UE due to Suspension" is sent. |
| 3G-NRSPCA-Abort-Handoff | Total number of NRSPCA procedures aborted in UMTS access by handoff to peer SGSN. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "Temporarily rejected due to handover procedure in progress" is sent. |
| 3G-NRSPCA-Abort-Max-Retry-Attempts | Total number of NRSPCA procedure aborted in UMTS access due to Request Secondary PDP context activation maximum retry attempts. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "UE not responding" is sent. |
| 3G-NRSPCA-Abort-Paging-Expiry | Total number of NRSPCA procedure aborted in UMTS access due to Paging Expiry. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "UE not responding" is sent. |
| 3G-NRSPCA-Abort-Linked-Ctx-Deactv | Total number of NRSPCA procedures aborted in UMTS access due to linked Context or bundle deactivation. No IPCA Response is sent in this case. |
| 3G-NRSPCA-Abort-Linked-Ctx-Detach | Total number of NRSPCA procedures aborted in UMTS access due to Detach procedure. No IPCA Response is sent in this case. |
| 3G-NRSPCA-Abort-Inter-RAT-Handoff | Total number of NRSPCA procedures aborted in UMTS access due to inter-RAT RAU. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "Temporarily rejected due to handover procedure in progress" is sent. |
| 3G-NRSPCA-Abort-Iu-release | Total number of NRSPCA procedures aborted in UMTS access due to Iu release. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "UE not responding" is sent. |

| Field | Description |
|------------------------------|---|
| 3G-NRSPCA-Abort-SRNS-Handoff | <p>Total number of NRSPCA procedures aborted in UMTS access due to old SGSN SRNS. IPCA Response with cause "MS is not GPRS responding" is sent in this case.</p> <p>For S4-SGSN, CBR Response with cause "Temporarily rejected due to handover procedure in progress" is sent.</p> |
| 3G-NRSPCA-Abort-Intra-RAU | <p>Total number of NRSPCA procedures aborted in UMTS access due to intra RAU. IPCA Response with cause "MS is not GPRS responding" is sent in this case.</p> <p>For S4-SGSN, CBR Response with cause "Temporarily rejected due to handover procedure in progress" is sent.</p> |
| 3G-NRSPCA-Abort-Intra-SRNS | <p>Total number of NRSPCA procedures aborted in UMTS access due to local SRNS. IPCA Response with cause "MS is not GPRS responding" is sent in this case.</p> <p>For S4-SGSN, CBR Response with cause "Temporarily rejected due to handover procedure in progress" is sent.</p> |
| 3G-NRSPCA-Abort-RAB-Failure | <p>Total number of NRSPCA procedures aborted in UMTS access due to RAB failure.</p> <p>NOTE: This is applicable only for S4-SGSN as RAB setup needs to be completed before sending CBR Response. (In Gn/Gp IPCA Rsp and Create PDP procedure is completed before RAB setup).</p> <p>CBR Response with cause "No resources available" is sent.</p> |
| 3G-NRSPCA-Abort-Ctx-Deactv | <p>Total number of NRSPCA procedures aborted in UMTS access due to PDP deactivation events such as,</p> <ul style="list-style-type: none"> • GTPU Path failure during RAB establishment • RAB Release while waiting for RAB Assignment Response for other bearers in case of multiple bearers being activated in a single CBR Request • Iu release during RAB setup <p>NOTE: This is applicable only for S4-SGSN as RAB setup needs to be completed before sending CBR Response. (In Gn/Gp IPCA Rsp and Create PDP procedure is completed before RAB setup)</p> <p>CBR Response with cause "No resources available" is sent.</p> |
| 2G-NRSPCA-Abort-Subs-Suspend | <p>Total number of NRSPCA procedures aborted in GPRS access due to GTP Suspend from peer SGSN. IPCA Response with cause "MS is GPRS Suspended" is sent in this case.</p> <p>For S4-SGSN, CBR Response with cause "Unable to page UE due to Suspension" is sent.</p> |

| Field | Description |
|-----------------------------------|--|
| 2G-NRSPCA-Abort-Handoff | Total number of NRSPCA procedures aborted in GPRS access by handoff to peer SGSN. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "Temporarily rejected due to handover procedure in progress" is sent. |
| 2G-NRSPCA-Abort-T3385-Expiry | Total number of NRSPCA procedures aborted in GPRS access due T3385 timer expiry. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "UE not responding" is sent. |
| 2G-NRSPCA-Abort-Paging-Expiry | Total number of NRSPCA procedures aborted in GPRS access due to Paging Expiry. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "UE not responding" is sent. |
| 2G-NRSPCA-Abort-Linked-Ctx-Deactv | Total number of NRSPCA procedures aborted in GPRS access due to linked context or bundle deactivation. No IPCA Response is sent in this case. |
| 2G-NRSPCA-Abort-Linked-Ctx-Detach | Total number of NRSPCA procedures aborted in GPRS access due to Detach procedure. No IPCA Response is sent in this case. |
| 2G-NRSPCA-Abort-Inter-RAT-Handoff | Total number of NRSPCA procedures aborted in GPRS access due to intra-RAT RAU. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "Temporarily rejected due to handover procedure in progress" is sent. |
| 2G-NRSPCA-Abort-Ready-Tmr-Expiry | Total number of NRSPCA procedure aborted in GPRS access due to ready timer expiry during NRSPCA activation. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "UE not responding" is sent. |
| 2G-NRSPCA-Abort-Radio-Status | Total number of NRSPCA procedures aborted in GPRS access due Radio Status procedure from BSC during NRSPCA activation. IPCA Response with cause "MS is not GPRS responding" is sent in this case. For S4-SGSN, CBR Response with cause "UE not responding" is sent. |

| Field | Description |
|------------------------------------|--|
| 2G-NRSPCA-Abort-BVC-Block-Or-Reset | Total number of NRSPCA procedures aborted in GPRS access due to BVC Block/Reset procedure from BSC during NRSPCA activation. IPCA Response with cause "No resources available" is sent in this case. For S4-SGSN, CBR Response with cause "No resources available" is sent. |
| Modify Context Request | Indicates the statistics of MS and network initiated PDP context modification requests received for 2G and 3G service. |
| Total-Modify-Request | Total number of MS and network initiated PDP context modification requests received for 2G and 3G service. |
| 3G-Modify-Request | Total number of MS and network initiated PDP context modification requests received for 3G service. |
| 2G-Modify Request | Total number of MS and network initiated PDP context modification requests received for 2G service. |
| Modify-Request Rx | Total number of MS initiated PDP context modification requests received for 2G and 3G service. |
| 3G-Modify-Request Rx | Total number of MS initiated PDP context modification requests received for 3G service. |
| 2G-Modify-Request Rx | Total number of MS initiated PDP context modification requests received for 2G service. |
| Modify-Request Tx | Total number of network initiated PDP context modification requests received for 2G and 3G service. |
| 3G-Modify-Request Tx | Total number of network initiated PDP context modification requests received for 3G service. |
| 2G-Modify-Request Tx | Total number of network initiated PDP context modification requests received for 2G service. |
| Retransmission | Indicates the statistics of network initiated PDP context modification requests retransmitted for 2G and 3G service. |
| Total-Modify-Request Tx | Total number of network initiated PDP context modification requests retransmitted for 2G and 3G service. |
| 3G-Modify-Request Tx | Total number of network initiated PDP context modification requests retransmitted for 3G service. |
| 2G-Modify-Request Tx | Total number of network initiated PDP context modification requests retransmitted for 2G service. |
| Modify Context Accept | Indicates the statistics of MS and network initiated PDP context modification requests accepted for 2G and 3G service. |

| Field | Description |
|-----------------------|--|
| Total-Modify-Accept | Total number of MS and network initiated PDP context modification requests accepted for 2G and 3G service. |
| 3G-Modify-Accept | Total number of MS and network initiated PDP context modification requests accepted for 3G service. |
| 2G-Modify-Accept | Total number of MS and network initiated PDP context modification requests accepted for 2G service. |
| Modify-Accept Tx | Total number of MS initiated PDP context modification requests accepted for 2G and 3G service. |
| 3G-Modify-Accept Tx | Total number of MS initiated PDP context modification requests accepted for 3G service. |
| 2G-Modify-Accept Tx | Total number of MS initiated PDP context modification requests accepted for 2G service. |
| Modify-Accept Rx | Total number of network initiated PDP context modification requests accepted for 2G and 3G service. |
| 3G-Modify-Accept Rx | Total number of network initiated PDP context modification requests received for 3G service. |
| 2G-Modify-Accept Rx | Total number of network initiated PDP context modification requests accepted for 2G service. |
| Modify Context Reject | Indicates the statistics of MS and network initiated PDP context modification requests rejected for 2G and 3G service. |
| Total-Modify-Reject | Total number of MS and network initiated PDP context modification requests rejected for 2G and 3G service. |
| 3G-Modify-Reject | Total number of MS and network initiated PDP context modification requests rejected for 3G service. |
| 2G-Modify-Reject | Total number of MS and network initiated PDP context modification requests rejected for 2G service. |
| Modify-Reject Tx | Total number of MS initiated PDP context modification requests rejected for 2G and 3G service. |
| 3G-Modify-Reject Tx | Total number of MS initiated PDP context modification requests rejected for 3G service. |
| 2G-Modify-Reject Tx | Total number of MS initiated PDP context modification requests rejected for 2G service. |
| Modify-Reject Rx | Total number of network initiated PDP context modification requests rejected for 2G and 3G service. |
| 3G-Modify-Reject Rx | Total number of network initiated PDP context modification requests rejected for 3G service. |

| Field | Description |
|--------------------------------|--|
| 2G-Modify-Reject Rx | Total number of network initiated PDP context modification requests rejected for 2G service. |
| Modify PDP Context Denied Tx | Indicates the reasons for denying MS initiated PDP context modifications for 2G and 3G services. |
| 3G-Insufficient Resources | Total number of MS initiated requests to modify PDP context for 3G service rejected due to insufficient resources. |
| 2G-Insufficient Resources | Total number of MS initiated requests to modify PDP context for 3G service rejected due to insufficient resources. |
| 3G-Svc Option Not Supported | Total number of MS initiated requests to modify PDP context for 3G service rejected as requested service option is not supported. |
| 2G-Svc Option Not Supported | Total number of MS initiated requests to modify PDP context for 2G service rejected as requested service option is not supported. |
| 3G-Sem Err in TFT OP | Total number of MS initiated requests to modify PDP context for 3G service rejected due to semantic error in subscriber traffic flow template operation. |
| 2G-Sem Err in TFT OP | Total number of MS initiated requests to modify PDP context for 2G service rejected due to semantic error in subscriber traffic flow template operation. |
| 3G-Syntactic Err in TFT OP | Total number of MS initiated requests to modify PDP context for 3G service rejected due to syntax error in subscriber traffic flow template operation. |
| 2G-Syntactic Err in TFT OP | Total number of MS initiated requests to modify PDP context for 2G service rejected due to syntax error in subscriber traffic flow template operation. |
| 3G-Sem Err in Pkt Filter | Total number of MS initiated requests to modify PDP context for 3G service rejected due to semantic error in packet filter. |
| 2G-Sem Err in Pkt Filter | Total number of MS initiated requests to modify PDP context for 2G service rejected due to semantic error in packet filter. |
| 3G-Syntactic Err in Pkt Filter | Total number of MS initiated requests to modify PDP context for 3G service rejected due to syntax error in packet filter. |
| 2G-Syntactic Err in Pkt Filter | Total number of MS initiated requests to modify PDP context for 2G service rejected due to syntax error in packet filter. |
| 3G-Sem Incorrect Msg | Total number of MS initiated requests to modify PDP context for 3G service rejected due to semantically incorrect message. |
| 2G-Sem Incorrect Msg | Total number of MS initiated requests to modify PDP context for 2G service rejected due to semantically incorrect message. |

| Field | Description |
|----------------------------------|--|
| 3G-Invalid Mandatory Info | Total number of MS initiated requests to modify PDP context for 3G service rejected as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of MS initiated requests to modify PDP context for 2G service rejected as mandatory information in message is invalid. |
| 3G-Msg Non Existent | Total number of MS initiated requests to modify PDP context for 3G service rejected due to non-existent type of message. |
| 2G-Msg Non Existent | Total number of MS initiated requests to modify PDP context for 2G service rejected due to non-existent type of message. |
| 3G-IE Non Existent | Total number of MS initiated requests to modify PDP context for 3G service rejected due to non-existence of information element. |
| 2G-IE Non Existent | Total number of MS initiated requests to modify PDP context for 2G service rejected due to non-existence of information element. |
| 3G-Conditional IE Error | Total number of MS initiated requests to modify PDP context for 3G service rejected due to error in conditional information element. |
| 2G-Conditional IE Error | Total number of MS initiated requests to modify PDP context for 2G service rejected due to error in conditional information element. |
| 3G-Msg Not Compatible with State | Total number of MS initiated requests to modify PDP context for 3G service rejected as message type is not compatible with protocol state. |
| 2G-Msg Not Compatible with State | Total number of MS initiated requests to modify PDP context for 2G service rejected as message type is not compatible with protocol state. |
| 3G-Recovery on Timer Expiry | Total number of MS initiated requests to modify PDP context for 3G service rejected as timer expired for recovery. |
| 2G-Recovery on Timer Expiry | Total number of MS initiated requests to modify PDP context for 2G service rejected as timer expired for recovery. |
| 3G-Proto Err Unspecified | Total number of MS initiated requests to modify PDP context for 3G service rejected due to unspecified protocol error. |
| 2G-Proto Err Unspecified | Total number of MS initiated requests to modify PDP context for 2G service rejected due to unspecified protocol error. |
| Modify PDP Context Rx | Indicates the statistics of reason to deny SGSN initiated PDP context modification for 2G and 3G service denied. |
| 3G-Insufficient Resources | Total number of SGSN initiated requests received to modify PDP context for 3G service rejected due to insufficient resources. |

| Field | Description |
|--------------------------------|--|
| 2G-Insufficient Resources | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to insufficient resources. |
| 3G-Svc Option Not Supported | Total number of SGSN initiated requests to modify PDP context for 3G service rejected as requested service option is not supported. |
| 2G-Svc Option Not Supported | Total number of SGSN initiated requests to modify PDP context for 2G service rejected as requested service option is not supported. |
| 3G-Sem Err in TFT OP | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to semantic error in subscriber traffic flow template operation. |
| 2G-Sem Err in TFT OP | Total number of SGSN initiated requests to modify PDP context for 2G service rejected due to semantic error in subscriber traffic flow template operation. |
| 3G-Syntactic Err in TFT OP | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to syntax error in subscriber traffic flow template operation. |
| 2G-Syntactic Err in TFT OP | Total number of SGSN initiated requests to modify PDP context for 2G service rejected due to syntax error in subscriber traffic flow template operation. |
| 3G-Sem Err in Pkt Filter | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to semantic error in packet filter. |
| 2G-Sem Err in Pkt Filter | Total number of SGSN initiated requests to modify PDP context for 2G service rejected due to semantic error in packet filter. |
| 3G-Syntactic Err in Pkt Filter | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to syntax error in packet filter. |
| 2G-Syntactic Err in Pkt Filter | Total number of SGSN initiated requests to modify PDP context for 2G service rejected due to syntax error in packet filter. |
| 3G-Sem Incorrect Msg | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to semantically incorrect message. |
| 2G-Sem Incorrect Msg | Total number of SGSN initiated requests to modify PDP context for 2G service rejected due to semantically incorrect message. |
| 3G-Invalid Mandatory Info | Total number of SGSN initiated requests to modify PDP context for 3G service rejected as mandatory information in message is invalid. |
| 2G-Invalid Mandatory Info | Total number of SGSN initiated requests to modify PDP context for 2G service rejected as mandatory information in message is invalid. |

| Field | Description |
|----------------------------------|--|
| 3G-Msg Non Existent | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to non-existent type of message. |
| 2G-Msg Non Existent | Total number of SGSN initiated requests to modify PDP context for 2G service rejected due to non-existent type of message. |
| 3G-IE Non Existent | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to non-existence of information element. |
| 2G-IE Non Existent | Total number of SGSN initiated requests to modify PDP context for 2G service rejected due to non-existence of information element. |
| 3G-Conditional IE Error | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to error in conditional information element. |
| 2G-Conditional IE Error | Total number of SGSN initiated requests to modify PDP context for 2G service rejected due to error in conditional information element. |
| 3G-Msg Not Compatible with State | Total number of SGSN initiated requests to modify PDP context for 3G service rejected as message type is not compatible with protocol state. |
| 2G-Msg Not Compatible with State | Total number of SGSN initiated requests to modify PDP context for 2G service rejected as message type is not compatible with protocol state. |
| 3G-Recovery on Timer Expiry | Total number of SGSN initiated requests to modify PDP context for 3G service rejected as timer expired for recovery. |
| 2G-Recovery on Timer Expiry | Total number of SGSN initiated requests to modify PDP context for 2G service rejected as timer expired for recovery. |
| 3G-Proto Err Unspecified | Total number of SGSN initiated requests to modify PDP context for 3G service rejected due to unspecified protocol error. |
| 2G-Proto Err Unspecified | Total number of SGSN initiated requests to modify PDP context for 2G service rejected due to unspecified protocol error. |
| Deactivate Context Request | Indicates the statistics of MS and network initiated PDP context deactivation requests received for 2G and 3G service. |
| Total-Deactv-Request | Total number of MS and network initiated PDP context deactivation requests received for 2G and 3G service. |
| 3G-Deactv-Request | Total number of MS and network initiated PDP context deactivation requests received for 3G service. |
| 2G-Deactv-Request | Total number of MS and network initiated PDP context deactivation requests received for 2G service. |

| Field | Description |
|----------------------------|---|
| MS-Deactiv-Request | Total number of MS initiated PDP context deactivation requests received for 2G and 3G service. |
| 3G-MS-Deactiv-Request | Total number of MS initiated PDP context deactivation requests received for 3G service. |
| 2G-MS-Deactiv-Request | Total number of MS initiated PDP context deactivation requests received for 2G service. |
| SGSN-Deactiv-Request | Total number of SGSN initiated PDP context deactivation requests received for 2G and 3G service. |
| 3G-SGSN-Deactiv-Request | Total number of SGSN initiated PDP context deactivation requests received for 3G service. |
| 2G-SGSN-Deactiv-Request | Total number of SGSN initiated PDP context deactivation requests received for 2G service. |
| HLR-Deactiv-Request | Total number of home location register (HLR) initiated PDP context deactivation requests received for 2G and 3G service. |
| 3G-HLR-Deactiv-Request | Total number of HLR initiated PDP context deactivation requests received for 3G service. |
| 2G-HLR-Deactiv-Request | Total number of HLR initiated PDP context deactivation requests received for 2G service. |
| GGSN-Deactiv-Request | Total number of GGSN initiated PDP context deactivation requests received for 2G and 3G service. |
| 3G-GGSN-Deactiv-Request | Total number of GGSN initiated PDP context deactivation requests received for 3G service. |
| 2G-GGSN-Deactiv-Request | Total number of GGSN initiated PDP context deactivation requests received for 2G service. |
| Retransmission | Indicates the statistics of network initiated PDP context deactivation requests retransmitted for 2G and 3G service |
| Total-SGSN-Deactiv-Request | Total number of SGSN initiated PDP context deactivation requests retransmitted for 2G and 3G service. |
| 3G-SGSN-Deactiv-Request | Total number of SGSN initiated PDP context deactivation requests retransmitted for 3G service. |
| 2G-SGSN-Deactiv-Request | Total number of SGSN initiated PDP context deactivation requests retransmitted for 2G service. |
| Total-HLR-Deactiv-Request | Total number of home location register (HLR) initiated PDP context deactivation requests retransmitted for 2G and 3G service. |
| 3G-HLR-Deactiv-Request | Total number of HLR initiated PDP context deactivation requests retransmitted for 3G service. |

| Field | Description |
|----------------------------|--|
| 2G-HLR-Deactiv-Request | Total number of HLR initiated PDP context deactivation requests retransmitted for 2G service. |
| Total-GGSN-Deactiv-Request | Total number of GGSN initiated PDP context deactivation requests retransmitted for 2G and 3G service. |
| 3G-GGSN-Deactiv-Request | Total number of GGSN initiated PDP context deactivation requests retransmitted for 3G service. |
| 2G-GGSN-Deactiv-Request | Total number of GGSN initiated PDP context deactivation requests retransmitted for 2G service. |
| Deactivate Context Accept | Indicates the statistics of MS and network initiated PDP context deactivation requests accepted for 2G and 3G service. |
| Total-Deactiv-Accept | Total number of MS and network initiated PDP context deactivation requests accepted for 2G and 3G service. |
| 3G-Deactiv-Accept | Total number of MS and network initiated PDP context deactivation requests accepted for 3G service. |
| 2G-Deactiv-Accept | Total number of MS and network initiated PDP context deactivation requests accepted for 2G service. |
| MS-Deactiv-Accept | Total number of MS initiated PDP context deactivation requests accepted for 2G and 3G service. |
| 3G-MS-Deactiv-Accept | Total number of MS initiated PDP context deactivation requests accepted for 3G service. |
| 2G-MS-Deactiv-Accept | Total number of MS initiated PDP context deactivation requests accepted for 2G service. |
| SGSN-Deactiv-Accept | Total number of SGSN initiated PDP context deactivation requests accepted for 2G and 3G service. |
| 3G-SGSN-Deactiv-Accept | Total number of SGSN initiated PDP context deactivation requests accepted for 3G service. |
| 2G-SGSN-Deactiv-Accept | Total number of SGSN initiated PDP context deactivation requests accepted for 2G service. |
| HLR-Deactiv-Accept | Total number of home location register (HLR) initiated PDP context deactivation requests accepted for 2G and 3G service. |
| 3G-HLR-Deactiv-Accept | Total number of HLR initiated PDP context deactivation requests accepted for 3G service. |
| 2G-HLR-Deactiv-Accept | Total number of HLR initiated PDP context deactivation requests accepted for 2G service. |
| GGSN-Deactiv-Accept | Total number of GGSN initiated PDP context deactivation requests accepted for 2G and 3G service. |

| Field | Description |
|---------------------------------|---|
| 3G-GGSN-Deactiv-Accept | Total number of GGSN initiated PDP context deactivation requests accepted for 3G service. |
| 2G-GGSN-Deactiv-Accept | Total number of GGSN initiated PDP context deactivation requests accepted for 2G service. |
| Deactivation Causes Rx | This group displays the statistics of PDP context deactivation causes received by SGSN. |
| 3G-Barred Due to ODB | The PDP contexts deactivated due to operator determined barring in 3G service network. |
| 2G-Barred Due to ODB | The PDP contexts deactivated due to operator determined barring in 2G service network. |
| 3G-Mbms Cap Insufficient Svc | The PDP contexts deactivated due to insufficient capacity for MBMS service in 3G service network. |
| 2G-Mbms Cap Insufficient Svc | The PDP contexts deactivated due to insufficient capacity for MBMS service in 2G service network. |
| 3G-Llc Or Sndcp Failure GB Mode | The PDP contexts deactivated due to failure of Logical Link Control or Sub Network Dependent Convergence Protocol (SND CP) on Gb interface in 3G service network. |
| 2G-Llc Or Sndcp Failure GB Mode | The PDP contexts deactivated due to failure of Logical Link Control or Sub Network Dependent Convergence Protocol (SND CP) on Gb interface in 2G service network. |
| 3G-Insufficient Resources | The PDP contexts deactivated due to insufficient resources in 3G service network. |
| 2G-Insufficient Resources | The PDP contexts deactivated due to insufficient resources in 2G service network. |
| 3G-Missing Or Unknown Apn | The PDP contexts deactivated due to unknown or missing APN in 3G service network. |
| 2G-Missing Or Unknown Apn | The PDP contexts deactivated due to unknown or missing APN in 2G service network. |
| 3G-Unknown Pdp Add Or Pdp Type | The PDP contexts deactivated due to unknown PDP context address or PDP context type in 3G service network. |
| 2G-Unknown Pdp Add Or Pdp Type | The PDP contexts deactivated due to unknown PDP context address or PDP context type in 2G service network. |
| 3G-User Auth Failed | The PDP contexts deactivated due to user authentication failure in 3G service network. |
| 2G-User Auth Failed | The PDP contexts deactivated due to user authentication failure in 2G service network. |

| Field | Description |
|----------------------------------|---|
| 3G-Actv Rej By Ggsn | The PDP contexts deactivated as PDP context activation rejected by GGSN in 3G service network. |
| 2G-Actv Rej By Ggsn | The PDP contexts deactivated as PDP context activation rejected by GGSN in 2G service network. |
| 3G-Actv Rej Unspecified | The PDP contexts deactivated as PDP context activation rejection was not specified by network in 3G service network. |
| 2G-Actv Rej Unspecified | The PDP contexts deactivated as PDP context activation rejection was not specified by network in 2G service network. |
| 3G-Svc Option Not Supported | The PDP contexts deactivated as service option was not supported in 3G service network. |
| 2G-Svc Option Not Supported | The PDP contexts deactivated as service option was not supported in 2G service network. |
| 3G-Req Svc Option Not Subscribed | The PDP contexts deactivated as requested service option was not subscribed by respective subscriber in 3G service network. |
| 2G-Req Svc Option Not Subscribed | The PDP contexts deactivated as requested service option was not subscribed by respective subscriber in 2G service network. |
| 3G-Svc Option Tmp Out Of Order | The PDP contexts deactivated as requested service option was temporarily out of order or not available in 3G service network. |
| 2G-Svc Option Tmp Out Of Order | The PDP contexts deactivated as requested service option was temporarily out of order or not available in 2G service network. |
| 3G-Nsapi Already Used | The PDP contexts deactivated as requested Network Service Access Point Identifier (NSAPI) was already used in 3G service network. |
| 2G-Nsapi Already Used | The PDP contexts deactivated as requested Network Service Access Point Identifier (NSAPI) was already used in 2G service network. |
| 3G-Regular Deactv | The PDP contexts deactivated due to periodic deactivation in 3G service network. |
| 2G-Regular Deactv | The PDP contexts deactivated due to periodic deactivation in 2G service network. |
| 3G-Qos Not Accepted | The PDP contexts deactivated as requested QoS for session was not accepted by system in 3G service network. |
| 2G-Qos Not Accepted | The PDP contexts deactivated as requested QoS for session was not accepted by system in 2G service network. |
| 3G-Network Failure | The PDP contexts deactivated due to network failure in 3G service network. |

| Field | Description |
|-----------------------------------|--|
| 2G-Network Failure | The PDP contexts deactivated due to network failure in 2G service network. |
| 3G-Reactv Required | The PDP contexts deactivated as reactivation was required for PDP context in 3G service network. |
| 2G-Reactv Required | The PDP contexts deactivated as reactivation was required for PDP context in 2G service network. |
| 3G-Feature Not Supported | The PDP contexts deactivated as requested feature was not supported in 3G service network. |
| 2G-Feature Not Supported | The PDP contexts deactivated as requested feature was not supported in 2G service network. |
| 3G-Sem Error In The Tft Op | The PDP contexts deactivated due to semantic error in traffic flow template options in 3G service network. |
| 2G-Sem Error In The Tft Op | The PDP contexts deactivated due to semantic error in traffic flow template options in 2G service network. |
| 3G-Synt Error In The Tft Op | The PDP contexts deactivated due to syntax error in traffic flow template options in 3G service network. |
| 2G-Synt Error In The Tft Op | The PDP contexts deactivated due to syntax error in traffic flow template options in 2G service network. |
| 3G-Unknown Ctx | The PDP contexts deactivated due to unknown PDP context in 3G service network. |
| 2G-Unknown Ctx | The PDP contexts deactivated due to unknown PDP context in 2G service network. |
| 3G-Ctx No-Tft Already Activated | The PDP contexts deactivated as no PDP context was available for activated TFT in 3G service network. |
| 2G-Ctx No-Tft Already Activated | The PDP contexts deactivated as no PDP context was available for activated TFT in 2G service network. |
| 3G-M-Cast Grp Membership Time Out | The PDP contexts deactivated due to timeout in multicast group membership for particular subscriber in 3G service network. |
| 2G-M-Cast Grp Membership Time Out | The PDP contexts deactivated due to timeout in multicast group membership for particular subscriber in 2G service network. |
| 3G-Sem Errors In Pkt Filter | The PDP contexts deactivated due to semantic error in packet filter in 3G service network. |
| 2G-Sem Errors In Pkt Filter | The PDP contexts deactivated due to semantic error in packet filter in 2G service network. |
| 3G-Synt Errors In Pkt Filter | The PDP contexts deactivated due to syntax error in packet filter in 3G service network. |

| Field | Description |
|----------------------------------|---|
| 2G-Synt Errors In Pkt Filter | The PDP contexts deactivated due to syntax error in packet filter in 2G service network. |
| 3G-Invalid Transaction Id Val | The PDP contexts deactivated due to invalid transaction id value in message in 3G service network. |
| 2G-Invalid Transaction Id Val | The PDP contexts deactivated due to invalid transaction id value in message in 2G service network. |
| 3G-Sem Incorrect Msg | The PDP contexts deactivated due to semantically incorrect message in 3G service network. |
| 2G-Sem Incorrect Msg | The PDP contexts deactivated due to semantically incorrect message in 2G service network. |
| 3G-Invalid Mandatory Info | The PDP contexts deactivated due to invalid information in mandatory field of message in 3G service network. |
| 2G-Invalid Mandatory Info | The PDP contexts deactivated due to invalid information in mandatory field of message in 2G service network. |
| 3G-Msg Non Existent | The PDP contexts deactivated due to non-existent type of message received in 3G service network. |
| 2G-Msg Non Existent | The PDP contexts deactivated due to non-existent type of message received in 2G service network. |
| 3G-Ie Non Existent | The PDP contexts deactivated due to non-existent type of information element received in 3G service network. |
| 2G-Ie Non Existent | The PDP contexts deactivated due to non-existent type of information element received in 2G service network. |
| 3G-Conditional Ie Error | The PDP contexts deactivated due to error in conditional information element received in 3G service network. |
| 2G-Conditional Ie Error | The PDP contexts deactivated due to error in conditional information element received in 2G service network. |
| 3G-Proto Err Unspecified | The PDP contexts deactivated due to unspecified protocol error in message received in 3G service network. |
| 2G-Proto Err Unspecified | The PDP contexts deactivated due to unspecified protocol error in message received in 2G service network. |
| 3G-Apn Restr val Incomp With Ctx | The PDP contexts deactivated due as APN restore value was incompatible with PDP context in 3G service network. |
| 2G-Apn Restr val Incomp With Ctx | The PDP contexts deactivated due as APN restore value was incompatible with PDP context in 2G service network. |
| 3G-Msg Not Comp With State | The PDP contexts deactivated due as received message was incompatible with session state in 3G service network. |

| Field | Description |
|---------------------------------|---|
| 2G-Msg Not Comp With State | The PDP contexts deactivated due as received message was incompatible with session state in 2G service network. |
| 3G-Recovery On Timer Expiry | The PDP contexts deactivated due recovery of context started after expiry of deactivation timer 3G service network. |
| 2G-Recovery On Timer Expiry | The PDP contexts deactivated due recovery of context started after expiry of deactivation timer 2G service network. |
| Deactivation Causes Tx | This group displays the statistics of PDP context deactivation causes sent by SGSN. |
| 3G-Barred Due to ODB | The PDP contexts deactivated due to operator determined barring in 3G service network. |
| 2G-Barred Due to ODB | The PDP contexts deactivated due to operator determined barring in 2G service network. |
| 3G-Mbms Cap Insufficient Svc | The PDP contexts deactivated due to insufficient capacity for MBMS service in 3G service network. |
| 2G-Mbms Cap Insufficient Svc | The PDP contexts deactivated due to insufficient capacity for MBMS service in 2G service network. |
| 3G-Llc Or Sndcp Failure GB Mode | The PDP contexts deactivated due to failure of Logical Link Control or Sub Network Dependent Convergence Protocol (SND CP) on Gb interface in 3G service network. |
| 2G-Llc Or Sndcp Failure GB Mode | The PDP contexts deactivated due to failure of Logical Link Control or Sub Network Dependent Convergence Protocol (SND CP) on Gb interface in 2G service network. |
| 3G-Insufficient Resources | The PDP contexts deactivated due to insufficient resources in 3G service network. |
| 2G-Insufficient Resources | The PDP contexts deactivated due to insufficient resources in 2G service network. |
| 3G-Missing Or Unknown Apn | The PDP contexts deactivated due to unknown or missing APN in 3G service network. |
| 2G-Missing Or Unknown Apn | The PDP contexts deactivated due to unknown or missing APN in 2G service network. |
| 3G-Unknown Pdp Add Or Pdp Type | The PDP contexts deactivated due to unknown PDP context address or PDP context type in 3G service network. |
| 2G-Unknown Pdp Add Or Pdp Type | The PDP contexts deactivated due to unknown PDP context address or PDP context type in 2G service network. |
| 3G-User Auth Failed | The PDP contexts deactivated due to user authentication failure in 3G service network. |

| Field | Description |
|----------------------------------|---|
| 2G-User Auth Failed | The PDP contexts deactivated due to user authentication failure in 2G service network. |
| 3G-Actv Rej By Ggsn | The PDP contexts deactivated as PDP context activation rejected by GGSN in 3G service network. |
| 2G-Actv Rej By Ggsn | The PDP contexts deactivated as PDP context activation rejected by GGSN in 2G service network. |
| 3G-Actv Rej Unspecified | The PDP contexts deactivated as PDP context activation rejection was not specified by network in 3G service network. |
| 2G-Actv Rej Unspecified | The PDP contexts deactivated as PDP context activation rejection was not specified by network in 2G service network. |
| 3G-Svc Option Not Supported | The PDP contexts deactivated as service option was not supported in 3G service network. |
| 2G-Svc Option Not Supported | The PDP contexts deactivated as service option was not supported in 2G service network. |
| 3G-Req Svc Option Not Subscribed | The PDP contexts deactivated as requested service option was not subscribed by respective subscriber in 3G service network. |
| 2G-Req Svc Option Not Subscribed | The PDP contexts deactivated as requested service option was not subscribed by respective subscriber in 2G service network. |
| 3G-Svc Option Tmp Out Of Order | The PDP contexts deactivated as requested service option was temporarily out of order or not available in 3G service network. |
| 2G-Svc Option Tmp Out Of Order | The PDP contexts deactivated as requested service option was temporarily out of order or not available in 2G service network. |
| 3G-Nsapi Already Used | The PDP contexts deactivated as requested Network Service Access Point Identifier (NSAPI) was already used in 3G service network. |
| 2G-Nsapi Already Used | The PDP contexts deactivated as requested Network Service Access Point Identifier (NSAPI) was already used in 2G service network. |
| 3G-Regular Deactv | The PDP contexts deactivated due to periodic deactivation in 3G service network. |
| 2G-Regular Deactv | The PDP contexts deactivated due to periodic deactivation in 2G service network. |
| 3G-Qos Not Accepted | The PDP contexts deactivated as requested QoS for session was not accepted by system in 3G service network. |
| 2G-Qos Not Accepted | The PDP contexts deactivated as requested QoS for session was not accepted by system in 2G service network. |

| Field | Description |
|-----------------------------------|--|
| 3G-Network Failure | The PDP contexts deactivated due to network failure in 3G service network. |
| 2G-Network Failure | The PDP contexts deactivated due to network failure in 2G service network. |
| 3G-Reactv Required | The PDP contexts deactivated as reactivation was required for PDP context in 3G service network. |
| 2G-Reactv Required | The PDP contexts deactivated as reactivation was required for PDP context in 2G service network. |
| 3G-Feature Not Supported | The PDP contexts deactivated as requested feature was not supported in 3G service network. |
| 2G-Feature Not Supported | The PDP contexts deactivated as requested feature was not supported in 2G service network. |
| 3G-Sem Error In The Tft Op | The PDP contexts deactivated due to semantic error in traffic flow template options in 3G service network. |
| 2G-Sem Error In The Tft Op | The PDP contexts deactivated due to semantic error in traffic flow template options in 2G service network. |
| 3G-Synt Error In The Tft Op | The PDP contexts deactivated due to syntax error in traffic flow template options in 3G service network. |
| 2G-Synt Error In The Tft Op | The PDP contexts deactivated due to syntax error in traffic flow template options in 2G service network. |
| 3G-Unknown Ctx | The PDP contexts deactivated due to unknown PDP context in 3G service network. |
| 2G-Unknown Ctx | The PDP contexts deactivated due to unknown PDP context in 2G service network. |
| 3G-Ctx No-Tft Already Activated | The PDP contexts deactivated as no PDP context was available for activated TFT in 3G service network. |
| 2G-Ctx No-Tft Already Activated | The PDP contexts deactivated as no PDP context was available for activated TFT in 2G service network. |
| 3G-M-Cast Grp Membership Time Out | The PDP contexts deactivated due to timeout in multicast group membership for particular subscriber in 3G service network. |
| 2G-M-Cast Grp Membership Time Out | The PDP contexts deactivated due to timeout in multicast group membership for particular subscriber in 2G service network. |
| 3G-Sem Errors In Pkt Filter | The PDP contexts deactivated due to semantic error in packet filter in 3G service network. |
| 2G-Sem Errors In Pkt Filter | The PDP contexts deactivated due to semantic error in packet filter in 2G service network. |

| Field | Description |
|----------------------------------|--|
| 3G-Synt Errors In Pkt Filter | The PDP contexts deactivated due to syntax error in packet filter in 3G service network. |
| 2G-Synt Errors In Pkt Filter | The PDP contexts deactivated due to syntax error in packet filter in 2G service network. |
| 3G-Invalid Transaction Id Val | The PDP contexts deactivated due to invalid transaction id value in message in 3G service network. |
| 2G-Invalid Transaction Id Val | The PDP contexts deactivated due to invalid transaction id value in message in 2G service network. |
| 3G-Sem Incorrect Msg | The PDP contexts deactivated due to semantically incorrect message in 3G service network. |
| 2G-Sem Incorrect Msg | The PDP contexts deactivated due to semantically incorrect message in 2G service network. |
| 3G-Invalid Mandatory Info | The PDP contexts deactivated due to invalid information in mandatory field of message in 3G service network. |
| 2G-Invalid Mandatory Info | The PDP contexts deactivated due to invalid information in mandatory field of message in 2G service network. |
| 3G-Msg Non Existent | The PDP contexts deactivated due to non-existent type of message received in 3G service network. |
| 2G-Msg Non Existent | The PDP contexts deactivated due to non-existent type of message received in 2G service network. |
| 3G-Ie Non Existent | The PDP contexts deactivated due to non-existent type of information element received in 3G service network. |
| 2G-Ie Non Existent | The PDP contexts deactivated due to non-existent type of information element received in 2G service network. |
| 3G-Conditional Ie Error | The PDP contexts deactivated due to error in conditional information element received in 3G service network. |
| 2G-Conditional Ie Error | The PDP contexts deactivated due to error in conditional information element received in 2G service network. |
| 3G-Proto Err Unspecified | The PDP contexts deactivated due to unspecified protocol error in message received in 3G service network. |
| 2G-Proto Err Unspecified | The PDP contexts deactivated due to unspecified protocol error in message received in 2G service network. |
| 3G-Apn Restr val Incomp With Ctx | The PDP contexts deactivated due as APN restore value was incompatible with PDP context in 3G service network. |
| 2G-Apn Restr val Incomp With Ctx | The PDP contexts deactivated due as APN restore value was incompatible with PDP context in 2G service network. |

| Field | Description |
|---------------------------------|--|
| 3G-Msg Not Comp With State | The PDP contexts deactivated due as received message was incompatible with session state in 3G service network. |
| 2G-Msg Not Comp With State | The PDP contexts deactivated due as received message was incompatible with session state in 2G service network. |
| 3G-Recovery On Timer Expiry | The PDP contexts deactivated due recovery of context started after expiry of deactivation timer 3G service network. |
| 2G-Recovery On Timer Expiry | The PDP contexts deactivated due recovery of context started after expiry of deactivation timer 2G service network. |
| SM Status Messages | This group displays the statistics of the service manager status messages for 2G and 3G service. |
| Total-SM-Status-Tx | Total number of service manager status messages sent for 2G and 3G service |
| 3G-SM-Status-Tx | Total number of service manager status messages sent for 3G service |
| 2G-SM-Status-Tx | Total number of service manager status messages sent for 2G service |
| Total-SM-Status-Rx | Total number of service manager status messages received for 2G and 3G service |
| 3G-SM-Status-Rx | Total number of service manager status messages received for 3G service |
| 2G-SM-Status-Rx | Total number of service manager status messages received for 2G service |
| SM Status Rcvd Causes | This group displays the statistics of session manager status messages received by SGSN. |
| 3G-Barred Due to ODB | The PDP contexts deactivated due to operator determined barring in 3G service network. |
| 2G-Barred Due to ODB | The PDP contexts deactivated due to operator determined barring in 2G service network. |
| 3G-Mbms Cap Insufficient Svc | The PDP contexts deactivated due to insufficient capacity for MBMS service in 3G service network. |
| 2G-Mbms Cap Insufficient Svc | The PDP contexts deactivated due to insufficient capacity for MBMS service in 2G service network. |
| 3G-Llc Or Sndcp Failure GB Mode | The PDP contexts deactivated due to failure of Logical Link Control or Sub Network Dependent Convergence Protocol (SNDCP) on Gb interface in 3G service network. |

| Field | Description |
|----------------------------------|--|
| 2G-Llc Or Sndcp Failure GB Mode | The PDP contexts deactivated due to failure of Logical Link Control or Sub Network Dependent Convergence Protocol (SNDCP) on Gb interface in 2G service network. |
| 3G-Insufficient Resources | The PDP contexts deactivated due to insufficient resources in 3G service network. |
| 2G-Insufficient Resources | The PDP contexts deactivated due to insufficient resources in 2G service network. |
| 3G-Missing Or Unknown Apn | The PDP contexts deactivated due to unknown or missing APN in 3G service network. |
| 2G-Missing Or Unknown Apn | The PDP contexts deactivated due to unknown or missing APN in 2G service network. |
| 3G-Unknown Pdp Add Or Pdp Type | The PDP contexts deactivated due to unknown PDP context address or PDP context type in 3G service network. |
| 2G-Unknown Pdp Add Or Pdp Type | The PDP contexts deactivated due to unknown PDP context address or PDP context type in 2G service network. |
| 3G-User Auth Failed | The PDP contexts deactivated due to user authentication failure in 3G service network. |
| 2G-User Auth Failed | The PDP contexts deactivated due to user authentication failure in 2G service network. |
| 3G-Actv Rej By Ggsn | The PDP contexts deactivated as PDP context activation rejected by GGSN in 3G service network. |
| 2G-Actv Rej By Ggsn | The PDP contexts deactivated as PDP context activation rejected by GGSN in 2G service network. |
| 3G-Actv Rej Unspecified | The PDP contexts deactivated as PDP context activation rejection was not specified by network in 3G service network. |
| 2G-Actv Rej Unspecified | The PDP contexts deactivated as PDP context activation rejection was not specified by network in 2G service network. |
| 3G-Svc Option Not Supported | The PDP contexts deactivated as service option was not supported in 3G service network. |
| 2G-Svc Option Not Supported | The PDP contexts deactivated as service option was not supported in 2G service network. |
| 3G-Req Svc Option Not Subscribed | The PDP contexts deactivated as requested service option was not subscribed by respective subscriber in 3G service network. |
| 2G-Req Svc Option Not Subscribed | The PDP contexts deactivated as requested service option was not subscribed by respective subscriber in 2G service network. |

| Field | Description |
|--------------------------------|---|
| 3G-Svc Option Tmp Out Of Order | The PDP contexts deactivated as requested service option was temporarily out of order or not available in 3G service network. |
| 2G-Svc Option Tmp Out Of Order | The PDP contexts deactivated as requested service option was temporarily out of order or not available in 2G service network. |
| 3G-Nsapi Already Used | The PDP contexts deactivated as requested Network Service Access Point Identifier (NSAPI) was already used in 3G service network. |
| 2G-Nsapi Already Used | The PDP contexts deactivated as requested Network Service Access Point Identifier (NSAPI) was already used in 2G service network. |
| 3G-Regular Deactiv | The PDP contexts deactivated due to periodic deactivation in 3G service network. |
| 2G-Regular Deactiv | The PDP contexts deactivated due to periodic deactivation in 2G service network. |
| 3G-Qos Not Accepted | The PDP contexts deactivated as requested QoS for session was not accepted by system in 3G service network. |
| 2G-Qos Not Accepted | The PDP contexts deactivated as requested QoS for session was not accepted by system in 2G service network. |
| 3G-Network Failure | The PDP contexts deactivated due to network failure in 3G service network. |
| 2G-Network Failure | The PDP contexts deactivated due to network failure in 2G service network. |
| 3G-Reactiv Required | The PDP contexts deactivated as reactivation was required for PDP context in 3G service network. |
| 2G-Reactiv Required | The PDP contexts deactivated as reactivation was required for PDP context in 2G service network. |
| 3G-Feature Not Supported | The PDP contexts deactivated as requested feature was not supported in 3G service network. |
| 2G-Feature Not Supported | The PDP contexts deactivated as requested feature was not supported in 2G service network. |
| 3G-Sem Error In The Tft Op | The PDP contexts deactivated due to semantic error in traffic flow template options in 3G service network. |
| 2G-Sem Error In The Tft Op | The PDP contexts deactivated due to semantic error in traffic flow template options in 2G service network. |
| 3G-Synt Error In The Tft Op | The PDP contexts deactivated due to syntax error in traffic flow template options in 3G service network. |

| Field | Description |
|-----------------------------------|--|
| 2G-Synt Error In The Tft Op | The PDP contexts deactivated due to syntax error in traffic flow template options in 2G service network. |
| 3G-Unknown Ctx | The PDP contexts deactivated due to unknown PDP context in 3G service network. |
| 2G-Unknown Ctx | The PDP contexts deactivated due to unknown PDP context in 2G service network. |
| 3G-Ctx No-Tft Already Activated | The PDP contexts deactivated as no PDP context was available for activated TFT in 3G service network. |
| 2G-Ctx No-Tft Already Activated | The PDP contexts deactivated as no PDP context was available for activated TFT in 2G service network. |
| 3G-M-Cast Grp Membership Time Out | The PDP contexts deactivated due to timeout in multicast group membership for particular subscriber in 3G service network. |
| 2G-M-Cast Grp Membership Time Out | The PDP contexts deactivated due to timeout in multicast group membership for particular subscriber in 2G service network. |
| 3G-Sem Errors In Pkt Filter | The PDP contexts deactivated due to semantic error in packet filter in 3G service network. |
| 2G-Sem Errors In Pkt Filter | The PDP contexts deactivated due to semantic error in packet filter in 2G service network. |
| 3G-Synt Errors In Pkt Filter | The PDP contexts deactivated due to syntax error in packet filter in 3G service network. |
| 2G-Synt Errors In Pkt Filter | The PDP contexts deactivated due to syntax error in packet filter in 2G service network. |
| 3G-Invalid Transaction Id Val | The PDP contexts deactivated due to invalid transaction id value in message in 3G service network. |
| 2G-Invalid Transaction Id Val | The PDP contexts deactivated due to invalid transaction id value in message in 2G service network. |
| 3G-Sem Incorrect Msg | The PDP contexts deactivated due to semantically incorrect message in 3G service network. |
| 2G-Sem Incorrect Msg | The PDP contexts deactivated due to semantically incorrect message in 2G service network. |
| 3G-Invalid Mandatory Info | The PDP contexts deactivated due to invalid information in mandatory field of message in 3G service network. |
| 2G-Invalid Mandatory Info | The PDP contexts deactivated due to invalid information in mandatory field of message in 2G service network. |
| 3G-Msg Non Existent | The PDP contexts deactivated due to non-existent type of message received in 3G service network. |

| Field | Description |
|----------------------------------|---|
| 2G-Msg Non Existent | The PDP contexts deactivated due to non-existent type of message received in 2G service network. |
| 3G-Msg Type Not Comp With State | The PDP contexts deactivated as message type was not compatible with session state in 3G service network. |
| 2G-Msg Type Not Comp With State | The PDP contexts deactivated as message type was not compatible with session state in 2G service network. |
| 3G-Ie Non Existent | The PDP contexts deactivated due to non-existent type of information element received in 3G service network. |
| 2G-Ie Non Existent | The PDP contexts deactivated due to non-existent type of information element received in 2G service network. |
| 3G-Conditional Ie Error | The PDP contexts deactivated due to error in conditional information element received in 3G service network. |
| 2G-Conditional Ie Error | The PDP contexts deactivated due to error in conditional information element received in 2G service network. |
| 3G-Proto Err Unspecified | The PDP contexts deactivated due to unspecified protocol error in message received in 3G service network. |
| 2G-Proto Err Unspecified | The PDP contexts deactivated due to unspecified protocol error in message received in 2G service network. |
| 3G-Apn Restr val Incomp With Ctx | The PDP contexts deactivated due as APN restore value was incompatible with PDP context in 3G service network. |
| 2G-Apn Restr val Incomp With Ctx | The PDP contexts deactivated due as APN restore value was incompatible with PDP context in 2G service network. |
| 3G-Msg Not Compatible With State | The PDP contexts deactivated due as received message was incompatible with session state in 3G service network. |
| 2G-Msg Not Compatible With State | The PDP contexts deactivated due as received message was incompatible with session state in 2G service network. |
| 3G-Recovery On Timer Expiry | The PDP contexts deactivated due recovery of context started after expiry of deactivation timer 3G service network. |
| 2G-Recovery On Timer Expiry | The PDP contexts deactivated due recovery of context started after expiry of deactivation timer 2G service network. |
| SM Status Sent Causes | This group displays the statistics of session manager status messages sent by SGSN. |
| 3G-Barred Due to ODB | The PDP contexts deactivated due to operator determined barring in 3G service network. |
| 2G-Barred Due to ODB | The PDP contexts deactivated due to operator determined barring in 2G service network. |

| Field | Description |
|---------------------------------|---|
| 3G-Mbms Cap Insufficient Svc | The PDP contexts deactivated due to insufficient capacity for MBMS service in 3G service network. |
| 2G-Mbms Cap Insufficient Svc | The PDP contexts deactivated due to insufficient capacity for MBMS service in 2G service network. |
| 3G-Llc Or Sndcp Failure GB Mode | The PDP contexts deactivated due to failure of Logical Link Control or Sub Network Dependent Convergence Protocol (SNDTCP) on Gb interface in 3G service network. |
| 2G-Llc Or Sndcp Failure GB Mode | The PDP contexts deactivated due to failure of Logical Link Control or Sub Network Dependent Convergence Protocol (SNDTCP) on Gb interface in 2G service network. |
| 3G-Insufficient Resources | The PDP contexts deactivated due to insufficient resources in 3G service network. |
| 2G-Insufficient Resources | The PDP contexts deactivated due to insufficient resources in 2G service network. |
| 3G-Missing Or Unknown Apn | The PDP contexts deactivated due to unknown or missing APN in 3G service network. |
| 2G-Missing Or Unknown Apn | The PDP contexts deactivated due to unknown or missing APN in 2G service network. |
| 3G-Unknown Pdp Add Or Pdp Type | The PDP contexts deactivated due to unknown PDP context address or PDP context type in 3G service network. |
| 2G-Unknown Pdp Add Or Pdp Type | The PDP contexts deactivated due to unknown PDP context address or PDP context type in 2G service network. |
| 3G-User Auth Failed | The PDP contexts deactivated due to user authentication failure in 3G service network. |
| 2G-User Auth Failed | The PDP contexts deactivated due to user authentication failure in 2G service network. |
| 3G-Actv Rej By Ggsn | The PDP contexts deactivated as PDP context activation rejected by GGSN in 3G service network. |
| 2G-Actv Rej By Ggsn | The PDP contexts deactivated as PDP context activation rejected by GGSN in 2G service network. |
| 3G-Actv Rej Unspecified | The PDP contexts deactivated as PDP context activation rejection was not specified by network in 3G service network. |
| 2G-Actv Rej Unspecified | The PDP contexts deactivated as PDP context activation rejection was not specified by network in 2G service network. |
| 3G-Svc Option Not Supported | The PDP contexts deactivated as service option was not supported in 3G service network. |

| Field | Description |
|----------------------------------|---|
| 2G-Svc Option Not Supported | The PDP contexts deactivated as service option was not supported in 2G service network. |
| 3G-Req Svc Option Not Subscribed | The PDP contexts deactivated as requested service option was not subscribed by respective subscriber in 3G service network. |
| 2G-Req Svc Option Not Subscribed | The PDP contexts deactivated as requested service option was not subscribed by respective subscriber in 2G service network. |
| 3G-Svc Option Tmp Out Of Order | The PDP contexts deactivated as requested service option was temporarily out of order or not available in 3G service network. |
| 2G-Svc Option Tmp Out Of Order | The PDP contexts deactivated as requested service option was temporarily out of order or not available in 2G service network. |
| 3G-Nsapi Already Used | The PDP contexts deactivated as requested Network Service Access Point Identifier (NSAPI) was already used in 3G service network. |
| 2G-Nsapi Already Used | The PDP contexts deactivated as requested Network Service Access Point Identifier (NSAPI) was already used in 2G service network. |
| 3G-Regular Deactv | The PDP contexts deactivated due to periodic deactivation in 3G service network. |
| 2G-Regular Deactv | The PDP contexts deactivated due to periodic deactivation in 2G service network. |
| 3G-Qos Not Accepted | The PDP contexts deactivated as requested QoS for session was not accepted by system in 3G service network. |
| 2G-Qos Not Accepted | The PDP contexts deactivated as requested QoS for session was not accepted by system in 2G service network. |
| 3G-Network Failure | The PDP contexts deactivated due to network failure in 3G service network. |
| 2G-Network Failure | The PDP contexts deactivated due to network failure in 2G service network. |
| 3G-Reactv Required | The PDP contexts deactivated as reactivation was required for PDP context in 3G service network. |
| 2G-Reactv Required | The PDP contexts deactivated as reactivation was required for PDP context in 2G service network. |
| 3G-Feature Not Supported | The PDP contexts deactivated as requested feature was not supported in 3G service network. |
| 2G-Feature Not Supported | The PDP contexts deactivated as requested feature was not supported in 2G service network. |

| Field | Description |
|-----------------------------------|--|
| 3G-Sem Error In The Tft Op | The PDP contexts deactivated due to semantic error in traffic flow template options in 3G service network. |
| 2G-Sem Error In The Tft Op | The PDP contexts deactivated due to semantic error in traffic flow template options in 2G service network. |
| 3G-Synt Error In The Tft Op | The PDP contexts deactivated due to syntax error in traffic flow template options in 3G service network. |
| 2G-Synt Error In The Tft Op | The PDP contexts deactivated due to syntax error in traffic flow template options in 2G service network. |
| 3G-Unknown Ctx | The PDP contexts deactivated due to unknown PDP context in 3G service network. |
| 2G-Unknown Ctx | The PDP contexts deactivated due to unknown PDP context in 2G service network. |
| 3G-Ctx No-Tft Already Activated | The PDP contexts deactivated as no PDP context was available for activated TFT in 3G service network. |
| 2G-Ctx No-Tft Already Activated | The PDP contexts deactivated as no PDP context was available for activated TFT in 2G service network. |
| 3G-M-Cast Grp Membership Time Out | The PDP contexts deactivated due to timeout in multicast group membership for particular subscriber in 3G service network. |
| 2G-M-Cast Grp Membership Time Out | The PDP contexts deactivated due to timeout in multicast group membership for particular subscriber in 2G service network. |
| 3G-Sem Errors In Pkt Filter | The PDP contexts deactivated due to semantic error in packet filter in 3G service network. |
| 2G-Sem Errors In Pkt Filter | The PDP contexts deactivated due to semantic error in packet filter in 2G service network. |
| 3G-Synt Errors In Pkt Filter | The PDP contexts deactivated due to syntax error in packet filter in 3G service network. |
| 2G-Synt Errors In Pkt Filter | The PDP contexts deactivated due to syntax error in packet filter in 2G service network. |
| 3G-Invalid Transaction Id Val | The PDP contexts deactivated due to invalid transaction id value in message in 3G service network. |
| 2G-Invalid Transaction Id Val | The PDP contexts deactivated due to invalid transaction id value in message in 2G service network. |
| 3G-Sem Incorrect Msg | The PDP contexts deactivated due to semantically incorrect message in 3G service network. |
| 2G-Sem Incorrect Msg | The PDP contexts deactivated due to semantically incorrect message in 2G service network. |

| Field | Description |
|----------------------------------|---|
| 3G-Invalid Mandatory Info | The PDP contexts deactivated due to invalid information in mandatory field of message in 3G service network. |
| 2G-Invalid Mandatory Info | The PDP contexts deactivated due to invalid information in mandatory field of message in 2G service network. |
| 3G-Msg Non Existent | The PDP contexts deactivated due to non-existent type of message received in 3G service network. |
| 2G-Msg Non Existent | The PDP contexts deactivated due to non-existent type of message received in 2G service network. |
| 3G-Msg Type Not Comp With State | The PDP contexts deactivated as message type was not compatible with session state in 3G service network. |
| 2G-Msg Type Not Comp With State | The PDP contexts deactivated as message type was not compatible with session state in 2G service network. |
| 3G-Ie Non Existent | The PDP contexts deactivated due to non-existent type of information element received in 3G service network. |
| 2G-Ie Non Existent | The PDP contexts deactivated due to non-existent type of information element received in 2G service network. |
| 3G-Conditional Ie Error | The PDP contexts deactivated due to error in conditional information element received in 3G service network. |
| 2G-Conditional Ie Error | The PDP contexts deactivated due to error in conditional information element received in 2G service network. |
| 3G-Proto Err Unspecified | The PDP contexts deactivated due to unspecified protocol error in message received in 3G service network. |
| 2G-Proto Err Unspecified | The PDP contexts deactivated due to unspecified protocol error in message received in 2G service network. |
| 3G-Apn Restr val Incomp With Ctx | The PDP contexts deactivated due as APN restore value was incompatible with PDP context in 3G service network. |
| 2G-Apn Restr val Incomp With Ctx | The PDP contexts deactivated due as APN restore value was incompatible with PDP context in 2G service network. |
| 3G-Msg Not Compatible With State | The PDP contexts deactivated due as received message was incompatible with session state in 3G service network. |
| 2G-Msg Not Compatible With State | The PDP contexts deactivated due as received message was incompatible with session state in 2G service network. |
| 3G-Recovery On Timer Expiry | The PDP contexts deactivated due recovery of context started after expiry of deactivation timer 3G service network. |
| 2G-Recovery On Timer Expiry | The PDP contexts deactivated due recovery of context started after expiry of deactivation timer 2G service network. |

| Field | Description |
|---------------------------------|--|
| RNC Initiated RAB Messages | Indicates the statistics of the radio network controller (RNC) initiated radio access bearer (RAB) messages for 2G and 3G service. |
| Total Rab Mod Requested | Total number of requests for radio access bearer modification initiated by radio network controller. |
| Num Rab Mod | Total number of RAB modified on requests for modification initiated by radio network controller. |
| Total Rab Rel Requested | Total number of requests for radio access bearer release initiated by radio network controller. |
| Num Rab Rel | Total number of RAB modified on requests for release initiated by radio network controller. |
| SGSN Initiated RAB Messages | Indicates the statistics of the SGSN initiated radio access bearer (RAB) messages for 2G and 3G service. |
| Total Rab Assign Requested | Total number of SGSN initiated RAB assign requests messages received. |
| Total Rab Assign Rsp Rcvd | Total number of SGSN initiated RAB assign response messages received. |
| Rab Setup/Mod Attempted | Total number of SGSN initiated setup and modification attempted for RAB. |
| Rab Setup/Mod Accepted | Total number of SGSN initiated setup and modification accepted for RAB. |
| Rab Setup/Mod Timer Expired | Total number of SGSN initiated RAB setup and modification events where procedure timer exhausted. |
| Rab Setup/Mod Failed | Total number of SGSN initiated RAB setup and modification events failed. |
| Rab Rel Attempted | Total number of SGSN initiated RAB release procedure attempted. |
| Rab Rel Accepted | Total number of SGSN initiated RAB release procedure accepted. |
| Rab Rel Timer Expired | Total number of SGSN initiated RAB release procedure where procedure timer exhausted. |
| Rab Rel Failed | Total number of SGSN initiated RAB release procedure failed. |
| Rab Queued | Total number of SGSN initiated RAB messages in queue. |
| Rab Setup Reattempted (Diff IP) | Total number of SGSN initiated RAB setup reattempted with different IP address. |
| Total Set/Mod/Rel Rab Rejected | Total number of SGSN initiated RAB setup, modification/release rejected. |

| Field | Description |
|-------------------------------|--|
| RAB Release Reason | This group indicates the statistics of reasons for RAB release. |
| Pre-Empted RAB Release | Total number of RABs released because SGSN preempted another RAB. |
| Rab Rel Due to UTRAN | Total number of RAB released due to UTRAN. |
| UE Radio Connection Lost | Total number of RAB released due to radio connection lost from UE. |
| Rab Rel Due to Other Reason | Total number of RAB released due to reasons other than listed in this table. |
| RAB Assignment Denied | This group indicates the statistics of reasons for RAB assignment denial. |
| Rab Pre Empted | Total number of RAB assignment denied because SGSN preempted another RAB. |
| Trelocoverall Expiry | Total number of RAB assignment denied because Overall Relocation timer expired. |
| Trelocprep Expiry | Total number of RAB assignment denied because Relocation Preparation timer expired. |
| Treloccomplete Expiry | Total number of RAB assignment denied because Relocation Completed timer expired. |
| Tqueuing Expiry | Total number of RAB assignment denied because Queuing timer expired. |
| Relocation Triggered | Total number of RAB assignment denied because another relocation procedure triggered. |
| Unable Establish During Reloc | Total number of RAB assignment denied because RAB failed to establish during relocation as it cannot be supported in the target RNC. |
| Unknown Target Rnc | Total number of RAB assignment denied because the target RNC is not known to the CN. |
| Relocation Cancelled | Total number of RAB assignment denied because relocation procedure was cancelled by the UTRAN or the UE. |
| Successful Relocation | Total number of RAB assignment denied because relocation was completed successfully. |
| Req Cipher Algo Not Supported | Total number of RAB assignment denied because the UTRAN or the UE is unable to support the requested ciphering and/or integrity protection algorithms. |
| Conflict Cipher Info | Total number of RAB assignment denied because there was conflict in ciphering information. |

| Field | Description |
|---------------------------------|--|
| Failure In The Radio I/F Proc | Total number of RAB assignment denied because radio interface procedure has failed. |
| Rel Due To Utran Reason | Total number of RAB assignment denied as RAB release is initiated due to UTRAN generated reason. |
| User Inactivity | Total number of RAB assignment denied due to user inactivity. |
| Time Critical Relocation | Total number of RAB assignment denied because relocation is requested for time critical reason. |
| Req Traffic Class Unavail | Total number of RAB assignment denied because requested traffic class was not available for subscriber or in the RAN. |
| Invalid Rab Parameters Val | Total number of RAB assignment denied due to invalid value in RAB parameters. |
| Req Max Bit Rate Unavail | Total number of RAB assignment denied because requested Maximum Bit Rate was not available for downlink or uplink in RAN. |
| Req Max Bit Rate DL Unavail | Total number of RAB assignment denied because requested Maximum Bit Rate was not available for downlink in RAN. |
| Req Max Bit Rate For UL Unavail | Total number of RAB assignment denied because requested Maximum Bit Rate was not available for uplink in RAN. |
| Req G-Bit Rate Unavail | Total number of RAB assignment denied because requested Guaranteed Bit Rate was not available for downlink or uplink in RAN. |
| Req DL G-Bit Rate Unavail | Total number of RAB assignment denied because requested Guaranteed Bit Rate was not available for downlink in RAN. |
| Req UL G-Bit Rate Unavail | Total number of RAB assignment denied because requested Guaranteed Bit Rate was not available for uplink in RAN. |
| Req Trans Delay Not Achievable | Total number of RAB assignment denied because requested transfer delay is not achievable. |
| Invalid Rab Param Combo | Total number of RAB assignment denied due to invalid RAB parameters combination. |
| Violation For Sdu Parameters | Total number of RAB assignment denied due to condition violation for SDU parameters. |
| Violation Traffic Hndl Prio | Total number of RAB assignment denied due to condition violation for traffic handling priority. |
| Violation For G-Bit Rate | Total number of RAB assignment denied due to condition violation for guaranteed bit rate. |

| Field | Description |
|--------------------------------|--|
| User Plane Ver Unsupported | Total number of RAB assignment denied because requested user plane versions were not supported. |
| Iu Up Failure | Total number of RAB assignment denied due to failure in Iu user plane. |
| Trelocalloc Expiry | Total number of RAB assignment denied because Relocation Resource Allocation procedure failed due to expiry of the timer TRELOCCalloc. |
| Relocation Failure In T-System | Total number of RAB assignment denied because relocation failed due to a failure in target CN/RNC or target system. |
| Invalid Rab Id | Total number of RAB assignment denied because the RAB ID is unknown in the RNC. |
| No Remaining Rab | Total number of RAB assignment denied because no RAB is available. |
| Interaction With Other Proc | Total number of RAB assignment denied because relocation was cancelled due to interaction with other procedure. |
| Repeated Integrity Check Fail | Total number of RAB assignment denied due to repeated failure in integrity checking. |
| Req Type Not Supported | Total number of RAB assignment denied because the RNC is not supporting the requested location report type. |
| Req Superseded | Total number of RAB assignment denied because there was a second request on the same RAB. |
| Ue Gen Sig Con Rel | Total number of RAB assignment denied due to due to UE generated signalling connection release |
| Resource Optimisation Reloc | Total number of RAB assignment denied because relocation was requested due to resource optimisation. |
| Req Info Unavail | Total number of RAB assignment denied because requested information is not available. |
| Relocation Due to Radio Reason | Total number of RAB assignment denied because relocation was requested due to radio reason. |
| Reloc Unsupported In T-Rnc | Total number of RAB assignment denied due to relocation failure as relocation was not supported in target RNC or target system. |
| Directed Retry | Total number of RAB assignment denied because retry was directed from RNC. |
| Radio Con With Ue Lost | Total number of RAB assignment denied because radio connection was lost with UE. |

| Field | Description |
|-------------------------------|--|
| Rnc Unable Establish All Rfcs | Total number of RAB assignment denied because RNC couldn't establish all RAB subflow combinations indicated within the RAB Parameters IE. |
| Deciphering Keys Unavail | Total number of RAB assignment denied because RNC is not able to provide requested deciphering keys. |
| Dedicated Assist Data Unavail | Total number of RAB assignment denied because RNC is not able to successfully deliver the requested dedicated assistance data to the UE. |
| Reloc Target Not Allowed | Total number of RAB assignment denied because relocation to the indicated target cell is not allowed for the UE in question. |
| Location Reporting Congestion | Total number of RAB assignment denied as congestion status reported location report. |
| Reduce Load In Serving Cell | Total number of RAB assignment denied because system was reducing load in service cell. |
| No Radio Resources In T-Cell | Total number of RAB assignment denied because radio resource was not available in target cell. |
| Geran Iu Mode Failure | Total number of RAB assignment denied because the GERAN cannot provide an appropriate RAB due to limited capabilities within GERAN. |
| Acc Rstrd Due To Shared N/w | Total number of RAB assignment denied because access to target system restricted due to shared networks. |
| Reloc Unsuported Due Puesbin | Total number of RAB assignment denied as the incoming relocation cannot be accepted by the target RNC because of the Provision of UE Specific Behavior Information to Network Entities (PUESBINE) feature. |
| Traffic T-Cell > S-Cell | Total number of RAB assignment denied because the target cell's traffic load is higher than that in the source cell. |
| Mbms No Multicast Svc For Ue | Total number of RAB assignment denied because the UE does not have any active multicast service. |
| Mbms Unknown Ue Id | Total number of RAB assignment denied because the CN does not know the UE or unknown UE identifier. |
| Mbms Sess Start No Data | Total number of RAB assignment denied because the MBMS Session Start procedure was successfully performed, but the RNC does not have any interested UE. |
| Mbms Superseded Due To Nnsf | Total number of RAB assignment denied as the MBMS Session Start procedure was rejected because NAS Node Selection Function (NNSF) towards another CN node. |

| Field | Description |
|--------------------------------|--|
| Mbms Ue Linking Already Done | Total number of RAB assignment denied because the UE has already been linked to the given Multicast service |
| Mbms Ue De Linking Failure | Total number of RAB assignment denied because the UE had not been linked to the given Multicast service. |
| Tmgi Unknown | Total number of RAB assignment denied due to requested MBMS action failure because of the indicated Temporary Mobile Group Identity (TMGI) is unknown. |
| MS Unspecified Failure | Total number of RAB assignment denied due to unspecified failures from UE side. |
| SRNS Context Transfer Messages | Indicates the statistics of SGSN radio network subsystem context transfer messages. |
| SRNS Context Req Send | Total number of SGSN radio network subsystem context transfer request messages sent. |
| SRNS Context Rsp Rcvd | Total number of SGSN radio network subsystem context transfer response messages received. |
| SRNS Context Req Timer Expired | Total number of events when timer exhausted for SGSN radio network subsystem context transfer request messages. |
| Total PDP-Ctxt Accepted | Total number of PDP context accepted for SGSN radio network subsystem. |
| Total PDP-Ctxt Rejected | Total number of PDP context rejected for SGSN radio network subsystem. |
| SRNS Data Fwd Cmd Send | Total number of SGSN radio network subsystem data forward commands sent. |
| SRNS Ctxt Req Denied | This group indicates the statistics of reasons for SRNS context request denial. |
| Rab Pre Empted | Total number of SRNS context request denied because SGSN preempted another RAB. |
| Trelocoverall Expiry | Total number of SRNS context request denied because Overall Relocation timer expired. |
| Trelocprep Expiry | Total number of SRNS context request denied because Relocation Preparation timer expired. |
| Treloccomplete Expiry | Total number of SRNS context request denied because Relocation Completed timer expired. |
| Tqueuing Expiry | Total number of SRNS context request denied because Queuing timer expired. |

| Field | Description |
|---------------------------------|--|
| Relocation Triggered | Total number of SRNS context request denied because another relocation procedure triggered. |
| Unable Establish During Reloc | Total number of SRNS context request denied because RAB failed to establish during relocation as it cannot be supported in the target RNC. |
| Unknown Target Rnc | Total number of SRNS context request denied because the target RNC is not known to the CN. |
| Relocation Cancelled | Total number of SRNS context request denied because relocation procedure was cancelled by the UTRAN or the UE. |
| Successful Relocation | Total number of SRNS context request denied because relocation was completed successfully. |
| Req Cipher Algo Not Supported | Total number of SRNS context request denied because the UTRAN or the UE is unable to support the requested ciphering and/or integrity protection algorithms. |
| Conflict Cipher Info | Total number of SRNS context request denied because there was conflict in ciphering information. |
| Failure In The Radio I/F Proc | Total number of SRNS context request denied because radio interface procedure has failed. |
| Rel Due To Utran Reason | Total number of SRNS context request denied as RAB release is initiated due to UTRAN generated reason. |
| User Inactivity | Total number of SRNS context request denied due to user inactivity. |
| Time Critical Relocation | Total number of SRNS context request denied because relocation is requested for time critical reason. |
| Req Traffic Class Unavail | Total number of SRNS context request denied because requested traffic class was not available for subscriber or in the RAN. |
| Invalid Rab Parameters Val | Total number of SRNS context request denied due to invalid value in RAB parameters. |
| Req Max Bit Rate Unavail | Total number of SRNS context request denied because requested Maximum Bit Rate was not available for downlink or uplink in RAN. |
| Req Max Bit Rate DL Unavail | Total number of SRNS context request denied because requested Maximum Bit Rate was not available for downlink in RAN. |
| Req Max Bit Rate For UL Unavail | Total number of SRNS context request denied because requested Maximum Bit Rate was not available for uplink in RAN. |

| Field | Description |
|--------------------------------|---|
| Req G-Bit Rate Unavail | Total number of SRNS context request denied because requested Guaranteed Bit Rate was not available for downlink or uplink in RAN. |
| Req DL G-Bit Rate Unavail | Total number of SRNS context request denied because requested Guaranteed Bit Rate was not available for downlink in RAN. |
| Req UL G-Bit Rate Unavail | Total number of SRNS context request denied because requested Guaranteed Bit Rate was not available for uplink in RAN. |
| Req Trans Delay Not Achievable | Total number of SRNS context request denied because requested transfer delay is not achievable. |
| Invalid Rab Param Combo | Total number of SRNS context request denied due to invalid RAB parameters combination. |
| Violation For Sdu Parameters | Total number of SRNS context request denied due to condition violation for SDU parameters. |
| Violation Traffic Hndl Prio | Total number of SRNS context request denied due to condition violation for traffic handling priority. |
| Violation For G-Bit Rate | Total number of SRNS context request denied due to condition violation for guaranteed bit rate. |
| User Plane Ver Unsupported | Total number of SRNS context request denied because requested user plane versions were not supported. |
| Iu Up Failure | Total number of SRNS context request denied due to failure in Iu user plane. |
| Trelocalloc Expiry | Total number of SRNS context request denied because Relocation Resource Allocation procedure failed due to expiry of the timer TRELOCalloc. |
| Relocation Failure In T-System | Total number of SRNS context request denied because relocation failed due to a failure in target CN/RNC or target system. |
| Invalid Rab Id | Total number of SRNS context request denied because the RAB ID is unknown in the RNC. |
| No Remaining Rab | Total number of SRNS context request denied because no RAB is available. |
| Interaction With Other Proc | Total number of SRNS context request denied because relocation was cancelled due to interaction with other procedure. |
| Repeated Integrity Check Fail | Total number of SRNS context request denied due to repeated failure in integrity checking. |
| Req Type Not Supported | Total number of SRNS context request denied because the RNC is not supporting the requested location report type. |

| Field | Description |
|--------------------------------|---|
| Req Superseded | Total number of SRNS context request denied because there was a second request on the same RAB. |
| Ue Gen Sig Con Rel | Total number of SRNS context request denied due to due to UE generated signalling connection release |
| Resource Optimisation Reloc | Total number of SRNS context request denied because relocation was requested due to resource optimisation. |
| Req Info Unavail | Total number of SRNS context request denied because requested information is not available. |
| Relocation Due to Radio Reason | Total number of SRNS context request denied because relocation was requested due to radio reason. |
| Reloc Unsupported In T-Rnc | Total number of SRNS context request denied due to relocation failure as relocation was not supported in target RNC or target system. |
| Directed Retry | Total number of SRNS context request denied because retry was directed from RNC. |
| Radio Con With Ue Lost | Total number of SRNS context request denied because radio connection was lost with UE. |
| Rnc Unable Establish All Rfcs | Total number of SRNS context request denied because RNC couldn't establish all RAB subflow combinations indicated within the RAB Parameters IE. |
| Deciphering Keys Unavail | Total number of SRNS context request denied because RNC is not able to provide requested deciphering keys. |
| Dedicated Assist Data Unavail | Total number of SRNS context request denied because RNC is not able to successfully deliver the requested dedicated assistance data to the UE. |
| Reloc Target Not Allowed | Total number of SRNS context request denied because relocation to the indicated target cell is not allowed for the UE in question. |
| Location Reporting Congestion | Total number of SRNS context request denied as congestion status reported location report. |
| Reduce Load In Serving Cell | Total number of SRNS context request denied because system was reducing load in service cell. |
| No Radio Resources In T-Cell | Total number of SRNS context request denied because radio resource was not available in target cell. |
| Geran Iu Mode Failure | Total number of SRNS context request denied because the GERAN cannot provide an appropriate RAB due to limited capabilities within GERAN. |

| Field | Description |
|------------------------------------|--|
| Acc Rstrd Due To Shared N/w | Total number of SRNS context request denied because access to target system restricted due to shared networks. |
| Reloc Unsuported Due Puesbin | Total number of SRNS context request denied as the incoming relocation cannot be accepted by the target RNC because of the Provision of UE Specific Behavior Information to Network Entities (PUESBINE) feature. |
| Traffic T-Cell > S-Cell | Total number of SRNS context request denied because the target cell's traffic load is higher than that in the source cell. |
| Mbms No Multicast Svc For Ue | Total number of SRNS context request denied because the UE does not have any active multicast service. |
| Mbms Unknown Ue Id | Total number of SRNS context request denied because the CN does not know the UE or unknown UE identifier. |
| Mbms Sess Start No Data | Total number of SRNS context request denied because the MBMS Session Start procedure was successfully performed, but the RNC does not have any interested UE. |
| Mbms Superseded Due To Nnsf | Total number of SRNS context request denied as the MBMS Session Start procedure was rejected because NAS Node Selection Function (NNSF) towards another CN node. |
| Mbms Ue Linking Already Done | Total number of SRNS context request denied because the UE has already been linked to the given Multicast service |
| Mbms Ue De Linking Failure | Total number of SRNS context request denied because the UE had not been linked to the given Multicast service. |
| Tmgi Unknown | Total number of SRNS context request denied due to requested MBMS action failure because of the indicated Temporary Mobile Group Identity (TMGI) is unknown. |
| MS Unspecified Failure | Total number of SRNS context request denied due to unspecified failures from UE side. |
| No Response From RNC | Total number of SRNS context request denied due no response from RNC. |
| Miscellaneous Statistics | This group displays the miscellaneous statistics. |
| Rnc Overload Statistics | This subgroup displays the RNC overload statistics. |
| Activate Request Rejected | Indicates the total number of PDP context activation requests rejected due to RNC overload. |
| Activation dropped during hand-off | Indicates the total number of PDP context activation dropped during handoff due to RNC overload. |
| Ms-Modify-Request Rejected | Indicates the total number of PDP context modify requests from MS rejected due to RNC overload. |

| Field | Description |
|---|---|
| N/W-Modify-Request Dropped | Indicates the total number of PDP context modify requests from network side dropped due to RNC overload. |
| Paging Req (Data) Dropped | Indicates the total number of paging requests from network side dropped due to RNC overload. |
| 2G APN Selection Failure Statistics | |
| SDL-1 | |
| All Packet Services Barred | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - "All Packet Switched Services Barred" setting is present in the Subscription information for the subscriber.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| PDP Type not Present, PDP Address Present | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - Activate PDP Context Request has PDP Address without PDP Type.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| PDP Type not Present, APN Present | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - Activate PDP Context Request has APN without PDP Type.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| PDP Type, Address and APN not Present, No Single SubRec | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - PDP Type, PDP Address, APN are not present in Activate PDP Context Request and multiple PDP Subscription Records are present for the subscriber.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| SDL-2 | |

| Field | Description |
|--|--|
| No SubRec matching PDP Type | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - No PDP Subscription Records matching PDP Type from Activate PDP Context Request.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| No SubRec matching PDP Type and APN, No Wildcard APN | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - No PDP Subscription Record matching PDP Type and APN from Activate PDP Context Request. Also, the subscriber does not have any PDP Subscription record with wildcard APN.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| Multiple SubRecs matching PDP Type and APN, No Dynamic Address | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - Multiple PDP Subscription Records exist matching the PDP Type and APN from Activate PDP Context Request, but without dynamic PDP address.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| Multiple SubRecs matching PDP Type and APN, with Dynamic Address | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - Multiple PDP Subscription Records exist matching the PDP Type and APN from Activate PDP Context Request, but all with dynamic PDP address.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| SDL-3 | |
| APN not Present | |
| No Wildcard APN, Multiple SubRecs matching PDP Type | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN not present in Activate PDP Context Request • No PDP Subscription record with wildcard APN and Multiple PDP Subscription Records exist matching the PDP Type <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |

| Field | Description |
|--|---|
| Multiple SubRecs with Wildcard APN and same PDP Type | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN not present in Activate PDP Context Request • Multiple PDP Subscription Records with wildcard APN exist matching the PDP Type <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| PDP Address Present | |
| No SubRec matching PDP Address | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • PDP Address present in Activate PDP Context Request • No PDP Subscription record exist matching the PDP Type and PDP Address <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| Single SubRec matching PDP Address, No APN Match | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • PDP Address present in Activate PDP Context Request • Single PDP Subscription record exist matching the PDP Type and PDP Address, but APN does not match <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| Multiple SubRecs matching PDP Address, APN not requested | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • PDP Address present in Activate PDP Context Request • Multiple PDP Subscription record exist matching the PDP Type and PDP Address, but APN not present in Activate PDP Context Request <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |

| Field | Description |
|---|--|
| Multiple SubRecs matching PDP Address, No APN Match | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • PDP Address present in Activate PDP Context Request • Multiple PDP Subscription record exist matching the PDP Type and PDP Address, but APN does not match <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| SDL-4 | |
| APN sent by MS | |
| VPLMN User, APN-OI not HPLMN, not VPLMN | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN present in Activate PDP Context Request • Subscriber is in VPLMN • Requested APN-OI is neither matching HPLMN nor VPLMN <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| VPLMN User, APN-OI is VPLMN, VPLMN Addr not allowed | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN present in Activate PDP Context Request • Subscriber is in VPLMN • Requested APN-OI matches VPLMN, but VPLMN Address is not allowed <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |

| Field | Description |
|--|--|
| VPLMN User, APN-OI is VPLMN, VPLMN AP Barred | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN present in Activate PDP Context Request • Subscriber is in VPLMN • Requested APN-OI matches VPLMN, but VPLMN Access Point Access is barred <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| VPLMN User, APN-OI is HPLMN, HPLMN AP Barred | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN present in Activate PDP Context Request • Subscriber is in VPLMN • Requested APN-OI matches HPLMN, but HPLMN Access Point Access is barred <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| VPLMN User, No APN-OI, VPLMN Addr not allowed, HPLMN AP Barred | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN present in Activate PDP Context Request • Subscriber is in VPLMN • Requested APN-OI is not present • VPLMN Address is not allowed • HPLMN Access Point Access is barred <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |

| Field | Description |
|---|---|
| VPLMN User, No APN-OI, VPLMN AP Barred, HPLMN AP Barred | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN present in Activate PDP Context Request • Subscriber is in VPLMN • Requested APN-OI is not present • VPLMN Access Point Access is barred • HPLMN Access Point Access is barred <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| HPLMN user, APN-OI not HPLMN | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN present in Activate PDP Context Request • Subscriber is in HPLMN • Requested APN-OI doesn't match HPLMN <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| APN from Single Context | |
| VPLMN Addr not allowed, HPLMN AP Barred | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN selected from Single PDP Subscription Record • VPLMN Address not allowed • HPLMN Access Point Access is barred <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |

| Field | Description |
|------------------------------------|---|
| VPLMN AP Barred, HPLMN AP Barred | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • APN selected from Single PDP Subscription Record • VPLMN Access Point Access is barred • HPLMN Access Point Access is barred <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| SDL-5: | |
| VPLMN User, VPLMN Addr not allowed | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • Default APN chosen by SGSN • Subscriber in VPLMN and • VPLMN Address not allowed <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| VPLMN User, VPLMN AP Barred | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reasons:</p> <ul style="list-style-type: none"> • Default APN chosen by SGSN • Subscriber in VPLMN • VPLMN Access Point Access is barred <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| No Default APN for PDP Type | <p>Description: Total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - No Default APN configured for the PDP Type.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| Internal APN Selection Failures: | |

| Field | Description |
|---------------------------------------|---|
| Wildcard APN with Static Address | <p>Description: This proprietary counter indicates the total number of 2G Activate Reject(s) sent to MS for the following APN Selection Failure reason - Subscription PDP Record with wildcard APN has static PDP address.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| Unknown PDP Type in Subscribed Record | <p>Description: This proprietary counter indicates the total number of 2G Activate Reject(s) sent to MS for the APN Selection Failure reason - matching Subscription PDP Record has unknown PDP Type.</p> <p>Triggers: Increments when Activate PDP Reject is sent due to this reason.</p> <p>Availability: per Chassis</p> |
| GPRS SM Dropped Statistics | This group displays the statistics related to GPRS session manager packets dropped. |
| 2G-Deactiv-Accept | Total number of Deactivate Accept messages received by GPRS session manager on SGSN for 2G service. |
| 2G-Other-SM-Msg | Total number of messages received by GPRS session manager on SGSN for 2G services from other session manager. |
| GPRS PDP FSM Statistics | This group displays the statistics related to GPRS finite state machine states for Primary PDP Context procedures. |
| Pri Actv Req Rcvd | Total number of Primary PDP Context Activate Request messages received by GPRS session manager on SGSN for GPRS service. |
| Pri Actv Acc Sent | Total number of Primary PDP Context Activate Request Accept messages sent by GPRS session manager on SGSN for GPRS service. |
| Pri Actv Rej Sent | Total number of Primary PDP Context Activate Request Reject messages sent by GPRS session manager on SGSN for GPRS service. |
| Sec Actv Req Rcvd | Total number of Secondary PDP Context Activate Request messages received by GPRS session manager on SGSN for GPRS service. |
| Sec Actv Acc Sent | Total number of Secondary PDP Context Activate Request Accept messages sent by GPRS session manager on SGSN for GPRS service. |
| Sec Actv Rej Sent | Total number of Secondary PDP Context Activate Request Reject messages sent by GPRS session manager on SGSN for GPRS service. |

| Field | Description |
|-----------------------------------|---|
| Modify Req Rcvd | Total number of PDP Context Modify Request messages received by GPRS session manager on SGSN for GPRS service. |
| Modify Acc Sent | Total number of PDP Context Modify Request Accept messages sent by GPRS session manager on SGSN for GPRS service. |
| Modify Rej Sent | Total number of PDP Context Modify Request Reject messages sent by GPRS session manager on SGSN for GPRS service. |
| Modify Req Sent | Total number of PDP Context Modify Request messages sent by GPRS session manager on SGSN for GPRS service. |
| Modify Acc Rcvd | Total number of PDP Context Modify Request Accept messages received by GPRS session manager on SGSN for GPRS service. |
| Deactv Req Rcvd | Total number of PDP Context Deactivate Request messages received by GPRS session manager on SGSN for GPRS service. |
| Deactv Acc Sent | Total number of PDP Context Deactivate Request Accept messages sent by GPRS session manager on SGSN for GPRS service. |
| Deactv Req Sent | Total number of PDP Context Deactivate Request messages sent by GPRS session manager on SGSN for GPRS service. |
| Deactv Acc Rcvd | Total number of PDP Context Deactivate Request messages received by GPRS session manager on SGSN for GPRS service. |
| SM Status Sent | Total number of messages with GPRS session manager status on SGSN for GPRS service sent by SGSN. |
| SM Status Rcvd | Total number of messages with GPRS session manager status on SGSN for GPRS service received by SGSN. |
| 3G-Req Rej BCM Violation | Indicates the transmission or receipt of a Modification PDP Context Reject with a Request Rejected, Bearer Control Mode (BCM) Violation Cause code on the S4-SGSN. |
| 2G-Req Rej BCM Violation | Indicates the transmission or receipt of a Modification PDP Context Reject with a Request Rejected, Bearer Control Mode (BCM) Violation Cause code on the S4-SGSN. |
| No suitable cell in Location Area | This counter is added for the re-direction message, it displays the presenc or absence of suitable cells in the Location Area. |
| XID Resp Failure | This counter keeps track of the number of attach failures due to the XID response failure for the XID's initiated from SGSN to negotiate IOV-UI value after successful authentication procedure (only if the Random IOV-UI procedure is enabled). Separate counters are added to count the XID faiures during simple attach and combined attach procedures. |
| Paging Statistics | |

| Field | Description |
|------------------------------|---|
| Total-CRA-Page-Req-Same-RAT | This counter keeps track of total common RA page requests. |
| 3G-PS-CRA-Page-Req-in-2G | This counter keeps track of common RA RANAP page requests for a 3G subscriber. |
| Total-CRA-Page-Ret-Same-RAT | This counter keeps track of total common RA page re-transmission requests . |
| 3G-PS-CRA-Page-Ret-Req-in-2G | This counter keeps track of total common RA RANAP page retransmission requests for a 3G subscriber. |
| Total-CRA-Page-Req-Other-RAT | This counter keeps track of total common RA page requests. |
| 3G-PS-CRA-Page-Req | This counter keeps track of total common RA BSSGP page for a 3G subscriber. |
| Total-CRA-Page-Ret-Other-RAT | This counter keeps track of total common RA page re-transmission requests |
| 3G-PS-CRA-Page-Ret-Req | This counter keeps track of total common RA page re-transmission requests for a 3G subscriber. |
| Total-CRA-Page-Rsp-Same-RAT | This counter keeps track of total common RA page responses. |
| 3G-PS-CRA-Page-Rsp | This counter keeps track of total common RA page response for a 3G subscriber. |
| Total-CRA-Page-Rsp-Other-RAT | This counter keeps track of total common RA page responses. |
| 3G-PS-CRA-Attach-from-2G | This counter keeps track of total common RA attach requests for 3G subscriber. |
| 3G-PS-CRA-RAU-from-2G | This counter keeps track of total common RA RAU requests for 3G subscriber. |
| 3G-PS-CRA-Power-Off-from-2G | This counter keeps track of total common RA Power of requests for 3G subscriber. |
| Total-CRA-Page-TO-Other-RAT | This counter keeps track of total common RA page requests to other RAT. |
| 3G-PS-CRA-Timeout-in-2G | This counter keeps track of total common RA time outs for a 3G subscriber. |
| Total-CRA-Page-Stop | This counter keeps track of total common RA stop ongoing page requests for subscribers. |
| 3G-PS-CRA-Page-Stop | This counter keeps track of total common RA stop ongoing page requests for 3G subscribers. |
| 2G-PS-CRA-Page-in-3G | This counter keeps track of common RA BSSGP page requests for a 2G subscriber. |

| Field | Description |
|--------------------------------|--|
| 2G-PS-CRA-Page-Ret-Req-in-3G | This counter keeps track of total common RA page re-transmission requests for a 2G subscriber. |
| 2G-PS-CRA-Page-Req | This counter keeps track of common RA BSSGP page requests for a 2G subscriber. |
| 2G-PS-CRA-Page-Rsp | This counter keeps track of total common RA page response for a 2G subscriber. |
| 2G-PS-CRA-Attach-from-3G | This counter keeps track of total common RA attach requests for 2G subscriber. |
| 2G-PS-CRA-RAU-from-3G | This counter keeps track of total common RA RAU requests for 2G subscriber. |
| 2G-PS-CRA-Power-Off-from-3G | This counter keeps track of total common RA Power of requests for 2G subscriber. |
| 2G-PS-CRA-Timeout-in-3G | This counter keeps track of total common RA time outs for a 2G subscriber. |
| 2G-PS-CRA-Page-Stop | This counter keeps track of total common RA stop ongoing page requests for 2G subscribers. |
| Non Paging Statistics | |
| 3G-CRA-Attach | This counter keeps track of common RA Attach requests for 3G subscribers. |
| 3G-CRA-RAU | This counter keeps track of common RA RAU requests for 3G subscribers. |
| 3G-CRA-Power-Off | This counter keeps track of common RA Power-Off requests for 3G subscribers. |
| 2G-CRA-Attach | This counter keeps track of common RA Attach requests for 2G subscribers. |
| 2G-CRA-RAU | This counter keeps track of common RA RAU requests for 2G subscribers. |
| 2G-CRA-Power-Off | This counter keeps track of common RA Power-Off requests for 2G subscribers. |
| 3G Page Throttling Statistics | |
| PS-Page-Req sent by RLF | Number of PS Paging Request sent by RLF |
| Ret-PS-Page-Req sent by RLF | Number of PS Paging Request Retries sent by RLF |
| PS-Page-Req dropped by RLF | Number of PS Paging Request dropped by RLF |
| Ret-PS-Page-Req dropped by RLF | Number of PS Paging Request Retries dropped by RLF |

| Field | Description |
|--------------------------------------|--|
| PS-Page-Req dropped due to no memory | Number of PS Paging Request dropped due to insufficient memory |
| 2G Page Throttling statistics | |
| Paging Request sent out by RLF | Number of Total PS Paging Request sent by RLF |
| Total-Page-Req sent | Total number of Paging requests sent. |
| Ret-Total-Page-Req sent | Number of Total PS Paging Request Retries sent by RLF |
| Page-Requests-LA | Number of PS Paging Request at LA level sent by RLF |
| Ret-Page-Requests-LA | Number of PS Paging Request Retries at LA level sent by RLF |
| Page-Requests-RA | Number of PS Paging Request at RA level sent by RLF |
| Ret-Page-Requests-RA | Number of PS Paging Request Retries at RA level sent by RLF |
| Page-Requests-BSS | Number of PS Paging Request at BSS level sent by RLF |
| Ret-Page-Requests-BSS | Number of PS Paging Request Retries at BSS level sent by RLF |
| Page-Requests-Cell | Number of PS Paging Request at Cell level sent by RLF |
| Ret-Page-Requests-Cell | Number of PS Paging Request Retries at Cell level sent by RLF |
| Paging Request dropped by RLF | Number of Total PS Paging Request dropped by RLF |
| Total-Page-Req dropped | Total number of Paging requests dropped. |
| Ret-Total-Page-Req dropped | Number of Total PS Paging Request Retries dropped by RLF |
| Page-Requests-LA | Number of PS Paging Request at LA level dropped by RLF |
| Ret-Page-Requests-LA | Number of PS Paging Request Retries at LA level dropped by RLF |
| Page-Requests-RA | Number of PS Paging Request at RA level dropped by RLF |
| Ret-Page-Requests-RA | Number of PS Paging Request Retries at RA level dropped by RLF |
| Page-Requests-BSS | Number of PS Paging Request at BSS level dropped by RLF |
| Ret-Page-Requests-BSS | Number of PS Paging Request Retries at BSS level dropped by RLF |
| Page-Requests-Cell | Number of PS Paging Request at Cell level dropped by RLF |
| Ret-Page-Requests-Cell | Number of PS Paging Request Retries at Cell level dropped by RLF |
| PS-Page-Req dropped due to no memory | Number of PS Paging Request dropped due to insufficient memory |
| Attach Reqs (with LAPI) | Number of 2G Attach Requests received with LAPI |

| Field | Description |
|-----------------------------|--|
| Attach Reqs(without LAPI) | Number of 2G Attach Requests received without LAPI |
| Attach Cong Rej(LAPI) | Number of 2G Attach Requests with LAPI rejected due to congestion |
| Attach Cong Rej(non LAPI) | Number of 2G Attach Requests without LAPI rejected due to congestion |
| Attach APN Cong Reject | Number of 2G Attach Requests rejected due to apn level congestion |
| RAU Reqs(with LAPI) | Number of 2G RAU Requests received with LAPI |
| RAU Reqs(without LAPI) | Number of 2G RAU Requests received without LAPI |
| RAU reject Cong LAPI | Number of 2G ISRAU Requests with LAPI rejected due to congestion |
| RAU reject Cong non-LAPI | Number of 2G ISRAU Requests without LAPI rejected due to congestion |
| RAU reject APN based Cong | Number of 2G ISRAU Requests rejected due to apn congestion |
| Dropped due to congestion | Number of 2G Intra RAU Requests dropped due to congestion |
| With LAPI | Number of 2G Intra RAU Requests with lapi dropped due to congestion |
| Without LAPI | Number of 2G Intra RAU Requests without lapi dropped due to congestion |
| RAU reject Cong LAPI | Number of 2G Intra RAU Requests with lapi rejected due to congestion |
| RAU reject Cong non-LAPI | Number of 2G Intra RAU Requests without lapi rejected due to congestion |
| Inter RAT Congestion Reject | Number of Inter RAT RAU Requests rejected due to congestion |
| Congestion rej with LAPI | Number of Inter RAT RAU Requests with LAPI rejected due to congestion |
| Congestion rej without LAPI | Number of Inter RAT RAU requests without LAPI rejected due to congestion |
| Inter GPRS Srv Rau Cong Rej | Number of Inter GPRS Service RAU Request rejected due to congestion |
| Congestion rej with LAPI | Number of Inter GPRS Service RAU Request with LAPI rejected due to congestion |
| Congestion rej without LAPI | Number of Inter GPRS Service RAU Request without LAPI rejected due to congestion |

| Field | Description |
|------------------------------|--|
| Inter RAT Congestion Drop | Number of Inter RAT RAU Requests dropped due to congestion |
| congestion drop with LAPI | Number of Inter RAT RAU requests with LAPI dropped due to congestion |
| congestion drop without LAPI | Number of Inter RAT RAU requests without LAPI dropped due to congestion |
| Inter GPRS Srv Rau Cong Drop | Number of Inter GPRS Service RAU Requests dropped due to congestion |
| Congestion drop with LAPI | Number of Inter GPRS Service RAU requests with LAPI dropped due to congestion |
| Congestion drop without LAPI | Number of Inter GPRS Service RAU requests without LAPI dropped due to congestion |
| 3G-Att-Req-with-LAPI | Number of 3G Attach Requests received with LAPI |
| 3G-Att-Req-without-LAPI | Number of 3G Attach Requests received without LAPI |
| Ret-3G-Req-With-LAPI | Number of 3G Attach Requests retried with LAPI |
| Ret-3G-Req-Without-LAPI | Number of 3G Attach Requests retried without LAPI |
| 3G-Att-Rej-Cong-With-LAPI | Number of 3G Attach requests with LAPI rejected due to congestion. |
| 3G-Att-Rej-Cong-Without-LAPI | Number of 3G Attach requests rejected without LAPI due to congestion |
| 3G-Att-Rej-APN-Based-Cong | Number of 3G Attach requests rejected due to apn level congestion |
| 3G-RAU-Req-with-LAPI | Number of 3G RAU Requests received with LAPI |
| 3G-RAU-Req-without-LAPI | Number of 3G RAU Requests received without LAPI |
| Ret-3G-RAU-With-LAPI | Number of 3G RAU Requests with LAPI retried |
| Ret-3G-RAU-Without-LAPI | Number of 3G RAU Requests without LAPI retried |
| 3G-RAU-Rej-Cong-With-LAPI | Number of 3G RAU requests with LAPI rejected due to congestion |
| 3G-RAU-Rej-Cong-Without-LAPI | Number of 3G RAU requests without LAPI rejected due to congestion |
| 3G-RAU-Rej-APN-Based-Cong | Number of 3G RAU requests rejected due to apn level congestion |
| 3G-Serv-Req-With-LAPI | Number of 3G Service Requests received with LAPI |
| 3G-Serv-Req-Without-LAPI | Number of 3G Service Requests received without LAPI |
| Ret-3G-Req-With-LAPI | Number of 3G Service Requests with LAPI retried |

| Field | Description |
|---|---|
| Ret-3G-Req-Without-LAPI | Number of 3G Service Requests without LAPI retried |
| 3G-Serv-Rej-Cong-With-LAPI | Number of 3G service requests rejected due to congestion with LAPI |
| 3G-Serv-Rej-Cong-Without-LAPI | Number of 3G service requests rejected due to congestion without LAPI |
| 3G-Congestion | Service requests rejected due to congestion. |
| Congestion(With LAPI) | Number of service requests with LAPI dropped due to congestion |
| Congestion(non LAPI) | Number of service requests without LAPI dropped due to congestion |
| Congestion(With LAPI) [under "Routing Area Update Requests Drops:"] | Number of 3G RAU requests with LAPI dropped due to congestion |
| Congestion(non LAPI) [under "Routing Area Update Requests Drops:"] | Number of 3G RAU requests without LAPI dropped due to congestion |
| Activated Subscribers 3G Activated Gn Interface | Number of 3G Gn subscribers activated with LAPI |
| Activated Subscribers 3G Activated Gn Interface | Number of 3G Gn subscribers activated without LAPI |
| Activated Subscribers 2G Activated Gn Interface | Number of 2G Gn subscribers activated with LAPI |
| Activated Subscribers 2G Activated Gn Interface | Number of 2G Gn subscribers activated without LAPI |
| Activated Subscribers 3G Activated S4 Interface | Number of 3G S4 subscribers activated with LAPI |
| Activated Subscribers 3G Activated S4 Interface | Number of 3G S4 subscribers activated without LAPI |
| Activated Subscribers 2G Activated S4 Interface | Number of 2G S4 subscribers activated with LAPI |
| Activated Subscribers 2G Activated S4 Interface | Number of 2G S4 subscribers activated without LAPI |
| Activate PDP Contexts 3G-Actv Pdp Ctx Gn Interface | Number of 3G Gn Activate PDP Contexts with LAPI |
| Activate PDP Contexts 3G-Actv Pdp Ctx Gn Interface | Number of 3G Gn Activate PDP Contexts without LAPI |
| Activate PDP Contexts 2G-Actv Pdp Ctx Gn Interface | Number of 2G Gn Activate PDP Contexts with LAPI |
| Activate PDP Contexts 2G-Actv Pdp Ctx Gn Interface | Number of 2G Gn Activate PDP Contexts without LAPI |
| Activate PDP Contexts 3G-Actv Pdp Ctx S4 Interface | Number of 3G S4 Activate PDP Contexts with LAPI |
| Activate PDP Contexts 3G-Actv Pdp Ctx S4 Interface | Number of 3G S4 Activate PDP Contexts without LAPI |
| Activate PDP Contexts 2G-Actv Pdp Ctx S4 Interface | Number of 2G S4 Activate PDP Contexts with LAPI |
| Activate PDP Contexts 2G-Actv Pdp Ctx S4 Interface | Number of 2G S4 Activate PDP Contexts without LAPI |
| Activate Context Request 3G-Actv-Request | Number of 3G Primary Activation Request Received with LAPI |

| Field | Description |
|--|--|
| Activate Context Request 2G-Actv-Request | Number of 2G Primary Activation Request Received with LAPI |
| Activate Context Request 3G-Secondary-Actv-Request Secondary-Actv-Request | Number of 3G Secondary Activation Request Received with LAPI |
| Activate Context Request 2G-Secondary-Actv-Request Secondary-Actv-Request | Number of 2G Secondary Activation Request Received with LAPI |
| Activate Context Reject Primary-Actv-Reject | Number of 3G Primary Activation Reject due to Congestion |
| Activate Context Reject Primary-Actv-Reject | Number of 3G Primary Activation Reject due to Congestion and LAPI |
| Activate Context Reject Primary-Actv-Reject | Number of 2G Primary Activation Reject due to Congestion |
| Activate Context Reject Primary-Actv-Reject | Number of 2G Primary Activation Reject due to Congestion and LAPI |
| Activate Context Reject Secondary-Actv-Reject | Number of 3G Secondary Activation Reject due to Congestion |
| Activate Context Reject Secondary-Actv-Reject | Number of 3G Secondary Activation Reject due to Congestion and LAPI |
| Activate Context Reject Secondary-Actv-Reject | Number of 2G Secondary Activation Reject due to Congestion |
| Activate Context Reject Secondary-Actv-Reject | Number of 2G Secondary Activation Reject due to Congestion and LAPI |
| Modify Context Request Modify-Request Rx 3G-Modify-Request Rx | Number of 3G MS Initiated Modify Request Received with LAPI |
| Modify Context Request Modify-Request Rx 2G-Modify-Request Rx | Number of 2G MS Initiated Modify Request Received with LAPI |
| Modify Context Reject Modify-Reject Tx | Number of 3G Modify Reject due to congestion |
| Modify Context Reject Modify-Reject Tx | Number of 3G Modify Reject due to congestion and LAPI |
| Modify Context Reject Modify-Reject Tx | Number of 2G Modify Reject due to congestion |
| Modify Context Reject Modify-Reject Tx | Number of 2G Modify Reject due to congestion and LAPI |
| cur-iu-srv-req-dt-ukn-ptmsi | This counter is incremented every time current access is released due to Service request received in direct transfer with unknown-ptmsi value. |
| cur-iu-intra-rau-dt-ukn-ptmsi | This counter is incremented every time current access is released due to Local Intra RAU received in direct transfer with unknown-ptmsi value. |

| Field | Description |
|--|---|
| Rab-Not-Re-Estd-UL-Data-Stat | This field is added to display the number of RABs not re-established due to absence of NSAPI bit set in the Uplink Data Status IE. This field is also used as a measure to verify the reduction in radio signaling. |
| 3G-Pri-Actv-APN-Not-Sup-Rej | Total number of Primary 3G activate requests rejected due to absence of APN support. |
| 2G-Pri-Actv-APN-Not-Sup-Rej | Total number of Primary 2G activate requests rejected due to absence of APN support. |
| 3G-APN-Not-Supported-in-PLMN-RAT | Indicates if APN is not supported in PLMN-RAT combination in a 3G scenario. |
| 2G-APN-Not-Supported-in-PLMN-RAT | Indicates if APN is not supported in PLMN-RAT combination in a 2G scenario. |
| APN Not Supported in PLMN RAT combination Statistics | Statistics collected for APN not supported in PLMN RAT combination. |
| 3G-Pdp-Dropped-During-New-SGSN-RAU | Number of 3G PDP contexts dropped due to new SGSN-RAU. |
| 2G-Pdp-Dropped-During-New-SGSN-RAU | Number of 2G PDP contexts dropped due to new SGSN-RAU. |
| 3G-Pdp-Dropped-During-New-SGSN-SRNS | Number of 3G PDP contexts dropped due to new SGSN-SRNS. |
| Pdp-Dropped-During-3G-To-2G-IRAT | Number of 2G PDP contexts dropped due to new SGSN-SRNS. |
| 3G-Actv-NRPCA-Reject | Number of 3G activate NRPCA requests rejected. |
| Pdp-Dropped-During-2G-To-3G-IRAT | Number of PDP contexts dropped during 2G to 3G IRAT |
| APN not sup PLMN-RAT | Statistics collected for APN not supported in PLMN RAT combination. |
| Inbound Inter node SRNS failure | Number of inbound inter-node SRNS failures. |
| APN not sup in PLMN/RAT | Statistics collected for APN not supported in PLMN RAT combination. |
| Inbound Inter-RAU Fallback Statistics | Displays the inbound Inter RAU Fallback statistics. |
| 3G-Inbound Inter SGSN RAU Fallback to GTPV1 | This counter displays the number of 3G in-bound ISRAUs for which GTPv2 is restricted and RAU has succeeded over GTPv1. This counter is pegged during 3G in-bound ISRAU, when the S4-SGSN sends EGTP context Ack with failure cause to the peer as the subscriber's call-control profile has sgsn core-nw-interface configuration and initiates a GTP context request for a subscriber. |

| Field | Description |
|-------------------------------------|--|
| Inter-RAU Inbound Fallback to GTPV1 | This counter displays the number of 2G in-bound ISRAUs for which GTPv2 is restricted and RAU has succeeded over GTPv1. This counter is pegged during 2G in-bound ISRAU, when the S4-SGSN sends EGTP context ACK with failure cause to the peer as the subscriber's call-control profile has sgsn core-nw-interface gn configuration and initiates a GTP context request for a subscriber. |

