

show gtpc

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show gtpc counters ggsn-service

Table 1: show gtpc counters ggsn-service Command Output Descriptions

Field	Description
APN Name	The name of the APN that the subscriber is currently accessing.
Callid	The call identification number that uniquely identifies the subscriber.
IMSI	The subscriber's International Mobile Subscriber Identity.
NSAPI	The subscriber's Network Service Access Point Identifier.
Updates PDP Context	
Update PDP Context RX	The total number of Update PDP Context Request messages received from the SGSN(s).
Accepted	The total number of Update PDP Context Response messages transmitted to the SGSN(s) containing a cause value of 128 (80H, Request accepted).
Denied	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s).
Update PDP Context Denied	
System Failure	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 204 (CCH, System failure).

Field	Description
Invalid Message Format	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 193 (C1H, Invalid message format).
Semantic Error in TFT	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 215 (D7H, Semantic error in the TFT operation).
Syntactic Error in TFT	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 216 (D8H, Syntactic error in the TFT operation).
Semantic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 217 (D9H, Semantic error in packet filter(s)).
Mandatory IE Incorrect:	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 201 (C9H, Mandatory IE incorrect).
Mandatory IE Missing	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 202 (CAH, Mandatory IE missing).
Syntactic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 218 (DAH, Syntactic error in packet filter(s)).
Optional IE Incorrect	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 203 (CBH, Optional IE incorrect).
Updates PDP Context Sent	
Update PDP Context RX	The total number of Update PDP Context Request messages transmitted to the SGSN(s).
Accepted	The total number of Update PDP Context Response messages received from the SGSN(s) containing a cause value of 128 (80H, Request accepted).
Denied	The total number of "reject" Update PDP Context Response messages received from the SGSN(s).
Update Sent Reasons	
IP Address Updated	The total number of Update PDP Context Request messages transmitted to the SGSN(s) because of a change in the IP address of the PDP context.
QoS Updated	The total number of Update PDP Context Request messages transmitted to the SGSN(s) because of a change in the quality of service (QoS) level for the PDP context.
Misc. Reasons	The total number of Update PDP Context Request messages transmitted to the SGSN(s) for other reasons.
Update PDP Context Deny Received	
System Failure	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 204 (CCH, System failure).
Non-existent	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 193 (C1H, Invalid message format).

Field	Description
Unsupported Service	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 215 (D7H, Semantic error in the TFT operation).
Invalid Message Format	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 216 (D8H, Syntactic error in the TFT operation).
Semantic Error in TFT	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 217 (D9H, Semantic error in packet filter(s)).
Syntactic Error in TFT	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 201 (C9H, Mandatory IE incorrect).
Semantic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 202 (CAH, Mandatory IE missing).
Mandatory IE Incorrect	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 218 (DAH, Syntactic error in packet filter(s)).
Mandatory IE Missing	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 203 (CBH, Optional IE incorrect).
Syntactic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 204 (CCH, System failure).
Optional IE Incorrect	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 193 (C1H, Invalid message format).
GTPU Receive	
Total Packets	The total number of GTPU packets received.
Total Bytes	The total number of GTPU bytes received.
GTPU Send	
Total Packets	The total number of GTPU packets transmitted.
Total Bytes	The total number of GTPU bytes transmitted.

show gtpc full

Table 2: show gtpc full Command Output Descriptions

Field	Description
APN Name	The name of the APN that the subscriber is currently accessing.
Callid	The call identification number that uniquely identifies the subscriber.
User Name	The user name associated with this session.

Field	Description
User Address	Is the address of the user's PDP context in dotted decimal notation.
Session Type	Specifies the type of session for MBMS service. Possible values are: • MBMS UE • MBMS Multicast Bearer
Mcast Address	Displays the IP address of Broadcast Multicast service center.
Update MBMS Context RX	Total number of update messages received for MBMS context.
Accepted	Total number of update messages received and accepted for MBMS context
Denied	Total number of update messages received and denied for MBMS context
Discarded	Total number of update messages discarded for MBMS context
IMEI(SV)	Indicates the International Mobile Equipment Identity (and Software Version) (IMEI(SV)) of subscriber's mobile equipment.
IMSI	The subscriber's International Mobile Subscriber Identity.
NSAPI	The subscriber's Network Service Access Point Identifier.
GGSN Service	Specifies the name of a configured GGSN service that can be from 1 to 63 alpha and/or numeric characters and is case sensitive.
SGSN Address	Specifies the IP address for the SGSN.
MBMS Session Start	This group specifies the statistics of messages for MBMS session start.
MBMS Session Start TX	Total number of messages sent for MBMS session start.
Accepted	Total number of messages accepted for MBMS session start.
Denied	Total number of messages denied for MBMS session start.
MBMS Session Start Denied	This group specifies the statistics of reasons for denial of MBMS session.
No Resources	Total number of MBMS session start messages denied due to non-availability of resources.
No Memory	Total number of MBMS session start messages denied due to non-availability of memory.
System Failure	Total number of MBMS session start messages denied due to system failure.
Non-existent	Total number of MBMS session start messages denied due to non-existence of MBMS context.
Invalid Message Format	Total number of MBMS session start messages denied due to invalid message format.
Mandatory IE Incorrect	Total number of MBMS session start messages denied as mandatory information element was incorrect.

Field	Description
Mandatory IE Missing	Total number of MBMS session start messages denied as mandatory information element was missing.
Bearer Ctxt Superseded	Total number of MBMS session start messages denied as beaer context get superseded by information in message.
MBMS Session Stop	This group specifies the statistics of messages for MBMS session stop.
MBMS Session Stop TX	Total number of messages sent for MBMS session stop.
Accepted	Total number of messages accepted for MBMS session stop.
Denied	Total number of messages denied for MBMS session stop.
Charging ID	Contains an identifier used for correlating charging records and events.
Charging Characteristics Statistics	Hot - The number of times that PDP Context Requests were processed with a charging characteristic profile index value of "1", representing "hot" billing. Normal - The number of times that PDP Context Requests were processed with a charging characteristic profile index value of "8", representing "normal" billing. Prepaid - The number of times that PDP Context Requests were processed with a charging characteristic profile index value of "4", representing "prepaid billing. Flat - The number of times that PDP Context Requests were processed with a charging characteristic profile index value of "2", representing "flat-rate" billing.
User Location Info Type	Indicates the type of User Location Information, Cell Global Identification (CGI) or Service Area Identity (SAI) of where the user currently is registered or available.
User Location Info	Indicates the information of User location, CGI or SAI.
MS TimeZone	The Time Zone MS is sending in the CPC/UPC message.
Daylight Saving Time	The number of hours the MS TimeZone is adjusted for Daylight Savings Time
CAMEL Charging Info	Indicates whether or not CAMEL charging information was received.
Length	The length of the CAMELInformationPDP IE
Payload Compression	Indicates whether payload compression is allowed or prohibited.
Transitions to Presv. Mode	Indicates total number sessions in transitions state for preservation mode. Note: This is a customer specific counter and dependent of customer specific license only.
Transitions to LORC state	Indicates total number sessions in transitions state for overcharging protection support mode. This counter is applicable when GGSN is enabled for overcharging protection for subscriber due to loss of radio coverage and SGSN notifies Update PDP Contexts for QOS change with GTP-C extension for LORC.

Field	Description
GTP-U Tunnel Establishment	Indicates if the particular session is using direct tunnel or not. Possible values are: • Normal • Pending • Direct-Tunnel Status "Pending" means that GGSN is switching from direct-tunnel to two tunnels for the particular session. "Normal" status indicates that particular context is not using Direct Tunnel.
Updates PDP Context	
Update PDP Context RX	The total number of Update PDP Context Request messages received from the SGSN(s).
Accepted	The total number of Update PDP Context Response messages transmitted to the SGSN(s) containing a cause value of 128 (80H, Request accepted).
Denied	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s).
Update PDP Context Denied	
System Failure	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 204 (CCH, System failure).
Invalid Message Format	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 193 (C1H, Invalid message format).
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Mandatory IE Incorrect:	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 201 (C9H, Mandatory IE incorrect).
Mandatory IE Missing	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 202 (CAH, Mandatory IE missing).
Syntactic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 218 (DAH, Syntactic error in packet filter(s)).
Optional IE Incorrect	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 203 (CBH, Optional IE incorrect).
Updates PDP Context Sent	
Update PDP Context TX	The total number of Update PDP Context Request messages transmitted to the SGSN(s).

Field	Description
Accepted	The total number of Update PDP Context Response messages received from the SGSN(s) containing a cause value of 128 (80H, Request accepted).
Denied	The total number of "reject" Update PDP Context Response messages received from the SGSN(s).
Update PDP Context Deny Received	
System Failure	The total number of "reject" Update PDP Context Response messages received with a cause code of 204 (CCH, System failure).
Non-existent	The total number of "reject" Update PDP Context Response messages received with a cause code of 192 (C0H, Non-existent).
Invalid Message Format	The total number of "reject" Update PDP Context Response messages received with a cause code of 193 (C1H, Invalid message format).
Semantic Error in TFT	The total number of "reject" Update PDP Context Response messages received with a cause code of 215 (D7H, Semantic error in the TFT operation).
Syntactic Error in TFT	The total number of "reject" Update PDP Context Response messages received with a cause code of 216 (D8H, Syntactic error in the TFT operation).
Semantic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages received with a cause code of 217 (D9H, Semantic error in packet filter(s).
Mandatory IE Incorrect:	The total number of "reject" Update PDP Context Response messages received with a cause code of 201 (C9H, Mandatory IE incorrect).
Mandatory IE Missing	The total number of "reject" Update PDP Context Response messages received with a cause code of 202 (CAH, Mandatory IE missing).
Syntactic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages received with a cause code of 218 (DAH, Syntactic error in packet filter(s)).
Optional IE Incorrect	The total number of "reject" Update PDP Context Response messages received with a cause code of 203 (CBH, Optional IE incorrect).
GTPU Receive	
Total Packets	The total number of GTP User (GTPU) packets received.
Traffic Class	
Conversational	The number of GTPU packets received tagged with a traffic class of Conversational.
Streaming	The number of GTPU packets received tagged with a traffic class of Streaming.
Interactive 1	The number of GTPU packets received tagged with a traffic class of Interactive and a priority of 1.
Interactive 2	The number of GTPU packets received tagged with a traffic class of Interactive and a priority of 2.

Field	Description
Interactive 3	The number of GTPU packets received tagged with a traffic class of Interactive and a priority of 3,
Background	The number of GTPU packets received tagged with a traffic class of Background.
GTPU Send	
Total Packets	The total number of GTP User (GTPU) packets transmitted.
Traffic Class	
Conversational	The number of GTPU packets transmitted tagged with a traffic class of Conversational.
Streaming	The number of GTPU packets transmitted tagged with a traffic class of Streaming.
Interactive 1	The number of GTPU packets transmitted tagged with a traffic class of Interactive and a priority of 1.
Interactive 2	The number of GTPU packets transmitted tagged with a traffic class of Interactive and a priority of 2.
Interactive 3	The number of GTPU packets transmitted tagged with a traffic class of Interactive and a priority of 3,
Background	The number of GTPU packets transmitted tagged with a traffic class of Background.

show gtpc summary callid

Table 3: show gtpc summary callid Command Output Descriptions

Field	Description
GTP Summary	Displays a brief status for GTP.
Update PDP Context RX	Displays the total number of Update PDP Context Request messages received.
Accepted	Displays the number of Update PDP Context Request messages received that were accepted.
Denied	Displays the number of Update PDP Context Request messages received that were denied.
Update PDP Context TX	Displays the total number of Update PDP Context Request messages transmitted.
Accepted	Displays the number of Update PDP Context Request messages received that were transmitted.
Denied	Displays the number of Update PDP Context Request messages received that were transmitted.
IP Address Updates	Displays the number of times the IP address was updated.

Field	Description
QoS Updates	Displays the number of times the quality of service (QoS) level was changed.
Misc. Updates	Displays the number of updates experienced.
Qos negotiation	
CPC Qos Accepted	The number of times QoS parameters received in Create PDP Context (CPC) Request messages were accepted.
CPC Qos Downgrade	The number of times QoS parameters received in Create PDP Context (CPC) Request messages were downgraded.
UPC Qos Accepted	The number of times QoS parameters received in Update PDP Context (UPC) Request messages were accepted.
UPC Qos Downgraded	The number of times QoS parameters received in Update PDP Context (UPC) Request messages were downgraded.
GTPU Receive	
Total Packets	The total number of GTP User (GTPU) packets received.
Traffic Class	
Conversational	The number of GTPU packets received tagged with a traffic class of Conversational.
Streaming	The number of GTPU packets received tagged with a traffic class of Streaming.
Interactive 1	The number of GTPU packets received tagged with a traffic class of Interactive and a priority of 1.
Interactive 2	The number of GTPU packets received tagged with a traffic class of Interactive and a priority of 2.
Interactive 3	The number of GTPU packets received tagged with a traffic class of Interactive and a priority of 3,
Background	The number of GTPU packets received tagged with a traffic class of Background.
GTPU Send	
Total Packets	The total number of GTP User (GTPU) packets transmitted.
Traffic Class	
Conversational	The number of GTPU packets transmitted tagged with a traffic class of Conversational.
Streaming	The number of GTPU packets transmitted tagged with a traffic class of Streaming.
Interactive 1	The number of GTPU packets transmitted tagged with a traffic class of Interactive and a priority of 1.
Interactive 2	The number of GTPU packets transmitted tagged with a traffic class of Interactive and a priority of 2.

Field	Description
Interactive 3	The number of GTPU packets transmitted tagged with a traffic class of Interactive and a priority of 3,
Background	The number of GTPU packets transmitted tagged with a traffic class of Background.

show gtpc statistics custom1



Important These statistics are specific to Free-of-Charge service (FoCS) and Operator Determined Barring (ODB) support using private GTP-C extensions and enabled under customer-specific license. For more information on this support, contact your local representative.

Table 4: show gtpc statistics custom1 Command Output Descriptions

Field	Description
Preservation Mode stats	Displays the statistics of GTP-C messages in preservation mode.
Sessions in preservation mode	Indicates total number sessions in preservation mode.
Transitions to preservation mode	Indicates total number sessions in transitions state from non-preservation mode to preservation mode.
Transitions to non-preservation mode	Indicates total number sessions in transitions state from preservation mode to non-preservation mode.
Free Of Charge Service stats	Displays the statistics of GTP-C messages for Free-of-Charge services.
Session stats	Indicates sessions statistics for FOCS and/or ODB enabled sessions.
FOCS	Indicates the total number of sessions Free-of-Charge services (FOCS) enabled status.
ODB	Indicates the total number of sessions with Operator Determined Barring enabled status.
Sessions release stats	Indicates the statistics for sessions, in preservation mode of using FOCS and/or ODB, released due to any reason
Other-reasons	Indicates the total number of sessions, in preservation mode of using FOCS and/or ODB, released due to reasons not specified in this table.
in-acl-disconnect-on-violation	Indicates the total number of sessions, in preservation mode of using FOCS and/or ODB, released due to ACL rule violation.

show gtpc statistics custom2



Important These statistics are specific to private GTP-C extensions for overcharging protection on loss of radio coverage for a subscriber. For more information on this support, contact your local representative.

Table 5: show gtpc statistics custom2 Command Output Descriptions

Field	Description
LORC Stats	This group indicates the status of loss of radio coverage extensions in GTP-C messages configured for overcharging protection.
Sessions in lorc state	Indicates the number of GGSN session are in LORC state and subscriber is in out of radio coverage area. This counter is applicable when GGSN is enabled for overcharging protection for subscriber due to loss of radio coverage and SGSN notifies Update PDP Contexts for QOS change with GTP-C extension for LORC.
Transitions to lorc state	Indicates total number sessions in transitions state for overcharging protection support mode. This counter is applicable when GGSN is enabled for overcharging protection for subscriber due to loss of radio coverage and SGSN notifies Update PDP Contexts for QOS change with GTP-C extension for LORC.

show gtpc statistics verbose

Table 6: show gtpc statistics verbose Command Output Descriptions

Field	Description
Session Stats	
Total Current	The total number of PDP contexts currently being facilitated by the system.
S6b Assume Positive	The number of S6b assumed positive subscriber count being facilitated by the system.
IPv4	The number of IPv4 PDP contexts currently being facilitated by the system.
PPP	The number of PPP PDP contexts currently being facilitated by the system.
IPv4 Emergency	The number of non-emergency IPv4 calls.
Auth IMSI	The number of authorized IMSIs by SGSN (i.e. valid subscription).
UnAuth IMSI	The number of authentic IMSIs but NOT verified by SGSN.

Field	Description
Only IMEI	The IMSIs that have not been provided by the SGSN and the session is based on IMEI.
IPv6	The number of IPv6 PDP contexts currently being facilitated by the system.
Network Initiated	The number of PDP contexts currently being facilitated by the system that were activated using the NRPA procedure.
IPv6 Emergency	The number of non-emergency IPv6 calls.
Auth IMSI	The number of authorized IMSIs by SGSN (i.e. valid subscription).
UnAuth IMSI	The number of authentic IMSIs but NOT verified by SGSN.
Only IMEI	The IMSIs that have not been provided by the SGSN and the session is based on IMEI.
IPv4v6	The number of IPv4v6 PDP contexts currently being facilitated by the system.
MBMS UE	Total number of MBMS UE context connected.
MBMS Mcast Bearer	Total number of MBMS multicast bearer context connected.
MBMS Bcast Bearer	Total number of MBMS broadcast bearer context connected.
Total Setup	The total number of PDP contexts that have been facilitated by the system since it was either powered up or since the statistics were last cleared -whichever is latest.
IPv4	The total number of IPv4 PDP contexts that have been facilitated by the system.
PPP	The total number of PPP PDP contexts that have been facilitated by the system.
IPv4 Emergency	The total number of non-emergency IPv4 calls.
Auth IMSI	The number of authorized IMSIs by SGSN (i.e. valid subscription).
UnAuth IMSI	The number of authentic IMSIs but NOT verified by SGSN.
Only IMEI	The IMSIs that have not been provided by the SGSN and the session is based on IMEI.
IPv6	The total number of IPv6 PDP contexts that have been facilitated by the system.
SGSN Initiated	The total number of SGSN-initiated PDP contexts that have been facilitated by the system
IPv6 Emergency	The number of non-emergency IPv6 calls.
Auth IMSI	The number of authorized IMSIs by SGSN (i.e. valid subscription).
UnAuth IMSI	The number of authentic IMSIs but NOT verified by SGSN.
Only IMEI	The IMSIs that have not been provided by the SGSN and the session is based on IMEI.
IPv4v6	The number of IPv4v6 PDP contexts currently being facilitated by the system.
Network Initiated	The number of IPv4v6 PDP contexts currently being facilitated by the system that were activated using the NRPA procedure.

Field	Description
MBMS UE	Total number of MBMS UE context connected.
MBMS Mcast Bearer	Total number of MBMS multicast bearer context connected.
MBMS Bcast Bearer	Total number of MBMS broadcast bearer context connected.
Total Released	The total number of PDP contexts that have been released by the system.
Dynamic Address Allocation	
IPv4 Attempt	The total number of IPv4 sessions attempted with dynamic PDP address allocation.
Successful	The total number of IPv4 sessions successfully established with dynamic PDP address allocation.
IPv6 Attempt	The total number of IPv6 sessions attempted with dynamic PDP address allocation.
Successful	The total number of IPv6 sessions successfully established with dynamic PDP address allocation.
IP Authentication	
CHAP Auth Attempt	The total number PDP contexts that attempted CHAP authentication.
Successful	The total number PDP contexts that were successfully authenticated using CHAP.
Failure	The total number PDP contexts that failed authentication attempting to use CHAP.
PAP Auth Attempt	The total number PDP contexts that attempted PAP authentication.
Successful	The total number PDP contexts that were successfully authenticated using PAP.
Failure	The total number PDP contexts that failed authentication attempting to use PAP.
No Auth Requests	The total number PDP contexts that did not have authentication enabled.
Session Release Reasons	
SGSN Initiated	The total number of PDP contexts that have been released due to the receipt of a Delete PDP Context message from the SGSN(s).
Secondary Teardown	The total number of PDP contexts that have been released due to the termination of a secondary context (for example, a teardown flag was set in Delete PDP Context message received or a teardown happened due to the context replacement case).
Session Mgr. Died	The total number of PDP contexts that have been released due to the termination of the Session Manager task that was facilitating the contexts.
Admin Releases	The total number of PDP contexts that have been released due by the system administrator (for example, issuing the **clear subscriber** command, or stopping the GGSN service).
APN Removed	The total number of PDP contexts that have been released due to the removal of the APN configuration from the system.

Field	Description
Call Aborted	The total number of PDP contexts that have been released due to miscellaneous reasons such as the removal of a source or destination context on the system, etc.
Idle Timeout	The total number of PDP contexts that have been released due to the expiration of the idle timeout period as configured in the APN configuration mode.
Absolute Timeout	The total number of PDP contexts that have been released due to the expiration of the absolute timeout period as configured in the APN configuration mode.
Source Addr Violation	The total number of PDP contexts that have been released due to the detection of a source violation.
Flow Addition Failure	The total number of PDP contexts that have been released due to the system's failure to add a flow.
DHCP Renewal Failure	The total number of PDP contexts that have been released due to a DHCP lease renewal failure.
Long Duration Timeout	The total number of PDP contexts that have been released due to the expiration of the long duration timeout period.
Error Indication	The total number of PDP contexts that have been released due to an error indication.
Context replacement	The total number of PDP contexts that have been released due to a context replacement.
Other Reasons	The total number of PDP contexts that have been released due to other reasons.
Purged via Audit	The total number requests that were purged during Session Manager recovery. If the GTPCMgr did not get an audit request for a particular session, then it is released by GTPCMgr.
Update Handoff Reject	The total number of PDP contexts that have been released due to the receipt of a reject message during an update handoff.
LP Fallback Timeout	The total number of IP CAN sessions that have been released due to local policy timeout.
Total Path Failures	The total number of PDP contexts that have been released due to SGSN path failures detected by the system.
SGSN Restart	
Create PDP Req	The total number of PDP contexts that have been released due to path failures detected after sending a Create PDP Context Request message.
Update PDP Req	The total number of PDP contexts that have been released due to path failures detected after sending a Update PDP Context Request message.
Echo Response	The total number of PDP contexts that have been released due to path failures detected after sending an Echo Response message.
Timeout	
GTPC Echo Timeout	

Field	Description
GTPU Echo Timeout	
GGSN Req Timeout	
Path Management Messages	
Echo Request RX	The total number of Echo Requests received from SGSN(s).
Echo Response TX	The total number of Echo Responses sent to SGSN(s) in response to Echo Requests.
Echo Request TX	The total number of Echo Requests sent to the SGSN(s).
Echo Response RX	The total number of Echo Responses received from SGSN(s) in response to Echo Requests.
GTP-U Echo Request RX	The total number of GTPU Echo Requests received from SGSN(s).
GTP-U Echo Response TX	The total number of GTPU Echo Responses sent to SGSN(s) in response to GTPU Echo Requests.
GTP-U Echo Request TX	The total number of GTPU Echo Requests sent to the SGSN(s).
GTP-U Echo Response RX	The total number of GTPU Echo Responses received from SGSN(s) in response to GTPU Echo Requests.
Version Not Supported	
RX	The total number of Version Not Supported messages received.
TX	The total number of Version Not Supported messages transmitted.
Supported Ext. Headers Notif	
RX	The total number of supported extension headers notifications received.
TX	The total number of supported extension headers notifications transmitted.
Tunnel Management Messages	
Total CPC Req	The total number of Create PDP Context Request messages received. This is the sum of GTPC v0 and GTP v1 messages.
CPC Req(V1)	The total number of Create PDP Context Request messages received that used GTPC version 1.
CPC Req(V0)	The total number of Create PDP Context Request messages received that used GTPC version 0.
Primary CPC Req	The total number of Activate Primary PDP Context Request received.
Secondary CPC Req	The total number of Activate Secondary PDP Context Request received
Initial CPC Req	The total number of non-retransmitted Create PDP Context Requests for the primary PDP context.

Field	Description
Retransmitted	The total number of re-transmitted Create PDP Context Request messages received for either the primary or secondary PDP contexts.
Total Accepted	The total number of Create PDP Context Response messages transmitted containing a cause value of 128 (80H, Request accepted).
Total Denied	The total number of "reject" Create PDP Context Response messages transmitted.
Total Discarded	The total number of Create PDP Context Request messages received from the SGSN(s) that were discarded.
Update PDP Context RX	The total number of Update PDP Context Request messages received from the SGSN(s).
Accepted	The total number of Update PDP Context Response messages transmitted to the SGSN(s) containing a cause value of 128 (80H, Request accepted).
Denied	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s).
Update PDP Context TX	The total number of Update PDP Context Request messages transmitted to the SGSN(s).
Accepted	The total number of Update PDP Context Response messages received from the SGSN(s) containing a cause value of 128 (80H, Request accepted).
Denied	The total number of "reject" Update PDP Context Response messages received from the SGSN(s).
Delete PDP Context RX	The total number of Delete PDP Context Request messages received from the SGSN(s).
Accepted	The total number of Delete PDP Context Response messages transmitted containing a cause value of 128 (80H, Request accepted).
Denied	The total number of "reject" Delete PDP Context Response messages transmitted.
Discarded	The total number of Delete PDP Context Request messages received from the SGSN(s) that were discarded
Delete PDP Context TX	The total number of Delete PDP Context Request messages transmitted to the SGSN(s).
Accepted	The total number of Delete PDP Context Response messages received from the SGSN(s) containing a cause value of 128 (80H, Request accepted).
Denied	The total number of "reject" Delete PDP Context Response messages received from the SGSN(s).
Error Indication RX	The total number of error indication messages received from the SGSN(s).
Error Indication TX	The total number of error indication messages transmitted to the SGSN(s).
PDU Notification	The total number of PDU notifications sent by GGSN as a part of the NRPA procedure.
Accepted	The total number of accepted PDU notifications sent by GGSN as a part of the NRPA procedure.

Field	Description
Denied	The total number of rejected PDU notifications sent by GGSN as a part of the NRPA procedure.
PDU Notificatn Reject	The total number of PDU Notification Rejects that were received.
Accepted	The total number of PDU Notification Rejects that were received and accepted.
Denied	The total number of PDU Notification Rejects that were received and rejected.
Discarded	The total number of PDU Notification Rejects that were received and discarded.
GTP-U Tunnel Establishment with RNC	
Direct Tunnels Established	Indicates the number of times direct tunnels established between GGSN and RNC as instructed by SGSN in Update PDP Context Request.
Direct Tunnels torn down by SGSNs	Indicates the total number of times direct tunnels between GGSN and RNC are removed as instructed by SGSN in Update PDP Context Request.
Direct Tunnels that received Error Indication	Indicates the total number of Direct Tunnels that have received GTP Error Indication from RNC. This statistic counts GTP Error Indication only once per Direct Tunnel.
Update PDP Tx Reasons	
QoS Change	The number of Update PDP Context Request messages were sent when the GGSN requested the QoS Profile information to the SGSN.
Providing PDP address	The providing PDP address that is sent to the SGSN.
Direct Tunnel Flags update	Indicates the number of Update PDP Context Requests going out of GGSN towards SGSN with direct tunnel flags IE.
Update PDP Context Rx Reasons	
SGSN Handoff	The total number SGSN handoffs that have been completed for which PDP context updated.
SGSN Group Handoff	The total number handoffs between SGSN groups that have been completed for which PDP context updated.
Create PDP Context Denied	
No Resources	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 199 (C7H, No resources available). **NOTE:** Statistics that further detail the reasons for rejecting a Create PDP Context Request with this reason are located in the **Create PDP Denied - No Resource Reasons** of this table.

Field	Description
No Memory	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 212 (D4H, No memory is available). **NOTE:** Statistics that further detail the reasons for rejecting a Create PDP Context Request with this reason are located in the **Create PDP Denied - No Memory** of this table.
All Dyn Addr Occupied	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 211 (D3H, All dynamic PDP addresses are occupied). **NOTE:** Statistics that further detail the reasons for rejecting a Create PDP Context Request with this reason are located in the **Create PDP Denied - Dynamic Address Occupied** of this table.
User Auth Failed	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 201 (D1H, User authentication failed). **NOTE:** Statistics that further detail the reasons for rejecting a Create PDP Context Request with this reason are located in the **Create PDP Denied - Auth Failure Reasons** section of this table.
Unknown/Missing APN	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 219 (DBH, Missing or unknown APN).
System Failure	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 204 (CCH, System failure). **NOTE:** Statistics that further detail the reasons for rejecting a Create PDP Context Request with this reason are located in the **Create PDP Denied - System Failure Reasons** section of this table.
Unknown PDP Addr/Type	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 220 (DCH, Unknown PDP address or PDP type). **NOTE:** Statistics that further detail the reasons for rejecting a Create PDP Context Request with this reason are located in the **Create PDP Denied - Unknown PDP Addr or Type** section of this table.
Unsupported Version	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 198 (C6H, version not supported).
Semantic Error in TFT	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 215 (D7H, Semantic error in the TFT operation).
Syntactic Error in TFT	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 216 (D8H, Syntactic error in the TFT operation).
Semantic Error in Packet Filter	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 217 (D9H, Semantic error in packet filter(s)).

Field	Description
Mandatory IE Incorrect	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 201 (C9H, Mandatory IE incorrect). **NOTE:** Statistics that further detail the reasons for rejecting a Create PDP Context Request with this reason are located in the **Create PDP Denied - Mandatory IE Incorrect** section of this table.
Mandatory IE Missing	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 202 (CAH, Mandatory IE missing).
Syntactic Error in Packet Filter	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 218 (DAH, Syntactic error in packet filter(s)).
Optional IE Incorrect	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 203 (CBH, Optional IE incorrect). **NOTE:** Statistics that further detail the reasons for rejecting a Create PDP Context Request with this reason are located in the **Create PDP Denied - Optional IE Incorrect** section of this table.
Invalid Message Format	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 193 (C1H, Invalid message format).
Context Not Found	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 210 (D2H, Context not found).
Service not Supported	The total number of "reject" Create PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 200 (C8H, Service not supported).
APN restriction Incompatibility	
No APN Subscription	Indicates that the GGSN has denied the user access to an APN because a subscription is required, but the subscriber does not have the necessary subscription.
Create PDP Denied - No Resource Reasons	
PLMN Policy Reject	The PLMN policy configured for the GGSN service processing the request is configured to reject the SGSN's requests.
New Call Policy Reject	The system is configured with a newcall policy to reject new sessions.
APN/Svc Capacity	The APN being accessed is currently facilitating the maximum number of PDP contexts specified in its configuration (refer to the **max-contexts** command in the APN configuration mode).
Input-Q Exceeded	The queue size between demux-mgr and session managers has been exceeded due to pending requests.
No Session Manager	No Session Manager task is available to process the request.
Session Manager Dead	The Session Manager Task assigned to the PDP context was terminated.
Secondary For PPP	A secondary request for PPP was received.

Field	Description
Other Reasons	Other reasons not listed here.
Session Mgr Retried	Multiple Session Manager Tasks were unable to accept the request.
Session Mgr Not Ready	The Session Manager Task assigned to the PDP context was not ready to accept the request.
Session Setup Timeout	The total number of Create PDP Context (CPC) reject due to session setup timeout
Charging Svc Auth Fail	Authorization with the charging service failed.
APN Reject Policy	
ICSR State Invalid	Indicates that the Create PDP request was denied because the interchassis session recovery state is invalid.
DHCP IP Address Not Present	DHCP-assigned IP addresses were not available for assignment to the PDP Context.
Radius IP Validation Failed	RADIUS IP validation failed.
S6B IP Validation Failed	
Congestion Policy Applied	The system entered a state resulting in the invocation of a GGSN service "reject" congestion policy.
Exceeded secondary-pdp-context limit per-subscriber	
GTP-v0 IP address allocation/validation failed	IP address allocation or validation failed.
Mediation Delay GTP Response Accounting Start failed:	The number of call setup failures due to Accounting Start failures with delay GTP response feature enabled.
Create PDP Denied - Auth Failure Reasons	
Authentication Failed	The total number of requests rejected due to incorrect username/password.
AAA Auth Req Failed	The total number of requests rejected due to authentication failure requests.
APN selection-mode mismatch	The total number of requests rejected due to a conflicting configuration of the Selection Mode in the Create PDP Context request and the APN.
Non-Existent Virtual APN	The request is rejected due to an invalid APN.
Reject Foreign Subscriber	
IMS Authorization Fail	
Create PDP Denied - No Memory	
No More AAA Sessions	The total number of requests rejected due to the system not having AAA session handles available.

Field	Description
Misc. Reasons	The total number of requests rejected due to the system not being able to allocate the memory required for processing the request.
Create PDP Denied - Unknown PDP Addr or Type	
Invalid IP Address	The total number of requests rejected due to the receipt of an invalid IP address (i.e. 0.0.0.0) from the SGSN.
Conflict IP Address	The total number of requests rejected due to a conflict between the IP addresses provided by the MS and RADIUS servers.
Static Address Not Present	The total number of requests rejected due to the MS not having a static address when the system is configured with an IP address allocation method of static.
Static Address Not Allowed	The total number of requests rejected due to the system's IP address allocation method being configured for static, but the Create PDP Context Request message requests dynamic allocation.
Static IP Validation Failed	The total number of requests rejected due to the validation failure of the static IP address offered by the MS.
Local Pool Static Address Not Allowed	The total number of requests rejected due to the MS offering a static IP address that is not configured in a pool on the system.
DHCP IP Validation Failed	The total number of requests rejected due to the validation failure of the IP address allocated by DHCP.
DHCP Relay Static Address Not Allowed	The total number of requests rejected due to the IP address being present in the call but the system not being configured to accept statically assigned addresses for DHCP relay.
DHCP Proxy Static Address Not Allowed	The total number of requests rejected due to the IP address being present in the call but the system not being configured to accept statically assigned addresses for DHCP proxy.
DHCP Local Pool Static Address Not Allowed	The total number of requests rejected due to the IP address being present in the call but the system not being configured to accept statically assigned addresses for DHCP local pool.
DHCP Client Static Address Not Allowed	The total number of requests rejected due to the IP address being present in the call but the system not being configured to accept statically assigned addresses for DHCP client.
PDP Type Mismatch or Unknown PDP Type	The total number of requests rejected due to an unknown PDP type or a PDP type that does not match with the one configured for the APN using the **pdp-type** command.
Create PDP Denied - Dynamic Address Occupied	
DHCP No IP Address Alloc	The total number of requests rejected due to a failure in DHCP IP address allocation.
DHCP Timer Notification	The total number of requests rejected due to an expiration of the system's DHCP timer prior to the receipt of a reply from the DHCP server resulting in a failure to allocate an IP address.
Local IP Validation Failed	The total number of requests rejected due to an IP address validation failure.

Field	Description
Local IP Pool All Address Occupied	The total number of requests that are occupied due to an IP address is occupied.
Create PDP Denied - System Failure Reasons	
Misc. Reasons	The total number of requests rejected due to miscellaneous reasons.
Create PDP Denied - Mandatory IE Incorrect	
NSAPI	The total number of requests rejected due to an invalid NSAPI.
Create PDP Denied - Optional IE Incorrect	
Private Extention	The total number of requests rejected due to incorrect optional information elements in the request such as private extensions.
Create PDP Discard Reasons	
No Session	The total number of requests discarded due to no session being found for the secondary context request.
No Memory	The total number of requests discarded due to no memory being available on the system to allocate for the request.
Malformed Message	The total number of requests discarded due to the request being poorly formed.
Invalid Ctrl TEID	The total number of requests discarded due to an invalid control TEID in the request.
Internal Bounce Error	The total number of requests discarded due to a bounce in an internal system message.
Misc. Reasons	The total number of requests discarded due to miscellaneous reasons.
Version Not Supported	The total number of requests discarded due to the request using an unsupported version.
Congestion Policy Applied	The system entered a state resulting in the invocation of a GGSN service "drop" congestion policy.
ICSR State Invalid	Indicates that the Create PDP request was denied because the interchassis session recovery state is invalid.
Update PDP Context Denied	
No Resources	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 199 (C7H, No resources available).
No Memory	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 212 (D4H, No memory is available).
System Failure	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 204 (CCH, System failure).
Non-existent	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 192 (C0H, Non-existent).

Field	Description
Unsupported Service	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 200 (C8H, Service not supported).
Invalid Message Format	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 193 (C1H, Invalid message format).
Semantic Error in TFT	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 215 (D7H, Semantic error in the TFT operation).
Syntactic Error in TFT	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 216 (D8H, Syntactic error in the TFT operation).
Semantic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 217 (D9H, Semantic error in packet filter(s)).
Mandatory IE Incorrect	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 201 (C9H, Mandatory IE incorrect).
Mandatory IE Missing	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 202 (CAH, Mandatory IE missing).
Syntactic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 218 (DAH, Syntactic error in packet filter(s)).
Optional IE Incorrect	The total number of "reject" Update PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 203 (CBH, Optional IE incorrect).
Update PDP Context Deny Received	
No Resources	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 199 (C7H, No resources available).
No Memory	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 212 (D4H, No memory is available).
System Failure	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 204 (CCH, System failure).
Non-existent	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 192 (C0H, Non-existent).
Unsupported Service	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 200 (C8H, Service not supported).
Invalid Message Format	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 193 (C1H, Invalid message format).
Semantic Error in TFT	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 215 (D7H, Semantic error in the TFT operation).
Syntactic Error in TFT	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 216 (D8H, Syntactic error in the TFT operation).

Field	Description
Semantic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 217 (D9H, Semantic error in packet filter(s)).
Mandatory IE Incorrect	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 201 (C9H, Mandatory IE incorrect).
Mandatory IE Missing	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 202 (CAH, Mandatory IE missing).
Syntactic Error in Packet Filter	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 218 (DAH, Syntactic error in packet filter(s)).
Optional IE Incorrect	The total number of "reject" Update PDP Context Response messages received from the SGSN(s) sent with a cause code of 203 (CBH, Optional IE incorrect).
Delete PDP Context Denied	
Mandatory IE Incorrect	The total number of "reject" Delete PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 201 (C9H, Mandatory IE incorrect).
Mandatory IE Missing	The total number of "reject" Delete PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 202 (CAH, Mandatory IE missing).
Optional IE Incorrect	The total number of "reject" Delete PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 203 (CBH, Optional IE incorrect).
Invalid Message Format	The total number of "reject" Delete PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 193 (C1H, Invalid message format).
Non-existent	The total number of "reject" Delete PDP Context Response messages transmitted to the SGSN(s) sent with a cause code of 192 (C0H, Non-existent).
Delete PDP Context Discard Reasons	
No Memory	The total number of "reject" Delete PDP Context Response messages received from the SGSN and discarded due to no memory being available to process the request.
Pacing Queue Exceeded	The total number of "reject" Delete PDP Context Response messages received from the SGSN and discarded due to there being too many requests pending in the Session Manager Task's Pacing Queue.
Recovery Session Fail	The total number of "reject" Delete PDP Context Response messages received from the SGSN and discarded due to the recovery of a demux-manager resulting in its inability to queue the request for processing.
ICSR State Invalid	Indicates that the delete PDP request was denied because the interchassis session recovery state is invalid.
Delete PDP Context Deny Received	
Mandatory IE Incorrect	The total number of "reject" Delete PDP Context Response messages received from the SGSN(s) sent with a cause code of 201 (C9H, Mandatory IE incorrect).

Field	Description
Mandatory IE Missing	The total number of "reject" Delete PDP Context Response messages received from the SGSN(s) sent with a cause code of 202 (CAH, Mandatory IE missing).
Optional IE Incorrect	The total number of "reject" Delete PDP Context Response messages received from the SGSN(s) sent with a cause code of 203 (CBH, Optional IE incorrect).
Invalid Message Format	The total number of "reject" Delete PDP Context Response messages received from the SGSN(s) sent with a cause code of 193 (C1H, Invalid message format).
Non-existent	The total number of "reject" Delete PDP Context Response messages received from the SGSN(s) sent with a cause code of 192 (C0H, Non-existent).
Location Management Messages	
Send Routeing Info	The total number of Send Routeing Info Request messages sent by the GGSN to the SGSN(s).
Accepted	The total number of Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were accepted.
Denied	The total number of Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied.
Failure Report	The total number of Failure Report messages sent by the GGSN to the SGSN(s).
Accepted	The total number of Failure Report messages sent by the GGSN to the SGSN(s) that were accepted.
Denied	The total number of Failure Report messages sent by the GGSN to the SGSN(s) that were denied.
Note MS GPRS Present	The total number of Note to MS GPRS Present Request messages sent by the GGSN to the SGSN(s).
Accepted	The total number of Note to MS GPRS Present Request messages sent by the GGSN to the SGSN(s) that were accepted.
Denied	The total number of Note to MS GPRS Present Request messages sent by the GGSN to the SGSN(s) that were denied.
Discarded	The total number of Note to MS GPRS Present Request messages sent by the GGSN to the SGSN(s) that were discarded.
Send Routing Information Request Failure Causes	
No Resources Available	The total number of Note to Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied with a cause code of 199 (C7H, No resources available).
Service Not Supported	The total number of Note to Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied with a cause code of 200 (C8H, Service not supported).
System Failure	The total number of Note to Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied with a cause code of 204 (CCH, System failure).

Field	Description
Mandatory IE Incorrect	The total number of Note to Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied with a cause code of 201 (C9H, Mandatory IE incorrect).
Mandatory IE Missing	The total number of Note to Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied with a cause code of 202 (CAH, Mandatory IE missing).
Optional IE Incorrect	The total number of Note to Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied with a cause code of 203 (CBH, Optional IE incorrect).
Invalid Message Format	The total number of Note to Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied with a cause code of 193 (C1H, Invalid message format).
No Proxy Found	The total number of Note to Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied because no proxy MAP configuration was located for the NRPA procedure.
Proxy Not Reachable	The total number of Note to Send Routeing Info Request messages sent by the GGSN to the SGSN(s) that were denied because the configured MAP proxy is unreachable (i.e. not responding to SRI requests).
Send Routing Information Failure MAP Causes	
Subscriber Absent	The total number of Send Routeing Info Request responses received with a failure MAP cause of subscriber absent.
System Failure	The total number of Send Routeing Info Request responses received with a failure MAP cause of system failure.
Data Missing	The total number of Send Routeing Info Request responses received with a failure MAP cause of data missing.
Unexpected Data	The total number of Send Routeing Info Request responses received with a failure MAP cause of unexpected data.
Unknown Subscriber	The total number of Send Routeing Info Request responses received with a failure MAP cause of unknown subscriber.
Facility Not Supported	The total number of Send Routeing Info Request responses received with a failure MAP cause of facility not supported.
Unauthorized Network	The total number of Send Routeing Info Request responses received with a failure MAP cause of unauthorized network.
Call Barred	
Note MS GPRS Present Request Failure Causes:	
Mandatory IE Incorrect	
Mandatory IE Missing	
PDU Notification Failure Causes	

Field	Description
Unsupported Service	The total number of PDU Notification responses received with a failure cause code of 200 (C8H, Service not supported).
System Failure	The total number of PDU Notification responses received with a failure cause code of 204 (CCH, System failure).
MS GPRS Detached	The total number of PDU Notification responses received with a failure cause code of 195 (C3H, MS is GPRS Detached).
GPRS Cnxn Suspended	The total number of PDU Notification responses received with a failure cause code of 207 (CFH, GPRS connection suspended).
Mandatory IE Incorrect	The total number of PDU Notification responses received with a failure cause code of 201 (C9H, Mandatory IE incorrect).
Mandatory IE Missing	The total number of PDU Notification responses received with a failure cause code of 202 (CAH, Mandatory IE incorrect).
Optional IE Incorrect	The total number of PDU Notification responses received with a failure cause code of 203 (CBH, Optional IE incorrect).
Invalid Message Format	The total number of PDU Notification responses received with a failure cause code of 193 (C1H, Invalid message format).
Unknown IMSI	The total number of PDU Notification responses received with a failure cause code of 194 (C2H, IMSI not known).
Roaming Restriction	
No Resources	The total number of PDU Notification responses received with a failure cause code of 199 (C7H, No resources available).
PDU Notification Reject Causes	
MS Not GPRS Responding	The total number of PDU Notification responses received with a reject cause code of 196 (C4H, MS is not GPRS Responding).
MS Refuses	The total number of PDU Notification responses received with a reject cause code of 197 (C5H, MS Refuses).
Mandatory IE Incorrect	The total number of PDU Notification responses received with a reject cause code of 201 (C9H, Mandatory IE incorrect).
Mandatory IE Missing	The total number of PDU Notification responses received with a reject cause code of 202 (CAH, Mandatory IE incorrect).
Optional IE Incorrect	The total number of PDU Notification responses received with a reject cause code of 203 (CBH, Optional IE incorrect).
Invalid Message Format	The total number of PDU Notification responses received with a reject cause code of 193 (C1H, Invalid message format).
MS Info Change Reporting Messages:	

Field	Description
MS Info Chng Notif Req	
Accepted	
Denied	
Discarded	
MS Info Change Reporting Message Failure Causes:	
Invalid Message Format	
Unknown IMSI	
Mandatory IE Incorrect	
Mandatory IE Missing	
Optional IE Incorrect	
System Failure	
Qos QCI Stats	
QCI 1	
CPC QoS Accepted	The number of QoS requests with QCI 1 coming from Create PDP Context (CPC) were accepted, as as it is without downgrading.
CPC QoS Downgraded	The number of QoS requests with qci1 coming from CPC were downgraded.
UPC QoS Accepted	The number of QoS requests with qci1 coming from Update PDP Context (UPC) were accepted as it is without any downgrading.
UPC QoS Downgraded	The number of QoS requests with qci1 coming from UPC were downgraded.
QCI 2	
CPC QoS Accepted	The number of QoS requests with qci 2 coming from Create PDP Context (CPC) were accepted, as as it is without downgrading.
CPC QoS Downgraded	The number of QoS requests with qci2 coming from CPC were downgraded.
UPC QoS Accepted	The number of QoS requests with qci 2 coming from Update PDP Context (UPC) were accepted as it is without any downgrading.
UPC QoS Downgraded	The number of QoS requests with qci 2 coming from UPC were downgraded.
QCI 3	
CPC QoS Accepted	The number of QoS requests with qci 3 coming from Create PDP Context (CPC) were accepted, as as it is without downgrading.
CPC QoS Downgraded	The number of QoS requests with qci 3 coming from CPC were downgraded.

Field	Description
UPC QoS Accepted	The number of QoS requests with qci 3 coming from Update PDP Context (UPC) were accepted as it is without any downgrading.
UPC QoS Downgraded	The number of QoS requests with qci 3 coming from UPC were downgraded.
QCI 4	
CPC QoS Accepted	The number of QoS requests with qci 4 coming from Create PDP Context (CPC) were accepted, as as it is without downgrading.
CPC QoS Downgraded	The number of QoS requests with qci 4 coming from CPC were downgraded.
UPC QoS Accepted	The number of QoS requests with qci 4 coming from Update PDP Context (UPC) were accepted as it is without any downgrading.
UPC QoS Downgraded	The number of QoS requests with qci 4 coming from UPC were downgraded.
QCI 5	
CPC QoS Accepted	The number of QoS requests with qci 5 coming from Create PDP Context (CPC) were accepted, as as it is without downgrading.
CPC QoS Downgraded	The number of QoS requests with qci 5 coming from CPC were downgraded.
UPC QoS Accepted	The number of QoS requests with qci 5 coming from Update PDP Context (UPC) were accepted as it is without any downgrading.
UPC QoS Downgraded	The number of QoS requests with qci 5 coming from UPC were downgraded.
QCI 6	
CPC QoS Accepted	The number of QoS requests with qci 6 coming from Create PDP Context (CPC) were accepted, as as it is without downgrading.
CPC QoS Downgraded	The number of QoS requests with qci 6 coming from CPC were downgraded.
UPC QoS Accepted	The number of QoS requests with qci 6 coming from Update PDP Context (UPC) were accepted as it is without any downgrading.
UPC QoS Downgraded	The number of QoS requests with qci 6 coming from UPC were downgraded.
QCI 7	
CPC QoS Accepted	The number of QoS requests with qci 7 coming from Create PDP Context (CPC) were accepted, as as it is without downgrading.
CPC QoS Downgraded	The number of QoS requests with qci 7 coming from CPC were downgraded.
UPC QoS Accepted	The number of QoS requests with qci 7 coming from Update PDP Context (UPC) were accepted as it is without any downgrading.
UPC QoS Downgraded	The number of QoS requests with qci 7 coming from UPC were downgraded.
QCI 8	

Field	Description
CPC QoS Accepted	The number of QoS requests with qci 8 coming from Create PDP Context (CPC) were accepted, as as it is without downgrading.
CPC QoS Downgraded	The number of QoS requests with qci 8 coming from CPC were downgraded.
UPC QoS Accepted	The number of QoS requests with qci 8 coming from Update PDP Context (UPC) were accepted as it is without any downgrading.
UPC QoS Downgraded	The number of QoS requests with qci 8 coming from UPC were downgraded.
QCI 9	
CPC QoS Accepted	The number of QoS requests with qci 9 coming from Create PDP Context (CPC) were accepted, as as it is without downgrading.
CPC QoS Downgraded	The number of QoS requests with qci 9 coming from CPC were downgraded.
UPC QoS Accepted	The number of QoS requests with qci 9 coming from Update PDP Context (UPC) were accepted as it is without any downgrading.
UPC QoS Downgraded	The number of QoS requests with qci 9 coming from UPC were downgraded.
GTPC Receive	
Total Packets	The total number of GTPC packets received.
Total Bytes	The total number of GTPC bytes received.
GTPC Send	
Total Packets	The total number of GTPC packets transmitted.
Total Bytes	The total number of GTPC bytes transmitted.
GTPC Outgoing Throttling:	
Total Messages Rate Limited	
Total Messages Rate Limited No Delay	
Total Messages Queued	
Total Messages Aborted From Queue	
Total Messages Throttled	
Prioritized APN/ARP Statistics:	
CPC Req allowed under APN prioritization	
CPC Req allowed under ARP prioritization	

Field	Description
GTPC Incoming Throttling:	
Total Messages Rate Limited	
Total Messages Scheduled	
Total Messages Currently Queued	
Total Messages Dropped From Queue	
Total Messages Throttled	