PS Core:

UGW:

1-Traffic:

KPI No.1 => 4G\_PS\_Payload\_per\_PDP

SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412094+HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)/1000/1000

/

AVG(HUAWEINEW\_TBL\_RESULT\_142606342\_3.Counter\_142606401)

----------------------------------------------------------------------------------------

KPI No.2 => APN\_Downlink\_Traffic(MB)\_(GGSN+PGW)

SUM(HUAWEINEW\_TBL\_RESULT\_134221244\_3\_N.Counter\_134706887)+SUM(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510085)

----------------------------------------------------------------------------------------

KPI No.3 => APN\_Total\_Traffic\_GB

Sum(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510084+HUAWEINEW\_TBL\_RESULT\_134221244\_3\_N.Counter\_134706885+HUAWEINEW\_TBL\_RESULT\_134221244\_3\_N.Counter\_134706887+HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510085)/1000

----------------------------------------------------------------------------------------

KPI No.4 => APN\_Uplink\_Traffic(MB)\_(GGSN+PGW)

SUM(HUAWEINEW\_TBL\_RESULT\_134221244\_3\_N.Counter\_134706885)+SUM(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510084)

----------------------------------------------------------------------------------------

KPI No.5 => DownlinTraffic/TotalTraffic%

100\*((sum(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686691)/1000/1000+sum(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)/1000/1000/1000))/SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412094+HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)/1000/1000/1000+

SUM(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686742)/1000/1000

----------------------------------------------------------------------------------------

KPI No.6 => In/Out\_UL\_traffic\_differences(GB)

SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_3.Counter\_140509200-HUAWEINEW\_TBL\_RESULT\_140509184\_3.Counter\_140509204)/1000/1000

----------------------------------------------------------------------------------------

KPI No.7 => MAX\_Data\_Traffic(Gi+SGi)\_TB

MAX(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412094+HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)/1000/1000/1000+

MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686742)/1000/1000

----------------------------------------------------------------------------------------

KPI No.8 => Service\_ID\_Downlink\_Traffic(GB)

SUM(HUAWEINEW\_TBL\_RESULT\_136317151\_2.Counter\_136612085)/1000/1000

----------------------------------------------------------------------------------------

KPI No.9 => Service\_ID\_Uplink\_Traffic(GB)

SUM(HUAWEINEW\_TBL\_RESULT\_136317151\_2.Counter\_136612084)/1000/1000

----------------------------------------------------------------------------------------

KPI No.10 => SGi(LTE)\_traffic\_GB

SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412094+HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)/1000/1000

----------------------------------------------------------------------------------------

KPI No.11 => SGi\_DL\_user\_Throughput(Gbps)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)\*8/1000/1000/3600

----------------------------------------------------------------------------------------

KPI No.12 => SGi\_DL\_user\_traffic\_TB

SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)/1000/1000/1000

----------------------------------------------------------------------------------------

KPI No.13 => SGi\_UL\_user\_traffic\_TB

SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412094)/1000/1000/1000

----------------------------------------------------------------------------------------

KPI No.14 => Total\_Data\_Traffic(Gi+SGi)\_MB/PDP(Core)

(SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412094+HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)/1000/1000/1000+

SUM(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686742)/1000/1000)\*1000\*1000

/

SUM(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409309)

----------------------------------------------------------------------------------------

KPI No.15 => Total\_Data\_Traffic(Gi+SGi)\_TB

SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412094+HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)/1000/1000/1000+

SUM(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686742)/1000/1000

----------------------------------------------------------------------------------------

KPI No.16 => Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.17 => Traffic\_Per\_User(MB)

ROUND(SUM(Counter\_140509204+Counter\_140509206)/power(10,3)/sum(Counter\_140409313)\*288,2)

----------------------------------------------------------------------------------------

KPI No.18 => uptodown%inUGW

100\*((sum(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686689)/1000/1000+SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412094)/1000/1000/1000)/(sum(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686691)/1000/1000+sum(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412090)/1000/1000/1000))

----------------------------------------------------------------------------------------

2-Current user

KPI No.19 => Average\_current\_user\_in\_UGW\_2G\_3G\_4G

AVG(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409309)

----------------------------------------------------------------------------------------

KPI No.20 => GGSN\_Current\_Direct\_Tunnel\_PDP

AVG(HUAWEINEW\_TBL\_RESULT\_134221228\_3\_N.Counter\_134686644)

----------------------------------------------------------------------------------------

KPI No.21 => GGSN\_Max\_Users\_per\_APN

max(HUAWEINEW\_TBL\_RESULT\_134221237\_3\_N.Counter\_134706620)

----------------------------------------------------------------------------------------

KPI No.22 => Max\_Users\_(APN)

MAX(HUAWEINEW\_TBL\_RESULT\_134221237\_3\_N.Counter\_134706620+HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138414007+HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_142606506)

----------------------------------------------------------------------------------------

KPI No.23 => maximum\_current\_user\_in\_UGW\_2G\_3G\_4G

MAX((HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409309))

----------------------------------------------------------------------------------------

KPI No.24 => Maximum\_Total(2G+3G+4G)\_Users\_APN

max(HUAWEINEW\_TBL\_RESULT\_134221237\_3\_N.Counter\_134706620+HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418095)

----------------------------------------------------------------------------------------

3- Throughput:

KPI No.25 => Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.26 => APN\_Downlink\_Thruput(GGSN+PGW)

SUM(HUAWEINEW\_TBL\_RESULT\_134221244\_3\_N.Counter\_136510075+HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510081)\*8/1000

----------------------------------------------------------------------------------------

KPI No.27 => APN\_Uplink\_Thruput(GGSN+PGW)

SUM(HUAWEINEW\_TBL\_RESULT\_134221244\_3\_N.Counter\_136510074+HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510080)\*8/1000

----------------------------------------------------------------------------------------

KPI No.28 => Current\_UGW\_Throughput(Gbps)

MAX(HUAWEINEW\_TBL\_RESULT\_140509184\_3.Counter\_136501020)\*8/1000/1000

----------------------------------------------------------------------------------------

KPI No.29 => Current\_UGW\_Throughput(Gbps)(5Min)

MAX(HUAWEINEW\_TBL\_RESULT\_140509184\_5.Counter\_136501020)\*8/1000/1000

----------------------------------------------------------------------------------------

KPI No.30 => GGSN\_Direct\_Tunnel-THP\_Gbps

Max(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686753+HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686752)\*8000/1000/1000/1000/3600

----------------------------------------------------------------------------------------

KPI No.31 => Gi+SGi\_Peak\_DL\_Thoughput(Gbps)

Max(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412092

+

HuaweiNew\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686739)/1000/1000\*8

----------------------------------------------------------------------------------------

KPI No.32 => Gi+SGi\_Peak\_DL\_Thoughput(Gbps)(5Min)

Sum(HUAWEINEW\_TBL\_RESULT\_138412032\_5.Counter\_138412092

+

HUAWEINEW\_TBL\_RESULT\_134221229\_5.Counter\_134686739)/1000/1000\*8

----------------------------------------------------------------------------------------

KPI No.33 => Gi+SGi\_Peak\_DL\_Thoughput(Gbps)\_vEPC(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_138412032\_2.Counter\_138412092

+

HUAWEINEW\_TBL\_RESULT\_134221229\_2.Counter\_134686739)/1000/1000\*8

----------------------------------------------------------------------------------------

KPI No.34 => Gi+SGi\_Peak\_UL\_Thoughput(Gbps)

(max(HUAWEINEW\_TBL\_RESULT\_134221229\_5.Counter\_134686737)+max(HUAWEINEW\_TBL\_RESULT\_138412032\_5.Counter\_138412096))/1000/1000\*8

----------------------------------------------------------------------------------------

KPI No.35 => Gn\_downlink\_peak\_throughput\_of\_UTRAN\_rat\_in\_MBps

SUM(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_136602734)

----------------------------------------------------------------------------------------

KPI No.36 => Throughput\_per\_User\_(Mbps)

MAX(HUAWEINEW\_TBL\_RESULT\_140509184\_3.Counter\_136501020)\*8/1000

/

MAX((HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409309))

----------------------------------------------------------------------------------------

KPI No.37 => UGW\_Throughput\_per\_PDP

AVG(HUAWEINEW\_TBL\_RESULT\_140509184\_3.Counter\_136501020)\*8

/

AVG(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409309)

----------------------------------------------------------------------------------------

KPI No.38 => user\_throughput\_in\_GW

MAX(HUAWEINEW\_TBL\_RESULT\_140509184\_3.Counter\_136501020)

/

MAX(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409313)

----------------------------------------------------------------------------------------

4- GW basic session management

KPI No.39 => current\_active\_bearers\_with\_EUTRAN\_rat

max((HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_136600017))

----------------------------------------------------------------------------------------

KPI No.40 => current\_active\_bearers\_with\_GERAN\_rat

max(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_136600014)

----------------------------------------------------------------------------------------

KPI No.41 => current\_active\_bearers\_with\_utran\_rat

max(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_136600013)

----------------------------------------------------------------------------------------

KPI No.42 => current\_active\_bearers\_with\_WLAN\_rat

max(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_136600015)

----------------------------------------------------------------------------------------

KPI No.43 => GW\_Active\_bearer

max(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409313)

----------------------------------------------------------------------------------------

KPI No.44 => GW\_bearers\_act\_failed\_OCS\_return\_result\_code\_indicating\_an\_abnormality

sum(HUAWEINEW\_TBL\_RESULT\_140509185\_2.Counter\_136606335)

----------------------------------------------------------------------------------------

KPI No.45 => GW\_bearers\_act\_failed-OCS\_Server\_NoResponse

sum(HUAWEINEW\_TBL\_RESULT\_140509185\_2.Counter\_136606334)

----------------------------------------------------------------------------------------

KPI No.46 => GW\_bearers\_act\_failed-PCRF-return-result-code-abnormal

sum(HUAWEINEW\_TBL\_RESULT\_140509185\_2.Counter\_136606342)

----------------------------------------------------------------------------------------

KPI No.47 => GW\_MAXIMUM\_SIMULTANEOUSLY\_ACTIVE\_BEARERS

max(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409309)

----------------------------------------------------------------------------------------

KPI No.48 => GW\_successful\_bearer\_creations\_SR

(SUM(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409304)/SUM(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409303))\*100

----------------------------------------------------------------------------------------

KPI No.49 => GW\_successful\_bearers\_creation

avg(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409304)

----------------------------------------------------------------------------------------

KPI No.50 => IP\_pool\_usage

max(HUAWEINEW\_TBL\_RESULT\_1124073492\_3.Counter\_1124084783)/MAX(HUAWEINEW\_TBL\_RESULT\_1124073492\_3.Counter\_1124084778)\*100

----------------------------------------------------------------------------------------

KPI No.51 => request-success

(SUM(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409303)-SUM(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409304))

----------------------------------------------------------------------------------------

5- Specified SPU instance:

KPI No.52 => current\_activated\_PDP\_context(SPU\_instance)

AVG(HUAWEINEW\_TBL\_RESULT\_134221303\_3.Counter\_134800202)

----------------------------------------------------------------------------------------

KPI No.53 => GW\_incoming\_DL\_User\_traffic(SPU\_instance)\_GB

SUM(HUAWEINEW\_TBL\_RESULT\_134221304\_3.Counter\_134800213)/1000/1000

----------------------------------------------------------------------------------------

KPI No.54 => GW\_outgoing\_UL\_User\_traffic(SPU\_instance)\_GB

SUM(HUAWEINEW\_TBL\_RESULT\_134221304\_3.Counter\_134800212)/1000/1000

----------------------------------------------------------------------------------------

KPI No.55 => GW\_total\_User\_traffic(SPU\_instance)\_GB

SUM(HUAWEINEW\_TBL\_RESULT\_134221304\_3.Counter\_134800212+HUAWEINEW\_TBL\_RESULT\_134221304\_3.Counter\_134800213)/1000/1000

----------------------------------------------------------------------------------------

KPI No.56 => GW\_total\_User\_traffic(SPU\_instance)\_Gb/s(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221304\_3.Counter\_134800212+HUAWEINEW\_TBL\_RESULT\_134221304\_3.Counter\_134800213)\*8/3600/1000/1000

----------------------------------------------------------------------------------------

KPI No.57 => PDP\_context\_activation\_SR(SPU\_instance)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_134221303\_3.Counter\_134800201/HUAWEINEW\_TBL\_RESULT\_134221303\_3.Counter\_134800200)

----------------------------------------------------------------------------------------

KPI No.58 => Successful\_PDP\_context\_activation(SPU\_instance)

AVG(HUAWEINEW\_TBL\_RESULT\_134221303\_3.Counter\_134800201)

----------------------------------------------------------------------------------------

6- Specified APN:

KPI No.59 => Activated\_Duration\_Per\_PDP\_Context(APN)

sum(HUAWEINEW\_TBL\_RESULT\_134221237\_3\_N.Counter\_136504986)

----------------------------------------------------------------------------------------

KPI No.60 => Activation\_Requests\_Per\_PDP\_Context(APN)

sum(HUAWEINEW\_TBL\_RESULT\_134221237\_3\_N.Counter\_136504989)

----------------------------------------------------------------------------------------

KPI No.61 => GW\_user\_traffic\_with\_invalid\_Destination\_address\_in\_packets(APN)

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509217)

----------------------------------------------------------------------------------------

KPI No.62 => GW\_user\_traffic\_with\_invalid\_Destination\_address\_in\_packets(APN)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509217)

----------------------------------------------------------------------------------------

KPI No.63 => GW\_user\_traffic\_with\_invalid\_source\_address\_in\_packets(APN)

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509216)

----------------------------------------------------------------------------------------

KPI No.64 => GW\_user\_traffic\_with\_invalid\_source\_address\_in\_packets(APN)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509216)

----------------------------------------------------------------------------------------

KPI No.65 => SubScriber\_With\_PDP\_Context\_Activation(APN)

SUM(HUAWEINEW\_TBL\_RESULT\_134221237\_3\_N.Counter\_134706636)

----------------------------------------------------------------------------------------

7- PGW user number meagurment

KPI No.66 => PGW\_Average\_Avtive\_Subscriber

AVG(HUAWEINEW\_TBL\_RESULT\_138412038\_3.Counter\_138420002)

----------------------------------------------------------------------------------------

KPI No.67 => PGW\_Current\_Avtive\_Subscriber

AVG(HUAWEINEW\_TBL\_RESULT\_138412038\_3.Counter\_138420000)

----------------------------------------------------------------------------------------

KPI No.68 => PGW\_Max\_Simultaneously\_Avtive\_Subscriber

MAX(HUAWEINEW\_TBL\_RESULT\_138412038\_3.Counter\_138420001)

----------------------------------------------------------------------------------------

8- PGW forwarding performance mesearement

KPI No.69 => FUI\_Dropped\_Downlink\_Packet(KB)

SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_5.Counter\_136611002)

----------------------------------------------------------------------------------------

KPI No.70 => GW\_Packet\_size\_Specific\_TAC\_Legacy(Byte)

1000\*AVG((HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608022+HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608020)/(HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608023+HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608021))

----------------------------------------------------------------------------------------

KPI No.71 => GW\_Packet\_size\_Specific\_TAC\_TOTAL(Byte)

\*\*\*Combined KPI (Network KPIs)\*\*\*\*

\*\*\*Combined KPI No.1 \*\*\*

Main KPI Name: GW\_Packet\_size\_Specific\_TAC\_V(Byte)

1000\*AVG((HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802017+HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802015)/(HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802018+HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802016))

\*\*\*Combined KPI No.2 \*\*\*

Main KPI Name: GW\_Packet\_size\_Specific\_TAC\_Legacy(Byte)

1000\*AVG((HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608022+HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608020)/(HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608023+HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608021))

----------------------------------------------------------------------------------------

KPI No.72 => GW\_Packet\_size\_Specific\_TAC\_V(Byte)

1000\*AVG((HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802017+HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802015)/(HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802018+HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802016))

----------------------------------------------------------------------------------------

KPI No.73 => GW\_User\_Traffic\_Specific\_TAC\_(GB)

SUM(HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608022+HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608020)/1000/1000

----------------------------------------------------------------------------------------

KPI No.74 => GW\_User\_Traffic\_Specific\_TAC\_TOTAL(GB)

\*\*\*Combined KPI (Network KPIs)\*\*\*\*

\*\*\*Combined KPI No.1 \*\*\*

Main KPI Name: GW\_User\_Traffic\_Specific\_TAC\_(GB)

SUM(HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608022+HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608020)/1000/1000

\*\*\*Combined KPI No.2 \*\*\*

Main KPI Name: GW\_User\_Traffic\_Specific\_TAC\_(GB)\_V

sum(HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802017+HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802015)/1000/1000

----------------------------------------------------------------------------------------

KPI No.75 => PGW\_Max\_number\_of\_Active\_EPS\_Bearer

max(HUAWEINEW\_TBL\_RESULT\_138412060\_3.Counter\_138414005)

----------------------------------------------------------------------------------------

KPI No.76 => SGi\_downlink\_user\_traffic\_peak\_throughput\_in(Mbps)

MAX(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412092)/1000\*8

----------------------------------------------------------------------------------------

KPI No.77 => SGi\_downlink\_user\_traffic\_peak\_throughput\_in\_Per\_PGW\_Max\_Simultaneously\_Avtive\_Subscriber

MAX(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412092)

/

MAX(HUAWEINEW\_TBL\_RESULT\_138412038\_3.Counter\_138420001)

----------------------------------------------------------------------------------------

9- PGW forwarding performance mesearement (specified APN)

KPI No.78 => SGi\_downlink\_user\_traffic\_in\_MB\_(APN)

sum(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510085)

----------------------------------------------------------------------------------------

KPI No.79 => SGi\_downlink\_user\_traffic\_peak\_throughput\_in\_MB/s\_(APN)

SUM(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510081)

----------------------------------------------------------------------------------------

KPI No.80 => SGi\_uplink\_user\_traffic\_in\_MB\_(APN)

sum(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510084)

----------------------------------------------------------------------------------------

KPI No.81 => SGi\_upnlink\_user\_traffic\_peak\_throughput\_in(Mbps)

sum(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510080)

----------------------------------------------------------------------------------------

10- S5/S8 (SGW) interface signal measure

KPI No.78 => SGi\_downlink\_user\_traffic\_in\_MB\_(APN)

sum(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510085)

----------------------------------------------------------------------------------------

KPI No.79 => SGi\_downlink\_user\_traffic\_peak\_throughput\_in\_MB/s\_(APN)

SUM(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510081)

----------------------------------------------------------------------------------------

KPI No.80 => SGi\_uplink\_user\_traffic\_in\_MB\_(APN)

sum(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510084)

----------------------------------------------------------------------------------------

KPI No.81 => SGi\_upnlink\_user\_traffic\_peak\_throughput\_in(Mbps)

sum(HUAWEINEW\_TBL\_RESULT\_138412033\_3.Counter\_136510080)

----------------------------------------------------------------------------------------

11- S11/S4 interface signal performance measure

KPI No.84 => S11/S4\_incomming\_Dedicated\_Bearer\_Reponse

SUM(HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321030)

----------------------------------------------------------------------------------------

KPI No.85 => S11/S4\_incomming\_Default\_Bearer\_Req

SUM(HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321026)

----------------------------------------------------------------------------------------

KPI No.86 => S11/S4\_outgoing\_Dedicated\_Bearer\_Req

SUM(HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321029)

----------------------------------------------------------------------------------------

KPI No.87 => S11/S4\_outgoing\_Default\_Bearer\_Response

SUM(HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321027)

----------------------------------------------------------------------------------------

12- SGW basic session measurement

KPI No.88 => PGW\_5G\_License\_Usage\_User

MAX(HUAWEINEW\_TBL\_RESULT\_142606340\_2.Counter\_136612414)+MAX(HUAWEINEW\_TBL\_RESULT\_136330356\_2.Counter\_136612407)

----------------------------------------------------------------------------------------

KPI No.89 => S+PGW\_maximum\_simultaneously\_active\_bearers

MAX(HUAWEINEW\_TBL\_RESULT\_142606340\_3.Counter\_142606409)

----------------------------------------------------------------------------------------

KPI No.90 => SGW\_Average\_Simultaneously\_Attached\_Active\_User(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136505041)

----------------------------------------------------------------------------------------

KPI No.91 => SGW\_create\_bearer\_requests(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136320011)

----------------------------------------------------------------------------------------

KPI No.92 => SGW\_Current\_Simultaneously\_Attached\_Active\_User(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136505040)

----------------------------------------------------------------------------------------

KPI No.93 => SGW\_Failed\_bearer\_creations\_via\_S11/S4\_NoResourcesAvailable(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136606414)

----------------------------------------------------------------------------------------

KPI No.94 => SGW\_Failed\_bearer\_creations\_via\_S11/S4\_NoResourcesAvailable\_No\_Bearer(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136320022)

----------------------------------------------------------------------------------------

KPI No.95 => SGW\_Failed\_bearer\_creations\_via\_S11/S4\_NoResourcesAvailable\_No\_License(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136320023)

----------------------------------------------------------------------------------------

KPI No.96 => SGW\_Failed\_bearer\_creations\_via\_S11/S4\_NoResourcesAvailable\_No\_QOS(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136320024)

----------------------------------------------------------------------------------------

KPI No.97 => SGW\_Max\_number\_of\_active\_bearer

Max(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136324005)

----------------------------------------------------------------------------------------

KPI No.98 => SGW\_Maximum\_Simultaneously\_Attached\_Active\_User(Core)

max(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136505059)

----------------------------------------------------------------------------------------

KPI No.99 => SGW\_Network\_Triggered\_Service\_Request\_attempt\_counter(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136324043)

----------------------------------------------------------------------------------------

KPI No.100 => SGW\_request-success

SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136320011)-SUM(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136320012)

----------------------------------------------------------------------------------------

13- PGW basic session measurement (specified APN)

KPI No.101 => PGW\_average\_active\_subscribers(specified\_APN)

sum(HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418097)

----------------------------------------------------------------------------------------

KPI No.102 => PGW\_current\_active\_subscribers\_(specified\_APN)

sum(HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418094)

----------------------------------------------------------------------------------------

KPI No.103 => PGW\_maximum\_simultaneously\_active\_subscribers(specified\_APN)

max(HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418095)

----------------------------------------------------------------------------------------

14- SGW user number measurement

KPI No.104 => SGW\_Max\_number\_of\_Active\_EPS\_Bearers

MAX(HUAWEINEW\_TBL\_RESULT\_136314925\_3.Counter\_136324005)

----------------------------------------------------------------------------------------

15- license

KPI No.105 => Direct tunnel usage (core)

Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.106 => PDP\_Context\_Usage(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221228\_3\_N.Counter\_134686601)

----------------------------------------------------------------------------------------

KPI No.107 => Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.108 => UGW\_IP\_Pool\_Usage\_Per\_APN(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221237\_3\_N.Counter\_136502214)

----------------------------------------------------------------------------------------

16-VPLMN

KPI No.1 => GW\_Create\_Bearer\_request\_times(VPLMN)

sum(HUAWEINEW\_TBL\_RESULT\_140509302\_3.Counter\_140509314)

----------------------------------------------------------------------------------------

KPI No.2 => GW\_Create\_Bearer\_SR%(VPLMN)

sum(HUAWEINEW\_TBL\_RESULT\_140509302\_3.Counter\_140509315)/sum(HUAWEINEW\_TBL\_RESULT\_140509302\_3.Counter\_140509314)\*100

----------------------------------------------------------------------------------------

KPI No.3 => GW\_Create\_Bearer\_success\_times(VPLMN)

sum(HUAWEINEW\_TBL\_RESULT\_140509302\_3.Counter\_140509315)

----------------------------------------------------------------------------------------

KPI No.4 => GW\_Current\_Acticve\_Subscriber(VPLMN)

Max(HUAWEINEW\_TBL\_RESULT\_140509302\_3.Counter\_140509318)

----------------------------------------------------------------------------------------

KPI No.5 => GW\_Maximum\_Simultaneously\_Active\_Bearer(VPLMN)

MAX(HUAWEINEW\_TBL\_RESULT\_140509302\_3.Counter\_140509317)

----------------------------------------------------------------------------------------

KPI No.6 => Incoming\_uplink\_user\_traffic\_in\_GB\_(SGSN/SGW\_PLMN)

sum(HUAWEINEW\_TBL\_RESULT\_140509303\_3.Counter\_140509337)/1000/1000

----------------------------------------------------------------------------------------

KPI No.7 => Incoming\_uplink\_user\_traffic\_in\_packets\_(SGSN/SGW\_PLMN)

MAX(HUAWEINEW\_TBL\_RESULT\_140509303\_3.Counter\_140509338)

----------------------------------------------------------------------------------------

KPI No.8 => Outgoing\_downlink\_user\_traffic\_in\_GB\_(SGSN/SGW\_PLMN)

sum(HUAWEINEW\_TBL\_RESULT\_140509303\_3.Counter\_140509339)/1000/1000

----------------------------------------------------------------------------------------

KPI No.9 => Outgoing\_downlink\_user\_traffic\_in\_packets\_(SGSN/SGW\_PLMN)

MAX(HUAWEINEW\_TBL\_RESULT\_140509303\_3.Counter\_140509340)

----------------------------------------------------------------------------------------

KPI No.10 => Total\_user\_traffic\_in\_GB\_(SGSN/SGW\_PLMN)

sum(HUAWEINEW\_TBL\_RESULT\_140509303\_3.Counter\_140509339+HUAWEINEW\_TBL\_RESULT\_140509303\_3.Counter\_140509337)/1000/1000

----------------------------------------------------------------------------------------

17- physical port

KPI No.11 => Physical\_Port\_Throughput\_recieved(Mbit/s)(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221264\_3.Counter\_134707313)\*8/3600

----------------------------------------------------------------------------------------

KPI No.12 => Physical\_Port\_Throughput\_recieved(Mbit/s)(GI)

Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.13 => Physical\_Port\_Throughput\_recieved(Mbit/s)(Gn)

Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.14 => Physical\_Port\_Throughput\_Sent(Mbit/s)(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221264\_3.Counter\_134707314)\*8/3600

----------------------------------------------------------------------------------------

KPI No.15 => Physical\_Port\_Throughput\_Sent(Mbit/s)(Gi)

Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.16 => Physical\_Port\_Throughput\_Sent(Mbit/s)(Gn)

Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

18- Gx KPIs

KPI No.17 => Average\_delay\_time\_of\_CCA\_I\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601133)/SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709303)

----------------------------------------------------------------------------------------

KPI No.18 => Average\_delay\_time\_of\_CCA\_T\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601135)/SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709307)

----------------------------------------------------------------------------------------

KPI No.19 => Average\_delay\_time\_of\_CCA\_U\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601134)/SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709305)

----------------------------------------------------------------------------------------

KPI No.20 => Gx\_Success\_Rate(RAR\_ASR)

100 \* SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709310+HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709312)/SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709309+HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709311)

----------------------------------------------------------------------------------------

KPI No.21 => Gx\_Success\_Rate\_(CC)\_(%)

100 \*(SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709304

+HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709306

+HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709308)

/

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709303

+HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709305

+HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709307))

----------------------------------------------------------------------------------------

KPI No.22 => Number\_of\_resend\_CCR-I\_message\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601136)

----------------------------------------------------------------------------------------

KPI No.23 => Number\_of\_resend\_CCR-T\_message\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601138)

----------------------------------------------------------------------------------------

KPI No.24 => Number\_of\_resend\_CCR-U\_message\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601137)

----------------------------------------------------------------------------------------

KPI No.25 => PCC\_Received\_ASR\_Messages

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709311)

----------------------------------------------------------------------------------------

KPI No.26 => PCC\_Received\_CCA-I\_Messages(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709304)

----------------------------------------------------------------------------------------

KPI No.27 => PCC\_Received\_CCA-T\_Message(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709308)

----------------------------------------------------------------------------------------

KPI No.28 => PCC\_Received\_CCA-U\_Messages(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709306)

----------------------------------------------------------------------------------------

KPI No.29 => PCC\_Received\_RAR\_Messages

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709309)

----------------------------------------------------------------------------------------

KPI No.30 => PCC\_Sent\_ASA\_Messages

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709312)

----------------------------------------------------------------------------------------

KPI No.31 => PCC\_Sent\_CCR-I\_Messages(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709303)

----------------------------------------------------------------------------------------

KPI No.32 => PCC\_Sent\_CCR-T\_Messages(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709307)

----------------------------------------------------------------------------------------

KPI No.33 => PCC\_Sent\_CCR-U\_Messages(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709305)

----------------------------------------------------------------------------------------

KPI No.34 => PCC\_Sent\_RAA\_Messages

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_134709310)

----------------------------------------------------------------------------------------

19- Gy KPIs

KPI No.35 => Average\_delay\_time\_of\_CCA-I(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601108)/SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708315)

----------------------------------------------------------------------------------------

KPI No.36 => Average\_delay\_time\_of\_CCA-T(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601110)/SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708319)

----------------------------------------------------------------------------------------

KPI No.37 => Average\_delay\_time\_of\_CCA-U(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601109)/SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708317)

----------------------------------------------------------------------------------------

KPI No.38 => Average\_online\_charging\_PDP\_contexts

Avg(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708322)

----------------------------------------------------------------------------------------

KPI No.39 => CCR\_Initial\_request(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708315)

----------------------------------------------------------------------------------------

KPI No.40 => CCR\_Termination\_request(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708319)

----------------------------------------------------------------------------------------

KPI No.41 => CCR\_Update\_request(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708317)

----------------------------------------------------------------------------------------

KPI No.42 => Failover\_resend\_message

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708320)

----------------------------------------------------------------------------------------

KPI No.43 => Gy\_CCR-I\_Success\_Rate\_(%)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136805029)/SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708315)

----------------------------------------------------------------------------------------

KPI No.44 => Gy\_CCR-T\_Success\_Rate\_(%)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136805031)/SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708319)

----------------------------------------------------------------------------------------

KPI No.45 => Gy\_CCR-U\_Success\_Rate\_(%)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136805030)/SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708317)

----------------------------------------------------------------------------------------

KPI No.46 => Gy\_Success\_Rate(RAR\_ASR)

100 \* SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708305+HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708307)/SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708306+HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708308)

----------------------------------------------------------------------------------------

KPI No.47 => Maximum\_online\_charging\_PDP\_contexts(OCS)

max(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708323)

----------------------------------------------------------------------------------------

KPI No.48 => Number\_of\_CCA\_I\_Received

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136805029)

----------------------------------------------------------------------------------------

KPI No.49 => Number\_of\_CCA\_T\_Received

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136805031)

----------------------------------------------------------------------------------------

KPI No.50 => Number\_of\_CCA\_U\_Received

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136805030)

----------------------------------------------------------------------------------------

KPI No.51 => Number\_of\_CCR\_message\_trigger\_by\_bearer\_update

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136610597)

----------------------------------------------------------------------------------------

KPI No.52 => Number\_of\_CCR\_message\_trigger\_by\_MSCC\_level\_Validity\_Time\_expire

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136610589)

----------------------------------------------------------------------------------------

KPI No.53 => Number\_of\_CCR\_message\_trigger\_by\_service\_begin

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136610599)

----------------------------------------------------------------------------------------

KPI No.54 => Number\_of\_CCR\_message\_trigger\_by\_time\_quota\_reach\_threshold

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136610592)

----------------------------------------------------------------------------------------

KPI No.55 => Number\_of\_CCR\_message\_trigger\_by\_volume\_quota\_exhausted

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136610595)

----------------------------------------------------------------------------------------

KPI No.56 => Number\_of\_CCR\_message\_trigger\_by\_volume\_quota\_reach\_threshold

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136610594)

----------------------------------------------------------------------------------------

KPI No.57 => Number\_of\_received\_CCA\_packets\_with\_result\_code\_means\_peer\_overload(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136600551)

----------------------------------------------------------------------------------------

KPI No.58 => Number\_of\_resend\_CCR-I\_message(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601111)

----------------------------------------------------------------------------------------

KPI No.59 => Number\_of\_resend\_CCR-T\_message(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_2.Counter\_136601113)

----------------------------------------------------------------------------------------

KPI No.60 => Number\_of\_resend\_CCR-U\_message(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601112)

----------------------------------------------------------------------------------------

KPI No.61 => Receive\_FUI\_AVP

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136610588)

----------------------------------------------------------------------------------------

KPI No.62 => Received\_MSCCs\_with\_class\_2/Received\_MSCCs\_with\_class\_4

100\*sum(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136501031)/sum(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136501029)

----------------------------------------------------------------------------------------

KPI No.63 => total\_delay\_time\_of\_CCA-U(OCS)

AVG(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601109)

----------------------------------------------------------------------------------------

20- Gx result codes

KPI No.64 => Number\_of\_ASA\_message\_with\_2001\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601116)

----------------------------------------------------------------------------------------

KPI No.65 => Number\_of\_ASA\_message\_with\_other\_Result-Code\_(Not\_2001)\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601117)

----------------------------------------------------------------------------------------

KPI No.66 => Number\_of\_CCA-I\_message\_with\_2001\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601118)

----------------------------------------------------------------------------------------

KPI No.67 => Number\_of\_CCA-I\_message\_with\_2xxx\_(exclude\_2001)\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601119)

----------------------------------------------------------------------------------------

KPI No.68 => Number\_of\_CCA-I\_message\_with\_3xxx\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601120)

----------------------------------------------------------------------------------------

KPI No.69 => Number\_of\_CCA-I\_message\_with\_4xxx\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601121)

----------------------------------------------------------------------------------------

KPI No.70 => Number\_of\_CCA-I\_message\_with\_5xxx\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601122)

----------------------------------------------------------------------------------------

KPI No.71 => Number\_of\_CCA-T\_message\_with\_2001\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601128)

----------------------------------------------------------------------------------------

KPI No.72 => Number\_of\_CCA-T\_message\_with\_2xxx\_(exclude\_2001)\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601129)

----------------------------------------------------------------------------------------

KPI No.73 => Number\_of\_CCA-T\_message\_with\_3xxx\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601130)

----------------------------------------------------------------------------------------

KPI No.74 => Number\_of\_CCA-T\_message\_with\_4xxx\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601131)

----------------------------------------------------------------------------------------

KPI No.75 => Number\_of\_CCA-T\_message\_with\_5xxx\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601132)

----------------------------------------------------------------------------------------

KPI No.76 => Number\_of\_CCA-U\_message\_with\_2001\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601123)

----------------------------------------------------------------------------------------

KPI No.77 => Number\_of\_CCA-U\_message\_with\_2xxx\_(exclude\_2001)\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601124)

----------------------------------------------------------------------------------------

KPI No.78 => Number\_of\_CCA-U\_message\_with\_3xxx\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601125)

----------------------------------------------------------------------------------------

KPI No.79 => Number\_of\_CCA-U\_message\_with\_4xxx\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601126)

----------------------------------------------------------------------------------------

KPI No.80 => Number\_of\_CCA-U\_message\_with\_5xxx\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601127)

----------------------------------------------------------------------------------------

KPI No.81 => Number\_of\_RAA\_message\_with\_2001\_Result-Code\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601114)

----------------------------------------------------------------------------------------

KPI No.82 => Number\_of\_RAA\_message\_with\_other\_Result-Code\_(Not\_2001)\_(PCC)

SUM(HUAWEINEW\_TBL\_RESULT\_134221265\_3.Counter\_136601115)

----------------------------------------------------------------------------------------

21- Gy result codes

KPI No.83 => Deactivated\_user\_number\_because\_of\_OCS\_fault

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708321)

----------------------------------------------------------------------------------------

KPI No.84 => Number\_of\_CCA\_message\_with\_2001\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601092)

----------------------------------------------------------------------------------------

KPI No.85 => Number\_of\_CCA-I\_message\_with\_2001\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601093)

----------------------------------------------------------------------------------------

KPI No.86 => Number\_of\_CCA-I\_message\_with\_2xxx\_(exclude\_2001)\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601094)

----------------------------------------------------------------------------------------

KPI No.87 => Number\_of\_CCA-I\_message\_with\_3xxx\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601095)

----------------------------------------------------------------------------------------

KPI No.88 => Number\_of\_CCA-I\_message\_with\_4xxx\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601096)

----------------------------------------------------------------------------------------

KPI No.89 => Number\_of\_CCA-I\_message\_with\_5xxx\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601097)

----------------------------------------------------------------------------------------

KPI No.90 => Number\_of\_CCA-T\_message\_with\_2001\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601103)

----------------------------------------------------------------------------------------

KPI No.91 => Number\_of\_CCA-T\_message\_with\_2xxx\_(exclude\_2001)\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601104)

----------------------------------------------------------------------------------------

KPI No.92 => Number\_of\_CCA-T\_message\_with\_3xxx\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601105)

----------------------------------------------------------------------------------------

KPI No.93 => Number\_of\_CCA-T\_message\_with\_4xxx\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601106)

----------------------------------------------------------------------------------------

KPI No.94 => Number\_of\_CCA-T\_message\_with\_5xxx\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601107)

----------------------------------------------------------------------------------------

KPI No.95 => Number\_of\_CCA-U\_message\_with\_2001\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601098)

----------------------------------------------------------------------------------------

KPI No.96 => Number\_of\_CCA-U\_message\_with\_2xxx\_(exclude\_2001)\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601099)

----------------------------------------------------------------------------------------

KPI No.97 => Number\_of\_CCA-U\_message\_with\_3xxx\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601100)

----------------------------------------------------------------------------------------

KPI No.98 => Number\_of\_CCA-U\_message\_with\_4xxx\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601101)

----------------------------------------------------------------------------------------

KPI No.99 => Number\_of\_CCA-U\_message\_with\_5xxx\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601102)

----------------------------------------------------------------------------------------

KPI No.100 => Number\_of\_RAA\_message\_with\_2001\_Result-Code(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_2.Counter\_136601090)

----------------------------------------------------------------------------------------

KPI No.101 => Number\_of\_RAA\_message\_with\_other\_Result-Code\_(Not\_2001)(OCS)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136601091)

----------------------------------------------------------------------------------------

KPI No.102 => OCS\_communication\_fault

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708301)

----------------------------------------------------------------------------------------

KPI No.103 => Received\_CCA\_packets\_with\_class\_1\_result\_code

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708310)

----------------------------------------------------------------------------------------

KPI No.104 => Received\_Command\_Level\_class\_2(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708311)

----------------------------------------------------------------------------------------

KPI No.105 => Received\_Command\_Level\_class\_3(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708312)

----------------------------------------------------------------------------------------

KPI No.106 => Received\_Command\_Level\_class\_4(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708313)

----------------------------------------------------------------------------------------

KPI No.107 => Received\_Command\_Level\_class\_5(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_134708314)

----------------------------------------------------------------------------------------

KPI No.108 => Received\_MSCCs\_with\_class\_2(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136501029)

----------------------------------------------------------------------------------------

KPI No.109 => Received\_MSCCs\_with\_class\_3(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136501030)

----------------------------------------------------------------------------------------

KPI No.110 => Received\_MSCCs\_with\_class\_4(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136501031)

----------------------------------------------------------------------------------------

KPI No.111 => Received\_MSCCs\_with\_class\_5(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136501032)

----------------------------------------------------------------------------------------

22- GW forwarding performance (specified TAC)

KPI No.112 => GW\_downlink\_user\_traffic\_in\_KB(TAC)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608022)

----------------------------------------------------------------------------------------

KPI No.113 => GW\_downlink\_user\_traffic\_in\_KB(TAC)vUGW(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802017)

----------------------------------------------------------------------------------------

KPI No.114 => GW\_uplink\_user\_traffic\_in\_KB(TAC)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316800\_3.Counter\_136608020)

----------------------------------------------------------------------------------------

KPI No.115 => GW\_uplink\_user\_traffic\_in\_KB(TAC)vUGW(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802015)

----------------------------------------------------------------------------------------

23- vEPC

KPI No.116 => Gi\_downlink\_peak\_throughput\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686719)\*8/1000

----------------------------------------------------------------------------------------

KPI No.117 => Gi\_downlink\_peak\_throughput\_of\_GERAN\_rat\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_136602736)\*8/1000

----------------------------------------------------------------------------------------

KPI No.118 => Gi\_downlink\_peak\_throughput\_of\_UTRAN\_rat\_in\_Gb/s(CORE)

MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_136602738)\*8/1000

----------------------------------------------------------------------------------------

KPI No.119 => Gi\_uplink\_peak\_throughput\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686715)\*8/1000

----------------------------------------------------------------------------------------

KPI No.120 => Gi\_uplink\_peak\_throughput\_of\_GERAN\_rat\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_136602735)\*8/1000

----------------------------------------------------------------------------------------

KPI No.121 => Gi\_uplink\_peak\_throughput\_of\_UTRAN\_rat\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_136602737)\*8/1000

----------------------------------------------------------------------------------------

KPI No.122 => Gn\_downlink\_peak\_throughput\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686717)\*8/1000

----------------------------------------------------------------------------------------

KPI No.123 => Gn\_Downlink+Uplink\_Throughput(Gbps)

8\*Max(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686717)/1000+8\*Max(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686713)/1000

----------------------------------------------------------------------------------------

KPI No.124 => Gn\_uplink\_peak\_throughput\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686713)\*8/1000

----------------------------------------------------------------------------------------

KPI No.125 => Gn\_Uplink+Downlink\_Throughput(GRAN)\_Gbps

8\*(Max(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_136602732)+Max(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_136602731))/1000

----------------------------------------------------------------------------------------

KPI No.126 => Gn\_Uplink+Downlink\_Throughput\_UTRAN(Gbps)

8\*(Max(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_136602733)+Max(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_136602734))/1000

----------------------------------------------------------------------------------------

KPI No.127 => S1U\_Downlink\_Througput(Gbps)

8\*Max(HUAWEINEW\_TBL\_RESULT\_136314880\_3.Counter\_136315007)/1000/1000

----------------------------------------------------------------------------------------

KPI No.128 => S1-u\_downlink\_user\_traffic\_peak\_throughput\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_136314880\_3.Counter\_136315007)\*8/1000/1000

----------------------------------------------------------------------------------------

KPI No.129 => S1U\_Downlink+Uplink\_Throughput(Gbps)

8\*Max(HUAWEINEW\_TBL\_RESULT\_136314880\_3.Counter\_136315007)/1000/1000+8\*Max(HUAWEINEW\_TBL\_RESULT\_136314880\_3.Counter\_136315003)/1000/1000

----------------------------------------------------------------------------------------

KPI No.130 => S1U\_Uplink\_Througput(Gbps)

8\*Max(HUAWEINEW\_TBL\_RESULT\_136314880\_3.Counter\_136315003)/1000/1000

----------------------------------------------------------------------------------------

KPI No.131 => S1-U\_uplink\_user\_traffic\_peak\_throughput\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_136314880\_3.Counter\_136315003)\*8/1000/1000

----------------------------------------------------------------------------------------

KPI No.132 => SGi\_downlink\_user\_traffic\_peak\_throughput\_in\_Gb/s(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412092)\*8/1000/1000

----------------------------------------------------------------------------------------

KPI No.133 => SGi\_uplink\_user\_traffic\_peak\_throughput\_in\_Gb/s(Core)

Max(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412096)\*8/1000/1000

----------------------------------------------------------------------------------------

KPI No.134 => Total\_(Gi+SGi)\_Downlink\_Throughput(Gb/s)\_vEPC(Core)

8\*(MAX(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412092)/1000 + MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686719))/1000

----------------------------------------------------------------------------------------

KPI No.135 => Total\_(Gi+SGi)\_Uplink\_Throughput(Gb/s)\_vEPC(Core)

8\*(MAX(HUAWEINEW\_TBL\_RESULT\_138412032\_3.Counter\_138412096)/1000 + MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686715))/1000

----------------------------------------------------------------------------------------

KPI No.136 => Total\_(S1u+Gn)\_Downlink\_Throughput(Gb/s)\_vEPC(Core)

8\*(MAX(HUAWEINEW\_TBL\_RESULT\_136314880\_3.Counter\_136315007)/1000 + MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686717))/1000

----------------------------------------------------------------------------------------

KPI No.137 => Total\_(S1u+Gn)\_Uplink\_Throughput(Gb/s)\_vEPC(Core)

8\*(MAX(HUAWEINEW\_TBL\_RESULT\_136314880\_3.Counter\_136315003)/1000 + MAX(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686713))/1000

----------------------------------------------------------------------------------------

KPI No.138 => Total\_Direct\_Tunnel\_Traffic(GB)

(SUM(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686753)+SUM(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686752))/1000/1000/1000

----------------------------------------------------------------------------------------

24- Virtual port performance measurement

KPI No.139 => Gi\_virtual\_port\_Rate\_In

Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.140 => => Gi\_virtual\_port\_Rate\_Out

Formula not available (Manual Query) You can check query in KPI -> Edit menu

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KPI No.141 => => Gn\_virtual\_port\_Rate\_In

Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.142 => => Gn\_virtual\_port\_Rate\_Out

Formula not available (Manual Query) You can check query in KPI -> Edit menu

----------------------------------------------------------------------------------------

KPI No.143 => Port\_Input\_All\_Packets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654028)

----------------------------------------------------------------------------------------

KPI No.144 => Port\_Input\_Dropped\_Packets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654101)

----------------------------------------------------------------------------------------

KPI No.145 => Port\_Input\_Error\_Packets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654100)

----------------------------------------------------------------------------------------

KPI No.146 => Port\_input\_octets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654026)

----------------------------------------------------------------------------------------

KPI No.147 => Port\_Input\_Peak\_Rate\_(Mbps)

Max(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654030)/1000/1000

----------------------------------------------------------------------------------------

KPI No.148 => Port\_Input\_Peak\_Rate\_Packets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654032)

----------------------------------------------------------------------------------------

KPI No.149 => Port\_Output\_All\_Packets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654029)

----------------------------------------------------------------------------------------

KPI No.150 => Port\_Output\_Dropped\_Packets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654103)

----------------------------------------------------------------------------------------

KPI No.151 => Port\_Output\_Error\_Packets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654102)

----------------------------------------------------------------------------------------

KPI No.152 => Port\_Output\_Octets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654027)

----------------------------------------------------------------------------------------

KPI No.153 => Port\_Output\_Peak\_Rate\_(Mbps)

Max(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654031)/1000/1000

----------------------------------------------------------------------------------------

KPI No.154 => Port\_Output\_Peak\_Rate\_Packets

SUM(HUAWEINEW\_TBL\_RESULT\_13653023\_2.Counter\_13654033)

----------------------------------------------------------------------------------------

25- GW forwarding performance measurement

KPI No.155 => The\_Rate\_of\_downlink\_\_all\_discarded\_packets\_due\_to\_account\_balance\_insufficiency(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802303)

/

SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802303 + HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802304 + HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802305)

----------------------------------------------------------------------------------------

KPI No.156 => The\_Rate\_of\_Total\_discarded\_packets\_due\_to\_account\_balance\_insufficiency(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802303 + HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802300)

/

SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802303 + HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802304 + HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802305 +HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802300 +HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802301 + HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802302)

----------------------------------------------------------------------------------------

KPI No.157 => The\_Rate\_of\_uplink\_all\_discarded\_packets\_due\_to\_account\_balance\_insufficiency(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802300)

/

SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802300 + HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802301 +HUAWEINEW\_TBL\_RESULT\_140509184\_2.Counter\_136802302)

----------------------------------------------------------------------------------------

26- S+PGW

KPI No.158 => P-GW\_Bearer\_Used\_Resource(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_142606342\_3.Counter\_142606402 + HUAWEINEW\_TBL\_RESULT\_138412038\_3.Counter\_138420001)

----------------------------------------------------------------------------------------

KPI No.159 => S+PGW\_Number\_of\_Active\_EPS(APN

Max(HUAWEINEW\_TBL\_RESULT\_142606341\_2.Counter\_142606568)

----------------------------------------------------------------------------------------

KPI No.160 => S-GW\_Bearer\_Used\_Resource(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_142606342\_3.Counter\_142606402 + HUAWEINEW\_TBL\_RESULT\_136314886\_3.Counter\_136322001)

----------------------------------------------------------------------------------------

27-GW forwarding performance measurement (specified APN)

KPI No.161 => Downlink\_user\_traffic\_discarded\_in\_packets\_Rate%\_(IMS\_APN)(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509222)

/

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509211)

----------------------------------------------------------------------------------------

KPI No.162 => GW\_incoming\_downlink\_user\_traffic\_in\_KB(APN)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509214)

----------------------------------------------------------------------------------------

KPI No.163 => GW\_incoming\_uplink\_user\_traffic\_in\_KB(APN)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509208)

----------------------------------------------------------------------------------------

KPI No.164 => GW\_outgoing\_downlink\_user\_traffic\_in\_KB(APN)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509210)

----------------------------------------------------------------------------------------

KPI No.165 => GW\_outgoing\_uplink\_user\_traffic\_in\_KB(APN)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509212)

----------------------------------------------------------------------------------------

KPI No.166 => Uplink\_user\_traffic\_discarded\_in\_packets\_Rate%\_(IMS\_APN)(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509220)

/

SUM(HUAWEINEW\_TBL\_RESULT\_140509186\_3.Counter\_140509209)

----------------------------------------------------------------------------------------

28- UGW VNFC Counters (L7 parser performance measurement)

KPI No.168 => L34\_parser\_downlink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_134708185)

----------------------------------------------------------------------------------------

KPI No.169 => L34\_parser\_uplink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_134708184)

----------------------------------------------------------------------------------------

KPI No.170 => L7\_(SA)\_DNS\_downlink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_136803625)

----------------------------------------------------------------------------------------

KPI No.171 => L7\_(SA)\_DNS\_uplink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_136803624)

----------------------------------------------------------------------------------------

KPI No.172 => L7\_(SA)\_FUI\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_136205322)

----------------------------------------------------------------------------------------

KPI No.173 => L7\_(SA)\_HTTP\_downlink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_136803627)

----------------------------------------------------------------------------------------

KPI No.174 => L7\_(SA)\_HTTP\_uplink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_136803626)

----------------------------------------------------------------------------------------

KPI No.175 => L7\_(SA)\_HTTPS\_downlink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_136803629)

----------------------------------------------------------------------------------------

KPI No.176 => L7\_(SA)\_HTTPS\_uplink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_136803628)

----------------------------------------------------------------------------------------

KPI No.177 => L7\_(SA)\_Others\_downlink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_136803631)

----------------------------------------------------------------------------------------

KPI No.178 => L7\_(SA)\_Others\_uplink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_136803630)

----------------------------------------------------------------------------------------

KPI No.179 => L7\_(SA)\_parser\_input\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_134708130)

----------------------------------------------------------------------------------------

KPI No.180 => L7\_(SA)\_parser\_output\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_134708131)

----------------------------------------------------------------------------------------

KPI No.181 => L7\_parser\_DNS\_downlink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_134708135)

----------------------------------------------------------------------------------------

KPI No.182 => L7\_parser\_DNS\_uplink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_134708134)

----------------------------------------------------------------------------------------

KPI No.183 => L7\_parser\_downlink\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_134708107)

----------------------------------------------------------------------------------------

KPI No.184 => L7\_parser\_total\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_134221254\_3.Counter\_134708133)

----------------------------------------------------------------------------------------

29- VoLTE KPIs

KPI No.186 => GW\_Dedicated\_Bearer\_Activation\_Success\_Rate(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510073 + HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418004 + HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321004)

/

SUM(HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510072 + HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418003+ HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321003)

----------------------------------------------------------------------------------------

KPI No.187 => GW\_Default\_Bearer\_Activation\_Success\_Rate(IMS\_APN)(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510071 +HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321001 + HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418001)

/

SUM( HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510070 + HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321000+ HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418000)

----------------------------------------------------------------------------------------

KPI No.188 => GW\_Default\_Bearer\_Activation\_Success\_Rate(IMS\_APN)(Core\_PER\_APN)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510071 +HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321001 + HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418001)

/

SUM( HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510070 + HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321000+ HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418000)

----------------------------------------------------------------------------------------

KPI No.189 => VoLTE\_insight\_downlink\_average\_delay

AVG(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606505)

----------------------------------------------------------------------------------------

KPI No.190 => VoLTE\_insight\_downlink\_average\_jitter

AVG(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606507)

----------------------------------------------------------------------------------------

KPI No.191 => VoLTE\_insight\_downlink\_average\_MOS

AVG(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606504)

----------------------------------------------------------------------------------------

KPI No.192 => VoLTE\_insight\_downlink\_average\_packet\_loss\_ratio

AVG(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606506)

----------------------------------------------------------------------------------------

KPI No.193 => VoLTE\_insight\_number\_of\_calls\_already\_ended\_with\_accept\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136609237)

----------------------------------------------------------------------------------------

KPI No.194 => VoLTE\_insight\_number\_of\_calls\_already\_ended\_with\_bad\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136609239)

----------------------------------------------------------------------------------------

KPI No.195 => VoLTE\_insight\_number\_of\_calls\_already\_ended\_with\_excellent\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136609235)

----------------------------------------------------------------------------------------

KPI No.196 => VoLTE\_insight\_number\_of\_calls\_already\_ended\_with\_good\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136609236)

----------------------------------------------------------------------------------------

KPI No.197 => VoLTE\_insight\_number\_of\_calls\_already\_ended\_with\_poor\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136609238)

----------------------------------------------------------------------------------------

KPI No.198 => VoLTE\_insight\_number\_of\_calls\_with\_abnormal\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606156)

----------------------------------------------------------------------------------------

KPI No.199 => VoLTE\_insight\_number\_of\_current\_online\_calls\_with\_accept\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606159)

----------------------------------------------------------------------------------------

KPI No.200 => VoLTE\_insight\_number\_of\_current\_online\_calls\_with\_bad\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606161)

----------------------------------------------------------------------------------------

KPI No.201 => VoLTE\_insight\_number\_of\_current\_online\_calls\_with\_excellent\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606157)

----------------------------------------------------------------------------------------

KPI No.202 => VoLTE\_insight\_number\_of\_current\_online\_calls\_with\_good\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606158)

----------------------------------------------------------------------------------------

KPI No.203 => VoLTE\_insight\_number\_of\_current\_online\_calls\_with\_poor\_MOS\_value

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606160)

----------------------------------------------------------------------------------------

KPI No.204 => VoLTE\_insight\_received\_RTP\_downlink\_traffic\_in\_KB

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606167)

----------------------------------------------------------------------------------------

KPI No.205 => VoLTE\_insight\_received\_RTP\_downlink\_traffic\_in\_packets

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606166)

----------------------------------------------------------------------------------------

KPI No.206 => VoLTE\_insight\_received\_RTP\_uplink\_traffic\_in\_KB

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606163)

----------------------------------------------------------------------------------------

KPI No.207 => VoLTE\_insight\_received\_RTP\_uplink\_traffic\_in\_packets

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606162)

----------------------------------------------------------------------------------------

KPI No.208 => VoLTE\_insight\_sent\_RTP\_downlink\_traffic\_in\_KB

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606169)

----------------------------------------------------------------------------------------

KPI No.209 => VoLTE\_insight\_sent\_RTP\_downlink\_traffic\_in\_packets

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606168)

----------------------------------------------------------------------------------------

KPI No.210 => VoLTE\_insight\_sent\_RTP\_uplink\_traffic\_in\_KB

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606165)

----------------------------------------------------------------------------------------

KPI No.211 => VoLTE\_insight\_sent\_RTP\_uplink\_traffic\_in\_packets

SUM(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606164)

----------------------------------------------------------------------------------------

KPI No.212 => VoLTE\_insight\_uplink\_average\_delay

AVG(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606501)

----------------------------------------------------------------------------------------

KPI No.213 => VoLTE\_insight\_uplink\_average\_jitter

AVG(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606503)

----------------------------------------------------------------------------------------

KPI No.214 => VoLTE\_insight\_uplink\_average\_MOS

AVG(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606500)

----------------------------------------------------------------------------------------

KPI No.215 => VoLTE\_insight\_uplink\_average\_packet\_loss\_ratio

AVG(HUAWEINEW\_TBL\_RESULT\_136316600\_3.Counter\_136606502)

----------------------------------------------------------------------------------------

30- Service instance

KPI No.216 => Average\_Gi\_DNS\_delay(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600117)

----------------------------------------------------------------------------------------

KPI No.217 => Average\_HTTP\_Response\_Delay(millisec)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600112)

----------------------------------------------------------------------------------------

KPI No.218 => Gi\_DNS\_Number\_of\_Requests

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600115)

----------------------------------------------------------------------------------------

KPI No.219 => Gi\_DNS\_success\_rate%(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600115)

/

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600114)

----------------------------------------------------------------------------------------

KPI No.220 => HTTP\_Response\_Success\_Rate%(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600110)

/

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600109)

----------------------------------------------------------------------------------------

KPI No.221 => Service\_instance\_TCP\_downlink\_incoming\_resend\_traffic\_in\_KB(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606543)

----------------------------------------------------------------------------------------

KPI No.222 => Service\_instance\_TCP\_downlink\_incoming\_resend\_traffic\_in\_packets(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606542)

----------------------------------------------------------------------------------------

KPI No.223 => Service\_instance\_TCP\_downlink\_incoming\_traffic\_in\_KB(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606537)

----------------------------------------------------------------------------------------

KPI No.224 => Service\_instance\_TCP\_downlink\_incoming\_traffic\_in\_packets(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606536)

----------------------------------------------------------------------------------------

KPI No.225 => Service\_instance\_TCP\_downlink\_outgoing\_average\_flow\_rate\_in\_KB/s(SERVICE\_INSTANCE)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606531)

----------------------------------------------------------------------------------------

KPI No.226 => Service\_instance\_TCP\_downlink\_outgoing\_total\_download\_duration(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606528)

----------------------------------------------------------------------------------------

KPI No.227 => Service\_instance\_TCP\_downlink\_outgoing\_total\_payload\_traffic\_in\_KB(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606527)

----------------------------------------------------------------------------------------

KPI No.228 => Service\_instance\_TCP\_downlink\_outgoing\_traffic\_in\_KB(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606539)

----------------------------------------------------------------------------------------

KPI No.229 => Service\_instance\_TCP\_downlink\_outgoing\_traffic\_in\_packets(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606538)

----------------------------------------------------------------------------------------

KPI No.230 => Service\_instance\_TCP\_flow\_Num\_of\_wireless\_conn\_setup\_RTT\_MoreThan\_wired\_conn\_setup\_RTT(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606550)

----------------------------------------------------------------------------------------

KPI No.231 => Service\_instance\_TCP\_flow\_Num\_of\_wireless\_conn\_SetupRTT\_LessThanOrEqualTo\_wired\_conn\_SetupRTT(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606551)

----------------------------------------------------------------------------------------

KPI No.232 => Service\_instance\_TCP\_flow\_number\_of\_wired\_average\_RTT\_in\_range1(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606556)

----------------------------------------------------------------------------------------

KPI No.233 => Service\_instance\_TCP\_flow\_number\_of\_wired\_average\_RTT\_in\_range2(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606557)

----------------------------------------------------------------------------------------

KPI No.234 => Service\_instance\_TCP\_flow\_number\_of\_wired\_average\_RTT\_in\_range3(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606558)

----------------------------------------------------------------------------------------

KPI No.235 => Service\_instance\_TCP\_flow\_number\_of\_wired\_average\_RTT\_in\_range4(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606559)

----------------------------------------------------------------------------------------

KPI No.236 => Service\_instance\_TCP\_flow\_number\_of\_wireless\_average\_RTT\_in\_range1(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606552)

----------------------------------------------------------------------------------------

KPI No.237 => Service\_instance\_TCP\_flow\_number\_of\_wireless\_average\_RTT\_in\_range2(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606553)

----------------------------------------------------------------------------------------

KPI No.238 => Service\_instance\_TCP\_flow\_number\_of\_wireless\_average\_RTT\_in\_range3(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606554)

----------------------------------------------------------------------------------------

KPI No.239 => Service\_instance\_TCP\_flow\_number\_of\_wireless\_average\_RTT\_in\_range4(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606555)

----------------------------------------------------------------------------------------

KPI No.240 => Service\_instance\_TCP\_total\_flow\_number(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606526)

----------------------------------------------------------------------------------------

KPI No.241 => Service\_instance\_TCP\_uplink\_incoming\_resend\_traffic\_in\_KB(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606541)

----------------------------------------------------------------------------------------

KPI No.242 => Service\_instance\_TCP\_uplink\_incoming\_resend\_traffic\_in\_packets(SERVICE\_INSTANCE)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606540)

----------------------------------------------------------------------------------------

KPI No.243 => Service\_instance\_TCP\_uplink\_incoming\_resend\_traffic\_in\_packets(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606540)

----------------------------------------------------------------------------------------

KPI No.244 => Service\_instance\_TCP\_uplink\_incoming\_traffic\_in\_KB(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606533)

----------------------------------------------------------------------------------------

KPI No.245 => Service\_instance\_TCP\_uplink\_incoming\_traffic\_in\_packets(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606532)

----------------------------------------------------------------------------------------

KPI No.246 => Service\_instance\_TCP\_uplink\_outgoing\_traffic\_in\_KB(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606535)

----------------------------------------------------------------------------------------

KPI No.247 => Service\_instance\_TCP\_uplink\_outgoing\_traffic\_in\_packets(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606534)

----------------------------------------------------------------------------------------

KPI No.248 => Service\_instance\_TCP\_wired\_average\_connection\_setup\_RTT(mSec)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606549)

----------------------------------------------------------------------------------------

KPI No.249 => Service\_instance\_TCP\_wired\_average\_data\_RTT(mSec)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609026)

----------------------------------------------------------------------------------------

KPI No.250 => Service\_instance\_TCP\_wireless\_average\_connection\_setup\_RTT(mSec)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606546)

----------------------------------------------------------------------------------------

KPI No.251 => Service\_instance\_TCP\_wireless\_average\_data\_RTT(mSec)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609022)

----------------------------------------------------------------------------------------

KPI No.252 => Service\_instance\_user\_Average\_time\_delay\_of\_DNS\_Response\_(SERVICE\_INSTANCE)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600117)

----------------------------------------------------------------------------------------

KPI No.253 => Service\_instance\_user\_Average\_time\_delay\_of\_DNS\_Response\_(SERVICE\_INSTANCE)\_test\_(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600117)

----------------------------------------------------------------------------------------

KPI No.254 => Service\_instance\_user\_Average\_time\_delay\_of\_HTTP\_Response\_(SERVICE\_INSTANCE)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600112)

----------------------------------------------------------------------------------------

KPI No.255 => Service\_instance\_user\_Average\_time\_delay\_of\_HTTP\_Response\_(SERVICE\_INSTANCE)\_test(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600112)

----------------------------------------------------------------------------------------

KPI No.256 => Service\_instance\_user\_DNS\_Failed\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600116)

----------------------------------------------------------------------------------------

KPI No.257 => Service\_instance\_user\_DNS\_Request\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600114)

----------------------------------------------------------------------------------------

KPI No.258 => Service\_instance\_user\_DNS\_Successful\_Rate\_(SERVICE\_INSTANCE)(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600115)

/

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600114)

----------------------------------------------------------------------------------------

KPI No.259 => Service\_instance\_user\_DNS\_Successful\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600115)

----------------------------------------------------------------------------------------

KPI No.260 => Service\_instance\_user\_HTTP\_1XX\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609000)

----------------------------------------------------------------------------------------

KPI No.261 => Service\_instance\_user\_HTTP\_200\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609005)

----------------------------------------------------------------------------------------

KPI No.262 => Service\_instance\_user\_HTTP\_2XX\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609001)

----------------------------------------------------------------------------------------

KPI No.263 => Service\_instance\_user\_HTTP\_301\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609006)

----------------------------------------------------------------------------------------

KPI No.264 => Service\_instance\_user\_HTTP\_302\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609007)

----------------------------------------------------------------------------------------

KPI No.265 => Service\_instance\_user\_HTTP\_303\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609008)

----------------------------------------------------------------------------------------

KPI No.266 => Service\_instance\_user\_HTTP\_3XX\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609002)

----------------------------------------------------------------------------------------

KPI No.267 => Service\_instance\_user\_HTTP\_404\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609009)

----------------------------------------------------------------------------------------

KPI No.268 => Service\_instance\_user\_HTTP\_4XX\_Response\_(SERVICE\_INSTANCE)(Core

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609003)

----------------------------------------------------------------------------------------

KPI No.269 => Service\_instance\_user\_HTTP\_503\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609010)

----------------------------------------------------------------------------------------

KPI No.270 => Service\_instance\_user\_HTTP\_504\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609011)

----------------------------------------------------------------------------------------

KPI No.271 => Service\_instance\_user\_HTTP\_5XX\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609004)

----------------------------------------------------------------------------------------

KPI No.272 => Service\_instance\_user\_HTTP\_Failed\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600111)

----------------------------------------------------------------------------------------

KPI No.273 => Service\_instance\_user\_HTTP\_Request\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600109)

----------------------------------------------------------------------------------------

KPI No.274 => Service\_instance\_user\_HTTP\_Successful\_Rate\_(SERVICE\_INSTANCE)(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600110)

/

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600109)

----------------------------------------------------------------------------------------

KPI No.275 => Service\_instance\_user\_HTTP\_Successful\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600110)

----------------------------------------------------------------------------------------

KPI No.276 => Service\_instance\_user\_total\_time\_delay\_of\_DNS\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600122)

----------------------------------------------------------------------------------------

KPI No.277 => Service\_instance\_user\_total\_time\_delay\_of\_HTTP\_Response\_(SERVICE\_INSTANCE)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136600121)

----------------------------------------------------------------------------------------

KPI No.278 => TCP\_DL\_Resend\_Rate(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606543)

/

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606537)

----------------------------------------------------------------------------------------

KPI No.279 => TCP\_downlink\_Retransmission\_Rate%(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606542)

/

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606538)

----------------------------------------------------------------------------------------

KPI No.280 => TCP\_downlink\_wired\_drop\_packets

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609031)

----------------------------------------------------------------------------------------

KPI No.281 => TCP\_UL\_Resend\_Rate(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606541)

/

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606533)

----------------------------------------------------------------------------------------

KPI No.282 => TCP\_uplink\_Retransmission\_Rate%(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606540)

/

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606534)

----------------------------------------------------------------------------------------

KPI No.283 => TCP\_uplink\_wired\_drop\_packets

SUM(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609029)

----------------------------------------------------------------------------------------

KPI No.284 => TCP\_wired\_average\_connection\_delay(millisec)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606549)

----------------------------------------------------------------------------------------

KPI No.285 => TCP\_wired\_average\_delay(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609026)

----------------------------------------------------------------------------------------

KPI No.286 => TCP\_wired\_connection\_success\_ratio%(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609017)

----------------------------------------------------------------------------------------

KPI No.287 => TCP\_wireless\_average\_connection\_delay(millisec)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136606546)

----------------------------------------------------------------------------------------

KPI No.288 => TCP\_wireless\_average\_delay(millisec)(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609022)

----------------------------------------------------------------------------------------

KPI No.289 => TCP\_wireless\_connection\_success\_ratio%(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136316001\_2.Counter\_136609014)

----------------------------------------------------------------------------------------

31- Service Resource measurement

KPI No.290 => Average\_number\_of\_quintuple\_nodes\_in\_use(Core)

AVG(HUAWEINEW\_TBL\_RESULT\_136330011\_2.Counter\_136800304)

----------------------------------------------------------------------------------------

KPI No.291 => Number\_of\_aged\_quintuple\_nodes(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136330011\_2.Counter\_136800302)

----------------------------------------------------------------------------------------

KPI No.292 => Number\_of\_created\_quintuple\_nodes(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136330011\_2.Counter\_136800301)

----------------------------------------------------------------------------------------

KPI No.293 => Number\_of\_current\_quintuple\_nodes\_in\_use(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136330011\_2.Counter\_136800303)

----------------------------------------------------------------------------------------

KPI No.294 => Peak\_number\_of\_quintuple\_nodes\_in\_use(Core)

MAX(HUAWEINEW\_TBL\_RESULT\_136330011\_2.Counter\_136800305)

----------------------------------------------------------------------------------------

KPI No.295 => Shaping\_current\_buffer\_user\_traffic\_in\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136330011\_2.Counter\_136800339)

----------------------------------------------------------------------------------------

KPI No.296 => Shaping\_peak\_buffer\_user\_traffic\_in\_packets(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_136330011\_2.Counter\_136800340)

----------------------------------------------------------------------------------------

32- Miscellaneous

KPI No.297 => Auth\_set\_request(Net\_synchronize\_fail)(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_117440610\_2.Counter\_117460423)

----------------------------------------------------------------------------------------

KPI No.298 => Dropped\_data\_packets\_of\_streaming\_class

sum(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686710)

----------------------------------------------------------------------------------------

KPI No.299 => Gi\_Downlink\_discarded\_packets\_Rate(Core)

100\*SUM(HUAWEINEW\_TBL\_RESULT\_134221229\_5.Counter\_134686759)/SUM(HUAWEINEW\_TBL\_RESULT\_134221229\_5.Counter\_134686692)

----------------------------------------------------------------------------------------

KPI No.300 => GW\_Creat\_Bearer\_req/GW\_Active\_Bearer

Avg(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409303)/Avg(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409313)

----------------------------------------------------------------------------------------

KPI No.301 => GW\_create\_bearers\_request

SUM(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409303)

----------------------------------------------------------------------------------------

KPI No.302 => GW\_current\_active\_bearers

max(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409313)

----------------------------------------------------------------------------------------

KPI No.303 => GW\_User\_Traffic\_Specific\_TAC\_(GB)\_V

sum(HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802017+HUAWEINEW\_TBL\_RESULT\_136330200\_2.Counter\_136802015)/1000/1000

----------------------------------------------------------------------------------------

KPI No.304 => IMS\_Default\_Bearer\_Context\_SR

SUM(HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510071+HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321001+HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418001)/SUM(HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510070+HUAWEINEW\_TBL\_RESULT\_136314905\_3.Counter\_136321000+HUAWEINEW\_TBL\_RESULT\_138412035\_3.Counter\_138418000)

----------------------------------------------------------------------------------------

KPI No.305 => Maximum\_number\_of\_assigned\_addresses\_in\_the\_IP\_address\_pool\_(number)

MAX(HUAWEINEW\_TBL\_RESULT\_1124073492\_3.Counter\_1124084783)

----------------------------------------------------------------------------------------

KPI No.306 => Maximum\_number\_of\_assigned\_addresses\_in\_the\_IP\_address\_pool\_(number)(Core\_TEST)

MAX(HUAWEINEW\_TBL\_RESULT\_134221237\_3\_N.Counter\_136502215)

----------------------------------------------------------------------------------------

KPI No.307 => Maximum\_simultaneously\_activated\_PDP\_contexts(SPU\_instant)

max(HUAWEINEW\_TBL\_RESULT\_134221303\_3.Counter\_134800204)/1000

----------------------------------------------------------------------------------------

KPI No.308 => Number\_of\_addresses\_in\_the\_IP\_address\_pool

Max(HUAWEINEW\_TBL\_RESULT\_1124073492\_3.Counter\_1124084778)

----------------------------------------------------------------------------------------

KPI No.309 => Number\_of\_downlink\_GW\_discarded\_packets\_due\_to\_account\_balance\_insufficiency

SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_5.Counter\_136802303)

----------------------------------------------------------------------------------------

KPI No.310 => Number\_of\_downlink\_GW\_discarded\_packets\_due\_to\_packet\_abnormality

SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_5.Counter\_136802305)

----------------------------------------------------------------------------------------

KPI No.311 => Number\_of\_downlink\_GW\_discarded\_packets\_due\_to\_rule\_matching

SUM(HUAWEINEW\_TBL\_RESULT\_140509184\_5.Counter\_136802304)

----------------------------------------------------------------------------------------

KPI No.312 => PDP\_context\_activation\_SR(HPLMN)

MAX(HUAWEINEW\_TBL\_RESULT\_134221246\_3.Counter\_134706982/HUAWEINEW\_TBL\_RESULT\_134221246\_3.Counter\_134706981)\*100

----------------------------------------------------------------------------------------

KPI No.313 => PDP\_Request\_Vs\_Active\_PDP

AVG(HuaweiNew\_TBL\_RESULT\_134221228\_3\_N.Counter\_134686590)/AVG(HUAWEINEW\_TBL\_RESULT\_134221228\_3\_N.Counter\_134686597)

----------------------------------------------------------------------------------------

KPI No.314 => PDP\_Request\_Vs\_Active\_PDP(SPU\_Instant)

AVG(HUAWEINEW\_TBL\_RESULT\_134221303\_3.Counter\_134800200)/AVG(HUAWEINEW\_TBL\_RESULT\_134221303\_3.Counter\_134800204)

----------------------------------------------------------------------------------------

KPI No.315 => received\_MSCCs\_with\_class\_2\_result\_code

sum(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136501029)

----------------------------------------------------------------------------------------

KPI No.316 => received\_MSCCs\_with\_class\_4\_result\_code

sum(HUAWEINEW\_TBL\_RESULT\_134221256\_3.Counter\_136501031)

----------------------------------------------------------------------------------------

KPI No.317 => S+PGW\_Create\_default\_bearer\_APN\_SR

SUM(HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510071)/SUM(HUAWEINEW\_TBL\_RESULT\_142606341\_3.Counter\_136510070)

----------------------------------------------------------------------------------------

KPI No.318 => S1\_mode\_combined\_attach\_success\_rate\_for\_non-EPS\_services\_New(PLMN)

100\*sum(HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491129+HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491128)/sum(HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491127-HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491130-HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491131-HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491132-HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491133-HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491134-HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491135-HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491136-HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491137-HUAWEINEW\_TBL\_RESULT\_117490518\_2.Counter\_117491138)

----------------------------------------------------------------------------------------

KPI No.319 => S13\_messages\_SR

100\*sum(HUAWEINEW\_TBL\_RESULT\_117496860\_2.Counter\_117500914)/sum(HUAWEINEW\_TBL\_RESULT\_117496860\_2.Counter\_117500913)

----------------------------------------------------------------------------------------

KPI No.320 => SUM\_GW\_current\_active\_bearers(Core)

SUM(HUAWEINEW\_TBL\_RESULT\_140509185\_3.Counter\_140409313)

----------------------------------------------------------------------------------------

KPI No.321 => UGW\_Peak\_CDR\_sending\_rate\_to\_CG

SUM(HUAWEINEW\_TBL\_RESULT\_134221234\_3.Counter\_136510012)

----------------------------------------------------------------------------------------

KPI No.322 => WEB\_TEST

SUM(HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686753+HUAWEINEW\_TBL\_RESULT\_134221229\_3\_N.Counter\_134686752)/1000/1000

----------------------------------------------------------------------------------------