

PM Subscription Import Export File Format Description

Interwork Description

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1 PM Subscription Import Export File Format Description

This document describes the format of import and export of subscriptions, counters and events from subscriptions in file.

1.1 Prerequisites

- A fully deployed ENM system.
- A connection to an ENM system.
- A valid Username and Password to access ENM system. For password policy, at first access the password must be changed.
- User authentication via ENM GUI.



2 Export and Import of Subscriptions

From the PMIC User Interface, the subscriptions can be exported to a JSON file or imported from a JSON file. The following subscription types are supported:

- Statistical
 - Standard
 - MO Instance (WRAN)
 - Cell Instance (WRAN)
 - RES (WRAN)
- Events/Recording
 - Cell Trace / EBS-L (LRAN)
 - Cell Trace / EBS-N
 - UE Trace (LRAN, NRAN and Core)
 - EBM / EBS-M (Core)
 - BSC Recordings (GRAN)
 - MTR (GRAN)
 - BSC Performance Events (GRAN)
 - RTT (GRAN)
 - GPEH (WRAN)
 - CTR (WRAN)
 - UETR (WRAN)



3 Statistical Subscription

3.1 Statistical Standard Subscriptions

JSON file format:

```
{
  "name" : "The name of the subscription",
  "description" : "A short description of the subscription",
  "type" : "STATISTICAL",
  "taskStatus": "OK",
  "scheduleInfo" : {
    "startDateTime" : null,
    "endDateTime" : null
  },
  "rop" : "FIFTEEN_MIN",
  "nodes" : [
    {
      "fdn" : "NetworkElement=LTE02ERBS00023",
      "pmFunction" : "ON"
    },
    {
      "fdn" : "NetworkElement=LTE02ERBS00024",
      "pmFunction" : "OFF",
    },
  ],
  "counters" : [
    {
      "name" : "pmMacCellThpTimeDl",
      "moClassType" : "EUTRANCellTDD"
    },
    {
      "name" : "pmS1SigConnEstabFailMmeOvlMos",
      "moClassType" : "EUTRANCellTDD"
    }
  ]
}
```

Table 1 Fields and Values Details

Field	Values	Description
name	String	Subscription Name
description	String	A short description
type	STATISTICAL	Subscription Type
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
rop	FIFTEEN_MIN	Start and end date of the schedule
nodes	A list of FDN's and pmFunction : Example:	The list of nodes selected for the subscription with the pmFunction status for each node



Field	Values	Description
	<pre>{ "fdn" : "NetworkElement=LTE02ERBS00023", "pmFunction" : "ON" }</pre>	
counters	<p>A list of counters. Where name is the name of the counter and moClassType is the group of the counter. Example:</p> <pre>{ "name": "pmS1SigConnEstabFailMmeOvlMos", "moClassType": "EUTranCell1TDD" }</pre>	List of included counters

3.2 Statistical MO Instance Subscriptions

JSON file format:

```
{
  "name" : "The name of the subscription",
  "description" : "A short description",
  "type" : "MOINSTANCE",
  "taskStatus": "OK",
  "scheduleInfo" : {
    "startDateTime" : null,
    "endDateTime" : null
  },
  "prop" : "FIFTEEN_MIN",
  "nodes" : [
    {
      "fdn" : "NetworkElement=RNC01",
      "pmFunction" : "ON"
    },
    {
      "fdn" : "NetworkElement=RNC01",
      "pmFunction" : "OFF"
    }
  ],
  "counters" : [
    {
      "name" : "pmBwErrBlocks",
      "moClassType" : "Aa10TpVccTp"
    },
    {
      "name" : "pmBwLostCells",
      "moClassType" : "Aa10TpVccTp"
    }
  ],
  "moInstances" : [
    {
      "nodeName" : "RNC01",
      "moInstanceName" : "Aa10TpVccTp=pm-1"
    }
  ]
}
```



Table 2 Fields and Values Details

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	MOINSTANCE	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA..
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
rop	FIFTEEN_MIN	The rop time
nodes	A list of FDN's and pmFunction : Example: <pre>{ "fdn": "NetworkElement=RNC01" "pmFunction" : "ON" }</pre>	The list of nodes selected for the subscription and the pmFunction status for each node.
counters	A list of counters: <ul style="list-style-type: none">— name is the name of the counter— moClassType is the group of the counter. Example: <pre>{ "name": "pmS1SigConnEstabFailMmeOvlMos", "moClassType": "EUTRanCellTDD" }</pre>	The list of the included counters.
moInstances	A list of MO instances: <ul style="list-style-type: none">— nodeName is the name of the node— moInstanceName is the name of the instance Example: <pre>{ "nodeName": "RNC01", "moInstanceName": "Aq10TpVccTp=pm-1" }</pre>	The list of MO instances included in the subscription.

3.3 Statistical Cell Instance (WRAN)

Cell Instance (WRAN)

```
{
  "type": "CELLINSTANCE",
```



```
"name": "The name of the subscription",
"description": "A short description of the subscription",
"taskStatus": "OK",
"scheduleInfo": {
  "startDateTime": null,
  "endDateTime": null
},
"nodeFilter": "NODE_TYPE",
"selectedNeTypes": [
  "RNC"
],
"nodes": [
  {
    "fdn" : "NetworkElement=RNC01",
    "pmFunction" : "ON"
  },
  {
    "fdn" : "NetworkElement=RNC01",
    "pmFunction" : "OFF",
  },
],
"numberOfNodes": 1,
"cellsSupported": true,
"cellInfoList": [
  {
    "nodeName": "RNC01",
    "utranCellId": "RNC01-1-1"
  },
  {
    "nodeName": "RNC01",
    "utranCellId": "RNC01-1-2"
  }
],
"rop": "FIFTEEN_MIN",
"counters": [
  {
    "name": "pmAttLbhoSpeech",
    "moClassType": "GsmRelation"
  },
  {
    "name": "pmFailLbhoSpeechGsmFailure",
    "moClassType": "GsmRelation"
  }
]
}
```



Table 3 Cell Instance (WRAN)

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	CELLINSTANCE	The type of the subscription
task status	String	The operational task status of the subscription.
scheduleInfo.startDateTime scheduleInfo.startDateTime	YYYY-MM-DDThh:mm:ss	The operational task status of the subscription. The valid values are OK, ERROR and NA.
rop	FIFTEEN_MIN	
nodes	A list of FDN's and pmFunction : Example: <pre>{ "fdn" : "NetworkElement=RNC01", "pmFunction" : "0FF", }</pre>	The list of nodes selected for the subscription with the pmFunction status for each node.
cellsSupported	Boolean	True or False based on cells support.
cellInfoList	A list of supported cell id and node name. Example: <pre>{ "nodeName": "RNC01" , "utranCellId": "RNC01-1-2" }</pre>	The list of included cell id and node name.
counters	A list of counters. Where name is the name of the counter and	The list of the included counters.



Field	Values	Description
	<p>moClassType is the group of the counter.</p> <p>Example: { "name": "pmAttLbhoSpeech", "moClassType": "GsmRelation" }</p>	

3.4 Statistical RES (WRAN)

JSON file format:

```
{
  "type": "RES",
  "name": "The name of the subscription",
  "description": "A short description of the subscription",
  "taskStatus": "OK",
  "scheduleInfo": {
    "startDateTime": null,
    "endDateTime": null
  },
  "nodeFilter": "NODE_TYPE",
  "selectedNeTypes": [
    "RNC"
  ],
  "nodes": [
    {
      "fdn" : "NetworkElement=RNC01"
      "pmFunction" : "ON"
    },
    {
      "fdn" : "NetworkElement=RNC01",
      "pmFunction" : "OFF",
    },
  ],
  "numberOfNodes": 1,
  "resMeasPeriods": {
    "STREAMING": 16,
    "INTERACTIVE": 16,
    "SPEECH": 6,
    "VIDEO": 16
  },
  "resUeFraction": 3,
  "resSpreadingFactor": [
    "SF_16"
  ],
  "resMeasDef": {
```



```

"pmRes1": {
  "rmq": "CPICH_RSCP",
  "service": "AMR4750"
},
"pmRes2": {
  "rmq": "CPICH_RSCP",
  "service": "PSCONVSPEECHEULHS_ALL"
}
},
"applyOnAllCells": false,
"cellInfoList": [
  {
    "nodeName": "RNC01",
    "utranCellId": "RNC01-1-1"
  },
  {
    "nodeName": "RNC01",
    "utranCellId": "RNC01-1-2"
  }
],
"rop": "FIFTEEN_MIN",
"counters": [
  {
    "name": "pmRes1",
    "moClassType": "UtranCell"
  },
  {
    "name": "pmRes2",
    "moClassType": "UtranCell"
  }
]
}

```

Table 4 Details of Fields and Values

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	RES	The type of the subscription
task status	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule



Field	Values	Description
scheduleInfo.startTime		
rop	FIFTEEN_MIN	The ROP time
nodes	A list of FDN's and pmFunction : Example: { "fdn": "NetworkElement=RNC01" "pmFunction" : "ON" }	The list of nodes selected for the subscription with the pmFunction status for each node.
resMeasPeriods	A list of rate measurements for RES. Example: { "STREAMING": 16, "INTERACTIVE": 16, "SPEECH": 6, "VIDEO": 16 }	Specifies the rate information.
resUeFraction	Number	Specifies the subset of the UEs to be included in the measurement.
resSpreadingFactor	List of Spreading Factors Example: SF_4 SF_8 SF_16 SF_32 SF_64 SF_128 SF_256	
resMeasDef	Example:	ResMeasDef defines the RES service to be



Field	Values	Description
	<pre>"pmRes1":{ "imq": "CPICH_RSCP", "service": "AMR4750" }, "pmRes2":{ "imq": "CPICH_RSCP", "service": "PSCONVSP EECHEULHS_ALL " } </pre>	measured and the RES measurement quantity to be measured for each counter.
applyOnAllCells	false	Selection of cells.
cellInfoList	<p>A list of cells:</p> <pre>{ "nodeName": "RNC01", "utranCellId": "RNC01-1-1" }</pre>	A list of cells where to collect the measures.
counters	<p>A list of counters. Where name is the name of the counter and moClassType is the group of the counter.</p> <pre>{ "name": "pmRes1", "moClassType": "UtranCell" }</pre>	The list of the included counters.



4 Events/Recordings Subscription Type

4.1 Cell Trace / EBS-L (LRAN) Subscription Events Recording

JSON file format for Cell Trace (LRAN) without EBS-L:

```
{
  "name" : "User Defined Cell Trace subscription" ,
  "description" : "User Defined Cell Trace subscription" ,
  "type" : "CELLTRACE" ,
  "taskStatus": "OK" ,
  "scheduleInfo" : {
    "startDateTime" : null ,
    "endDateTime" : null
  } ,
  "rop" : "FIFTEEN_MIN" ,
  "nodes" : [
    {
      "fdn" : "NetworkElement=LTE02ERBS00023" ,
      "pmFunction" : "ON"
    } ,
    {
      "fdn" : "NetworkElement=LTE02ERBS00024" ,
      "pmFunction" : "OFF" ,
    } ,
  ] ,
  "events" : [
    {
      "name" : "INTERNAL_EVENT_ANR_HO_LEVEL_CHANGED" ,
      "groupName" : "CCTR" ,
      "eventProducerId" : "Lrat"
    } ,
    {
      "name" : "INTERNAL_EVENT_CA_WAITING_FOR_COVERAGE" ,
      "groupName" : "CCTR" ,
      "eventProducerId" : "Lrat"
    } ,
    {
      "name" : "INTERNAL_EVENT_PM_RECORDING_FAULT_JVM" ,
      "groupName" : "CCTR" ,
      "eventProducerId" : "Lrat"
    } ,
    {
      "name" : "INTERNAL_EVENT_RRC_SCELL_DECONFIGURED" ,
      "groupName" : "CCTR" ,
      "eventProducerId" : "Lrat"
    }
  ] ,
  "outputMode" : "FILE" ,
  "streamInfoList" : [ ] ,
  "ebsCounters" : [ ] ,
  "cellTraceCategory" : "CELLTRACE" ,
  "ueFraction" : 1000 ,
  "asnEnabled" : false
}
```

JSON file format for Cell Trace (LRAN) with EBS-L:

```
{
  "name" : "User defined Cell Trace and EBS-L subscription" ,
  "description" : "User defined Cell Trace and EBS-L subscription" ,
  "type" : "CELLTRACE" ,
  "taskstatus" : "OK" ,
```



```

"scheduleInfo" : {
  "startDateTime" : null ,
  "endDateTime" : null
},
"rop" : "FIFTEEN_MIN" ,
"nodes" : [
  {
    "fdn" : "NetworkElement=LTE01dg2ERBS00001"
    "pmFunction" : "ON"
  }
],
"events" : [
  {
    "name" : "INTERNAL_EVENT_ADV_CELL_SUP_DETECTION" ,
    "groupName" : "INTERNAL" ,
    "eventProducerId" : "Lrat"
  },
  {
    "name" : "INTERNAL_EVENT_RRC_SCELL_DECONFIGURED" ,
    "groupName" : "SESSION_PERFORMANCE_EVALUATION" ,
    "eventProducerId" : "Lrat"
  },
  {
    "name" : "INTERNAL_PER_PROCESSOR_LOAD" ,
    "groupName" : "CAPACITY_MANAGEMENT_EVALUATION" ,
    "eventProducerId" : "Lrat"
  }
],
"outputMode" : "FILE" ,
"streamInfoList" : [],
"ebsCounters" : [
  {
    "name" : "pmTimingAdvance" ,
    "moClassType" : "EUTRAN_CELL_TDD"
  }
],
"cellTraceCategory" : "CELLTRACE_AND_EBSL_FILE" ,
"ueFraction" : 1000 ,
"asnEnabled" : false
}

```

Table 5 Details of Fields and Values

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	CELLTRACE	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
rop	FIFTEEN_MIN	The rop time
nodes	A list of FDN's and pmFunction : <pre> { "fdn": "NetworkElement=LTE02ERBS00001" "pmFunction" : "ON" } </pre>	The list of nodes selected for the subscription with the pmFunction status for each node.
ebsCounters	A list of EBS counters:	The list of the included EBS counters.



Field	Values	Description
	<ul style="list-style-type: none">— name is the name of the EBS counter— moClassType is the group of the EBS counter. Example: <pre>{ "name": "pmTimingAdvance", "moClassType": "EUTranCellTDD"}</pre>	
events	A list of events described by: <ul style="list-style-type: none">— name is the name of the event— groupName is the name of the group Example: <pre>{ "name": "INTERNAL_PROCC_RRC_CONN_SETUP", "groupName": "INTERNAL"}</pre>	The list of events included in the subscription. Triggered events by ebsCounters are automatically added by ENM.
outputMode	FILE STREAMING FILE_AND_STREAMING	The output of the subscription.
streamInfoList	A list of streamInfo with IP address and port. <pre>[{ "ipAddress": "10.0.0.10", "port": "100" }, { "ipAddress": "10.0.0.11", "port": "1301" }]</pre>	
ueFraction	Integer	The value for the UE fraction
asnEnabled	true false	Specify if the asn format shall be enabled.

4.2 Cell Trace (NRAN) Subscription Events Recording

JSON file format:



```

{
  "name" : "E/I Cell Trace NRAN",
  "description" : "Test subscription for export/import cell trace nran ",
  "type" : "CELLTRACE",
  "taskStatus": "OK",
  "scheduleInfo" : {
    "startDateTime" : null,
    "endDateTime" : null
  },
  "rop" : "FIFTEEN_MIN",
  "nodes" : [
    {
      "fdn" : "NetworkElement=NR01gNodeBRadio00005",
      "pmFunction" : "ON"
    },
    {
      "fdn" : "NetworkElement=NR01gNodeBRadio00006",
      "pmFunction" : "OFF",
    }
  ],
  "events" : [
    {
      "name" : "CuCpTestEventEnm",
      "groupName" : "CCTR",
      "eventProducerId" : "CUCP"
    },
    {
      "name" : "CuUpTestEventEnm",
      "groupName" : "CCTR",
      "eventProducerId" : "CUUP"
    },
    {
      "name" : "DuPerRadioUeMeasurement",
      "groupName" : "CCTR",
      "eventProducerId" : "DU"
    },
    {
      "name" : "DuPerUeTrafficRep",
      "groupName" : "CCTR",
      "eventProducerId" : "DU"
    },
    {
      "name" : "DuTestEventEnm",
      "groupName" : "CCTR",
      "eventProducerId" : "DU"
    },
    {
      "name" : "CuCpProcInitialCtxtEstab",
      "groupName" : "PROPRIETARY",
      "eventProducerId" : "CUCP"
    },
    {
      "name" : "CuCpProcPduSessionResourceSetup",
      "groupName" : "PROPRIETARY",
      "eventProducerId" : "CUCP"
    },
    {
      "name" : "CuCpRwrMobilityDecision",
      "groupName" : "PROPRIETARY",
      "eventProducerId" : "CUCP"
    },
    {
      "name" : "CuCpTestEventEnm",
      "groupName" : "PROPRIETARY",
      "eventProducerId" : "CUCP"
    },
    {
      "name" : "CuUpBbDataCollectionLost",
      "groupName" : "PROPRIETARY",
      "eventProducerId" : "CUUP"
    },
    {
      "name" : "CuUpTestEventEnm",
      "groupName" : "PROPRIETARY",
      "eventProducerId" : "CUUP"
    },
    {
      "name" : "DuBbDataCollectionLost",
      "groupName" : "PROPRIETARY",
    }
  ]
}

```



```

    "eventProducerId" : "DU"
  },
  {
    "name" : "DuPerCellMacPbControl" ,
    "groupName" : "PROPRIETARY" ,
    "eventProducerId" : "DU"
  }
],
"outputMode" : "FILE" ,
"streamInfoList" : [],
"ebsCounters" : [],
"cellTraceCategory" : "CELLTRACE_NRAN" ,
"ueFraction" : 1000 ,
"asnEnabled" : false
}

```

Table 6 Details of Fields and Values

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	CELLTRACE	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
rop	FIFTEEN_MIN	The rop time
nodes	A list of FDN's and pmFunction : Example: <pre>{ "fdn": "NetworkElement=NR01gNodeBRadio00005" "pmFunction": "ON" }</pre>	The list of nodes selected for the subscription with the pmFunction status for each node.
ebsCounters	A list of EBS counters	Not supported for EBS-N (NRAN)
events	A list of events described by: <ul style="list-style-type: none">— name is the name of the event— groupName is the name of the group Example: <pre>{ "name": "CuCpTestEventEnm", "groupName": "CCTR", "eventProducerId": "CUCP" }</pre>	The list of events included in the subscription.
outputMode	FILE STREAMING	The output of the subscription.



Field	Values	Description
	FILE_AND_STREAMING	
streamInfoList	A list of streamInfo with IP address and port. <pre>[{ "ipAddress" : "10.0.0.10", "port": "100" }, { "ipAddress" : "10.0.0.11", "port": "1301" }]</pre>	
cellTraceCategory	String	The Cell Trace Category
ueFraction	Integer	The value for the UE fraction (set to default value 1000).
asnEnabled	true false	Specify if the asn format should be enabled.

4.3 UE Trace (LRAN, NLAN and Core) Subscription Events Recording

JSON file format:

```
{
  "name" : "The name of the subscription" ,
  "description" : "A short description" ,
  "type" : "UETRACE" ,
  "taskStatus": "OK" ,
  "scheduleInfo" : {
    "startDateTime" : null ,
    "endDateTime" : null
  },
  "rop" : "FIFTEEN_MIN" ,
  "outputMode" : "FILE" ,
  "streamInfo" : null ,
  "ueInfo" : {
    "type" : "IMSI" ,
    "value" : "12345"
  },
  "nodeInfoList" : [
    {
      "nodeGrouping" : "ENODEB" ,
      "traceDepth" : "MINIMUM" ,
      "interfaceTypes" : [
        "s1" ,
        "uu" ,
        "x2"
      ]
    },
    {
      "nodeGrouping" : "MME" ,
      "traceDepth" : null ,
      "interfaceTypes" : [
        "s1_mme" ,

```




Field	Values	Description
	s1_mme s1_mme slg gb iu sv s11 s6a s3_s16 s3_s10 s4 s6d sgs gn_gp gr sls	
streamInfo	IP address and port. Example: { "ipAddress" : "10.0.0 .10", "port": "100" }	Specify the IP address and the port for the STREAMING output mode

4.4 EBM / EBS-M (Core) Subscription Events Recording

JSON file format:

```
{
  "name" : "The name of the subscription,
  "description" : "A short description" ,
  "type" : "EBM" ,
  "taskStatus": "OK" ,
  "scheduleInfo" : {
    "startDateTime" : null ,
    "endDateTime" : null
  },
  "rop" : "FIFTEEN_MIN" ,
  "nodes" : [
    {
      "fdn" : "NetworkElement=CORE10SGSN001",
      "pmFunction" : "ON"
    },
    {
      "fdn" : "NetworkElement=CORE10SGSN002",
      "pmFunction" : "OFF",
    },
  ],
  "events" : [
    {
      "name" : "L_ATTACH" ,
      "groupName": "OTHER"
    }
  ],
  "eventProducerId": null
}
"outputMode" : "FILE" ,
"streamInfoList" : [],
"ebsCounters" : [
{
```



```

        "name" : "MME Attach" ,
        "moClassType" : "MME"
    },
    {
        "name" : "MME Attach Abort" ,
        "moClassType" : "MME"
    }
],
"ebsOutputStrategy" : "ENIQ_GZ"
}
    
```

Table 8 Table 6 Details of Fields and Values

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	EBM	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
rop	FIFTEEN_MIN	The rop time
nodes	A list of FDN's and pmFunction: Example: <pre>{ "fdn": "NetworkElement=CORE10SGSN001" "pmFunction": "ON" }</pre>	The list of nodes selected for the subscription with the pmFunction status for each node.
ebsCounters	A list of EBS counters: <ul style="list-style-type: none"> name is the name of the EBS counter moClassType is the group of the EBS counter. Example: <pre>{ "name": "MME Attach Abort" "moClassType": "MME" }</pre>	The list of the included EBS counters.
events	A list of events described by: <ul style="list-style-type: none"> name is the name of the event groupName is the name of the group Example: <pre>{ "name": "L_ATTACH", "groupName": "OTHER" "eventProduc</pre>	The list of events included in the subscription. Triggered events by ebsCounters are automatically added by ENM.



Field	Values	Description
	<code>erId": null }</code>	
outputMode	FILE	The output of the subscription.
streamInfoList	Always empty	Not supported by this type of subscription.
ebsOutputStrategy	TGPP (3GPP output file) TGPP_GZ (Compressed 3GPP output file) TGPP_ENIQ_GZ (3GPP and Compressed ENIQ output files) TGPP_GZ_ENIQ_GZ (Compressed 3GPP and Compressed ENIQ output files) ENIQ_GZ (ENIQ output file)	The ebs output strategy.

4.5 BSC Recordings (GRAN) Subscription

JSON file format:

```
{
  "name" : "019",
  "description" : null,
  "type" : "BSCRECORDINGS",
  "taskStatus": "OK",
  "scheduleInfo" : {
    "startDateTime" : null,
    "endDateTime" : null
  },
  "rop" : "FIFTEEN_MIN",
  "nodes" : [
    {
      "fdn" : "NetworkElement=GSM02BSC02",
      "pmFunction" : "ON"
    },
    {
      "fdn" : "NetworkElement=GSM02BSC01",
      "pmFunction" : "OFF"
    }
  ]
}
```

Table 9 Table 7 Details of Fields and Values

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	BSCRECORDINGS	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule



Field	Values	Description
rop	FIFTEEN_MIN	The rop time
nodes	A list of FDN's and pmFunction : Example: <pre>{ "fdn": "NetworkElement=GSM02BSC01" "pmFunction" : "ON" }</pre>	The list of nodes selected for the subscription with the pmFunction status for each node.

4.6 MTR (GRAN) Subscription

JSON file format:

```
{
  "name" : "Test_MTR",
  "description" : null,
  "type" : "MTR",
  "taskStatus": "OK",
  "scheduleInfo" : {
    "startDateTime" : null,
    "endDateTime" : null
  },
  "rop" : "FIFTEEN_MIN",
  "nodes" : [
    {
      "fdn" : "NetworkElement=MSC06"
      "pmFunction" : "ON"
    }
  ],
  "recordingReference" : 0,
  "traceReference" : "339314210001",
  "mtrAccessTypes" : [
    "LCS"
  ],
  "attachedNodes" : [
    {
      "fdn" : "NetworkElement=GSM02BSC02"
      "pmFunction" : "ON"
    }
  ],
  "ueInfo" : {
    "type" : "IMSI",
    "value" : "424241"
  }
}
```

Table 10 Table 8 Details of Fields and Values

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	MTR	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA..
scheduleInfo.startDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule



Field	Values	Description
scheduleInfo.endDateTime		
rop	FIFTEEN_MIN	The rop time
nodes	A list of FDN's and pmFunction : Example: <pre>{ "fdn": "NetworkElement=MSC06" "pmFunction" : "ON" }</pre>	The list of nodes selected for the subscription with the pmFunction status for each node.
attachedNodes	A list of attached BSC nodes: Example: <pre>{ "fdn": "NetworkElement=GSM02BSC02" "pmFunction" : "ON" }</pre>	The list of nodes selected for the subscription with the pmFunction status for each node
recordingReference	12	The value of Recording Reference
traceReference	339314210001	The TraceReference
ueInfo.type	IMSI	The type of the UE info.
ueInfo.value	String	The value of the UE info.
mtrAccessTypes	A list of access types. Example: <pre>["LCS"],</pre>	The list of access types included in the subscription.

4.7 BSC Performance Events(GRAN) Subscription

JSON file format:

```
{
  "name" : "BSC_Performance_Events_Test" ,
  "description" : "Test" ,
  "type" : "BSCPERFORMANCEEVENTS" ,
  "taskStatus": "OK" ,
  "scheduleInfo" : {
    "startDateTime" : null ,
    "endDateTime" : null
  },
  "nodeFilter" : "NODE_TYPE" ,
  "selectedNeTypes" : [
    "BSC"
  ],
  "nodes" : [
    {
      "fdn" : "NetworkElement=BSC01"
      "pmFunction" : "ON"
    }
  ],
  "numberOfNodes" : 1 ,
  "applyOnAllCells" : false ,
  "cellInfoList" : [
```



```

    {
      "nodeName" : "BSC01"
      "utranCellId" : "BSC01-1-1"
    }
  ]
}

```

Table 11 Table 9 Details of Fields and Values

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	BSCPERFORMANCEEVENTS	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
nodes	A list of FDN's and pmFunction : <pre> { "fdn" : "NetworkElement=BSC01" "pmFunction" : "ON" } </pre>	The list of nodes selected for the subscription with the pmFunction status for each node.
applyOnAllCells	false	Selection of cells.
cellInfoList	List of cells Example: <pre> "cellInfoList": [{ "nodeName": "BSC01", "utranCellI d": "BSC01-1-1" }, { "nodeName": "BSC01", "utranCellI d": "BSC01-10-4" }] </pre>	The list of cells included in the subscription.

4.8 RTT (GRAN) Subscription

JSON file format:

```

{
  "name" : "TEST_RTT",
  "description" : "test RTT subscription" ,
  "type" : "RTT",
  "taskStatus": "OK",
  "scheduleInfo" : {
    "startDateTime" : null ,
    "endDateTime" : null
  },
  "nodes" : [

```



```

    {
      "fdn" : "NetworkElement=MSC17BSC33"
      "pmFunction" : "ON"
    }
  ],
  "ueInfoList" : [
    {
      "type" : "IMSI"
      "value" : "123435"
    }
  ]
}

```

Table 12 Table 10 Details of Fields and Values

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	RTT	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
nodes	A list of FDN's and pmFunction : <pre> { "fdn" : "NetworkElement=MSC17BSC33" "pmFunction" : "ON" } </pre>	The list of nodes selected for the subscription with the pmFunction status for each node.
ueInfoList.type	IMSI IMEI	The type of the UE info.
ueInfoList.value	String	The value of the UE info.

4.9 CTR (WRAN) Subscription Recording

JSON File format for GPEH (WRAN) Subscription Recording:

```

{
  "type": "CELLTRAFFIC",
  "name": "The name of the subscription",
  "description": "A short description of the subscription",
  "taskStatus": "OK",
  "scheduleInfo": {
    "startDateTime": null,
    "endDateTime": null
  },
  "nodeFilter": "NODE_TYPE",
  "selectedNeTypes": [
    "RNC"
  ],
  "nodes": [
    {
      "fdn": "NetworkElement=RNC01"
      "pmFunction" : "ON"
    }
  ]
}

```



```

    ],
    "numberOfNodes": 1,
    "outputMode": "FILE",
    "cellInfoList": [
      {
        "nodeName": "RNC01",
        "utranCellId": "AtmPort 11"
      }
    ],
    "top": "FIFTEEN_MIN",
    "events": [
      {
        "groupName": "OTHER",
        "name": "RRC_RRC_CONNECTION_SETUP"
      },
      {
        "groupName": "OTHER",
        "name": "L_ATTACH"
      }
    ],
    "triggerEventInfo": {
      "groupName": "OTHER",
      "name": "RRC_RRC_CONNECTION_SETUP"
    }
  }
}

```

Table 13 Fields and Values Details

Field	Values	Description
cellInfoList	A list of supported cell id and node name: Example: { "nodeName": "RNC01", "utranCellId": "AtmPort 11" }	A list of cells where to collect the measures.
description	String	A short description
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
outputMode	String	ENM implementation, the output mode's possible values are FILE, STREAMING and FILE_AND_STREAMING.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
events	A list of events described by: name is the name of the event groupName is the name of the group. { "groupName": "OTHER", "name": "RRC_RRC_CONNECTIO N_SETUP" }	The list of events included in the subscription.
nodes	A list of FDN's and pmFunction : Example: { "fdn": "NetworkElement=RNC 01"	The list of nodes selected for the subscription with the pmFunction status for each node.



Field	Values	Description
	"pmFunction" : "ON" }	
name	String	The name of the subscription
rop	FIFTEEN_MIN	The ROP time.
type	CELLTRAFFIC	The type of the subscription

4.10 GPEH (WRAN) Subscription Recording

JSON File format for GPEH (WRAN) Subscription Recording:

```
{
  "type": "GPEH",
  "name": "The name of the subscription",
  "description": "A short description of the subscription",
  "taskStatus": "OK",
  "scheduleInfo": {
    "startDateTime": null,
    "endDateTime": null
  },
  "nodeFilter": "NODE_TYPE",
  "selectedNeTypes": [],
  "nodes": [
    {
      "fdn": "NetworkElement=RNC01"
      "pmFunction" : "ON"
    }
  ],
  "numberOfNodes": 1,
  "outputMode": "FILE",
  "ueFraction": 1000,
  "cellsSupported": true,
  "applyOnAllCells": false,
  "cellInfoList": [
    {
      "nodeName": "RNC01",
      "utranCellId": "RNC01-1-1"
    },
    {
      "nodeName": "RNC01",
      "utranCellId": "RNC01-1-2"
    }
  ],
  "rop": "FIFTEEN_MIN",
  "events": [
    {
      "groupName": "ALWAYS_ACTIVE",
      "name": "INTERNAL_EVENT_ANR_CONFIG_MISSING"
    },
    {
      "groupName": "ALWAYS_ACTIVE",
      "name": "INTERNAL_EVENT_LICENSE_UNAVAILABLE"
    },
    {
      "groupName": "ALWAYS_ACTIVE",
      "name": "INTERNAL_EVENT_LIC_GRACE_PERIOD_EXPIRED"
    }
  ]
}
```



Table 14 Fields and Values Details

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	GPEH	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
rop	A list of FDNs FIFTEEN_MIN	The ROP time
nodes	A list of FDN's and pmFunction : Example: <pre>{ "fdn": "NetworkElement=RNC01" "pmFunction" : "ON" }</pre>	The list of nodes selected for the subscription with the pmFunction status for each node.
outputMode	String	File
cellsSupported	Boolean	True or False based on cells support.
applyOnAllCells	false	Selection of cells.
cellInfoList	A list of cells: <pre>{ "nodeName": "RNC01", "utranCellId": "RNC01-1-1" }</pre>	The list of cells included in the subscription.
events	A list of events described by: - name is the name of the event. - groupName is the name of the group. Example: <pre>{ "groupName": "ALWAYS_ACTIVE", "name": "INTERNAL_EVENT_ANR_CONFIG_MISSING" }</pre>	The list of events included in the subscription.



4.11 UETR (WRAN) Subscription Recording

JSON File format for GPEH (WRAN) Subscription Recording:

```
{
  "type": "UETR",
  "name": "The name of the subscription",
  "description": "A short description of the subscription",
  "taskStatus": "OK",
  "scheduleInfo": {
    "startDateTime": null,
    "endDateTime": null
  },
  "nodeFilter": "NODE_TYPE",
  "selectedNeTypes": [
    "RNC"
  ],
  "nodes": [
    {
      "fdn": "NetworkElement=RNC01"
      "pmFunction" : "ON"
    }
  ],
  "numberOfNodes": 1,
  "ueInfoList": [
    {
      "type": "IMSI",
      "value": "123456578"
    },
    {
      "type": "IMSI",
      "value": "1348456415"
    }
  ],
  "outputMode": "STREAMING",
  "rop": "NOT_APPLICABLE",
  "streamInfoList": [
    {
      "ipAddress": "1.1.1.1",
      "port": 11,
      "portOffset": 0
    }
  ],
  "events": [
    {
      "groupName": "ALWAYS_ACTIVE",
      "name": "INTERNAL_EVENT_ANR_CONFIG_MISSING"
    },
    {
      "groupName": "ALWAYS_ACTIVE",
      "name": "INTERNAL_EVENT_LICENSE_UNAVAILABLE"
    }
  ]
}
```

Table 15 Fields and Values Details

Field	Values	Description
name	String	The name of the subscription
description	String	A short description
type	UETR	The type of the subscription
taskstatus	String	The operational task status of the subscription. The valid values are OK, ERROR and NA.
scheduleInfo.startDateTime scheduleInfo.endDateTime	YYYY-MM-DDThh:mm:ss	Start and end date of the schedule
rop	FIFTEEN_MIN	The ROP time



Field	Values	Description
nodes	<p>A list of FDN's and pmFunction :</p> <pre>Example: { "fdn": "NetworkElement=RNC 01" "pmFunction" : "ON" }</pre>	The list of nodes selected for the subscription with the pmFunction status for each node.
ueInfoList	<p>UE Trace details:</p> <pre>Example: [{ "type": "IMSI", "value": "123456578" }]</pre>	UE Trace information such as IMSI, IMEI, IMEI-SV.
streamInfoList	<p>A list of streamInfo with IP address and port.</p> <pre>[{ "ipAddress" : "10.0.0. 10", "port": "100" }, { "ipAddress" : "10.0.0. 11", "port": "1301" }]</pre>	
events	<p>A list of events described by: name is the name of the event groupName is the name of the group</p> <pre>Example: { "name": "ALWAYS_ACTIVE", "groupName": "INTERNAL_EVEN T_ANR_CONFIG_MISSING" }</pre>	The list of events included in the subscription.



5 Counters and Events Export and Import

From the PMIC UI, counters, events and EBS counters can be exported from a subscription to a file or imported to a subscription from a file.

This feature can be used to speed up the moving of a subscription from a test environment to a production environment, or to more easily add a large number of counters or events in a new subscription.

The same file template applies whether importing or exporting, and for counters, events and EBS counters. The file format is a JSON.

```
[
  {
    "groupName" : "<group_name_1>" ,
    "eventCounterNames" : [
      "<item1>" ,
      "<item2>"
    ]
  }
  {
    "groupName" : "<group_name_2>" ,
    "eventCounterNames" : [
      "<item3>" ,
      "<item4>"
    ]
  }
]
```



Reference List

- [1] *ENM Summary of External Interfaces*, 2/15519-AOM 901 151 Uen
- [2] *ENM Identity and Access Management Programmers Guide*, 19817-CNA 403 3016 Uen