

# Supplementary Documentation for 3GPP Bulk CM Import/Export File Format

Interwork Description

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# 1 ActionChangeFrequency.xml

```

<bulkCmConfigDataFile xmlns:un="utranNrm.xsd" xmlns:xn="genericNrm.xsd" xmlns:es="EricssonSpecificAttributes.16.07.xsd" xmlns:gn="geranNrm.xsd" xmlns="configData.xsd">
  <fileHeader fileFormatVersion="32.615 V4.5" vendorName="Ericsson"/>
  <configData dnPrefix="Undefined">
    <xn:SubNetwork id="ONRM_ROOT_MO_R">
      <xn:SubNetwork id="ERBS-SUBNW-1">
        <xn:MeContext id="LTE04ERBS00002">
          <xn:ManagedElement id="1">
            <xn:VsDataContainer id="1">
              <xn:attributes>
                <xn:vsDataType>vsDataENodeBFunction</xn:vsDataType>
                <xn:vsDataFormatVersion>EricssonSpecificAttributes.16.07</xn:vsDataFormatVersion>
                <es:vsDataENodeBFunction/>
              </xn:attributes>
              <xn:VsDataContainer id="LTE04ERBS00002-1" modifier="action">
                <xn:attributes>
                  <xn:vsDataType>vsDataEUtranCellFDD</xn:vsDataType>
                  <xn:vsDataFormatVersion>EricssonSpecificAttributes.16.07</xn:vsDataFormatVersion>
                  <es:vsDataEUtranCellFDD>
                    <es:changeFrequency>
                      <es:earfcn>17999</es:earfcn>
                    </es:changeFrequency>
                  </es:vsDataEUtranCellFDD>
                </xn:attributes>
              </xn:VsDataContainer>
            </xn:VsDataContainer>
          </xn:ManagedElement>
        </xn:MeContext>
      </xn:SubNetwork>
    </xn:SubNetwork>
  </configData>
  <fileFooter dateTime="2014-08-23T09:20:18Z"/>
</bulkCmConfigDataFile>

```



## 2

## CreateEUtranCellFDD.xml

```
<bulkCmConfigDataFile xmlns:un="utranNrm.xsd" xmlns:xn="genericNrm.xsd" xmlns:es="EricssonSpecificAttributes.16.07.xsd" xmlns:gn="geranNrm.xsd" xmlns="configData.xsd">
  <fileHeader fileFormatVersion="32.615 V4.5" vendorName="Ericsson"/>
  <configData dnPrefix="Undefined">
    <xn:SubNetwork id="ONRM_ROOT_MO_R">
      <xn:SubNetwork id="ERBS-SUBNW-1">
        <xn:MeContext id="LTE04ERBS00002">
          <xn:ManagedElement id="1">
            <xn:VsDataContainer id="1">
              <xn:attributes>
                <xn:vsDataType>vsDataENodeBFunction</xn:vsDataType>
                <xn:vsDataFormatVersion>EricssonSpecificAttributes.16.07</xn:vsDataFormatVersion>
                <es:vsDataENodeBFunction/>
              </xn:attributes>
              <xn:VsDataContainer id="LTE04ERBS00002-4" modifier="create">
                <xn:attributes>
                  <xn:vsDataType>vsDataEUtranCellFDD</xn:vsDataType>
                  <xn:vsDataFormatVersion>EricssonSpecificAttributes.16.07</xn:vsDataFormatVersion>
                  <es:vsDataEUtranCellFDD>
                    <es:userLabel>LTE02ERBS00001-4</es:userLabel>
                    <es:cellId>2</es:cellId>
                    <es:earfcndl>0</es:earfcndl>
                    <es:earfcnul>18000</es:earfcnul>
                    <es:sectorCarrierRef>SubNetwork=ONRM_ROOT_MO_R,SubNetwork=ERBS-SUBNW-1,MeContext=LTE04ERBS00002,ManagedElement=1,vsDataENodeBFunction=1,vsDataSectorCarrier=1</es:sectorCarrierRef>
                    <es:physicalLayerCellIdGroup>27</es:physicalLayerCellIdGroup>
                    <es:physicalLayerSubCellId>0</es:physicalLayerSubCellId>
                    <es:tac>0</es:tac>
                  </es:vsDataEUtranCellFDD>
                </xn:attributes>
              </xn:VsDataContainer>
            </xn:VsDataContainer>
          </xn:ManagedElement>
        </xn:MeContext>
      </xn:SubNetwork>
    </xn:SubNetwork>
  </configData>
</bulkCmConfigDataFile>
```



```
        </xn:ManagedElement>  
        </xn:MeContext>  
        </xn:SubNetwork>  
        </xn:SubNetwork>  
    </configData>  
    <fileFooter dateTime="2014-08-23T09:20:18Z"/>  
</bulkCmConfigDataFile>
```



### 3 DeleteEutranCellRelation.xml

```
<bulkCmConfigDataFile xmlns:un="utranNrm.xsd" xmlns:xn="genericNrm.xsd" xmlns:es="EricssonSpecificAttributes.16.07.xsd" xmlns:gn="geranNrm.xsd"
  xmlns="configData.xsd">
  <fileHeader fileFormatVersion="32.615 V4.5" vendorName="Ericsson"/>
  <configData dnPrefix="Undefined">
    <xn:SubNetwork id="ONRM_ROOT_MO_R">
      <xn:SubNetwork id="ERBS-SUBNW-1">
        <xn:MeContext id="LTE02ERBS00001">
          <xn:ManagedElement id="1">
            <xn:VsDataContainer id="1">
              <xn:attributes>
                <xn:vsDataType>vsDataENodeBFunction</xn:vsDataType>
                <xn:vsDataFormatVersion>EricssonSpecificAttributes.16.07</xn:vsDataFormatVersion>
                <es:vsDataENodeBFunction/>
              </xn:attributes>
            </xn:VsDataContainer id="LTE02ERBS00001-1">
              <xn:attributes>
                <xn:vsDataType>vsDataEUtranCellFDD</xn:vsDataType>
                <xn:vsDataFormatVersion>EricssonSpecificAttributes.16.07</xn:vsDataFormatVersion>
                <es:vsDataEUtranCellFDD/>
              </xn:attributes>
            </xn:VsDataContainer id="3">
              <xn:attributes>
                <xn:vsDataType>vsDataEUtranFreqRelation</xn:vsDataType>
```



```

        <xn:vsDataFormatVersion>EricssonSpecificAttribut
es.16.07</xn:vsDataFormatVersion>
        <es:vsDataEUtranFreqRelation/>
    </xn:attributes>
    <xn:VsDataContainer id="3" modifier="delete">
        <xn:attributes>
            <xn:vsDataType>vsDataEUtranCellRelation<
/xn:vsDataType>
            <xn:vsDataFormatVersion>EricssonSpecific
Attributes.16.07</xn:vsDataFormatVersion>
        </xn:attributes>
    </xn:VsDataContainer>
</xn:VsDataContainer>
ataContainer>
            </xn:VsD
iner>
                </xn:VsDataConta
                    </xn:ManagedElement>
                        </xn:MeContext>
                            </xn:SubNetwork>
                                </xn:SubNetwork>
                                    </configData>
                                        <fileFooter dateTime="2014-09-09T17:04:51Z"/>
</bulkCmConfigDataFile>

```





```
ataContainer>                                     </xn:VsD →  
                                                    </xn:VsDataConta →  
iner>  
                                                    </xn:ManagedElement>  
                                                    </xn:MeContext>  
                                                    </xn:SubNetwork>  
                                                    </xn:SubNetwork>  
        </configData>  
        <fileFooter dateTime="2014-08-23T09:20:18Z"/>  
</bulkCmConfigDataFile>
```



## 5 configData.xsd

```
<!-- edited with XMLSpy v2006 rel. 3 sp2 (http://www.altova.com) -->
  by Ericsson (Ericsson) -->
<!--
  3GPP TS 14.025 v4.5 Bulk CM IRP
  Configuration data file base XML schema
  configData.xsd
-->
<schema xmlns:xn="genericNrm.xsd" xmlns="http://www.w3.org/2001/
XMLSchema" targetNamespace="configData.xsd"
  elementFormDefault="qualified" attributeFormDefault="unq
ualified">
  <!-- Configuration data file root XML element -->
  <import namespace="genericNrm.xsd" schemaLocation="genericNr
m.xsd"/>
  <element name="bulkCmConfigDataFile">
    <complexType>
      <sequence>
        <element name="fileHeader">
          <complexType>
            <attribute name="fileFormatVersion" type
="string" use="required"/>
            <attribute name="senderName" type="strin
g" use="optional"/>
            <attribute name="vendorName" type="strin
g" use="optional"/>
          </complexType>
        </element>
        <element name="configData" maxOccurs="unbounded"
>
          <complexType>
            <sequence>
              <choice minOccurs="1" maxOccurs="unb
ounded">
                <element ref="xn:SubNetwork"/>
                <element ref="xn:MeContext"/>
                <element ref="xn:ManagedElement"
/>
                <element ref="xn:VsDataContainer"
/>
              </choice>
            </sequence>
            <attribute name="dnPrefix" type="string"
use="optional"/>
          </complexType>
        </element>
        <element name="fileFooter">
```



```
        <complexType>
            <attribute name="dateTime" type="dateTim →
e" use="required"/>
        </complexType>
    </element>
</sequence>
</complexType>
</element>
</schema>
```



## 6 genericNrm.xsd

```
<!--
 3GPP TS 32.615 v4.5 Bulk CM IRP
 Configuration data file Generic Network Resources IRP NRM XML schema
-->
<schema xmlns="http://www.w3.org/2001/XMLSchema" xmlns:xn="genericNrm.xsd" targetNamespace="genericNrm.xsd" elementFormDefault="qualified"
  attributeFormDefault="unqualified">
  <!-- Abstract base type for all NRM class associated XML elements -->
  <complexType name="NrmClassXmlType" abstract="true">
    <attribute name="id" type="string" use="required"/>
    <attribute name="modifier" use="optional">
      <simpleType>
        <restriction base="string">
          <enumeration value="create"/>
          <enumeration value="delete"/>
          <enumeration value="update"/>
          <enumeration value="action"/>
        </restriction>
      </simpleType>
    </attribute>
    <attribute name="minName" type="string" use="optional"/>
  </complexType>
  <!-- Generic Network Resources IRP NRM class associated XML elements -->
  <element name="SubNetwork">
    <complexType>
      <complexContent>
        <extension base="xn:NrmClassXmlType">
          <sequence>
            <element name="attributes" minOccurs="0"
              >
                <complexType>
                  <all>
                    <element name="userLabel" minOccurs="0"/>
                    <element name="userDefinedNetworkType" minOccurs="0"/>
                  </all>
                </complexType>
              </element>
            <choice minOccurs="0" maxOccurs="unbounded">
              <element ref="xn:SubNetwork"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>
</schema>
```



```

<element ref="xn:ManagedElement"/>
<element ref="xn:MeContext"/>
<element ref="xn:ManagementNode"/>
<element ref="xn:IRPAgent"/>
<any processContents="skip" minOccurs="0" namespace="##other"/>
<element ref="xn:VsDataContainer"/>
</choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>
<element name="ManagedElement">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClassXmlType">
        <sequence>
          <element name="attributes" minOccurs="0"
>
          <complexType>
            <all>
              <element name="managedElement
tType" minOccurs="0"/>
              <element name="userLabel" mi
nOccurs="0"/>
              <element name="vendorName" m
inOccurs="0"/>
              <element name="userDefinedSt
ate" minOccurs="0"/>
              <element name="locationName"
minOccurs="0"/>
              <element name="swVersion" mi
nOccurs="0"/>
              <element name="managedBy" mi
nOccurs="0"/>
            </all>
          </complexType>
        </element>
        <choice minOccurs="0" maxOccurs="unbound
ed">
          <any processContents="skip" minOccurs="0" namespace="##other"/>
          <element ref="xn:VsDataContainer"/>
        </choice>
      </sequence>
    </extension>
  </complexContent>
</complexType>
</element>
<element name="MeContext">
  <complexType>

```



```

        <complexContent>
          <extension base="xn:NrmClassXmlType">
            <sequence>
              <element name="attributes" minOccurs="0" →
>
                <complexType/>
              </element>
              <choice minOccurs="0" maxOccurs="unbound →
ed">
                <element ref="xn:ManagedElement"/>
                <element ref="xn:VsDataContainer"/>
              </choice>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </element>
    <element name="ManagementNode">
      <complexType>
        <complexContent>
          <extension base="xn:NrmClassXmlType">
            <sequence>
              <element name="attributes" minOccurs="0" →
>
                <complexType>
                  <all>
                    <element name="userLabel" mi →
nOccurs="0"/>
                    <element name="vendorName" m →
inOccurs="0"/>
                    <element name="userDefinedSt →
ate" minOccurs="0"/>
                    <element name="locationName" →
minOccurs="0"/>
                    <element name="manages" min0 →
ccurs="0"/>
                    <element name="swVersion" mi →
nOccurs="0"/>
                  </all>
                </complexType>
              </element>
              <choice minOccurs="0" maxOccurs="unbound →
ed">
                <element ref="xn:IRPAgent"/>
              </choice>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </element>
    <element name="IRPAgent">
      <complexType>
```



```

        <complexContent>
          <extension base="xn:NrmClassXmlType">
            <sequence>
              <element name="attributes" minOccurs="0" →
                >
                  <complexType>
                    <all>
                      <element name="systemDN" min →
                        Occurs="0"/>
                    </all>
                  </complexType>
                </element>
              <choice minOccurs="0" maxOccurs="unbound →
                ed">
                  <element ref="xn:NotificationIRP"/>
                  <element ref="xn:AlarmIRP"/>
                  <element ref="xn:BulkCmIRP"/>
                </choice>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </element>
    <element name="NotificationIRP">
      <complexType>
        <complexContent>
          <extension base="xn:NrmClassXmlType">
            <sequence>
              <element name="attributes" minOccurs="0" →
                >
                  <complexType>
                    <all>
                      <element name="irpVersion" m →
                        inOccurs="0"/>
                    </all>
                  </complexType>
                </element>
            </sequence>
          </extension>
        </complexContent>
      </complexType>
    </element>
    <element name="AlarmIRP">
      <complexType>
        <complexContent>
          <extension base="xn:NrmClassXmlType">
            <sequence>
              <element name="attributes" minOccurs="0" →
                >
                  <complexType>
                    <all>
                      <element name="irpVersion" m →

```



```
inOccurs="0"/>
        </all>
        </complexType>
    </element>
</sequence>
</extension>
</complexContent>
</complexType>
</element>
<element name="BulkCmIRP">
    <complexType>
        <complexContent>
            <extension base="xn:NrmClassXmlType">
                <sequence>
                    <element name="attributes" minOccurs="0" →
>
                        <complexType>
                            <all>
                                <element name="irpVersion" m →
inOccurs="0"/>
                                    </all>
                                    </complexType>
                                </element>
                            </sequence>
                        </extension>
                    </complexContent>
                </complexType>
            </element>
            <element name="VsDataContainer">
                <complexType>
                    <complexContent>
                        <extension base="xn:NrmClassXmlType">
                            <sequence>
                                <element name="breakpoint" minOccurs="0" →
maxOccurs="1">
                                    <complexType>
                                        <attribute name="type" use="requ →
ired">
                                            <simpleType>
                                                <restriction base="strin →
g">
                                                    <enumeration value=" →
commit" />
                                                        </restriction>
                                                    </simpleType>
                                                </attribute>
                                            <attribute name="id" type="strin →
g"/>
                                                        <attribute name="description" ty →
pe="string" />
                                                            </complexType>
                                                        </element>

```



```

        <element name="attributes" minOccurs="0" →
    >
        <complexType>
            <sequence>
                <element name="vsDataType" m →
    minOccurs="1" maxOccurs="1"/>
                <element name="vsDataFormatV →
    version" minOccurs="1" maxOccurs="1"/>
                <any processContents="skip" →
    minOccurs="0" namespace="##any"/>
            </sequence>
        </complexType>
    </element>
    <choice minOccurs="0" maxOccurs="unbound →
    ed">
        <element ref="xn:VsDataContainer"/>
    </choice>
    </sequence>
    </extension>
    </complexContent>
    </complexType>
    </element>
    <complexType name="vsData" abstract="true"/>
    <!-- VsDataContainer NRM class vsData attribute associated e →
    mpty XML element -->
    <element name="vsData" type="xn:vsData" abstract="true"/>
</schema>

```