

## OsmoBTS - Bug #3161

### osmo-bts does not send State Changed Event Reports when RF is locked/unlocked

04/12/2018 09:24 AM - stsp

<b>Status:</b>	Resolved	<b>Start date:</b>	04/12/2018
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	stsp	<b>% Done:</b>	0%
<b>Category:</b>			
<b>Target version:</b>			
<b>Spec Reference:</b>			

#### Description

A nanobts sends 'State Changed Event Reports' when RF is locked/unlocked.  
This same state change is redundantly reported in an 'Administrative State Change ACK'.

osmo-bts only reports the administrative state change in the 'Administrative State Change ACK'.  
For better interop with ipaccess equipment it should also send a 'State Changed Event Report' just like the nanobts does.

For instance, consider the following 'State Changed Event Report' sent by a nanobts.  
osmo-bts does not send such a report at present. It only sends 'State Changed Event Reports' for operational and availability state changes, but not administrative ones.

```
Frame 8: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0
Ethernet II, Src: IpAccess_00:5a:d7 (00:02:95:00:5a:d7), Dst: WistronI_9e:0e:57 (f0:de:f1:9e:0e:57)
)
Internet Protocol Version 4, Src: 192.168.100.4, Dst: 192.168.100.11
Transmission Control Protocol, Src Port: 6611, Dst Port: 3002, Seq: 19, Ack: 19, Len: 20
IPA protocol ip.access, type: OML
GSM A-bis OML, Radio Carrier(00,00,ff) State Changed Event Report
  Message Discriminator: Formatted O&M (0x80)
  Placement Indicator: Only (0x80)
  Sequence Number: 0x00
  Length Indicator: 13
  FOM Message Type: State Changed Event Report
    FOM Object Class: Radio Carrier (0x02)
    FOM Object Instance BTS: 0
    FOM Object Instance TRX: 0
    FOM Object Instance TS: 255
    FOM Attribute ID: Operational State
      FOM Attribute Length: 1
      Operational State: Disabled (0x01)
    FOM Attribute ID: Availability Status
      FOM Attribute Length: 1
      Availability Status: Off line (0x03)
    FOM Attribute ID: Administrative State
      FOM Attribute Length: 1
      Administrative State: Unlocked (0x02)
```

The above report was preceded by the Administrative State Changed ACK:

```
Frame 5: 68 bytes on wire (544 bits), 68 bytes captured (544 bits) on interface 0
Ethernet II, Src: IpAccess_00:5a:d7 (00:02:95:00:5a:d7), Dst: WistronI_9e:0e:57 (f0:de:f1:9e:0e:57)
)
Internet Protocol Version 4, Src: 192.168.100.4, Dst: 192.168.100.11
Transmission Control Protocol, Src Port: 6611, Dst Port: 3002, Seq: 5, Ack: 19, Len: 14
IPA protocol ip.access, type: OML
GSM A-bis OML, Radio Carrier(00,00,ff) Change Administrative State ACK
  Message Discriminator: Formatted O&M (0x80)
```

Placement Indicator: Only (0x80)  
Sequence Number: 0x00  
Length Indicator: 7  
FOM Message Type: Change Administrative State ACK  
    FOM Object Class: Radio Carrier (0x02)  
    FOM Object Instance BTS: 0  
    FOM Object Instance TRX: 0  
    FOM Object Instance TS: 255  
    FOM Attribute ID: Administrative State  
        FOM Attribute Length: 1  
        Administrative State: Unlocked (0x02)

This issue was discovered during work on issue [#2591](#), in particular in changeset: <https://gerrit.osmocom.org/#/c/7770/>

## History

---

### #1 - 04/12/2018 01:59 PM - stsp

- Assignee set to stsp

### #2 - 05/08/2018 12:11 PM - stsp

- Status changed from New to Resolved

Fixed by <https://gerrit.osmocom.org/#/c/8057/>