

XT Data

Control and Monitoring Function

Declarations

APSI

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Asia Pacific Satellite communications Inc.

MES Control and Monitoring Functions(CMF)

1.Hardware and software revisions of the Item (DUT)

1) H/W Revision

Description	Revision
XT, Main Board	Rev0.2
XT, Front Board	Rev0.1

2) S/W Revision :

Revision
New XT v0.1

2.ETSI EN 301 681, subclause 4.2.4.1: Processor Monitoring

XT, Thuraya Satellite Mobile Hand Held Terminal has the processor monitoring functions, which would detect any kind of fault condition and when it detects such condition, MES will stop all the transmissions within a second.

For example of fault condition, if the local oscillator frequency is not locked properly and runs abnormal frequencies, MES will lose the synchronization with the network and will be in searching network mode. In searching network mode, MES will not transmit any signals to air and it will be remained at the carrier off state.

3.ETSI EN 301 681, sub-clause 4.2.4.2: Transmit frequency generation sub-system monitoring.

XT, Thuraya Satellite Mobile Hand Held Terminal has the transmitting frequency generation sub-system monitoring functions. When it detects any failure of transmit

frequency generation subsystem, MES will stop all the transmissions within 5 seconds. For example, if the local oscillator frequency is not locked properly for the transmit frequency and runs abnormal frequencies, MES will not transmit any signals and it will be at the carrier off state according to the radio link failure procedure algorithm.

4.ETSI EN 301 681, sub-clause 4.2.4.4 Network Control Reception

ETSI EN 301 681, sub-clause 4.2.4.4.1: Transmission disable/enable

The Declaration for the Network Control Reception and Transmission Disable/Enable

- a) When MES status change from Power off to Power on, MES will synchronize to the network. When the call is initiated using normal user operational procedures, the Tx signal will be observed and MES will be at the carrier on state.
- b) If the Network transmits “CHANNEL RELEASE” message which is based on GMR-1 04.008(ETSI TS 101 376-4-8), MES will stop the transmission and will be at the carrier off-state after receiving transmission disable command from the network. This will take less than 1 second to respond.
- c) When disable command is applied, an attempt will be made to initiate a call using normal user operational procedures, There is no burst observed.
- d) After re-initiating the channel assign, call is initiated using normal user operational procedures and MES becomes a carrier on state.
- e) When the call is stopped and MES is in carrier off state, network command “CHANNEL RELEASE” is sent to MES. There is no burst transmission from MES.
- f) When the disable command is applied, there is an attempt to initiate a call using normal user operational procedures and MES will not transmit burst (carrier off state).
- g) The MES is re-enabled and initiated a call using normal user operation procedures and MES becomes a carrier on state.

During the test, each initial burst transmission sequence has a total carrier on time that is less than one second and the total carrier-on time for repeated initial bursts is not exceed 1% of the time.



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