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**KHAREEF  
2013 EVENT  
OPERATIONAL  
MANUAL**

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1    **Preface and Message from Management**

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**2 Omantel Salalah Network Description**

Omantel Salalah Network consists of Ericsson RAN Network 2G, 3G and LTE with Huawei CS Core Network and Ericsson SGSN-Huawei GGSN.

The Ericsson RAN Network consists of:

- 1 Evo BSC – carrying all 157 - 2G sites
- 1 Evo RNC – carrying all 134 - 3G sites
- 103 – eNodeB sites

The current running software in the Salalah Network for Ericsson RAN describes as follow:

- BSC - G12B - IPA5.
- BTS - G12B / G13A
- RNC - W12.2.0.6
- NODEB - W12 (CXP9018350/1 R12D/1) - W.12.1.2.3
- ENODEB - L12 (CXP102051/16 R27BC)

Sites detail attached



Oman\_Mobile\_Site\_Data\_Ericsson\_MS 072

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Overall Omantel Network Topology described in diagram below

Omantel 3G Core network topology

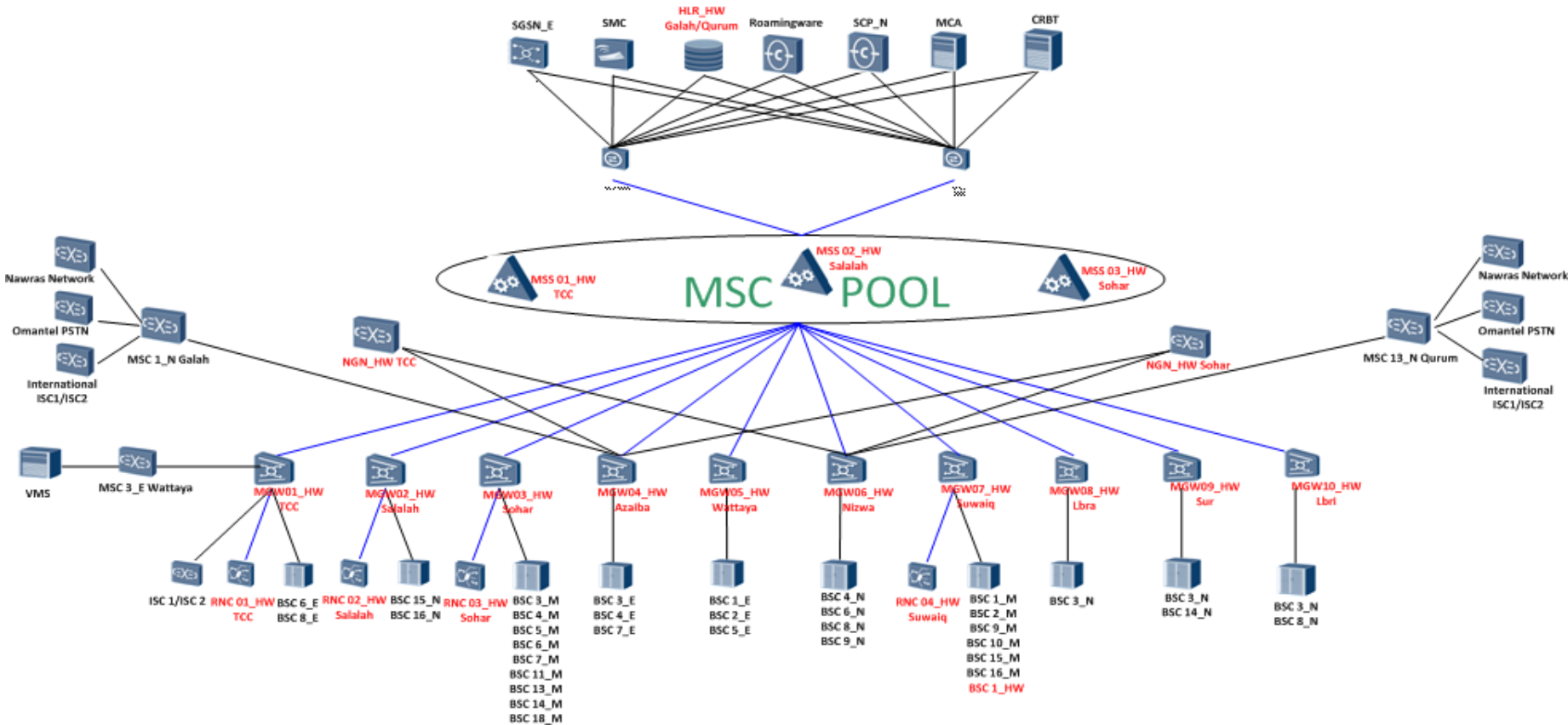


Figure 1 Omantel Core Network

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### 3 Khareef Event Description

Salalah (Arabic: صلالة; transliterated Ṣalālah), is the capital and seat of the governor or Wali of the southern Omani province of Dhofar. The population of Salalah was 197,169 in 2009.[1]

Salalah is the second largest city in the Sultanate of Oman, and the largest city in the Dhofar Provence.

Khareef (Arabic: خريف, autumn) is a colloquial Arabic term used in southern Oman, southeastern Yemen and Sudan for the south east monsoon. The monsoon affects Dhofar Governorate and Al Mahrah Governorate from about June to early September. Towns such as Salalah depend upon the khareef for water supply. An annual Khareef festival is held in Salalah to celebrate the monsoon and attract tourists.

Lying at approximately 18 degrees north, Salalah, the second town of the Sultanate of Oman and 1,000 km from Muscat, faces the expanse of the Indian Ocean (see satellite image). The image will open in a separate window. The size is 72.5 K and the file takes up to 30 seconds to download fully at 28.8K.

The mountains of Jibal Dhofar, which rise to 1,000m, encircle the Salalah plain and stretch westwards into Yemen. Sailors have made landfall on this coast for thousands of years en route from Africa, the Red Sea, India and beyond.

The ruins of a port, Samhuran, known to have been in its heyday over 2,000 years ago lie on a promontory between twokhawrs, or sea creeks, some 30 km east of Salalah. Locally and popularly known as the Queen of Sheba's Palace, Samhuran was important for the trade in frankincense.

Frankincense is a resin hardened from the sap of the frankincense tree, a very unprepossessing plant which grows only in southern Oman, parts of Somalia and India. Omani frankincense has the best quality and value.

Travelling westwards from Salalah, stunted trees are spotted easily by the roadside usually growing in wadis, but these are not usually reckoned as yielding good quality resin. Two main crops are taken each year.

Frankincense was used very widely in the ancient world and was prized as highly as gold. Thus the rulers of Dhofar were accounted very wealthy men.

This Phoenician inscription at Samhuran testifies to a cultured way of life.



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The coastal fringe of Dhofar and Salalah is touched by the winds of the southwest monsoon between June and September. The surface winds encourage an upwelling of colder waters in the Indian Ocean which cool the over-lying moisture-laden air.

As this air is lifted over the Jibal Dhofar, the moisture condenses as thick fogs over the hills which support an annual resurgence of many herbs, grasses and trees in this summer season. Many of these plants have been used throughout history for their medicinal properties.

Salalah depends for its water supply on annual replenishment by the Khareef fogs. Groundwater travels fairly rapidly through the fractured limestone and either recharges the alluvial gravels under the plain or emerges in springs in the foothills, such as this one at Ayn Homran.

The people of the region have traditionally been nomadic pastoralists. Flocks of goats and sheep still roam the plain searching for forage. Cattle are kept at higher levels.

Camels are very common in Dhofar, regularly following the road to get to where they want. Amazing as it may seem, each camel has an owner even though they may wander over long distances.

The fog cools temperatures considerably, such that Salalah is a popular destination for Gulf visitors in the summer as a respite from the relentless heat. The phenomenon of this rain-bearing fog is known locally as the Khareef.

No vegetation grows in this wadi on the Salalah Plain, but the moisture-bearing winds of the Khareef green the hills in the distance.

The Whale's Mouth near Mughsail, west of Salalah. This view towards the sea looks down on the same wadi bed shown in the neighbouring picture.

A raging monsoon sea. Looking towards the Whale's Mouth from the shore at Mughsail.

Many of the visitors camp out on the plain north of Salalah, cooking on improvised barbecues. The municipality has been organizing a Khareef festival since 1952 to encourage this tourism.

Tourists also visit the blowholes at Mughsail west of Salalah, where jets of water are forced up through narrow vents in the limestone rocks. Seas are high during the monsoon season, and care should be taken swimming.

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Salalah Khareef Festival, which celebrates the monsoon splendour and the cultural heritage of Oman is expected to draw a record number of visitors this year.

Dubbed as the family meeting place, the festival offers cultural, art, sport, heritage, contest and shopping activities.

Salalah, about 1,040 kms from Muscat, is well connected to the rest of the country by good tarmac road. The Oman National Transport Company operates two daily coach services between Muscat and Salalah.

Spread along the coast the Salalah mountain plantations produce a large variety of fruits and vegetables. Salalah is a major tourist spot for people from the GCC countries.

Besides the enchanting scenic beauty, the festival offers modern entertainment facilities for families and people of all age groups. Baladiya Entertainment Centre in Eteen plain is the main area for most festival activities. Equipped with modern facilities, the centre has a modern theatre, heritage village, Child Village and spacious grounds for exhibitions.

That explains why the number of visitors to the festival has been increasing every year.

About one million visits were recorded to the Baladiya Entertainment Centre during the Salalah Khareef Festival-2000.

The souqs of Salalah offer an experience to cherish.

On sale are fresh fruits and vegetables along with frankincense and incense burners, gold and silverware, and traditional Dhofari dress of velvet with glittering beads and sequins.

Salalah has three main souqs, namely the Al Haffa Souq, the Gold Souq, and the New Souq. The Al Haffa Souq in the main corniche area sells fruits, vegetables, incense burners and frankincense.

The small shops of gold and silver souq are near the Nahda-Salam roundabout in the city centre, on small side road. The New Souq is known for fresh seasonal seafood, such as lobsters, abalone and prawns, which is best bought early in the morning. The Hamdan Complex in Al Wadi district offers modern shopping experience in Salalah.

Since the Dhofar region has potential for year round tourism attraction, the National Priority Action Plan for Tourism Development in Oman has suggested the establishment of a consolidated tourist facility area along the beachfront to the east of Salalah.

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This star resort facility of about 300 rooms can be very fruitful if it is integrated with the Al Baleed archaeological site where a museum, culture auditorium and traditional village shopping will be provided, says the PAP. Around 137,234 people enjoyed the festival last year against 113,920, showing an increase of 23,314 tourists.

The Khareef Festival is becoming increasingly popular among Gulf nationals, expatriates and foreign tourists. Over the years, it has grown into an international festival, thanks to the long-standing efforts of the authorities to expand the existing tourism infrastructure in Salalah.

Offering an ideal place for families to enjoy their summer holidays, the Salalah Khareef Festival (15 July-31 August) is expected to attract a record number of visitors this year. The increasing popularity of the Salalah Khareef Festival can be traced to the region's richness in natural assets and cultural heritage. Indeed, Salalah provides an attractive and safe destination for tourists. Authorities here are committed to the well-planned development of tourism.

Within the GCC region, Salalah is emerging as a distinct, highly attractive quality tourist destination that showcases Dhofar's natural assets, culture and heritage and offers a highly competitive tourism experience.

There is much to see in Salalah because it has an array of historical and archaeological sites, protected areas, coastal scenery, scenic lagoons and a wealth of wild life, including the red fox, flamingo, ibis, coots, herons, egrets and valuable marine creatures such as lobster, sardine and abalone. Agriculture thrives here with bananas, papaya and sugar cane.

The mystique of caves of Dhofar is slowly but surely giving rise to cave tourism. To sum it up, Salalah has something to offer to people of all tastes, age groups and walks of life.

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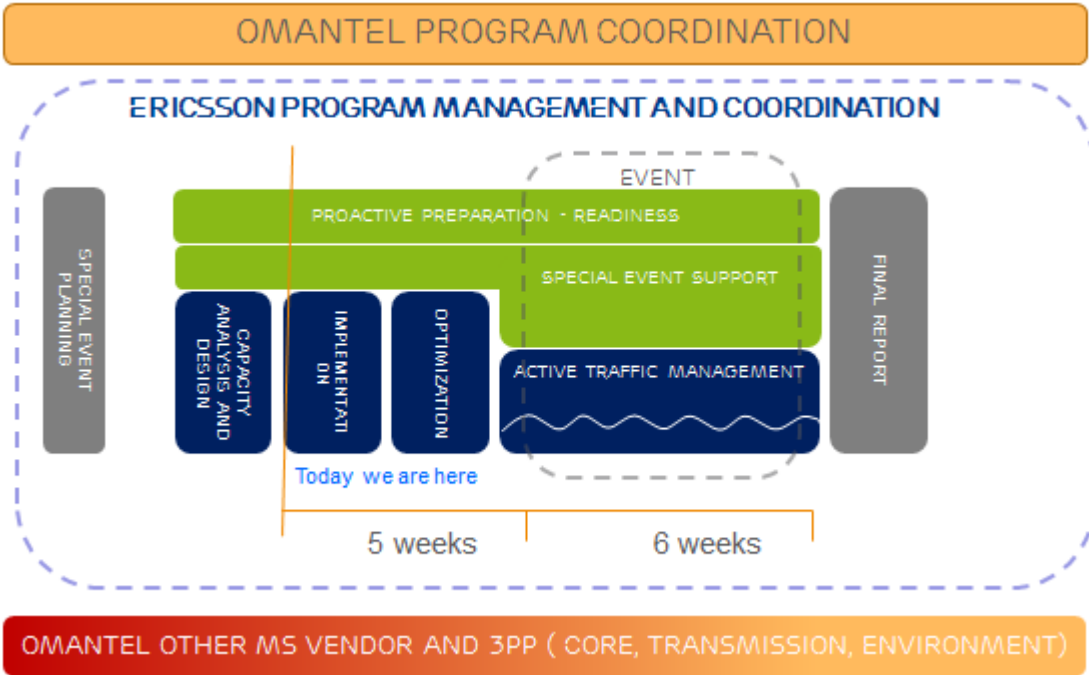
**JOINT EVENT  
MANAGEMENT**

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4      **Joint Event Management Description**

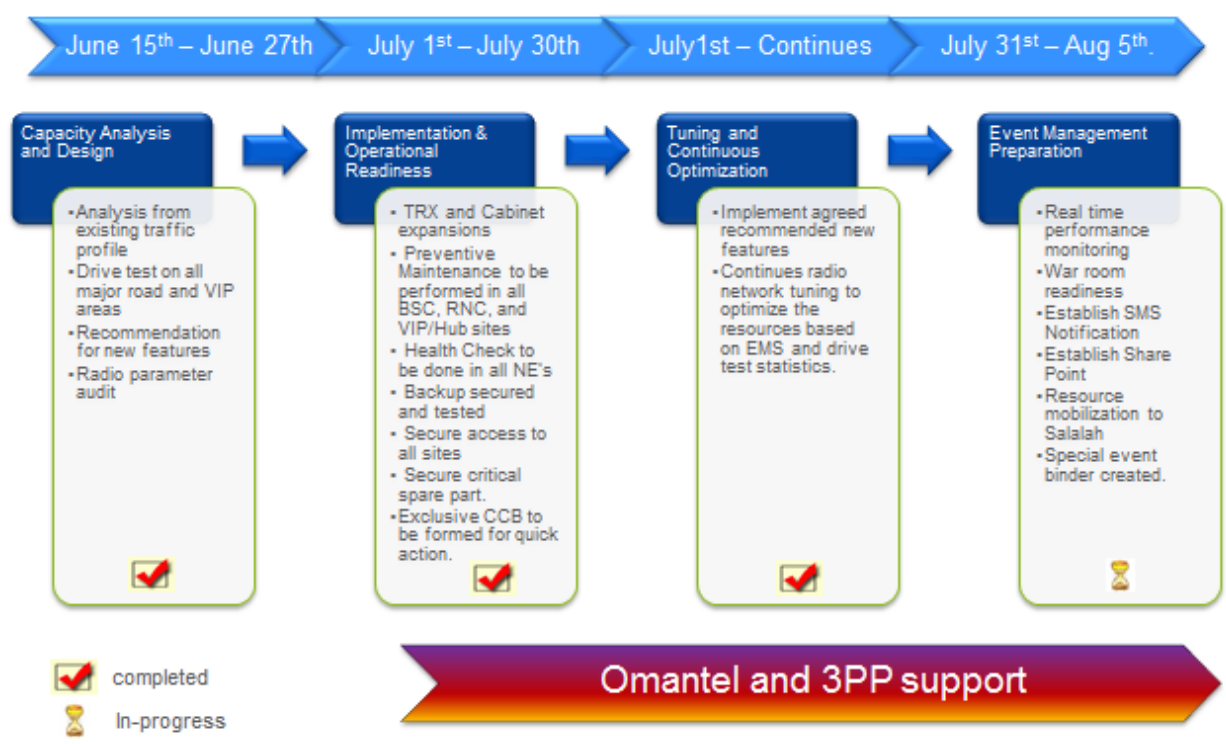
Mission of the Khareef Event Management is to maximize the traffic, reduce operational risk, and enhance Omantel brand reputation through bringing Ericsson’s best practices of similar special Event Management across the globe.

4.1    **Khareef Event Handling Methodology**



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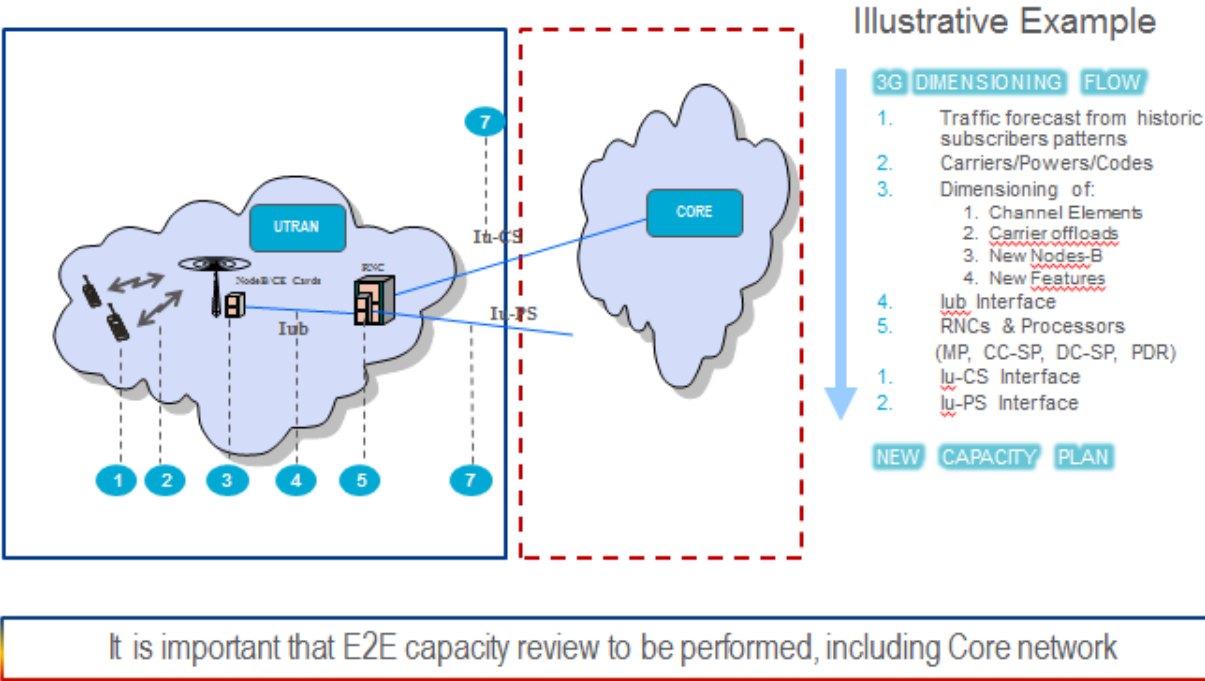
4.2 Khareef Preparation Status



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4.3 Capacity Analysis Methodology

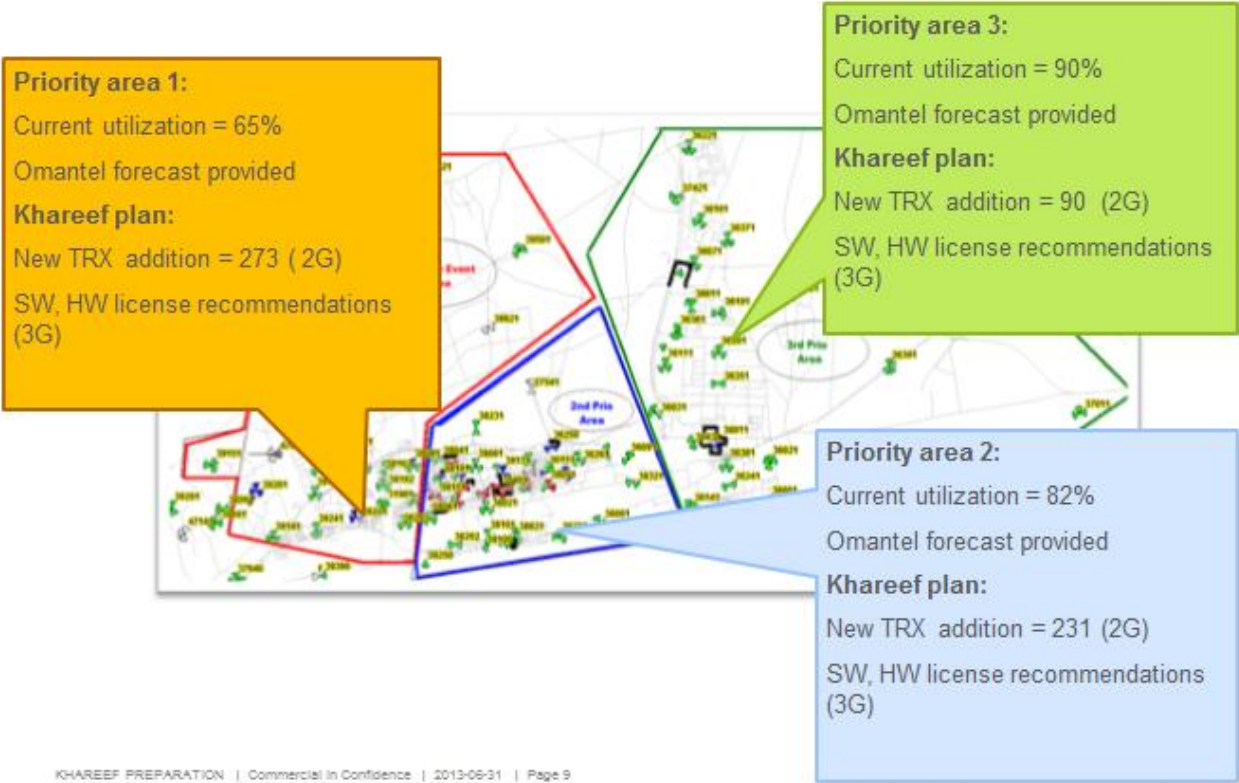
4.3.1 Step by step process





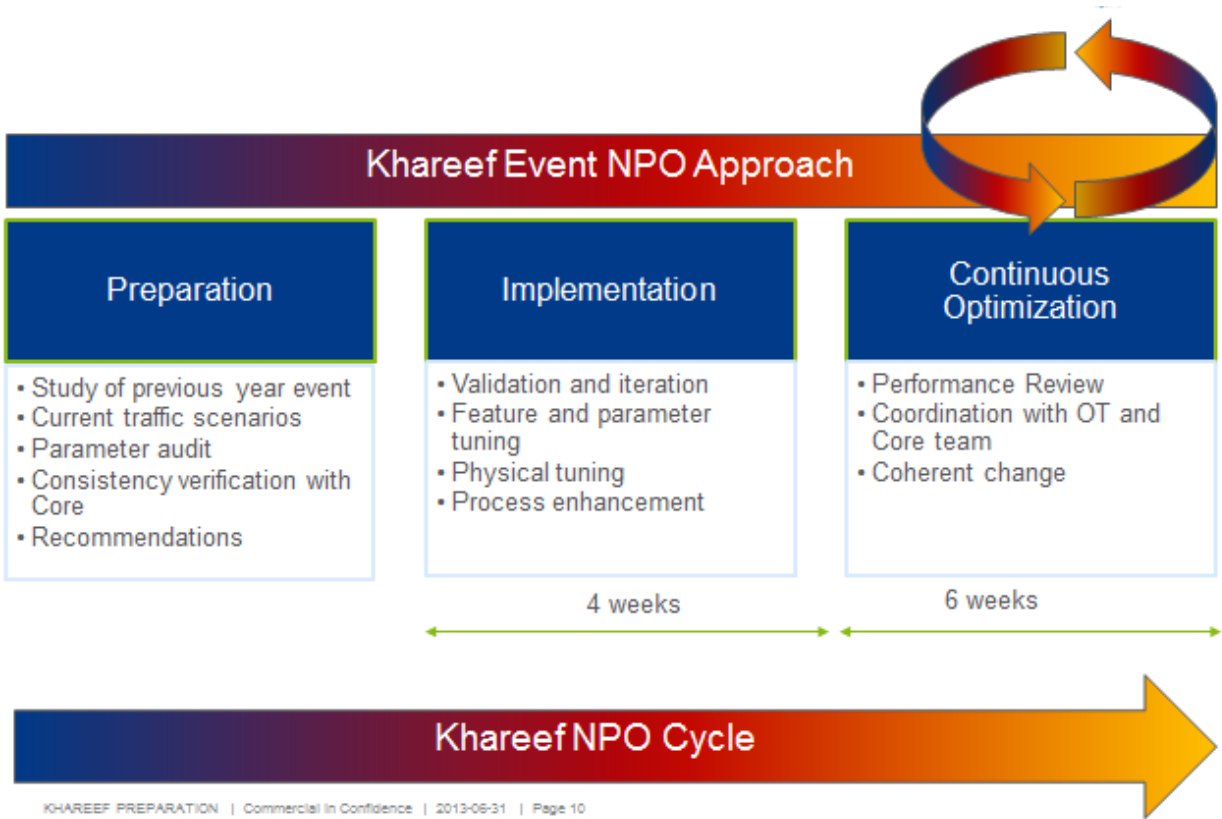
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4.3.2 Traffic Forecast and Recommendation



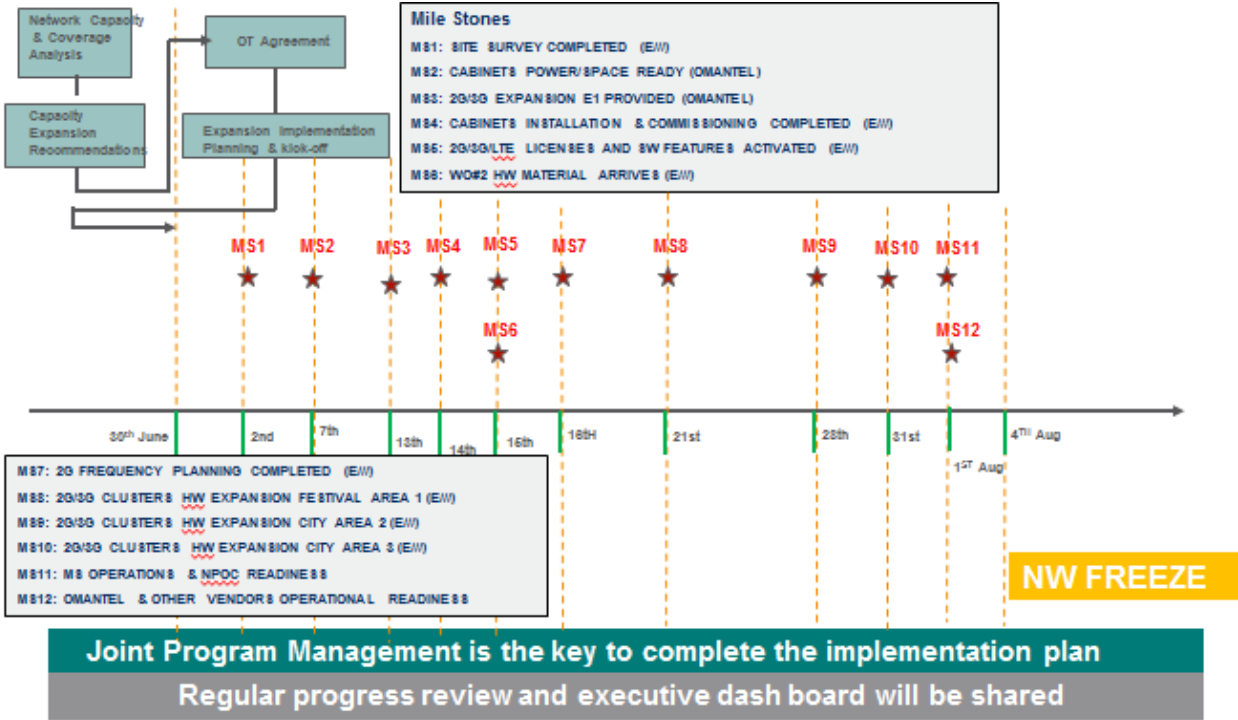
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4.3.3 Network Planning and Optimization Approach



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4.4 Khareef Readiness Milestones



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4.4.1 Khareef Readiness Milestones Description

MS #	Milestone	Owner	Deadline
MS1	PHYSICAL SITE SURVEY COMPLETED	ERICSSON	2 <sup>ND</sup> JULY
MS2	CABINETS POWER/SPACE READY	OMANTEL	7 <sup>TH</sup> JULY
MS3	2G/3G EXPANSION E1 PROVIDED	OMANTEL	13 <sup>TH</sup> JULY
MS4	CABINETS INSTALLATION & COMMISSIONING COMPLETED	ERICSSON	14 <sup>TH</sup> JULY
MS5	2G/3G/LTE <u>HW</u> LICENSES AND SW FEATURES ACTIVATED	ERICSSON	15 <sup>TH</sup> JULY
MS6	WO#2 <u>HW</u> MATERIAL ARRIVES	ERICSSON	15 <sup>TH</sup> JULY
MS7	2G FREQUENCY PLANNING COMPLETED	ERICSSON	16 <sup>TH</sup> JULY
MS8	2G/3G CLUSTERS <u>HW</u> EXPANSION FESTIVAL AREA 1	ERICSSON	21 <sup>ST</sup> JULY
MS9	2G/3G CLUSTERS <u>HW</u> EXPANSION CITY AREA 2	ERICSSON	28 <sup>TH</sup> JULY
MS10	2G/3G CLUSTERS <u>HW</u> EXPANSION CITY AREA 3	ERICSSON	31 <sup>ST</sup> JULY
MS11	MS OPERATIONS & <u>NPOC</u> READINESS	ERICSSON	1 <sup>ST</sup> AUG
MS12	OMANTEL & OTHER VENDORS OPERATIONAL READINESS	OMANTEL	1 <sup>ST</sup> AUG
EVENT MANAGEMENT KICKS-IN			

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4.4.2 Implementation and Event Readiness Dependencies

TRANSMISSION EXPANSION FOR 2G/3G SITES – PROVISIONING FOR IMPLEMENTATION

POWER FOR EXPANSION CABINETS

SITE ACCESS MANAGEMENT FOR IMPROVED RESTORATION TIME  
QUICK AND CO-ORDINATED CHANGE MGMT PROCESS

E2E NETWORK READINESS  
– CORE, VAS, IN, TXN, POWER, SITE INFRASTRUCTURE

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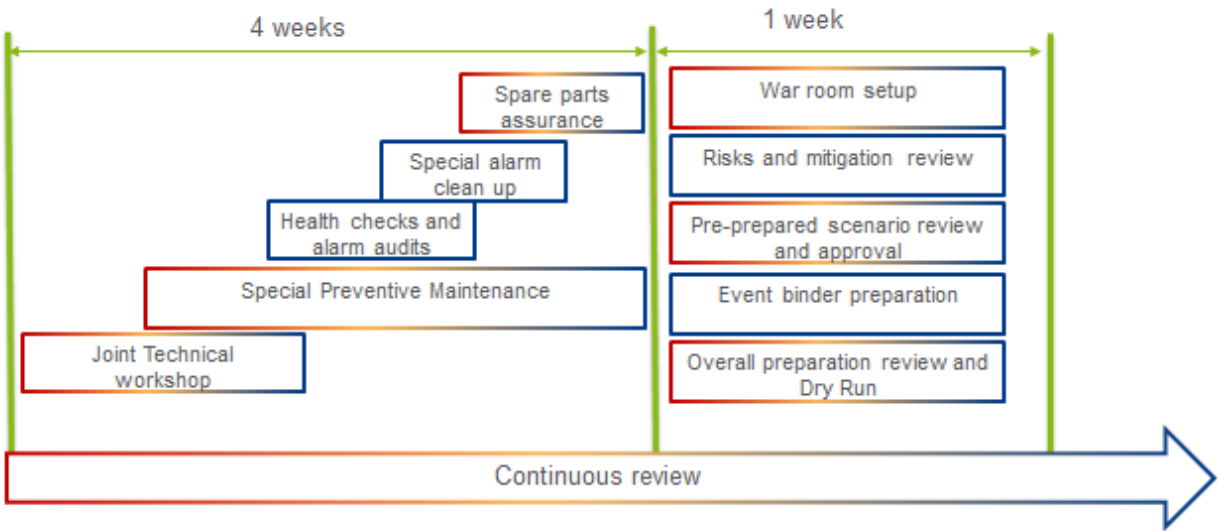
4.5 Event Management

4.5.1 Event Management Methodology



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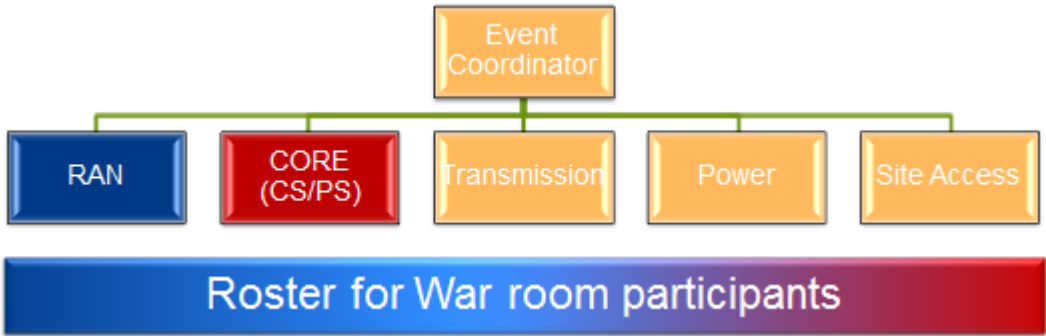
4.5.2 Event Support Preparation





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4.5.3 SPOC and Interfaces



4.5.4 Risk and Mitigation

Risk Description	Impact (1-5)	Probability (1-5)	Risk value I x P	Mitigation
Site congestion	3	5	15	Cabinet and TRH expansion Increase HR utilization
BSC Overload	5	2	10	Implement BSC overload handling
RNC Overload	5	2	10	Implement RNC overload handling
Abis Interface Congestion	4	2	8	Abis Optimization
luB Congestion	3	2	6	Load Regulation

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4.5.5 Request to Omantel

Request	Severity	Action required
Ensure Core and transmission availability and capacity readiness	High	<ul style="list-style-type: none"><li>• SPOC with clear responsibility</li><li>• Transmission redundancy, hardware and software inspection and required battery back up verification for key sites</li></ul>
Facilitate E2E coordination between stakeholders during event management	High	<ul style="list-style-type: none"><li>• Pre-prepared scenario preparation and obtain pre-approval for remedial actions</li><li>• War room preparation and availability of required stakeholders from OmanTel, Huawei and 3PP</li><li>• Preparation of communication matrix including emergency numbers and onsite/stand by availability</li></ul>
Real time monitoring tools from Core	Major	<ul style="list-style-type: none"><li>• Monitoring tool access to be provided from CN side</li></ul>
Ensure readiness of on-site power (batteries, generators) especially for VIP/High traffic/Major HUB sites/etc	Major	<ul style="list-style-type: none"><li>• OT to test battery backup and provide separate battery for hub site transmission</li><li>• E/// MS can assist providing information from 4 month fault history</li></ul>
Focus and resolve access issue for some sites	Major	<ul style="list-style-type: none"><li>• E/// to provide Omantel with list of sites with access issue</li></ul>
Share lesson learnt from previous Khareef Events.	Major	<ul style="list-style-type: none"><li>• Requesting last 2 events</li></ul>

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4.6 Documentation and Knowledge Transfer



4.6.1 Knowledge Reuse

Knowledge and experience utilized and re-used from other event management projects in various regions.

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- 5        **Network Performance**
- 5.1     **Salalah Improvement and Network Performance**
- 5.2     **VIP Improvement and Network Performance**

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PREAPPROVED  
SCENARIOS

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6    **Preapproved Scenario and Action Plan**

6.1    **2G Overload Handling**

6.1.1    **CP Load Handling**

Prerequisites for Recovery	Indicator	Trigger
<ul style="list-style-type: none"><li>• Processor and Exchange Input Load Measurement, Initiate</li><li>• Processor Load Control Data</li><li>• Processor Load Observation Data</li><li>• Base Level Load Regulation</li></ul>	<ul style="list-style-type: none"><li>• PLLDP;</li><li>• CP LOAD ALARM: “EXCHANGE INPUT LOAD SUPERVISION”</li></ul>	<ul style="list-style-type: none"><li>• CP load &gt;= 95% for more than 5 minutes</li></ul>



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6.1.2 Action on CP Load Handling

Recovery Procedure	Command
<ul style="list-style-type: none"><li>• Set the paging repetition timer in MSC to at least 6 s and set the repeated page to be in location area</li><li>• If excessive amount of accesses is observed (PLLDP: OFFDO): Reduce parameter MAXRET to 2</li><li>• If TCH congestion is suspected: Set the allocation repetition timer TALLOC to at least 12 s</li><li>• Extend the periodic registration timer T3212 to 5 hours</li><li>• Turn off the IMEI check</li><li>• Reduce the number of Authentications</li><li>• Bar one or more access classes in the cells gradually from 10%. 20% and 30%</li></ul>	<ul style="list-style-type: none"><li>• To be done from MSS</li><li>• RLSBC:CELL=ALL,MAXRET=2;</li><li>• RLLBC:TALLOC=12;</li><li>• RLSBC:CELL=cell,T3212=50;<ul style="list-style-type: none"><li>• The implicit detach in mss must be greater than the longest T3212 value of the connected BSCs</li></ul></li><li>• To be done from MSS</li><li>• To be done from mss</li><li>• RLSBC:CELL=ALL,ACC=acc;<ul style="list-style-type: none"><li>• RLSBC:CELL=ALL,ACC=0; ! BAR 10% !</li><li>• RLSBC:CELL=ALL,ACC=0&amp;1; ! BAR 20% !</li><li>• RLSBC:CELL=ALL,ACC=0&amp;&amp;2; ! BAR 30% !</li></ul></li><li>• Acc To be changed every 10 minutes.</li></ul>

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6.2 Transceiver Handler Overload

Prerequisites for Recovery	Indicator	Recovery procedure
<ul style="list-style-type: none"><li>Implement Trh load distribution</li></ul>	<ul style="list-style-type: none"><li>By printing the event log (command: RAHEP) the overloaded TRH RPs can be identified as being marked EVENT=HIGH PAGE DISC</li><li>ALARM: "RADIO CONTROL ADMINISTRATION TRH LOAD THRESHOLD EXCEEDED"</li></ul>	<ul style="list-style-type: none"><li>Order an immediate TRH rearrangement (Command: RAHII)</li><li>Set the paging repetition timer in MSC to at least 6 s and Set the repeated page to be in location area</li><li>Disable the feature Dynamic Half Rate Allocation (RLDHC)</li><li>Disabled parameters for Idle Channel Measurement reporting</li><li>Reduce the number of paging groups</li></ul>

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**6.3 GPH Processor Overload**

Prerequisites for Recovery	Indicator	Recovery procedure
<ul style="list-style-type: none"><li>Implement GPH Load Control</li></ul>	<ul style="list-style-type: none"><li>Statistic from five counters in the object type GPHLOADREG are implemented: LCHIRPLOAD, LCPARREJ, and LCMSSUPRFC</li></ul>	<ul style="list-style-type: none"><li>Reduction of the parameter PILTIMER</li><li>Note:<ul style="list-style-type: none"><li>(Only if there is gsl congestion and CP load consider normal)</li></ul></li></ul>

**6.4 CP Emergency Handling**

**6.4.1 CP Cyclic Restart**

In Case of Emergency Situations Follow the Alex OPI "System Start/Restart, Manually Initiate

Incase problem still persist perform initial loading from the latest backup.

**6.4.2 CP-AP Communication Loss**

Telnet to active node, if both node status was undefined, reference to cluster stop

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Telnet to active node.

Ping IPN device, make sure the physical connection to CP is working

```
C:\>ping 192.168.169.128
```

```
C:\>ping 192.168.170.128
```

If the physical connection to CP is not working, check the physical connection.

4. "Cluster netint" to check if network interface to CP is up.

```
C:\>cluster netint
```

5. Check for the status of the MCS\_ADH\_ADM process. Restart the MCS\_ADH\_ADM process. Wait 2-3 minutes and then see if CP-AP communication is restored.

```
C:\>Cluster res MCS_ADH_ADM /offline /wait
```

```
C:\>Cluster res MCS_ADH_ADM /online /wait
```

```
C:\> net stop InetD
```

```
C:\> net start InetD
```

If it doesn't work then the suggestion is to perform failover of APG40 node.

```
C:\> prcstate    ! Node should be active !
```

```
C:\> prcboot
```

If step4, step5&step6 check items ok, but the AP CP still lost communication.

Reset CP by CPT function.

PTCOI:

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PTWSP;

PTSRI: RANK=SMALL;

If the CPT function cannot connect to CP due to "time out" or "data link error" reason, reboot the active node, do a failover.

Try to CPT connection on another node.

**6.4.3 APG Cyclic Reboot**

On the node that is rebooting, stop the ACS\_PRC\_ClusterControl service and the ACS\_FCH\_Server service:  
Note: If the other node is attempting to join the cluster, then it may be necessary to stop these services on the other node as well.

AP commands:  
net stop ACS\_PRC\_ClusterControl  
net stop ACS\_FCH\_Server

Disable the ACS\_PRC\_ClusterControl service:  
Note: If the other node is attempting to join the cluster, then it may be necessary to disable this service on the other node as well.  
AP commands:  
sc config ACS\_PRC\_ClusterControl start= Disabled

If it is not started and you want to be online, start the Cluster Server service:  
AP command:  
net start clussvc

There may be many reason for 1067 error, after AD is fine if still error code is 1067 then check the raids, if that is fine, then please escalate to next level.

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**6.5 3G Overload Handling**

TYPE OF EVENTS:

- ✓ Predicted Event during Khareef
- ✓ Unpredicted Event during Khareef, such as high traffic after Eid Prayer

**6.5.1 Predicted Event**

Predicted events allows dimensioning to expected traffic.

Please note that RRC Load Control which already implemented in the network.

**6.5.2 Unpredicted Event**

Access Class barring features (Optional feature)

Initial UE Load Regulation (Optional Feature)

RANAP overload control (Optional feature)

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## 6.6 Parameter Tuning Strategy during High Traffic

### 6.6.1 3G Parameter Tuning Strategy

Parameter	Proposed Values For Event	Resolution
pwradm	90	Event Beginning, Network Wide
pwoffset	5	Event Beginning, Network Wide
dlCodeAdm	90	Event Beginning, Network Wide
sf8Adm	0	Event Beginning, Network Wide
sf16adm	0	Event Beginning, Network Wide
sf4AdmUI	0	Event Beginning, Network Wide
sf8Admul	0	Event Beginning, Network Wide
hsdpausersadm	64	Event Beginning, Network Wide
maxNumHsPdschCodes	Steps 10, 8, 7, 5	Event Beginning, Network Wide
maxNumHsdpaUsers	64	Event Beginning, Network Wide
Numhspdschcodes	Minimum Permissible: 2 Codes	Event Beginning, Network Wide
qQualmin	Case basis, Minimum Permissible: -15	Selective Basis
qRxlevmin	Case basis, Minimum Permissible: -98	Selective Basis
sRATsearch	2 to 4, Case basis	Selective Basis
primaryCpichPower	Case Basis: Minimum permissible: 300 on high DL Power Congestion only	Selective Basis
usedFreqThresh2dEcno	Can Increase from -14 to -12/Case Basis	Selective Basis
usedFreqThresh2dRscp	Can Increase from -100 to -98/Case Basis	Selective Basis
loadsharinggsmthreshold	Minimum permissible: 50	Selective Basis
Qoffset2sn	Case Basis: Traffic balance on high loaded cells	Selective Basis
ReportingRange1A	Minimum Permissible: 5 (Current 8)	Selective Basis



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6.6.2 2G Parameter Tuning Strategy

Soft Optimization for 2G		
Parameters / Features	Current Value	Proposed Value
DHA/ DYMA	Activated	Per cell level to max.
SDCCH Tunings	Min. 02 SD per cell	SDCCH Additions for event cells
Edge TS	2 per cell	Max based Upon E1 slots
Assignment to worst cell	Activated	will be aggressive for event
Preemption	Active	Active
Load Sharing	Active	Set per cell
ACLC	Active	Active
LOL & CHAP	Active	Further tunings for event area
MCCCH	Active	2 per cell

6.6.3 LTE Parameter Tuning Strategy

Parameter
Connected Users Licenses
Baseband Capacity
no. of PUCCHCQI Users
no. of PUCCHSR Users

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# TECHNICAL DOCUMENTATION

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7      **Technical Documentation**

Evo controller 8100 Data Specification



Evo Controller 8100  
Data Sheet.pdf

Evo controller 8100 Product Description



Evo Controller 8100  
Product Description.p

Evo controller 8200 Data Specification



Evo Controller 8200  
Data Sheet.pdf

Evo controller 8200 Product Description



Evo Controller 8200  
Product Description.p



RBS 6000 Product  
Description.pdf

RBS 6000 Product Description

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KNOWLEDGE  
TRANSFER  
METHODOLOGY

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8      **Knowledge Transfer Methodology**

During Khareef Event Preparation 3 Optimization Engineer from Omantel Salalah are actively involved.

Below is the activities part of knowledge transfer during Khareef Event Preparation

- Maps and Locations
- Sites covering people movements
- VIP site list
- Traffic forecast and recommendations
- Taskforce and SPOC contacts
- Spares distribution
- Transmission routing plan
- Sites with access issues
- Implementation status
- Core preparations
- Share point logs
- Final reports

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## 9 KHAREEF LIVE -Mobile Application User Guide

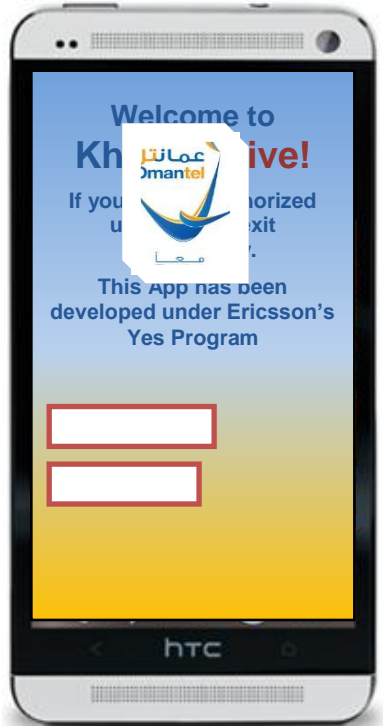
KhareefLIVE is a special event for Oman Tel organized and run by Ericsson. To ensure the smooth and faster operation we are introducing KhareefLIVE mobile and web application. Our main aims are to simply the operational work and ensure better governance and performance.

### 9.1 Application:

- KhareefLIVE has mainly two applications
- 1- Mobile application (mail attachment installer)
  - 2- Web based management and reporting application

Link of web based application: <http://188.75.104.141/khareefliveweb/login.aspx>  
We are using mobile application to access the system, network and event easily from our android mobile.

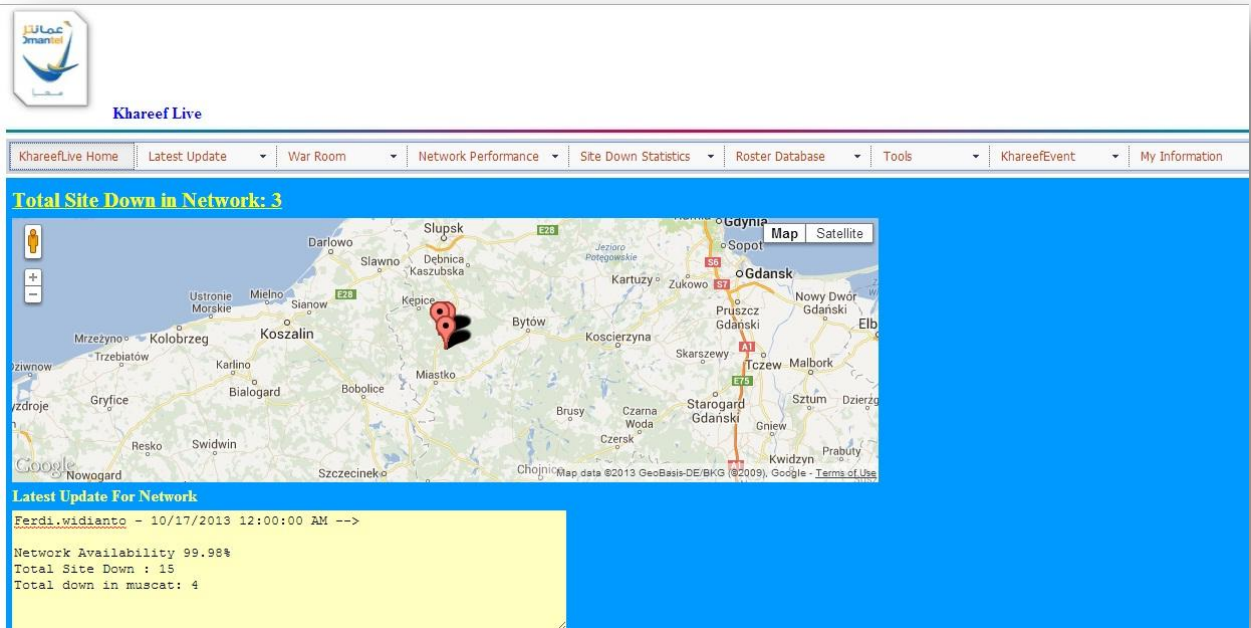
Prepared (Subject resp) EFERWID		No. Uen		
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Web based application are serving administration and reporting both purpose of KhareefLIVE event management and operation.



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9.2

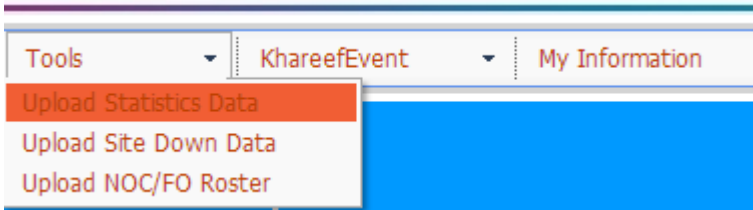
**Tools**

How to upload statistics data:

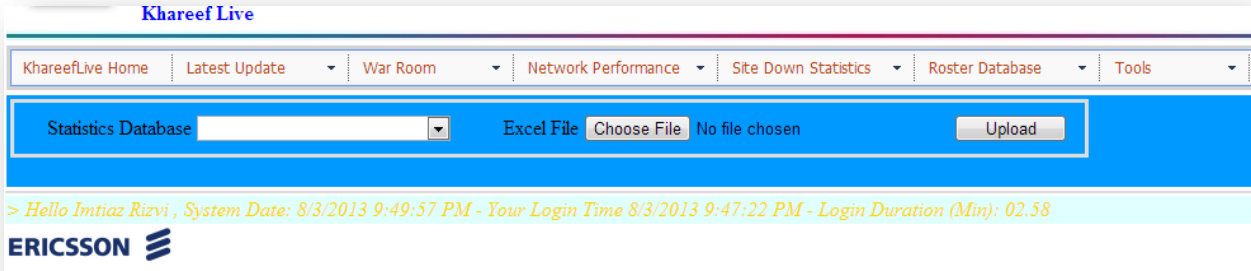
Step 1:

- Login to application
- Go to Tools
- Click on Upload Statistics Data (see below **pic**)

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Step 2:  
Below page will appear to choose the appropriate files.

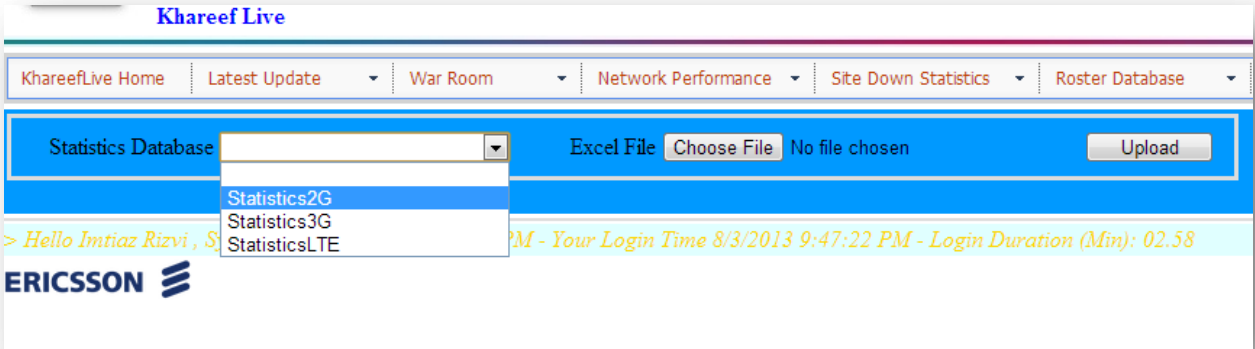


Step 3:  
Below page will appear to choose the appropriate files.

Step 4

Please choose the appropriate statistics database from the drop down list

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Step 5

Choose the appropriate excel file for the database (.xlsx). Please check the below format. Except this format you cannot upload the file. Sheet name should be “Sheet1”



2G.xlsx



3G.xlsx

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Approved (Document resp) EFERWID	Checked	Date 2013-08-04	Rev PA1	Reference



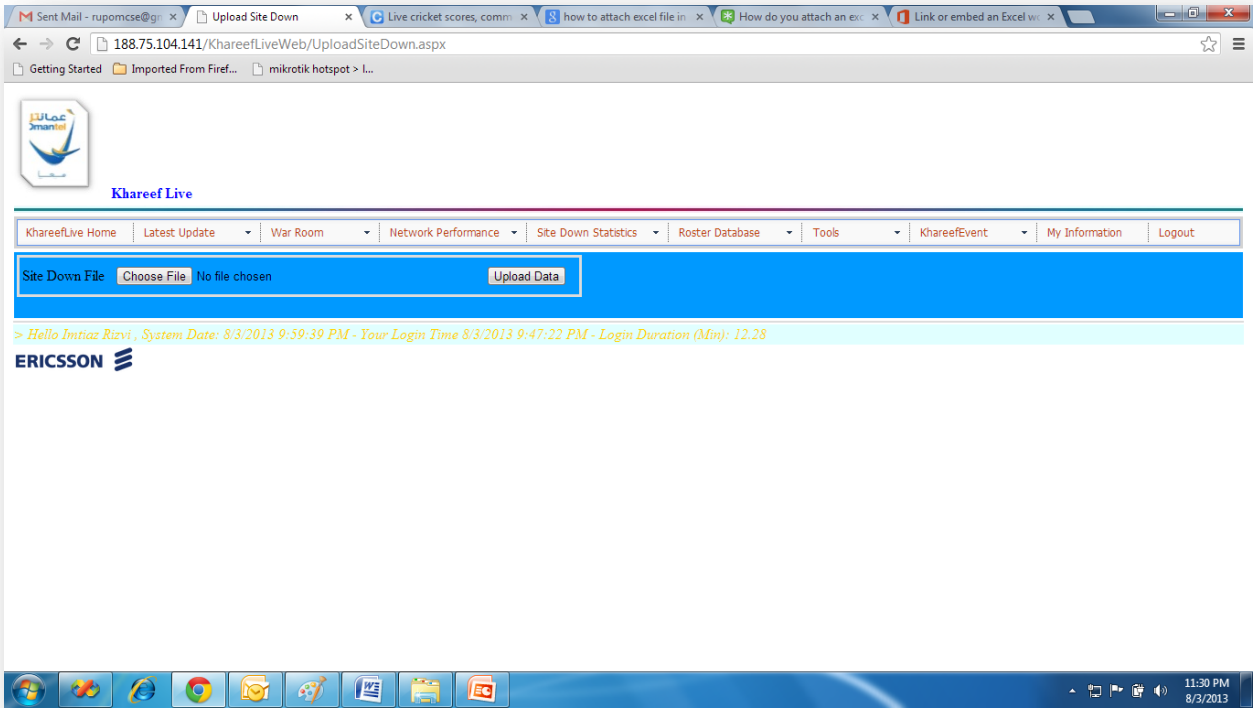
LTE.xlsx

Step 6

Click the Upload Button.  
Upload Site Down Data:

Step 7:  
Follow the step 1, 2 and 3 from above. Click on “Upload Site Down Data”  
Below screen will appear

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Browse the appropriate site down file from system. Please be ensure that you are uploading right order file.

Prepared (Subject resp) EFERWID		No. Uen		
Approved (Document resp) EFERWID	Checked	Date 2013-08-04	Rev PA1	Reference

  
24SiteDown\_20130727\_1841.txt

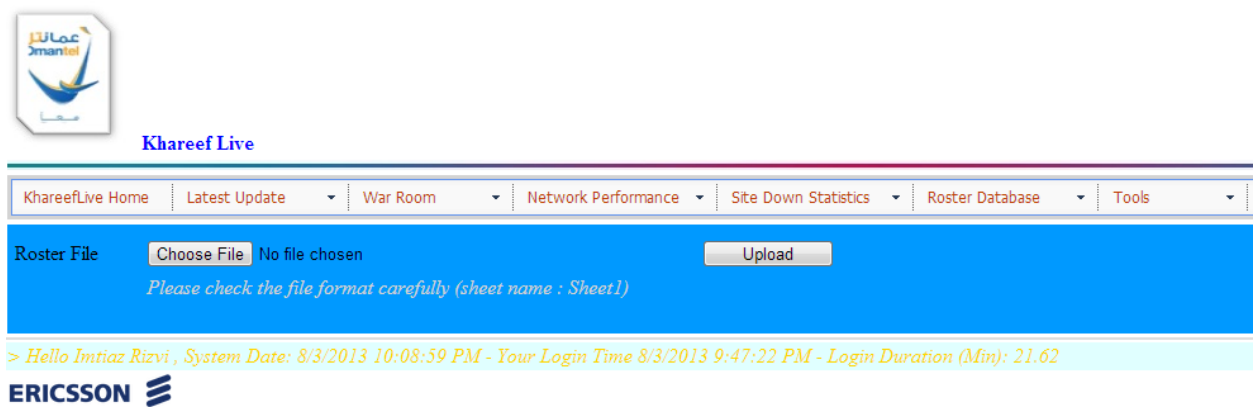
  
24SiteDown\_20130727\_1900.txt

Sample File:  
Click Upload button.

Prepared (Subject resp) EFERWID		No. Uen		
Approved (Document resp) EFERWID	Checked	Date 2013-08-04	Rev PA1	Reference

9.2.1 Upload Roster Database:

Step:  
Follow step 1, 2 and 3  
Below page will open



Browse the appropriate file from the directory



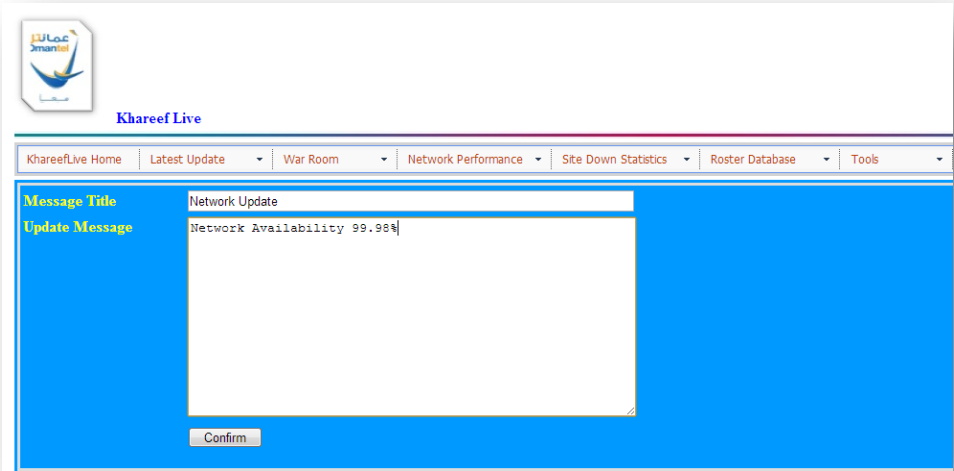
OMANTelRoster.xlsx

Sample file :  
Click upload.

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**9.2.2 Latest Update:**

Feature of latest update application  
Post New Network Update: User can update latest network status



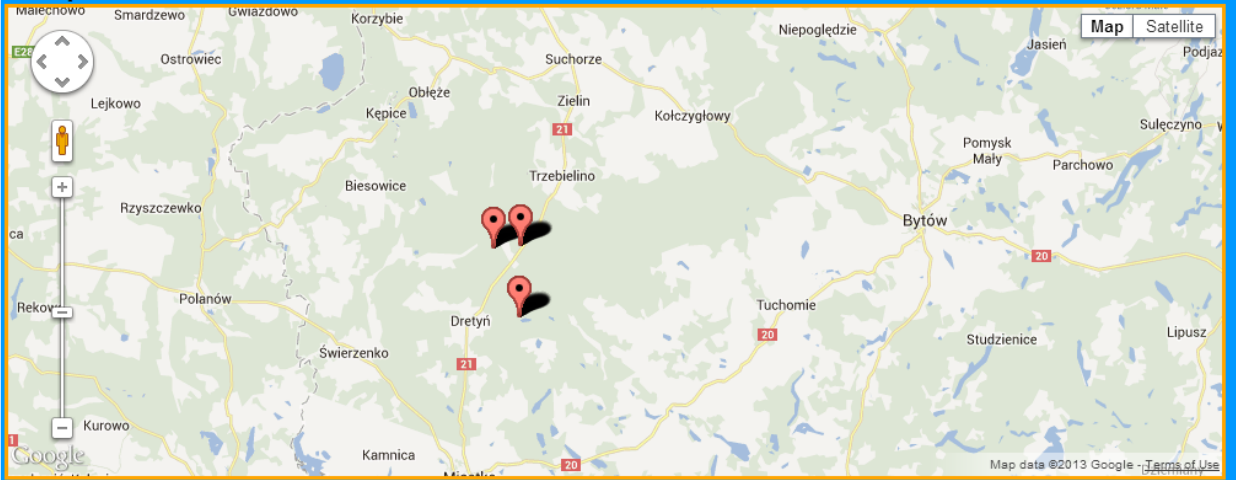
View Network Update: View Overall network status update and google map for latest network summary



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KhareefLive HomeLatest UpdateWar RoomNetwork PerformanceSite Down StatisticsRoster DatabaseTools

Latest Update: > Last refresh at 8/3/2013 10:34:36 PM



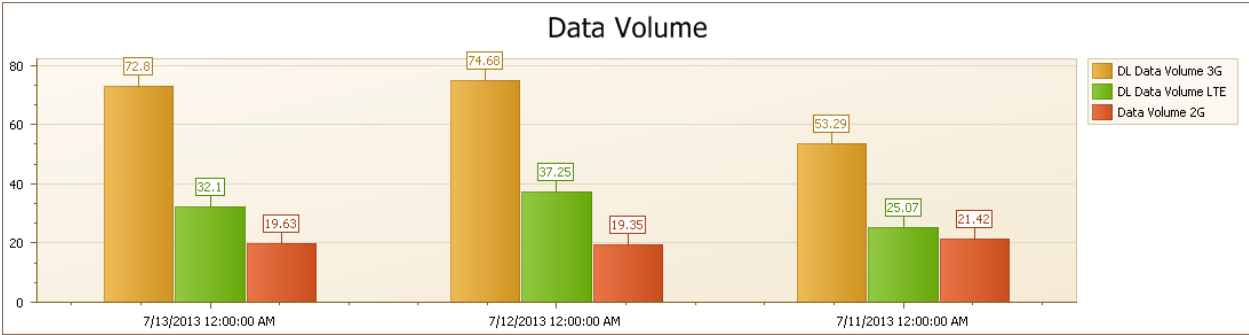
Header	Latest Update	Updated By	Updated Time
Hello World	Hello World !!	Ferdi.widianto	10/17/2013 12:00:00 AM

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9.3 Network Performance Summary: Last three hours updated network performance statistics



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9.4 War Room:

War room group discussion  
If you want to check latest discussion of war room and if you want to post new update please go to war room.

Step:  
Please go to the war room  
Select the room name from available room list  
You will find the user list of the particular group in the left panel.  
Post your message and click send button.  
You will find latest message in the bottom panel.

KhareefLive HomeLatest UpdateWar RoomNetwork PerformanceSite Down StatisticsRoster DatabaseToolsKhareefEvent

Available Room

War Room

syed.awais  
stephen.young  
imtiazi.rizvi  
gheith.darmaki  
ferdi.widianto  
b  
amjad.syed  
amjad.dawod  
amer.khalil  
abdullah

Post Message

Send Message

Latest Update	Updated By	Updated Time
test2	a	8/3/2013 2:14:36 PM
test1	a	8/3/2013 1:31:18 PM
test	a	8/3/2013 1:24:07 PM

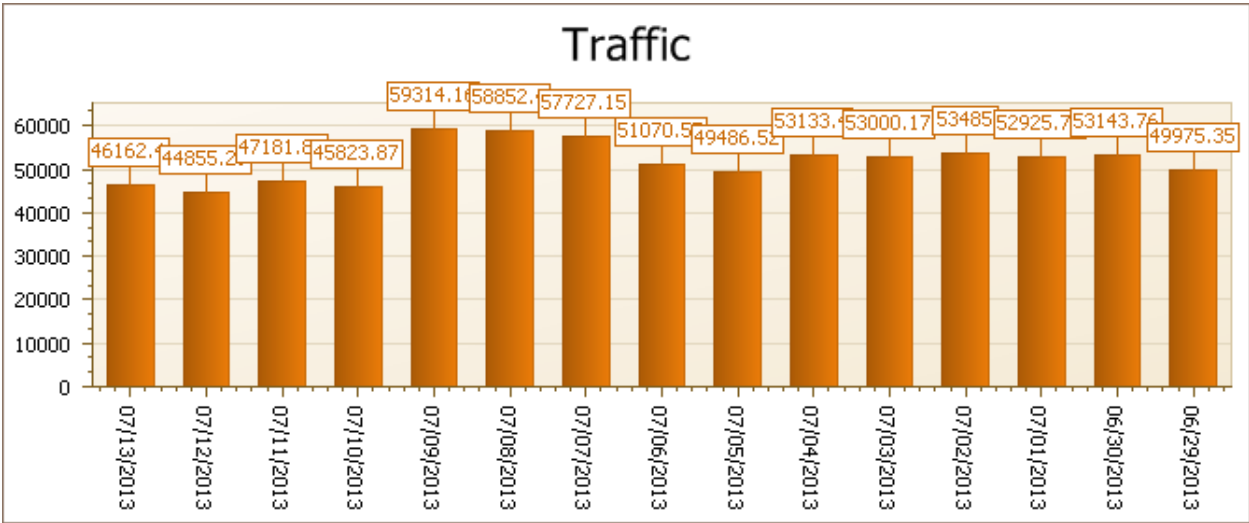
Prepared (Subject resp) EFERWID		No. Uen		
Approved (Document resp) EFERWID	Checked	Date 2013-08-04	Rev PA1	Reference

9.5 Network Performance:

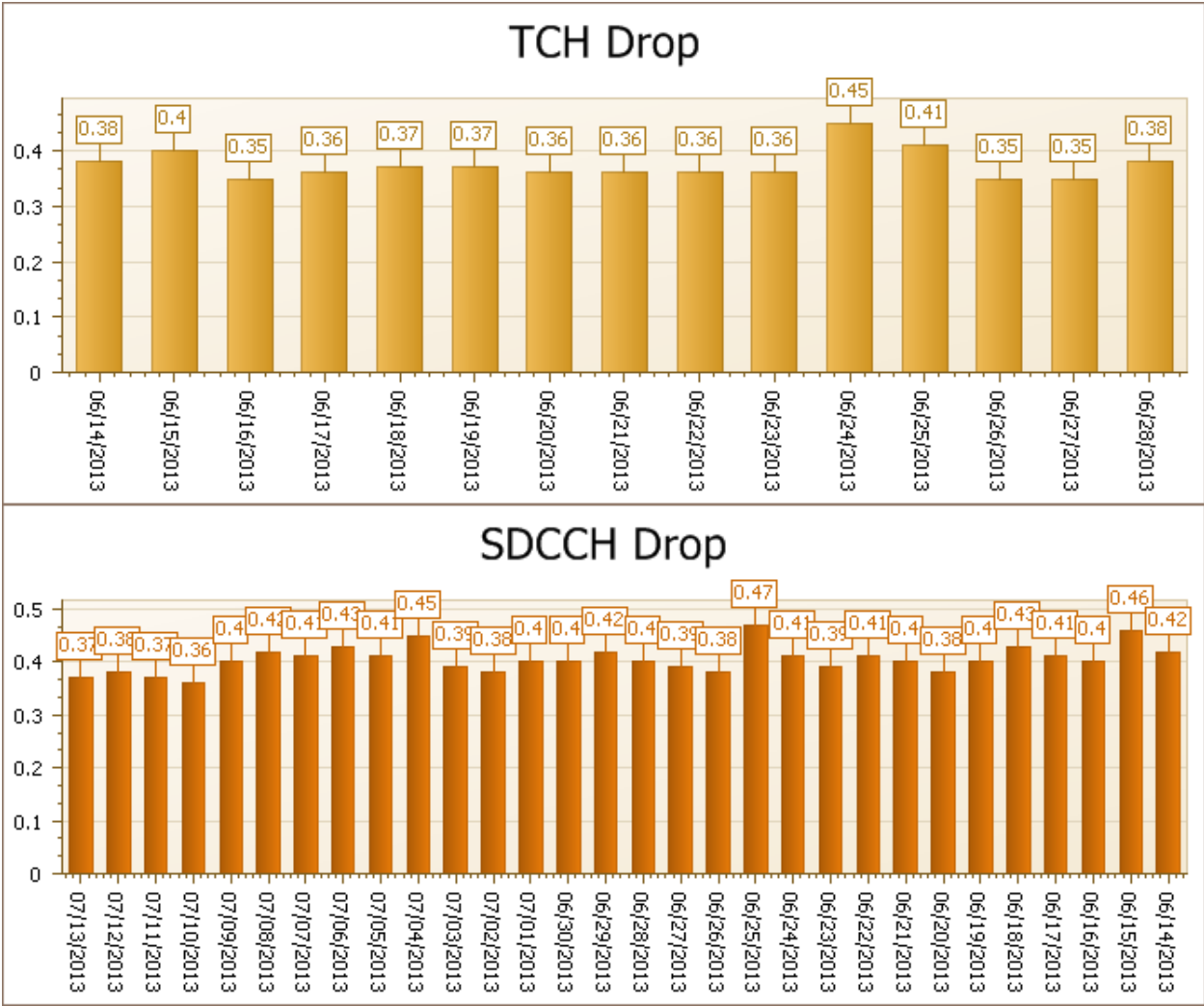
Network performance basically divided on below three part.

- 2G
- 3G
- LTE

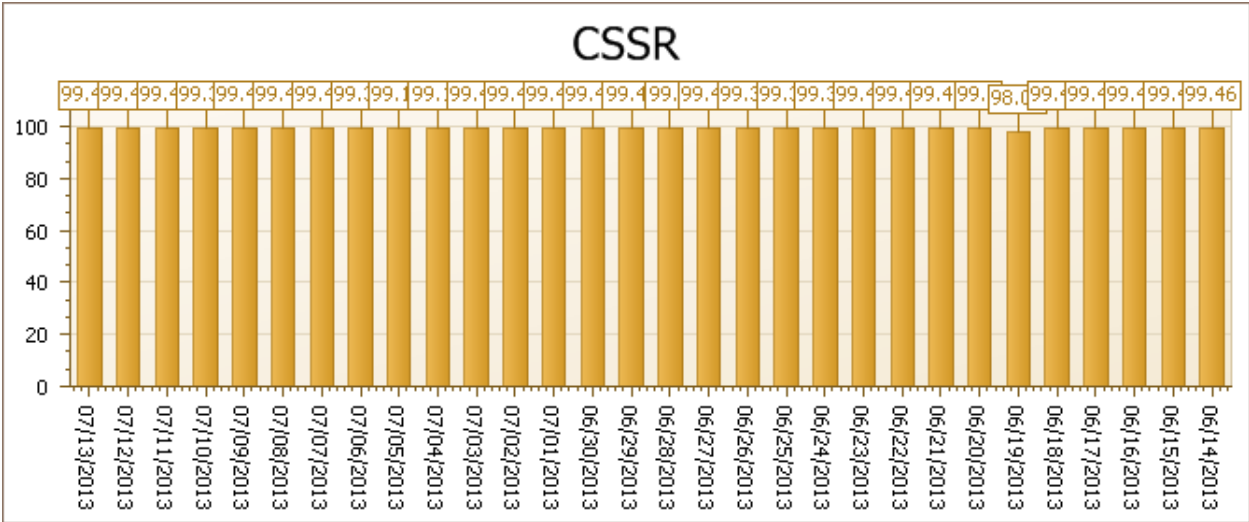
From the application you can find updated data and graph for the above network  
Please find below sample graph.



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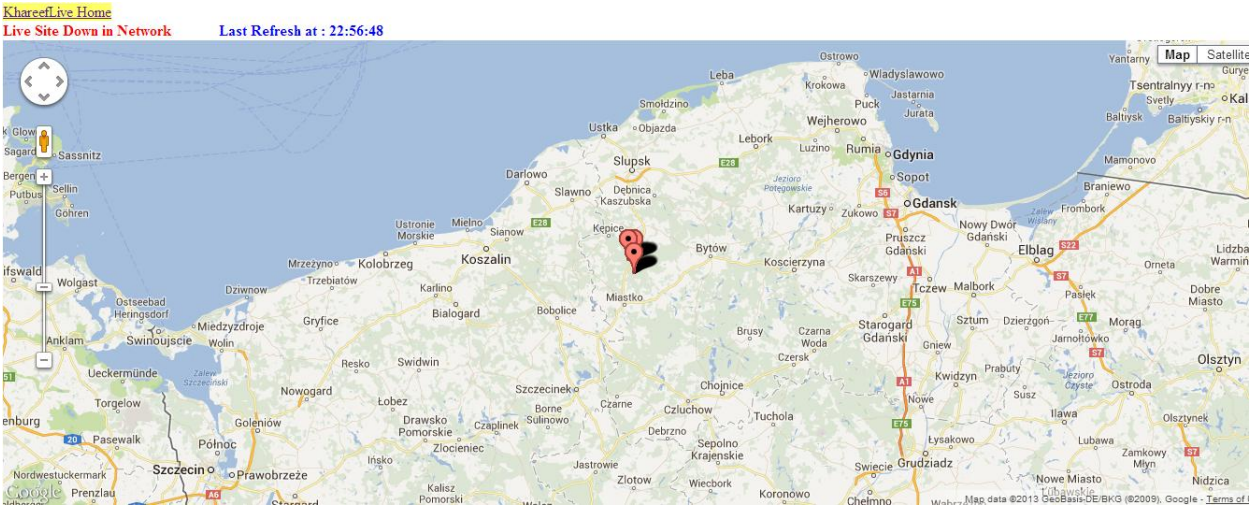
Prepared (Subject resp) EFERWID		No. Uen		
Approved (Document resp) EFERWID	Checked	Date 2013-08-04	Rev PA1	Reference



9.6 Site down statistics:

View Site Down  
Site Down Google Map  
Site Basic Database  
User can check latest site down statistics in tabular and google map.

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Prepared (Subject resp) EFERWID		No. Uen		
Approved (Document resp) EFERWID	Checked	Date 2013-08-04	Rev PA1	Reference

9.7 Roster Database:

Option:  
Add roster database: User can add new roster database for network  
Bulk Upload: User can upload roster database excel file for network  
View Roster: check latest roster database



Khareef Live

KhareefLive HomeLatest UpdateWar RoomNetwork PerformanceSite Down StatisticsRoster DatabaseToolsKhareefEventMy InformationLogout

Resource Name

Contact Number

Shift Start Time

Shift Stop Time

(MM/dd/yyyy HH:mm)

Description

Confirm

SLNO	Resource	mobile	StartTime	EndTime	UpdateBy	UpdatedDate	Status	Description
7	Erfan Khandorkar	+8801716166636	7/21/2013 10:00:00 AM	7/21/2013 12:00:00 PM	rupom	7/31/2013 1:58:13 PM	Active	asdasd
5	rupom ghosh	+21312123	7/21/2013 10:00:00 AM	7/21/2013 10:00:00 AM	admin	7/21/2013 10:14:49 PM	Active	rest
1	Rupom	NOC	7/21/2013 10:00:00 AM	7/21/2013 6:00:00 PM	Samira	7/21/2013 12:00:00 AM	Active	

Local intranet | Protected Mode: Off

KhareefDirectory: User database for the KhareefLIVE event management.

Prepared (Subject resp) EFERWID		No. Uen		
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KhareefLive Home Latest Update War Room Network Performance Site Down Statistics Roster Database Tools KhareefEvent				
User.Name	Designation	Company	Mobile	Email
a			+8801610004316	
Abdullah Al-Balushi			+96892109109	
Amer Khalil			+96898538292	
Amjad Dawod			+971553009892	
Amjad Syed			+96899234916	
b			+8801712240630	
Ferdi Widiyanto	Project Director		+96898551047	
Gheith Al Darmaki			+96899249625	
Imtiaz Rizvi	MS COO		+971559816603	
Stephen Young			+96893211466	
Syed Awais	Manager		+96893211597	
> Hello Imtiaz Rizvi , System Date: 8/3/2013 11:00:03 PM - Your Login Time 8/3/2013 9:47:22 PM - Login Duration (Min): 72.77				

Prepared (Subject resp) EFERWID		No. Uen		
Approved (Document resp) EFERWID	Checked	Date 2013-08-04	Rev PA1	Reference

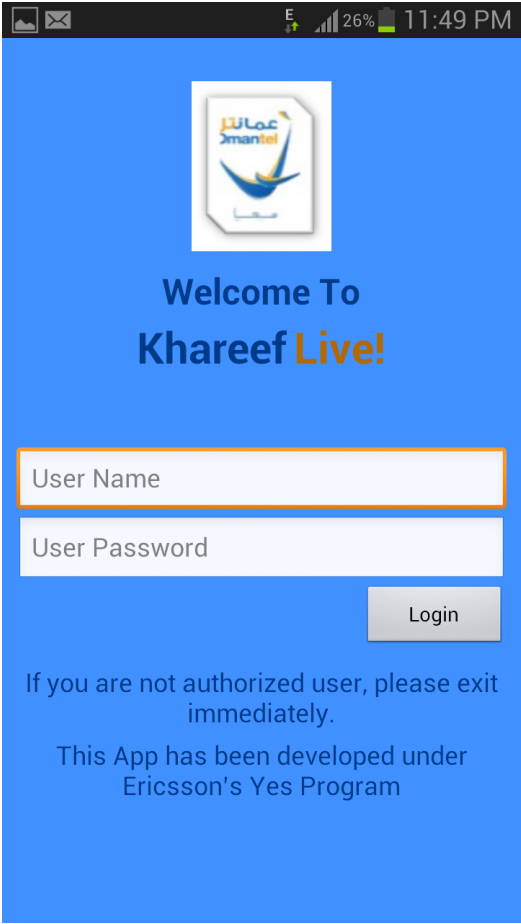
**9.8 Mobile Application feature:**

KHAREEF LIVE web and mobile application provides the following features:

- Latest Update
- War Room Situation
- Network Performance
- Site Down Statistics
- NOC roster
- Khareef Directory
- Omantel offers
- Omantel – Ericsson Partnership

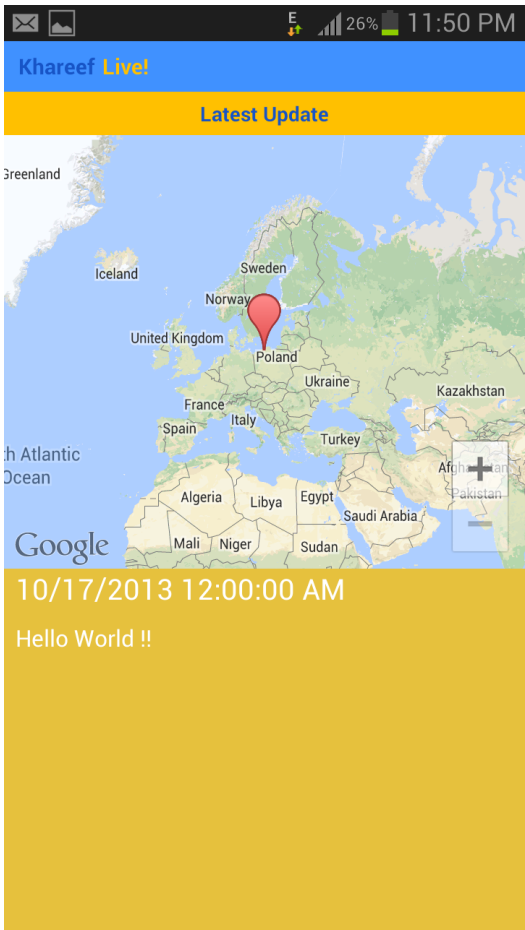
**Application Access:** Application access is strictly secured by user name and password which shall be provided by the app administrator.

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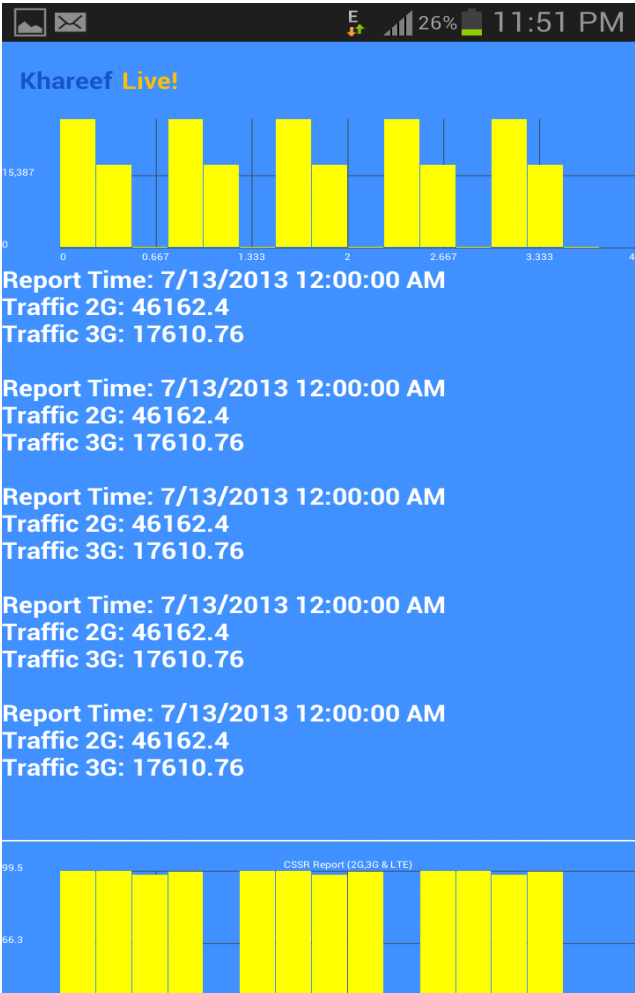
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**Latest Update:** Network Summary Update (Latest message + Site down Information in Google map)



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**Network performance:** Latest Network performance data in graph and tabular format.



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10      **Appendix**

10.1      **Notification and Communication Matrix**

During the event agreed notification update via mobile application will be sent hourly to Omantel and Ericsson Management.

All decision will be made in the war room as pre-approved mitigation scenario, and all the action will be recorded and feasible in the mobile application

The event close will be decided by the event coordinator from Omantel.

The event close will be decided by the event coordinator

10.1.1      **Escalation Matrix**

<b>Level 1</b>	<ul style="list-style-type: none"><li>• Omantel : </li><li>• Ericsson : Syed Awais Rehman</li></ul>
<b>Level 2</b>	<ul style="list-style-type: none"><li>• Omantel : </li><li>• Ericsson : Ferdi Widiyanto</li></ul>
<b>Level 3</b>	<ul style="list-style-type: none"><li>• Omantel : </li><li>• Ericsson : Stephen Young</li></ul>

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10.2 Project Organization

10.3 Khareef Special Implementation Plan

Task Name	Duration	Start	Finish	Owner
Khareef Event				
NPO	6 days	Fri 7/26/13	Sun 8/4/13	Amer Khalil
2G and 3G Optimization	4 days	Fri 7/26/13	Wed 7/31/13	Amer Khalil
Priority Area 1 Festival City	1 day	Fri 7/26/13	Sat 7/27/13	Umar & Saqib
Physical Optimization	2 days	Fri 7/26/13	Sat 7/27/13	Umar & Saqib
Drive Test	2 days	Fri 7/26/13	Sat 7/27/13	Umar & Saqib
Neighbor analysis	2 days	Fri 7/26/13	Sat 7/27/13	Umar & Saqib
Priority Area 2 Salalah City	1 day	Sun 7/28/13	Mon 7/29/13	Umar & Saqib
Physical Optimization	2 days	Sun 7/28/13	Mon 7/29/13	Umar & Saqib
Drive Test	2 days	Sun 7/28/13	Mon 7/29/13	Umar & Saqib
Neighbor analysis	2 days	Sun 7/28/13	Mon 7/29/13	Umar & Saqib
Priority Area 3 Salalah City	2 days	Tue 7/30/13	Wed 7/31/13	Umar & Saqib
Physical Optimization	2 days	Tue 7/30/13	Wed 7/31/13	Umar & Saqib
Drive Test	2 days	Tue 7/30/13	Wed 7/31/13	Umar & Saqib
Neighbor analysis	2 days	Tue 7/30/13	Wed 7/31/13	Umar & Saqib
LTE Optimization	3 days	Sat 7/27/13	Wed 7/31/13	Saqib
Physical Optimization	4 days	Sat 7/27/13	Wed 7/31/13	Saqib & Junaed
Drive Test	4 days	Sat 7/27/13	Wed 7/31/13	Saqib & Junaed
Neighbor analysis	4 days	Sat 7/27/13	Wed 7/31/13	Saqib & Junaed
3G Feature Implementation	5 days	Sun 7/28/13	Sat 8/3/13	Amer Khalil & Neill
URA PCH Trial	2 days	Sun 7/28/13	Mon 7/29/13	Amer Khalil & Neill
RNC RRC Load Control	2 days	Sun 7/28/13	Mon 7/29/13	Amer Khalil & Neill



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lub utilization / dedicated for voice	6 days	Sun 7/28/13	Fri 8/2/13	Amer Khalil & Neill
Inter cells interference coordination	2 days	Mon 7/29/13	Tue 7/30/13	Amer Khalil & Neill
Pre-emption and admission control on Voice over data	7 days	Sun 7/28/13	Sat 8/3/13	Amer Khalil & Neill & Feroze
Multy RAB Combination	2 days	Tue 7/30/13	Wed 7/31/13	Amer Khalil & Neill
<b>2G Feature Implementation</b>	<b>3 days</b>	<b>Wed 7/31/13</b>	<b>Sun 8/4/13</b>	<b>Saqib</b>
Inteference rejection combining	4 days	Wed 7/31/13	Sun 8/4/13	Saqib
COW Site Design (5 sites)	7 days	Sun 7/28/13	Sat 8/3/13	Amer Khalil
<b>Freq Plan implementation</b>	<b>3 days</b>	<b>Sat 7/27/13</b>	<b>Wed 7/31/13</b>	<b>Azril</b>
Priority Area 1 Festival City	2 days	Sat 7/27/13	Sun 7/28/13	Azril
Priority Area 2 Salalah City	2 days	Mon 7/29/13	Tue 7/30/13	Azril
Priority Area 3 Salalah City	2 days	Tue 7/30/13	Wed 7/31/13	Azril
VIP Drive Test	5 days	Sun 7/28/13	Fri 8/2/13	
List to be provided by Omantel	1 day	Sun 7/28/13	Sun 7/28/13	Syed Awais Rehman
Performed Drive Test	1 day	Mon 7/29/13	Mon 7/29/13	Amer Khalil
Analysis and Recommendation	2 days	Tue 7/30/13	Wed 7/31/13	Amer Khalil
Implementation	2 days	Thu 8/1/13	Fri 8/2/13	Amer Khalil
<b>NRO</b>	<b>31 days</b>	<b>Fri 6/21/13</b>	<b>Sun 8/4/13</b>	<b>Amjad Syed</b>
Physical Site Survey	5 days	Tue 7/2/13	Sun 7/7/13	Amjad Syed
Cabinet Power / Space	5 days	Wed 7/3/13	Tue 7/9/13	Amjad Syed
2G/3G Expansion E1 provided	5 days	Fri 7/5/13	Thu 7/11/13	Amjad Syed
Cabinet Installation and commissioning completed	4 days	Tue 7/9/13	Fri 7/12/13	Amjad Syed
WO# material arrived	17 days	Fri 6/21/13	Mon 7/15/13	Amjad Syed

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<b>2G and 3G Hardware Expansion</b>	<b>15 days</b>	<b>Mon 7/15/13</b>	<b>Sun 8/4/13</b>	<b>Amjad Syed</b>
Priority area 1 Festival Area	6 days	Mon 7/15/13	Sat 7/20/13	Amjad Syed
Priority area 2 Salalah City	7 days	Sun 7/21/13	Sat 7/27/13	Amjad Syed
Priority area 3 Salalah City	4 days	Sun 7/28/13	Wed 7/31/13	Amjad Syed
1800 sites expansion (12 sites)	5 days	Thu 7/25/13	Wed 7/31/13	Amjad Syed
5 Cow Sites	6 days	Mon 7/29/13	Sun 8/4/13	Amjad Syed
<b>NO</b>	<b>47 days</b>	<b>Sun 6/2/13</b>	<b>Tue 8/6/13</b>	<b>Syed Awais Rehman</b>
<b>Known Fault</b>	<b>47 days</b>	<b>Sun 6/2/13</b>	<b>Tue 8/6/13</b>	<b>Vijay &amp; Gheith</b>
Multiple reset messages causing MSS high CPU load CSR2292357	45 days	Sun 6/2/13	Thu 8/1/13	Gheith
Hanging sites / cells CSR 2304615	6 days	Thu 7/25/13	Thu 8/1/13	Gheith
Throughput more than 3.6 Mbps	3 days	Thu 8/1/13	Mon 8/5/13	Vijay
Node Congestion	1 day	Thu 8/1/13	Thu 8/1/13	Vijay
Cell degradation after transmission problem	5 days	Sun 7/28/13	Thu 8/1/13	Gheith
Critical SW correction to be loaded	3 days	Mon 7/29/13	Wed 7/31/13	Vijay
Emergency License	1 day	Tue 7/30/13	Tue 7/30/13	Vijay
Transmission Error / DIP (2G)	1 day	Mon 7/29/13	Mon 7/29/13	Vijay
Transmission Error Analysis	1 day	Tue 7/30/13	Tue 7/30/13	Vijay
Packet Loss (3G)	2 days	Mon 7/29/13	Tue 7/30/13	Vijay
TCH Availability (2G)	2 days	Mon 7/29/13	Tue 7/30/13	Ferdi
License and Capacity Management (2G/3G)	2 days	Mon 7/29/13	Tue 7/30/13	Vijay and Neill
Cell logical supervision (2G)	1 day	Mon 7/29/13	Mon 7/29/13	Vijay

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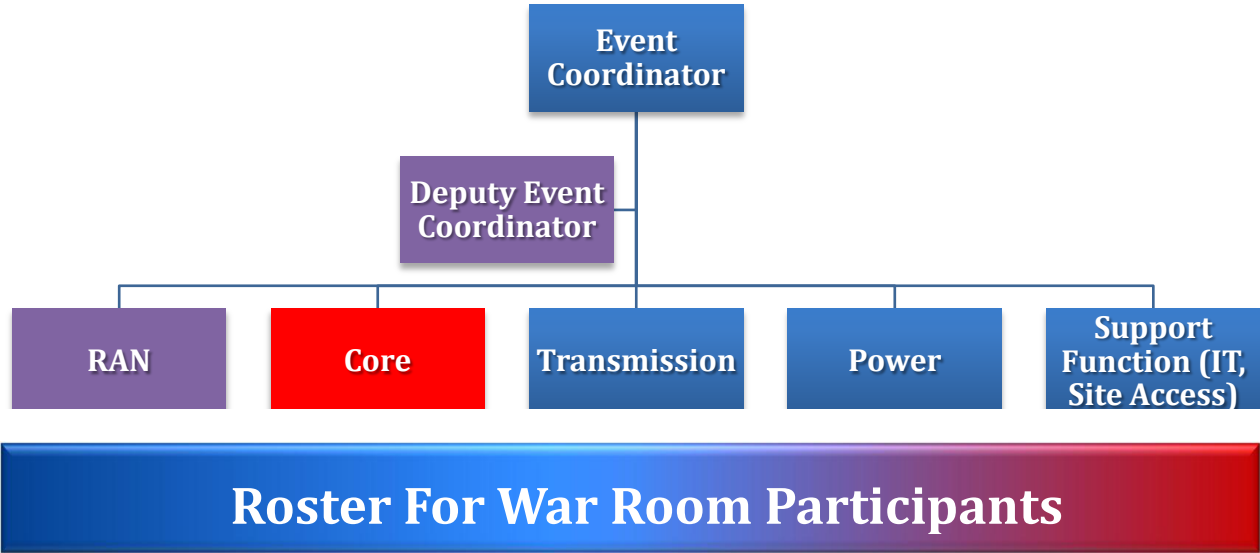
VSWR Setting	3 days	Thu 8/1/13	Mon 8/5/13	Vijay
Critical Alarm reviewed		Sun 6/2/13		
Critical spare part	4 days	Wed 7/31/13	Sat 8/3/13	
S-PDCH	4 days	Wed 7/31/13	Sun 8/4/13	
Abis Optimization	5 days	Wed 7/31/13	Tue 8/6/13	
Flexible Abis	5 days	Wed 7/31/13	Tue 8/6/13	
War Room Readiness	22 days	Fri 7/5/13	Sun 8/4/13	Ferdi
Projector	1 day	Sun 7/28/13	Sun 7/28/13	Omantel
White Board	1 day	Sun 7/28/13	Sun 7/28/13	Omantel
Wifi access for 10 people	2 days	Tue 7/30/13	Wed 7/31/13	Omantel
Access to NMS (OSSRC, Core monitoring, moshell)	2 days	Sun 7/28/13	Mon 7/29/13	Omantel
2 Phone Line	1 day	Tue 7/30/13	Tue 7/30/13	Omantel
Binder	2 days	Tue 7/30/13	Wed 7/31/13	Ferdi
Dry Run	1 day	Sat 8/3/13	Sat 8/3/13	Ferdi
Mobile Application Readiness	12 days	Sun 7/21/13	Sun 8/4/13	Rupom & Martin
Application trial (E//I)	1 day	Wed 7/31/13	Wed 7/31/13	Rupom & Martin
Application trial (E///+Customer)	1 day	Fri 8/2/13	Fri 8/2/13	Rupom & Martin

10.4 War Room Setup and Contact

War room will be located in 1st floor Omantel office in Salalah, responsible personnel should be in the war room +/- 1 hour before the event start.

The requirement personnel in the war room described in the hierarchy below

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10.4.1 Contact Number and Interfaces

10.4.1.1 Ericsson

Name	Job Title	Phone Number	Email ID
Abdullah Al Balushi	Key Account Manager	92109109	abdullah.al-balushi@ericsson.com
Stephen Young	Account Ops Manager	93211466	stephen.s.young@ericsson.com
Imtiaz Rizvi	MS COO	+971559816603	imtiaz.rizvi@ericsson.com
Ferdi Widiyanto	MS Program Manager	98551047	ferdi.widiyanto@ericsson.com
Amjad Syed	Roll-Out Project Manager	99234916	amjad.syed@ericsson.com
Gheith Al Damaki	Service Delivery Manager	99249625	gheith.al.darmaki@ericsson.com

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Name	Job Title	Phone Number	Email ID
Mohammed Amer	NPO Manager	98538292	Mohammed.amer@omantel.om
Junaid Ahmad	NPO Engineer	98179207	junaid.ahmed@omantel.om
Saqib Babar	NPO Engineer	92801658	saqib.babar@omantel.om
Azril Idris	NPO Engineer	99863834	azril.idris@omantel.om
M Umer Farooq	NPO Engineer	91201047	Muhammed.farooq@omantel.om

Name	Job Title	Phone Number	Email ID
Syed Awais Rehman	MS Operations Assurance Manager	93211597	awais.rehman@omantel.om
Zubaida Al Hilali	1st Level OperationsTeam Leader	93210660	Zubaida.Hilali@omantel.om
<b>1st Level Operation Hotline number : 99479549</b>			
Vijayachandran Shanmugam	2nd Level OperationsTeam Leader	93209330	Vijayachandran.Shanmugam@omantel.om
Sajad Ikram Toor	2nd Level Operations	99026427	Sajad.Toor@omantel.om
Farid Arif Shidiq	2nd Level Operations	98205189	Farid.Shidiq@omantel.om
Martin A Tomacruz	2nd Level Operations OSS	91280813	Martin.Tomacruz@omantel.om
Basel Hamed	Field ServicesTeam Leader	99237013	basel.hameed@ericsson.com

**10.4.1.2 Huawei**

Name	Job Title	Phone Number	Email ID
Shafqat Ejaz	MNS Management Team	99887829	
Rehan Manzoor	MNS Management Team	93215981	

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### 10.4.1.3 Omantel

Name	Designation	Team Area	Mobile	Email
Abdullah Al Rawahy	PM Ericsson SRAN & LTE	Project Management	99105333	
Feroze Jalali	Sr. Manager - Quality Control	Network Quality Control/ P & O PM	92807900	feroze.jalali@omantel.om
Faisal Al Raisi	Engineer	Network Quality Control/ P & O PM		
Mazhar Qazi	Engineer	Network Quality Control/ P & O PM		
Juma Al Saadi	Sr. Engineer	Fixed Access Design	99867401/99000089	Juma.Saadi4@omantel.om
Ali Hussein Al-Ibrahim	Engineer	Customer Solution Design (Tx)	99265658	Ali.Ibrahim@omantel.om
Hamed Al-Shanfari	Manager - Dhofar NI&R	Network Installation & Repair	92100010	hamed.shanfari@omantel.om
Mohammed Aideed	TL- Data (Dhofar NI&R)	Network Installation & Repair	99494405	mohammed.aideed@omantel.om
Mohammed Alhakmani	Engineer	Fixed Core Network Planning	99443919	mohammed.hakmani@omantel.om
Mahmoud Alsaleh	Engineer	Mobile Core Network Planning	92074047	Mahmoud.Al-Saleh@omantel.om
Ahmed Al Humaidi	CME & Operation	Infrastructure Services	99899090	ahmed.humaidi@omantel.com
K.P.Mohammed	CME & Planning	Infrastructure Services	99443439	K.P.Mohammed@omantel.om
Saleh Al Wahaibi	Specialist	Infrastructure Services	99417896	saleh.wahaibi@omantel.om
Abdul Samad Abdul Qader	Engineer	Infrastructure Services	92240599	abdulsamad.vali@omantel.om
Mohammed Shah Nawaz	Senior Expert	Core Transport Design – CX / ATN / NE	99833020	Mohammad.Ahmed@omantel.om
Hatim Yousif Kambal	Senior Expert	Core Transport Design – SDH / DWDM	99196709	Hatim.Kambal@omantel.om
Sultan Ramadhan Marzooq	Manager	Dhofar Maintenance	99495525	Sultan.marzooq@omantel.om
Adil Mohammed Al Amri	TL	Dhofar Mobile	99485151	Adil.amri@omantel.om
Salim Alhadhrami	Manager	Access Transport Design – PMP/ mw	92810040	salim.m.hadhrami@omantel.om

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**10.5 Khareef Success Criteria**

Criteria	Passed	Conditionally Passed	Failed	Comment
Overall preparation check				
Network Operation and NPO Readiness				
Situation room readiness				
Site access, spare support, EM readiness				
Top risks readiness				
Escalation and SMS format				
House keeping/ Extensive health check				
Backup availability				
Tools, Documentation and Binders				
Vendor preparation				

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**10.6 Dry Run Reviewed**

Description	War Room	FO	FM / Access / Spare part	3PP Support	Documents and Tools	Handling Time
Moving surveillance from Omantel to Ericsson office						
BSC Overload						
RNC Overload						
Core (MSS/MGW) Overload						
BSC / RNC having HW faulty						
Hub-site down due to power outage						
Transmission outage on Hub / VIP sites						
High traffic scenario where HR utilization and dedicated SDCCH implementation required						



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10.7      2G Health Check



10.8      3G Health Check



10.9      ENobeB Health Check



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