

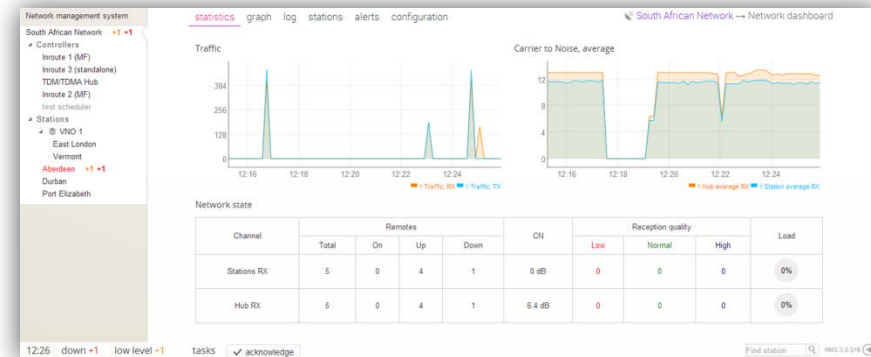
## UHP NMS 3.1

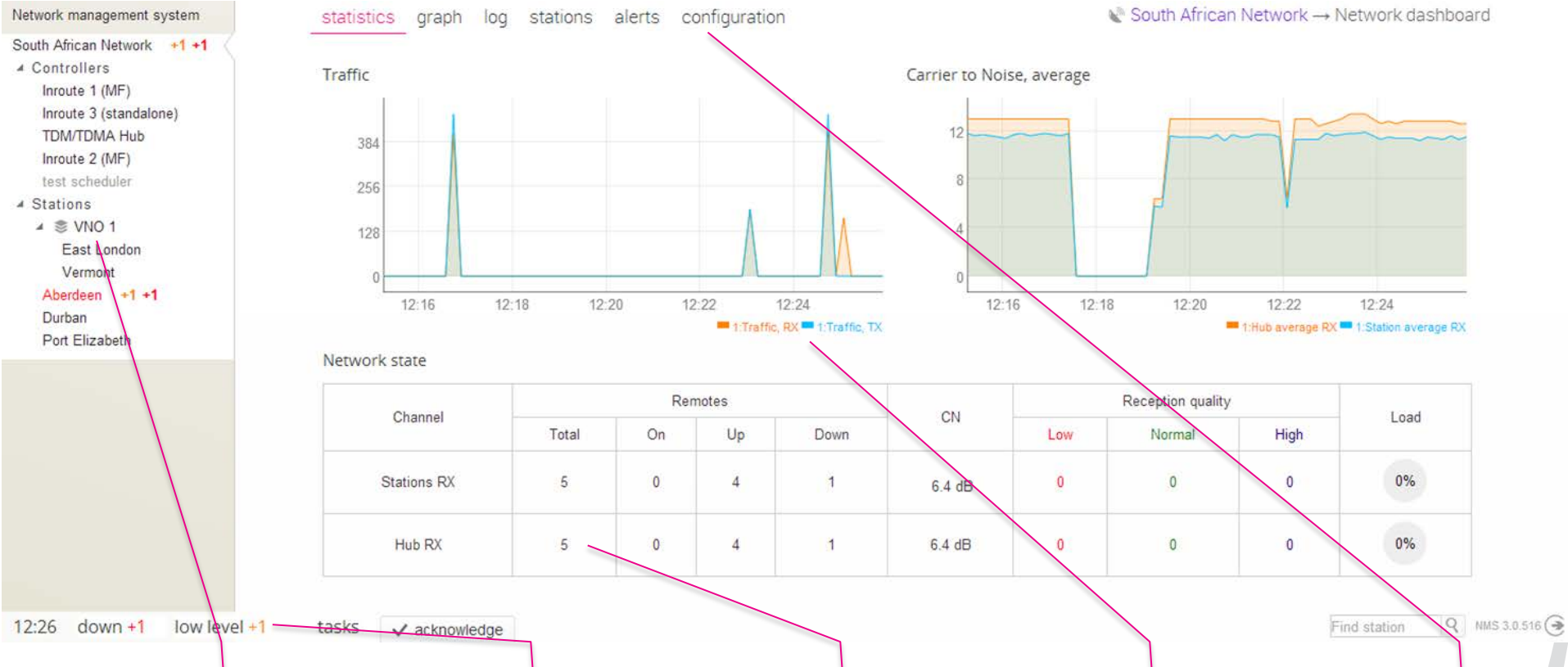
NETWORK MANAGEMENT SYSTEM  
FOR UHP VSAT PLATFORM



# UHP Network Management System v3.1

- **Enhanced Graphical Interface**
  - web-based, multiuser, multi-language
- **Comprehensive dash-board**
  - complete network overview just in one screen
- **Multi-Hub management**
  - combine all your networks in a single NMS
- **Virtual Network Operator**
  - share you network and NMS with multiple VNO
- **Ideal for any size Networks**
  - from simple SCPC link and up to multi-hub network
- **Advanced statistics and analysis**
  - exhaustive data for network troubleshooting
- **Works with all UHP modes of operation**
  - SCPC, TDM/TDMA, Hubless TDMA
- **Customized reports and graphics**
  - export network statistics for further analysis





Single tool for multiple networks, VNO support

Customized, dynamic events groups with smart prioritization

Quick overview of network performance

User-scalable, customized graphs

Easy and intuitive navigation

**UHP NMS: Comprehensive dash-board**

Network management system

South African Network +3 +3

Controllers

Inroute 1 (MF)

Inroute 3 (standalone)

TDM/TDMA Hub

Inroute 2 (MF)

test scheduler

Stations

VNO 1 +1 +2

East London +1 +1

Vermont +1

Aberdeen +1 +1

Durban +1 +1

Port Elizabeth +1 +1

statistics

alerts

configuration

South African Network → All stations

Short

State

RF details

All

Local

#	Name	RX controller	TX controller	Faults	Hub level,dB	Remote level, dB	TX, kbps	RX, kbps	Updated
3	Aberdeen	TDM/TDMA Hub	TDM/TDMA Hub		13.0	10.5			04 Mar 17:01
4	Durban	TDM/TDMA Hub	TDM/TDMA Hub		13.0	12.1			04 Mar 17:01
8	Port Elizabeth	Inroute 3 (standalone)	TDM/TDMA Hub		12.4	11.9			04 Mar 17:01
6	East London	TDM/TDMA Hub	TDM/TDMA Hub		11.0	10.8			04 Mar 17:01
5	Vermont	TDM/TDMA Hub	TDM/TDMA Hub		14.6	11.9			04 Mar 17:01

Clear

Add station

Quick overview of stations

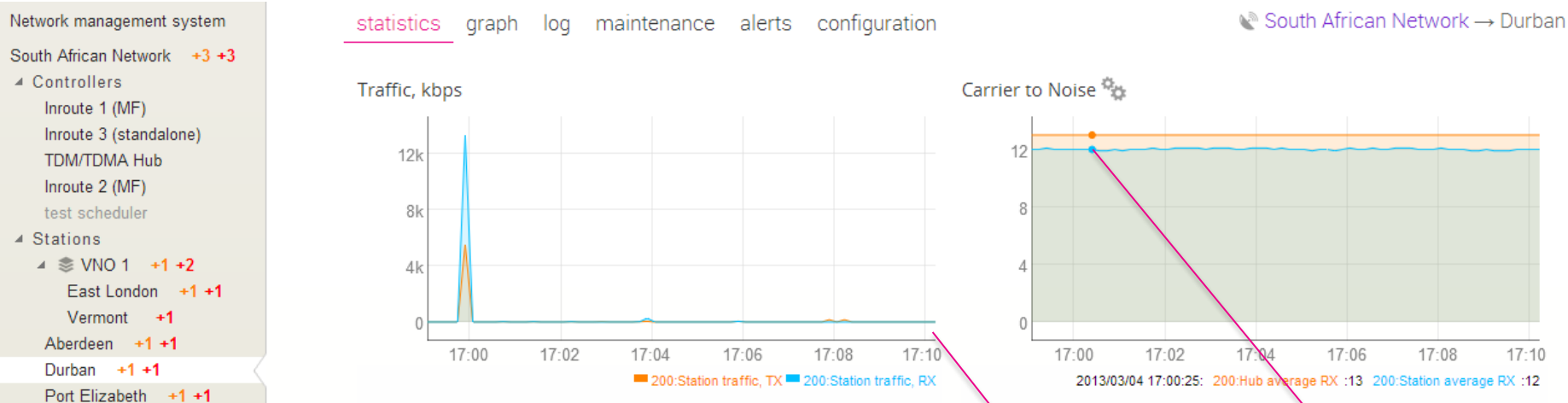
Different views

Recent faults

Actual RF performance

Actual throughputs

# UHP NMS: Network Stations overview



Last events  
with time  
stamp

Actual state  
and  
performance

List of active  
alerts

User-scalable  
graphs of  
performance

Smart graph  
pointer tool

UHP NMS: Station status monitor

South African Network +3 +3

Controllers

Inroute 1 (MF)

Inroute 3 (standalone)

TDM/TDMA Hub

Inroute 2 (MF)

test scheduler

Stations

VNO 1 +1 +2

East London +1 +1

Vermont +1

Aberdeen +1 +1

Durban +1 +1

Port Elizabeth +1 +1

ShortStateRF details

NewCurrentHistory

Clear all

Down

#	Name	First in	Last out	Flaps	Duration	Last clear
3	Aberdeen	28 Feb 17:30	04 Mar 15:12	168	34 m	28 Feb 15:02
4	Durban	28 Feb 17:30	04 Mar 15:12	11	160 s	28 Feb 15:02
6	East London	28 Feb 17:25	04 Mar 15:12	6	285 s	28 Feb 15:02
8	Port Elizabeth	28 Feb 17:28	04 Mar 15:12	4	165 s	28 Feb 15:02
5	Vermont	28 Feb 17:25	04 Mar 15:12	7	5 m	28 Feb 15:02

Clear

Low level

#	Name	First in	Last out	Flaps	Duration	Last clear
3	Aberdeen	04 Mar 10:32	04 Mar 13:25	61	-	-
4	Durban	-	-	1	-	-
6	East London	-	-	1	-	28 Feb 15:02
8	Port Elizabeth	-	-	2	-	28 Feb 17:29

Clear

Up

#	Name	First in	Last out	Flaps	Duration	Last clear
3	Aberdeen	-	-	168	4 d	28 Feb 15:02
4	Durban	-	-	11	4 d	28 Feb 15:02
6	East London	-	-	6	4 d	28 Feb 15:02
8	Port Elizabeth	-	-	4	4 d	28 Feb 15:02
5	Vermont	-	-	7	4 d	28 Feb 15:02

Clear

Detailed information for analysis and troubleshooting

Selective events clearance

Easy to correlate alerts groups

Network management system

South African Network

- Controllers
  - Inroute 1 (MF)
  - Inroute 3 (standalone)
  - TDM/TDMA Hub
  - Inroute 2 (MF)
  - test scheduler
- Stations
  - VNO 1
    - East London
    - Vermont
    - Aberdeen
    - Durban
    - Port Elizabeth

back to monitoring settings routing

Basic settings RF setup Site setup IP protocols

DVB mode

Mode ☐ DVB-S1 ☒ DVB-S2

TDM Rx

Frequency (kHz)  950 000 - 2 050 000 kHz or target frequency if local oscillator enabled

Symbol rate (kSps)  DVB-S1: 250-34000 (240-54000 kbps); DVB-S2: 550-32000 (530-86000 kbps)

TDM Tx

Frequency (kHz)  950 000 - 2 050 000 kHz or target frequency if local oscillator enabled

Symbol rate (kSps)  DVB-S1: 250-34000 (240-54000 kbps); DVB-S2: 550-32000 (530-86000 kbps)

FEC  DVB-S2 Forward Error Correction algorithm

Modulator mode ☐ CCM ☐ ACM-LF ☒ ACM-SF

ACM Settings

☒ Enable ACM Adaptive Coding and Modulation

ACM FEC2  DVB-S2

Streamlined network configuration tool

Access to any network settings

Validation of input values and useful drop-down lists

Context help for every parameter with valid ranges

User-friendly configurator of IP routes

## UHP NMS: Network Configuration

South African Network

↳ Controllers

Inroute 1 (MF)

Inroute 3 (standalone)

TDM/TDMA Hub

Inroute 2 (MF)

test scheduler

↳ Stations

↳ VNO 1

East London

Vermont

Aberdeen

Durban

Port Elizabeth

Timetable ⚙

Map Timetable Add reservation Hour Day Two days Week Month &lt;&lt; &gt;&gt;

New reservation

Comment

SNG Live HD

Start

02/28/2013 20:00

End

02/28/2013 21:00

Action on start

Switch off

Station1(Saxony)\_profile0

Switch on

Station1(Saxony)\_profile1

Switch on

SCPC\_channel\_1

Add another action

Add reservation

Action on end

Switch off

SCPC\_channel\_1

Switch off

Station1(Saxony)\_profile1

Switch on

Station1(Saxony)\_profile0

Add another action

Allocation



Channels,  
throughput  
and/or modes  
of operation  
on-schedule

Customized  
network  
configuration  
actions

Visual  
interface to  
scheduled  
actions

### Applications:

- SCPC and TDMA DSNG
- Day/night network adjustments
- Support of videoconferencing
- Flexible network throughput

# UHP NMS: Scheduler



# UHP NMS: SPECIFICATIONS



## SERVER

<b>Hardware</b>	Rack-mountable 1U, Intel 2.6 GHz, 3GB RAM, 200GB/SATA (higher on demand)
<b>Operating System</b>	Linux
<b>Network Interface</b>	4 Fast Ethernet/Gigabit Ethernet

## NETWORK

<b>Supported UHP networks</b>	TDM/TDMA, TDM/TDMA MESH, Hubless TDMA
<b>Multi-Hub operations</b>	Up to 25 Hubs
<b>Virtual Network Operators</b>	Up to 25 VNOs per each hierarchy level
<b>Statistics database disc usage</b>	20 Mbytes/year/terminal
<b>Statistics gathering interval</b>	From 10 seconds (1 minute default)

## ORDER CODE / MODIFICATIONS

<b>UHP-NMS-BASE</b>	UHP NMS 3.X Server Basic: Support for one network
<b>UHP-NMS-VNO</b>	UHP NMS 3.X Server VNO: Support for multiple networks and VNO