Technology and Equipment Update

Jacques Botha
AFRICON

Presentation

- Technology and Equipment Update:
  - *Disaster Management Planning*
  - *New Developments in AFRICON's Emergency & Disaster Management Planning system*
  - *Disaster Management Centre*

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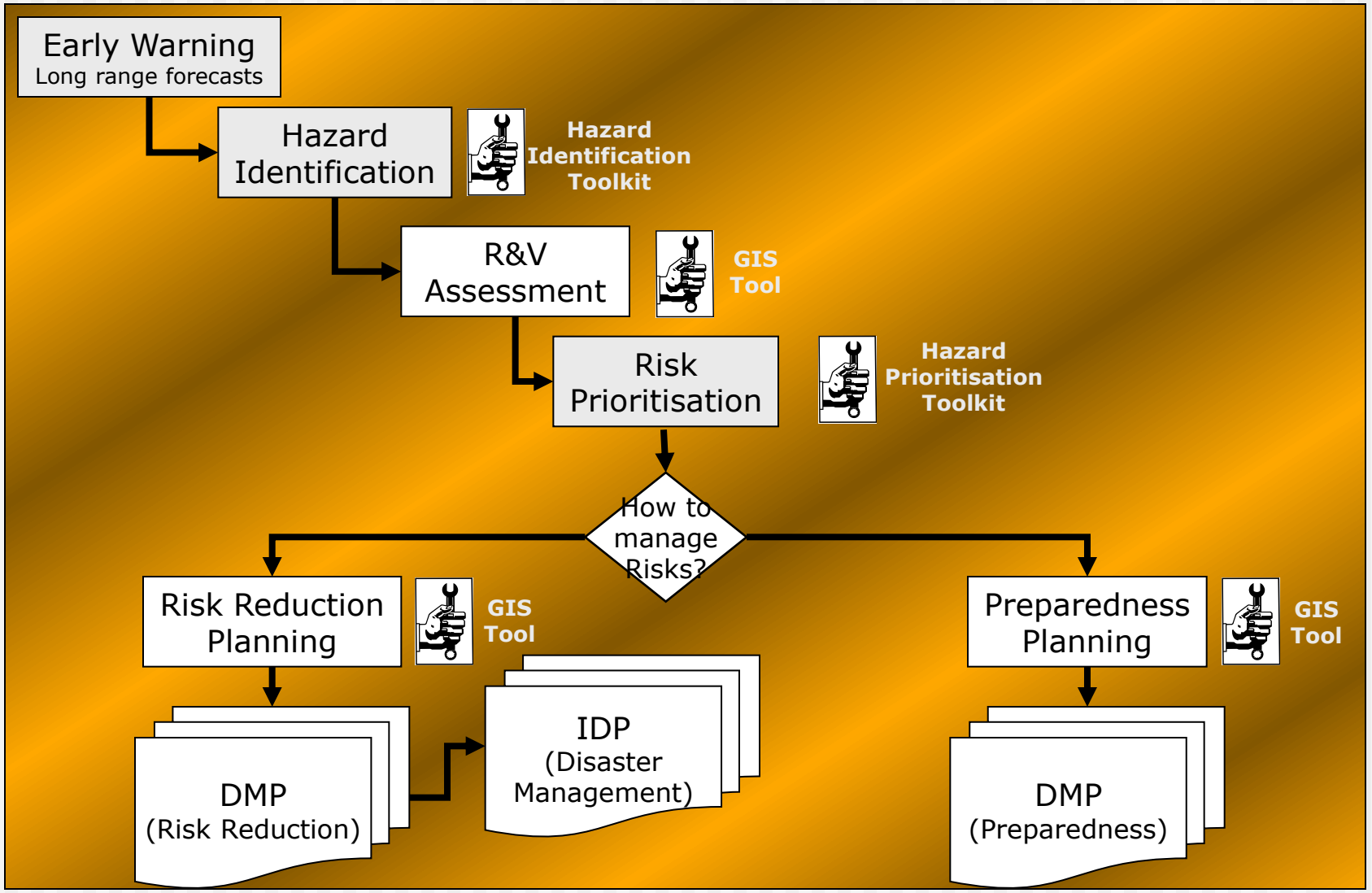
Annual Disaster Management Planning Cycle at Local & District Level



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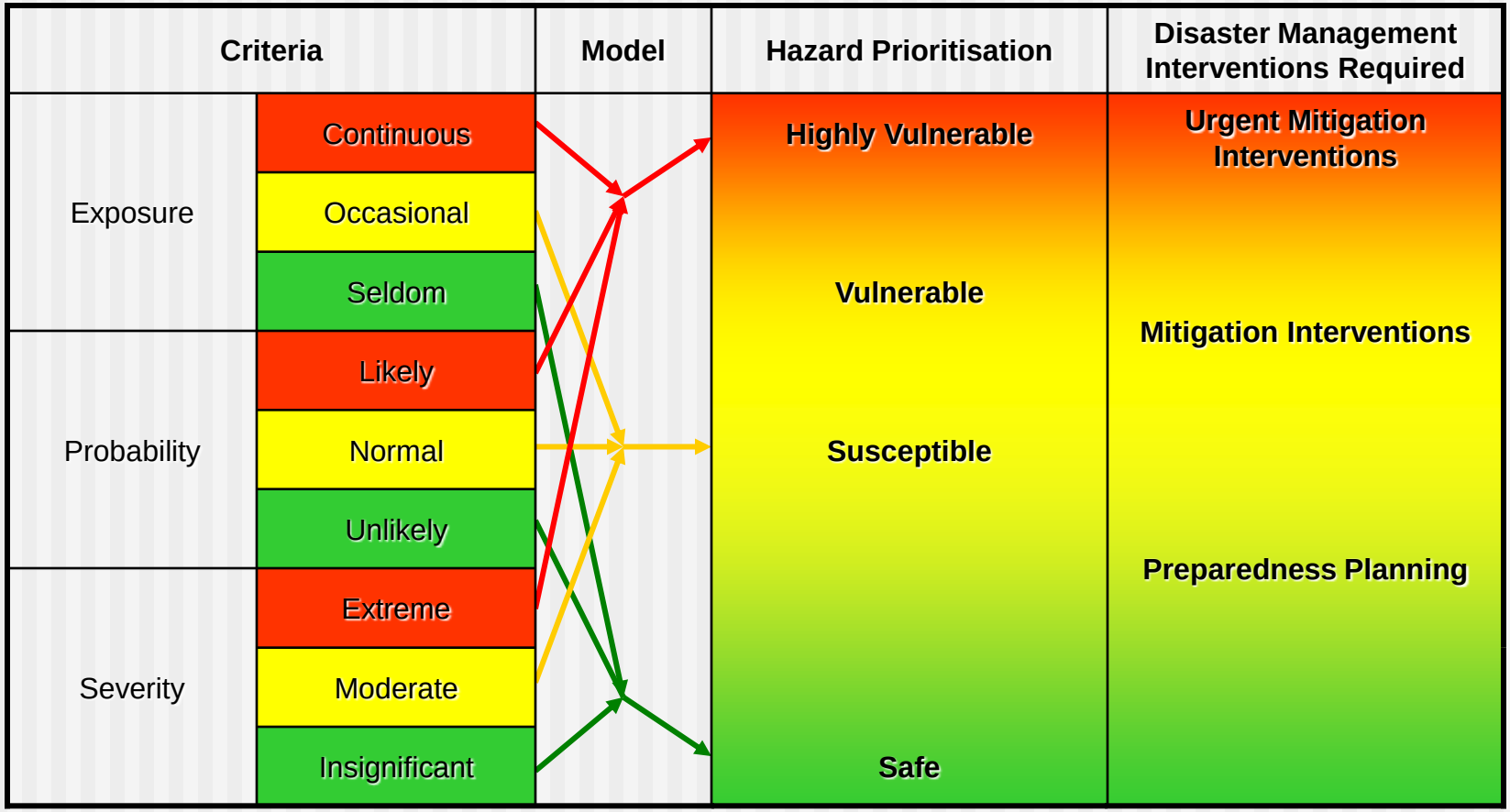
Risk Prioritisation Tool



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Risk Prioritisation Example

Risks	Exposure	Probability	Severity	Hazard Prioritisation	Disaster Management Planning Required
Food Security	Continuous (5/5)	Likely (5/5)	Moderate (3/5)	Somewhat Vulnerable (75/125)	Urgent Mitigation Planning
Veld Fires	Occasional (3/5)	Normal (3/5)	Extreme (4/5)	Susceptible (36/125)	Mitigation & Preparedness Planning
Flooding	Seldom (2/5)	Unlikely (2/5)	Moderate (3/5)	Low Susceptibility (12/125)	Preparedness Planning
Landslides	Seldom (2/5)	Unlikely (2/5)	Moderate (3/5)	Low Susceptibility (12/125)	Preparedness Planning

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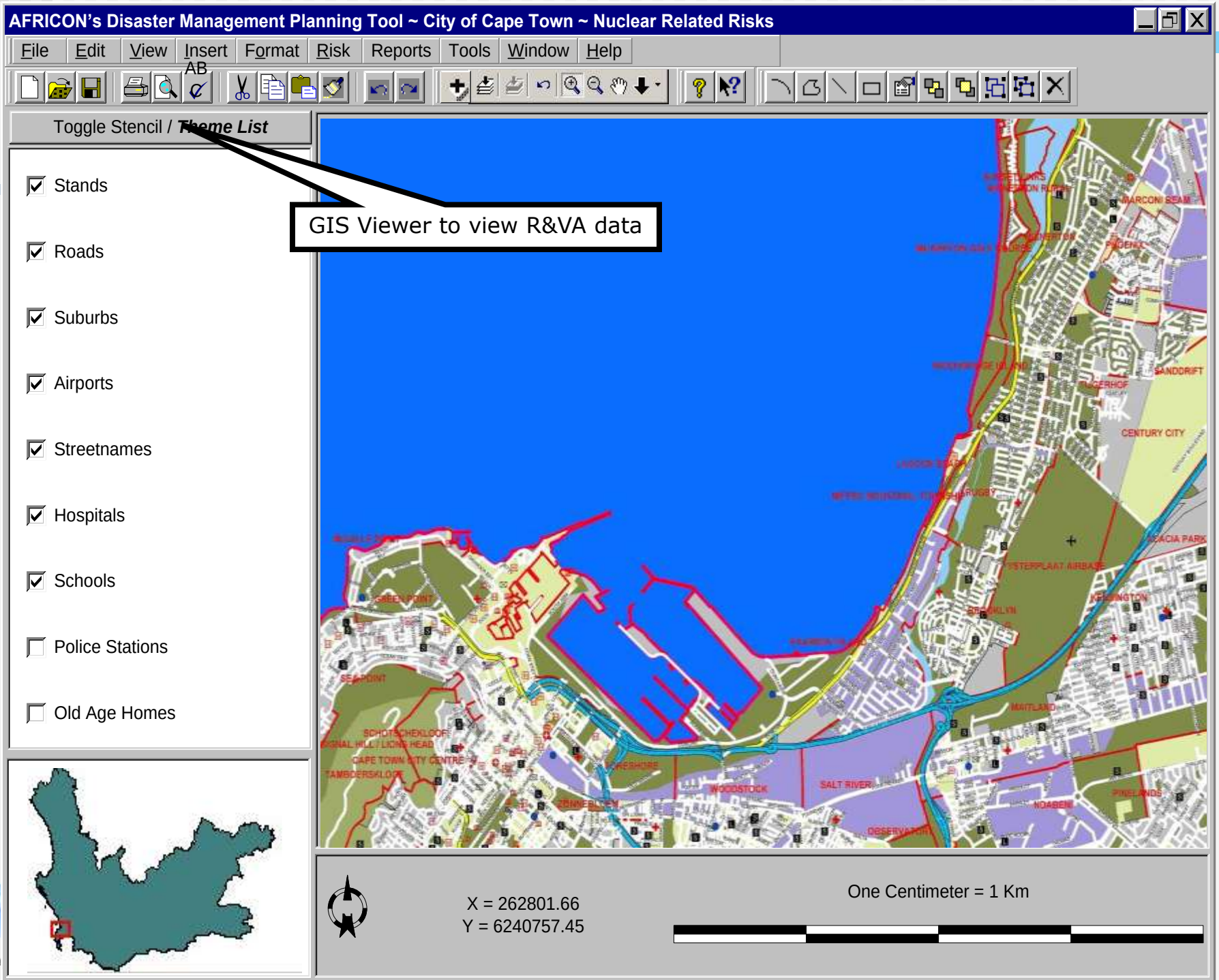

AFRICON's Disaster Management Planning Tool ~ City of Cape Town ~ Nuclear Related Risks
File
Edit
View
Insert
Format
Risk
Reports
Tools
Window
Help
Toggle Stencil / Theme List
GIS Viewer to view R&VA data
Stands
Roads
Suburbs
Airports
Streetnames
Hospitals
Schools
Police Stations
Old Age Homes
X = 262801.66
Y = 6240757.45
One Centimeter = 1 Km

AFRICON's Disaster Management Planning Tool ~ City of Cape Town ~ Nuclear Related Risks

File | Edit | View | Insert | Format | Risk | Reports | Tools | Window | Help

Reduction ▶
Management ▶

Hazards to Address
List of Actions to be Planned
Resource Requirements

Toggle ***Stencil*** / Theme List

- Medical Response Unit
- Police Response Unit
- Hazmat Response Unit
- Fire Response Unit
- Temporary Housing
- Radio Active Material
- Road Blocks
- Parking Area

2 User defines which HAZARD he / she wants to address

3 User defines what ***Actions Steps*** is relevant

1 User selects Risk Reduction or Risk Management Plans

List of Actions to be Planned

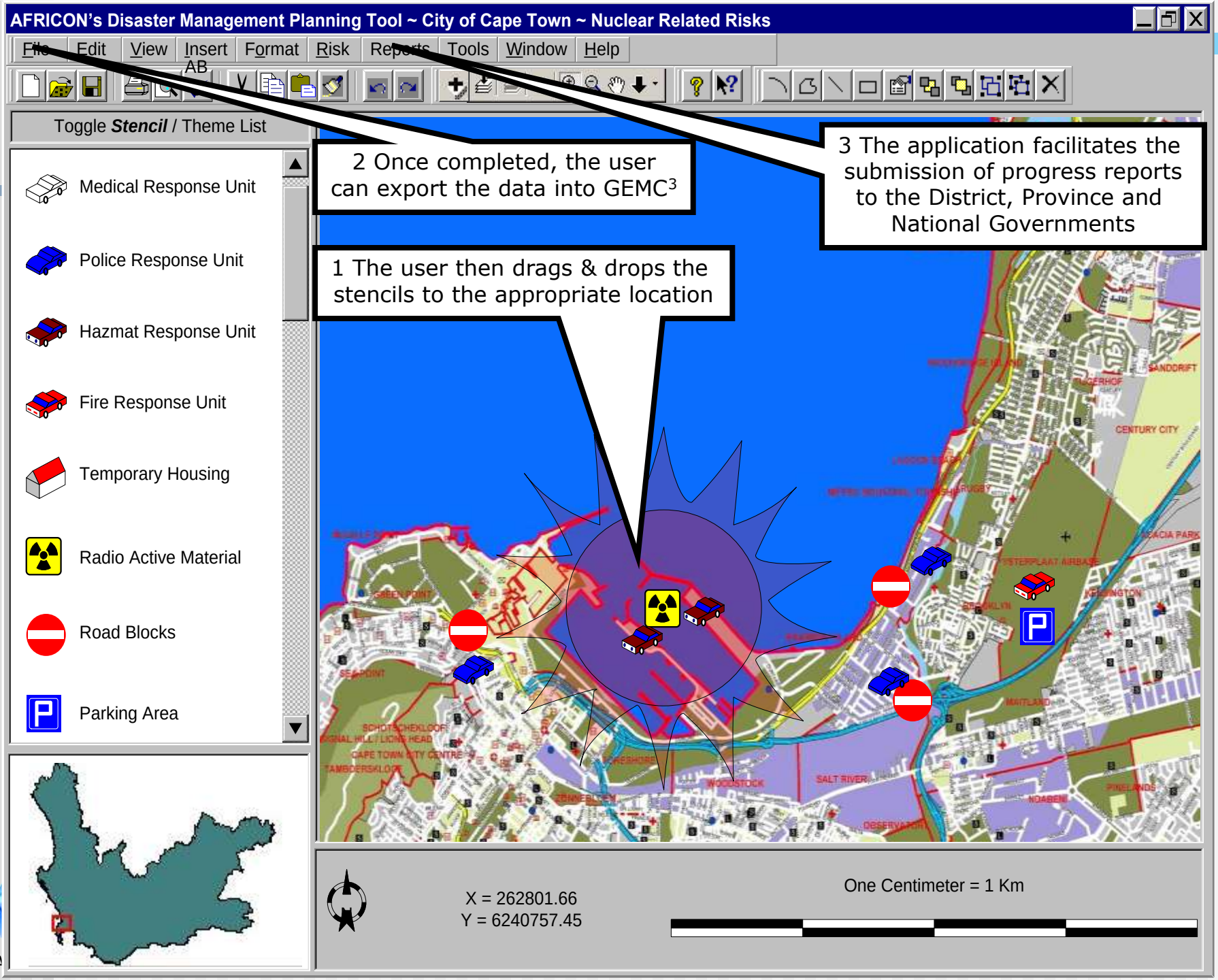
Action Step	Description	Primary Role Player	Secondary Role Player
☑ 1	Activate Disaster Management Centre	District Disaster Manager	N/A
☑ 2	Inform Media	Liaison Officer	N/A
☑ 3	Mobilize Ambulance Services	Duty Officer ~ EMS	N/A
☑ 4	Inform Hospitals	Hospital Liaison Officer	N/A
☐ 5	Mobilize SAPS	N/A	N/A
☑ 6	Mobilize Traffic Police	Duty Officer ~ City Police	N/A
☑ 7	Establish Road Blocks	Duty Officer ~ City Police	N/A

4 As the ***Action Steps*** is selected certain Stencils are made available

X = 262801.66
Y = 6240757.45

One Centimeter = 1 Km

© A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Toggle Stencil / Theme List
Medical Response Unit
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Hazmat Response Unit
Fire Response Unit
Temporary Housing
Radio Active Material
Road Blocks
Parking Area
2 Once completed, the user can export the data into GEMC3
3 The application facilitates the submission of progress reports to the District, Province and National Governments
1 The user then drags & drops the stencils to the appropriate location
X = 262801.66
Y = 6240757.45
One Centimeter = 1 Km

Presentation

- Technology and Equipment Update:
  - *Disaster Management Planning*
  - *New Developments in AFRICON's Emergency & Disaster Management Planning system*
  - *Disaster Management Centre*

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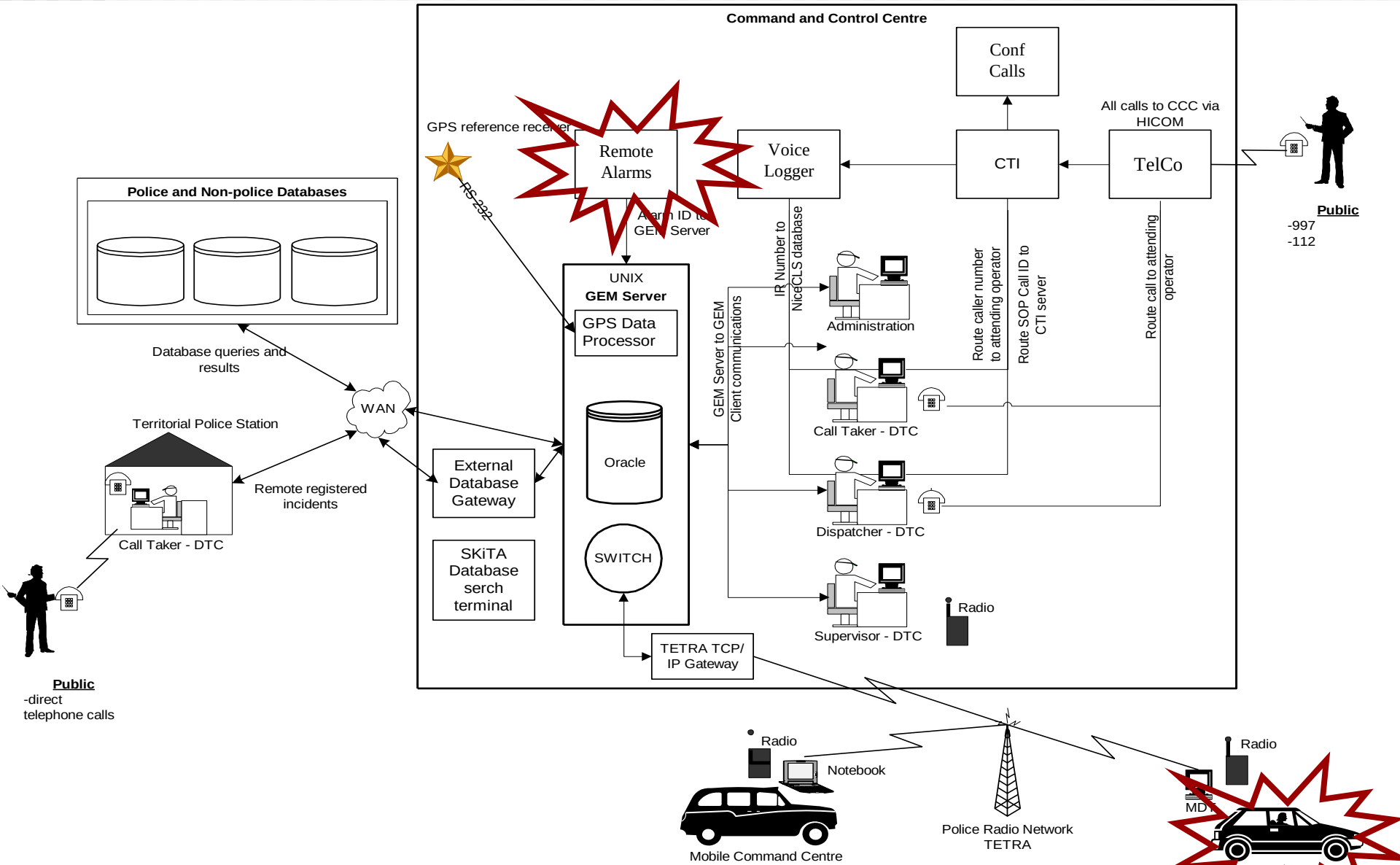
Typical GEMC³ Configuration



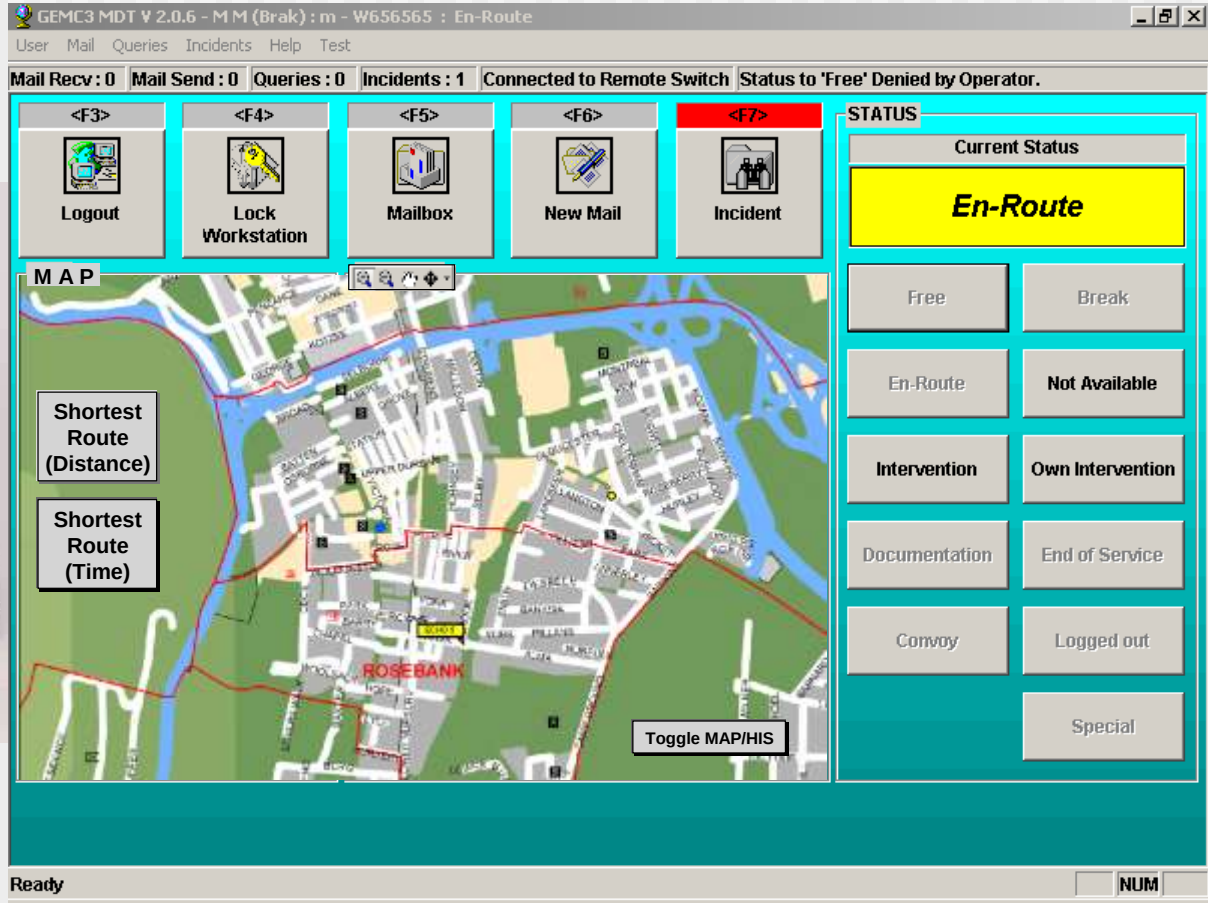
GEMC³ and Mobile Units
In Vehicle

Vehicle

Motorola TETRA Radio

Motorola TETRA MDT

On MDT



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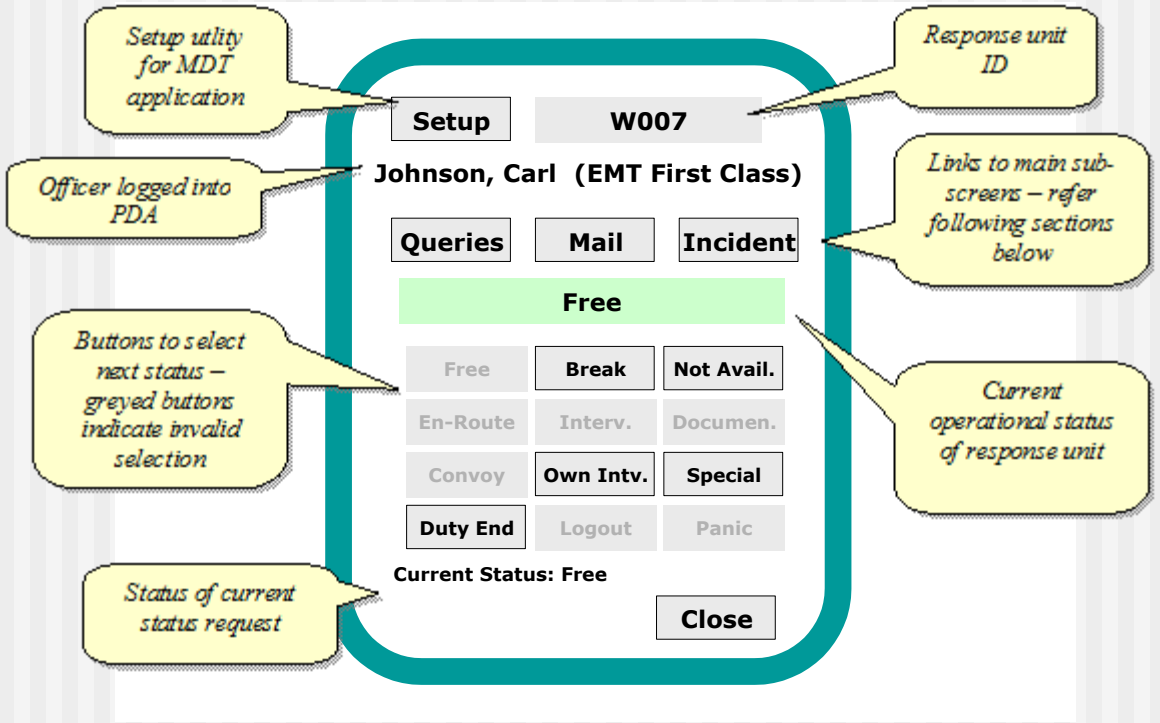
GEMC³ and Mobile Units
On Foot

Foot Patrol

On PPC



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GEMC³ and Mobile Units
On Foot

Foot Patrol

On PPC

IR Number	20031112123
Type	A1 - MVA
Description	Head-on collision
Priority	1
Address	Battery Street 222
Apartment	32
City	Cape Town
Caller Lastn.	Phillips
Patrols	W001, W003
Time sent	2003-11-10 12:03

Close

Incident detail fields

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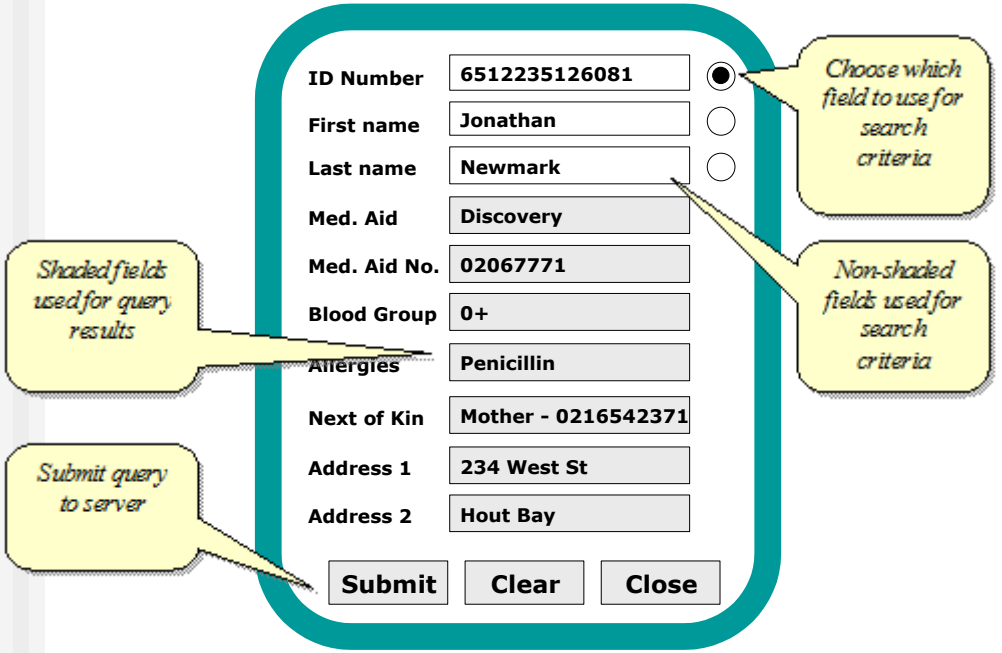
GEMC³ and Mobile Units
On Foot

Foot Patrol

On PPC



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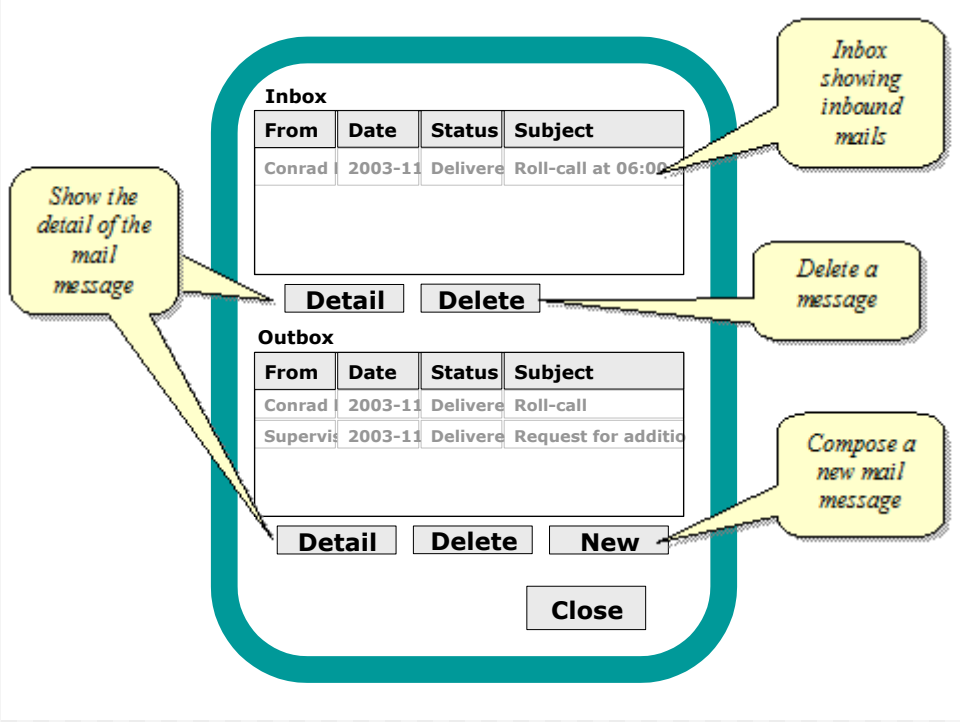
GEMC³ and Mobile Units
On Foot

Foot Patrol

On PPC



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GEMC³ and "Remote Alarms"
On Foot

- AFRICON, in conjunction with the PGWC, is currently negotiating with the SAWS to get information re weather and extreme weather:
  - *Previous 24hr rainfall patterns*
  - *Forecasted weather for the day (rainfall, wind, temperature, FDI's, etc.)*
  - *Actual wind speeds, wind direction, rainfall on 3-hourly intervals*

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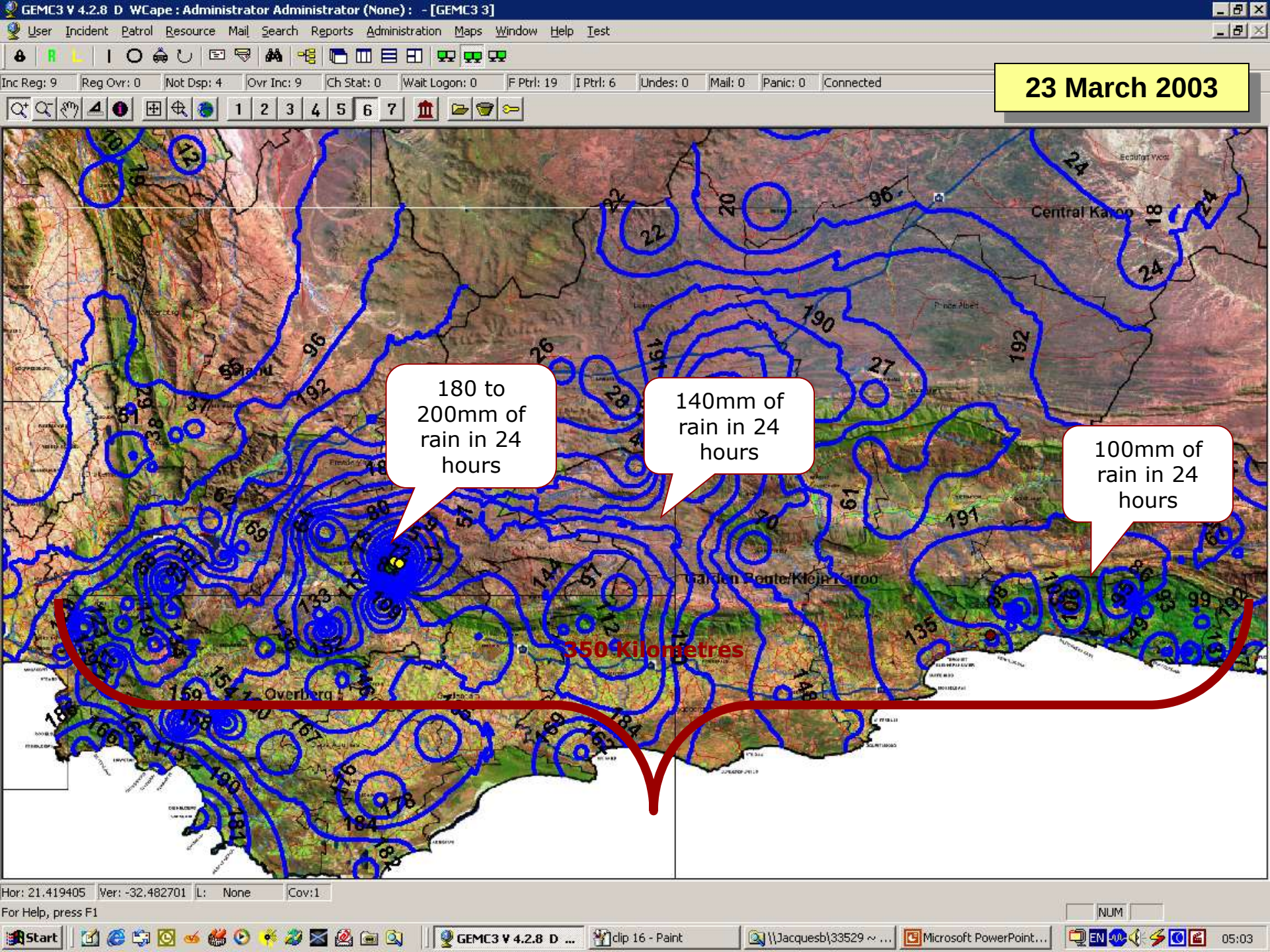
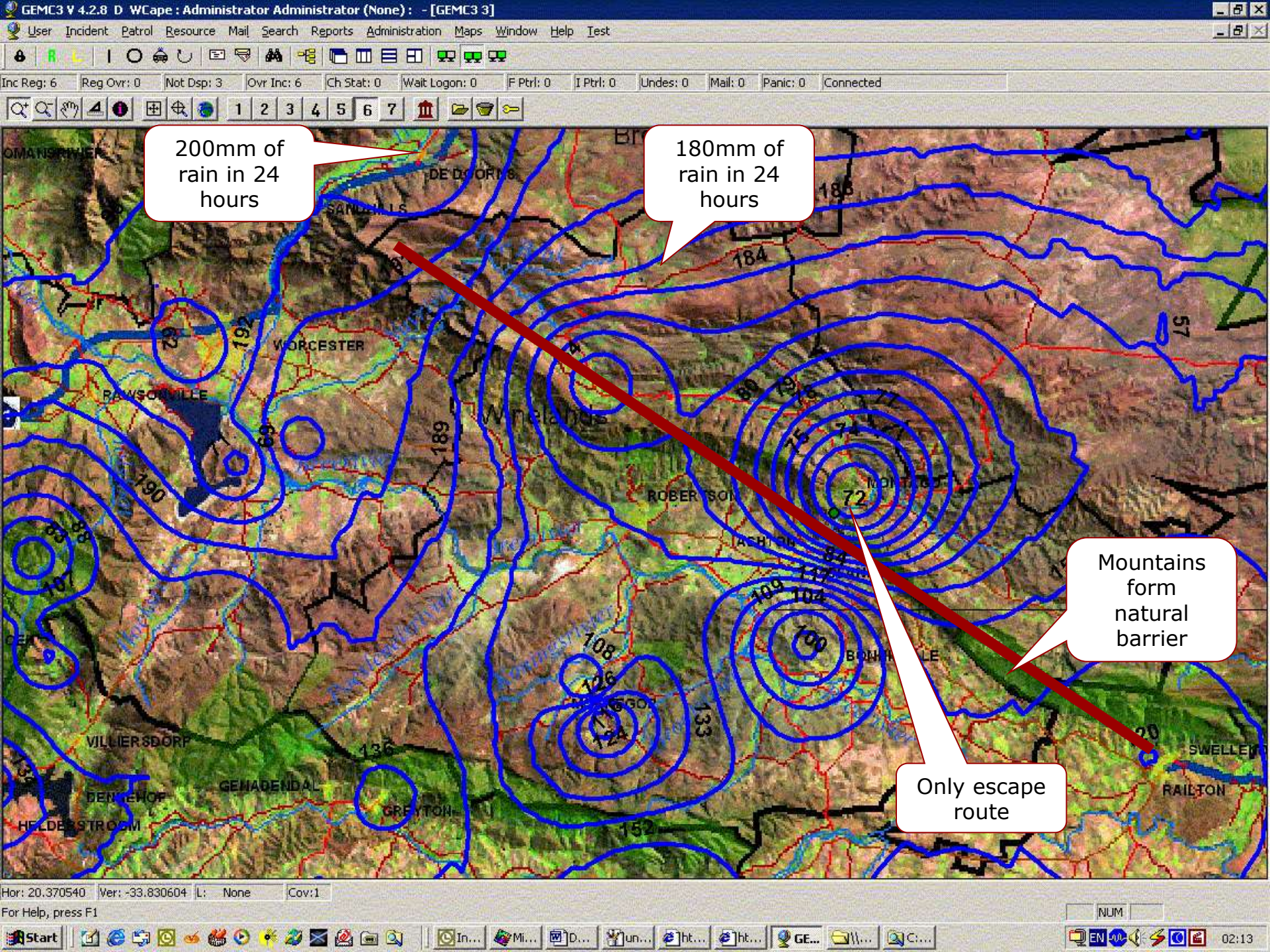

GEMC3 V 4.2.8 D WCape : Administrator Administrator (None) : - [GEMC3 3]
User Incident Patrol Resource Mail Search Reports Administration Maps Window Help Test
Inc Reg: 9 Reg Ovr: 0 Not Dsp: 4 Ovr Inc: 9 Ch Stat: 0 Wait Logon: 0 F Ptrl: 19 I Ptrl: 6 Undes: 0 Mail: 0 Panic: 0 Connected
23 March 2003
1 2 3 4 5 6 7
180 to 200mm of rain in 24 hours
140mm of rain in 24 hours
100mm of rain in 24 hours
350 Kilometres
Central Karoo
Overberg
Hor: 21.419405 Ver: -32.482701 L: None Cov:1
For Help, press F1
NUM
Start
GEMC3 V 4.2.8 D ...
clip 16 - Paint
\\Jacquesb\33529 ~ ...
Microsoft PowerPoint...
05:03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User Incident Patrol Resource Mail Search Reports Administration Maps Window Help Test
Inc Reg: 6 Reg Ovr: 0 Not Dsp: 3 Ovr Inc: 6 Ch Stat: 0 Wait Logon: 0 F Ptrl: 0 I Ptrl: 0 Undes: 0 Mail: 0 Panic: 0 Connected
200mm of rain in 24 hours
180mm of rain in 24 hours
Mountains form natural barrier
Only escape route
DE DOORNS
WORCESTER
RAWSONVILLE
ROBERTSON
VILLIERSDORP
GENADENDAL
GREYTON
RAILTON
Hor: 20.370540 Ver: -33.830604 L: None Cov:1
For Help, press F1
NUM
Start
02:13

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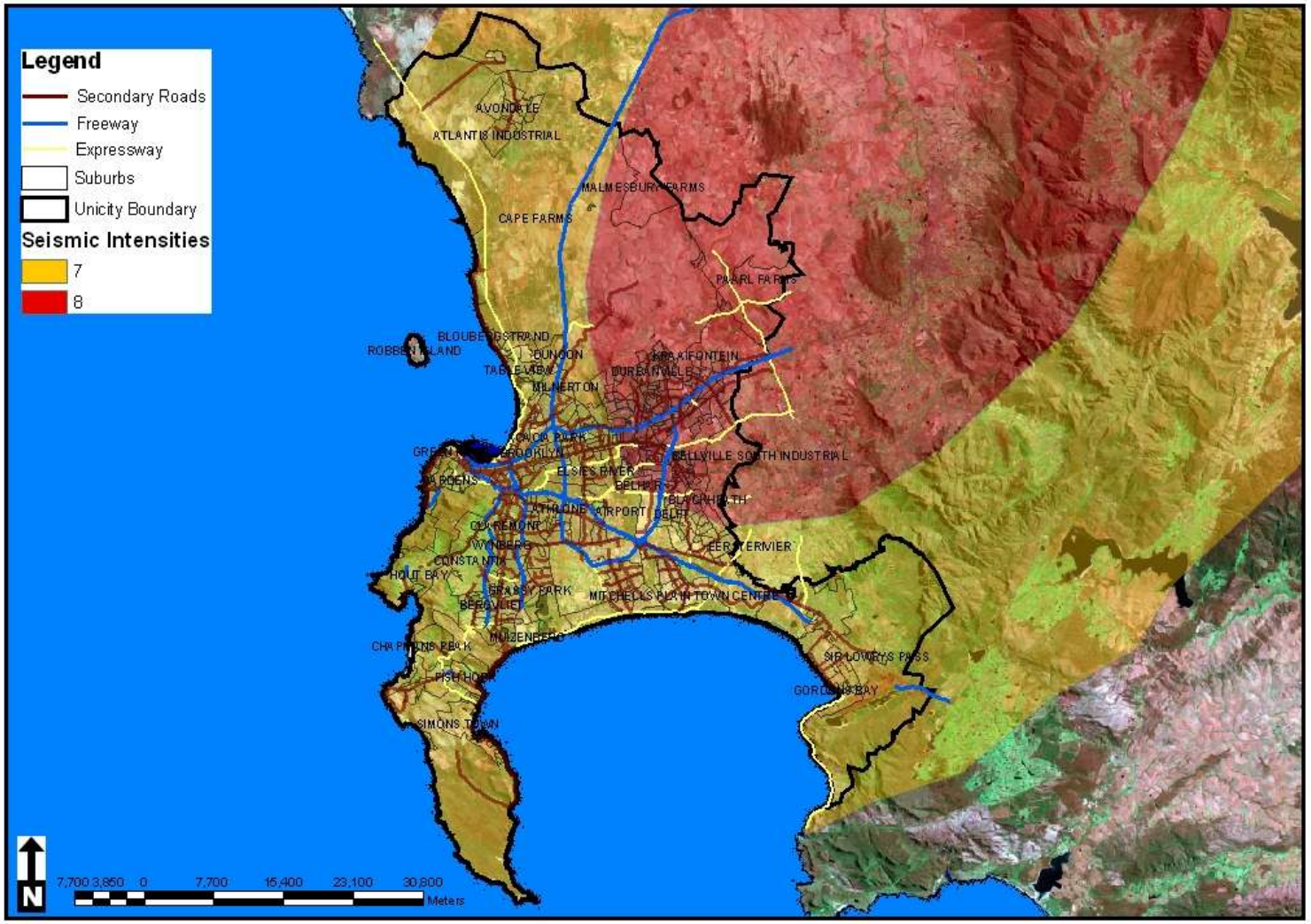
Seismic Active Area in Western Cape



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Technology in the Disaster Management Centre

- Satellite communication is essential:
  - *Data channel for IT systems communication*
  - *Voice communication*

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Thank you

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Internet: http://www.africon.com

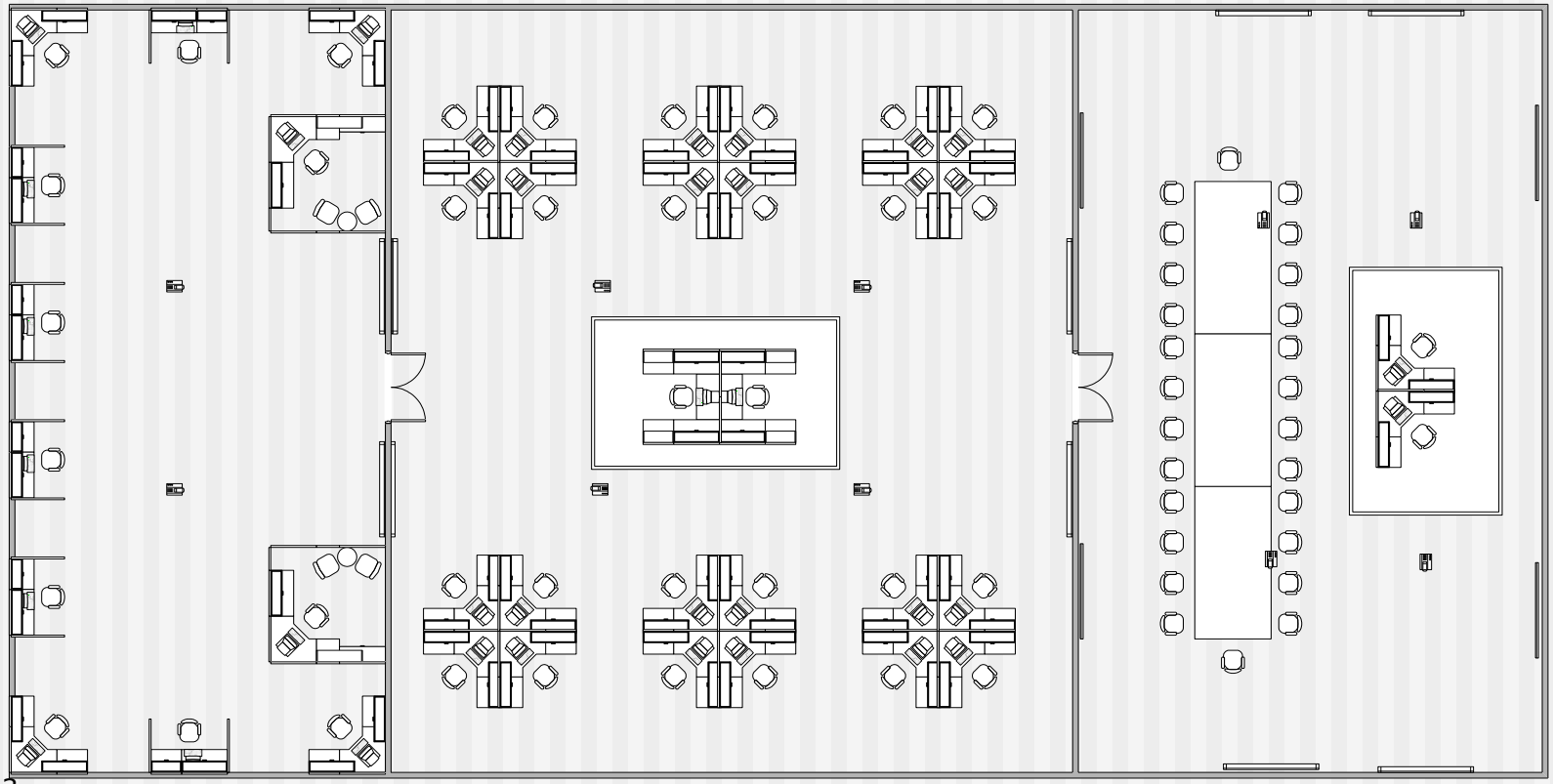
Envisaged PGWC DMC

Operational Incident Management (112)

Tactical Disaster Management

Line Function Management

Organisational Management



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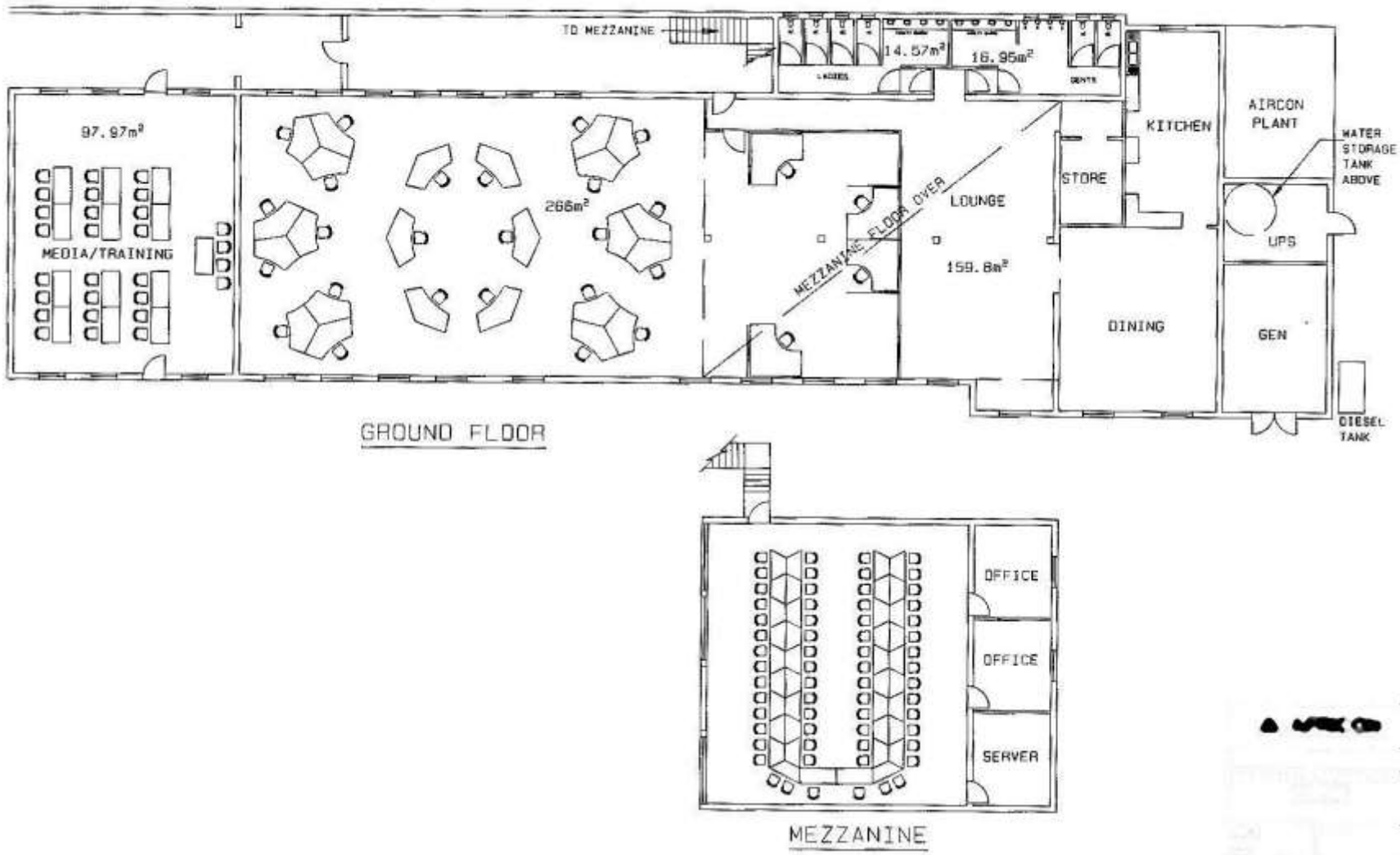
Envisaged PGWC DMC



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