

A decorative graphic on the left side of the slide, consisting of four overlapping circular frames. The top frame shows a city skyline at night with a prominent tower. The middle frame shows a white office telephone on a desk. The bottom frame shows a hand typing on a computer keyboard. The bottom-most frame shows a close-up of a hand typing on a keyboard with blue backlighting.

# Planning for a Crisis and Mitigating Risk

Carol A Allers  
Issues & Crisis Communication Manager  
Eskom

30 October 2013

## Facts & figures

Power lines: **373 280** KM



Nominal capacity: **41 919** MW



Customers: **5 million**



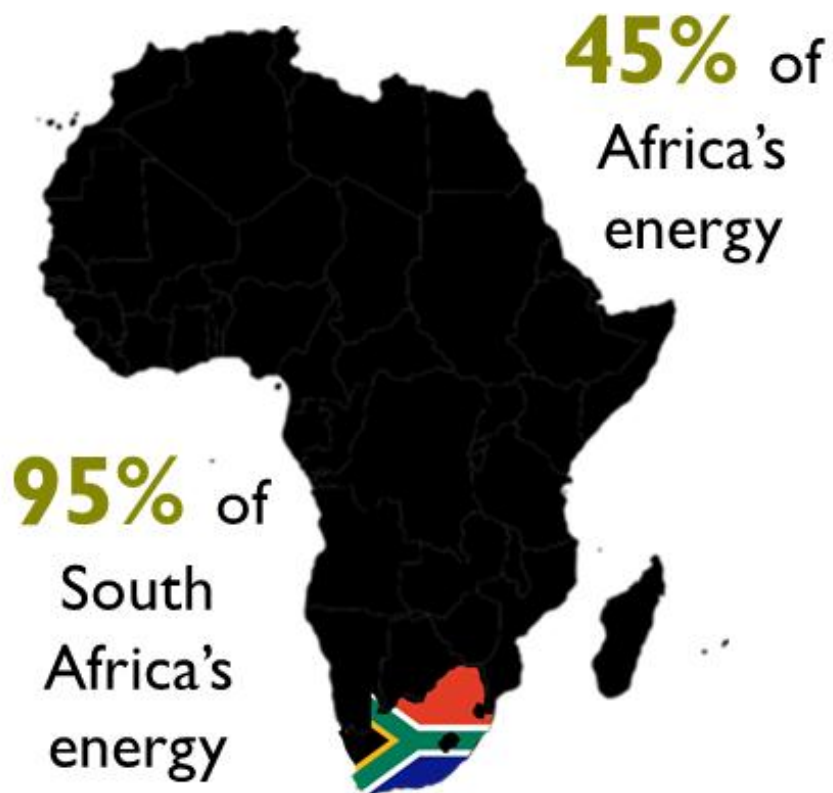
Power stations: **27**



Employees: **46 266**

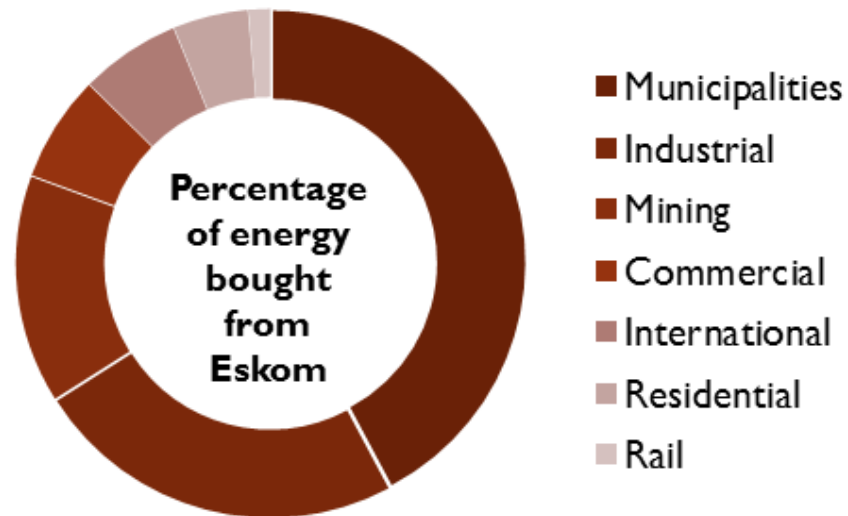


## Eskom in Africa



## Our customers

Over **40%** of power is sold to municipalities, who sell it to customers



Under **5%** goes straight to residential customers

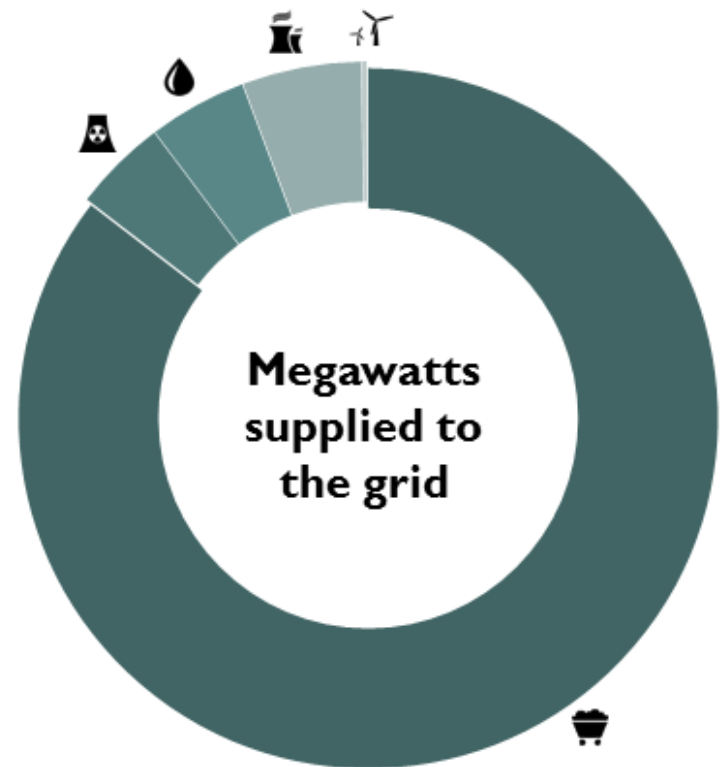
## Our energy mix

**85%** of South Africa's power comes from coal



Power station types:

- Coal Fired
- Nuclear
- Hydroelectric & Pumped Storage
- Gas Turbine
- Wind



## New Build projects

Eskom aims to **double** nominal capacity by 2026

**Medupi**



Coal fired  
power station

**4 764** MW

**Kusile**



Coal fired  
power station

**4 800** MW

**Sere**



Wind farm

**1 00** MW

**Ingula**



Pumped storage  
scheme

**1 332** MW

**Upington  
solar**



Concentrated  
solar power

**1 00** MW

## On-going GDP contribution



Impact stretching way beyond own company gates; e.g. country's largest coal and logistics buyer

**Advancing electrification**

## Economic stimulus through new build projects



New build programme is one of South Africa's largest economic stimuli, creating more than R250bn in GDP

**Creator of local employment**

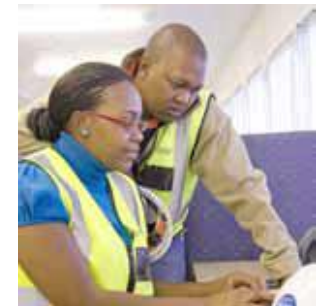
## Development of new industries in South Africa



Money strategically spent to nurture sustainable development of new industries in S.A.

**Social contribution**

## Fostering shared growth



Support for principles of New Growth Path  
Active role beyond South African borders in particular in the SADC region

**A top 20 utility in the world**

January 2008  
Load shedding



An electrical system collapse in South Africa, colloquially known as a **blackout**, would qualify as a major disaster

**Load shedding** is the last resort of any electrical utility before system collapse or blackout. Load shedding is a major crisis.....

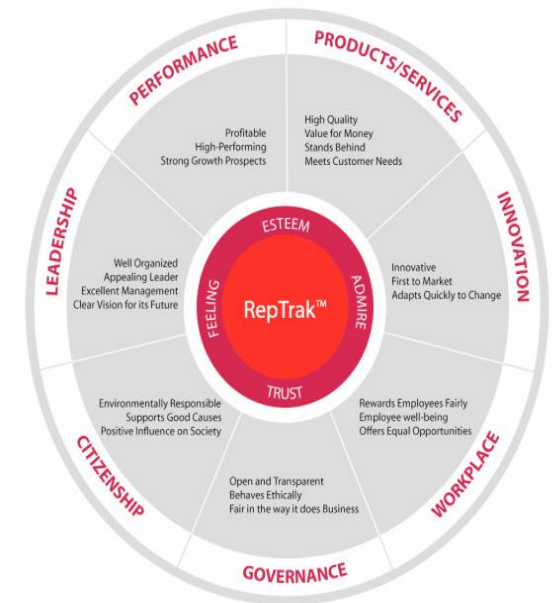
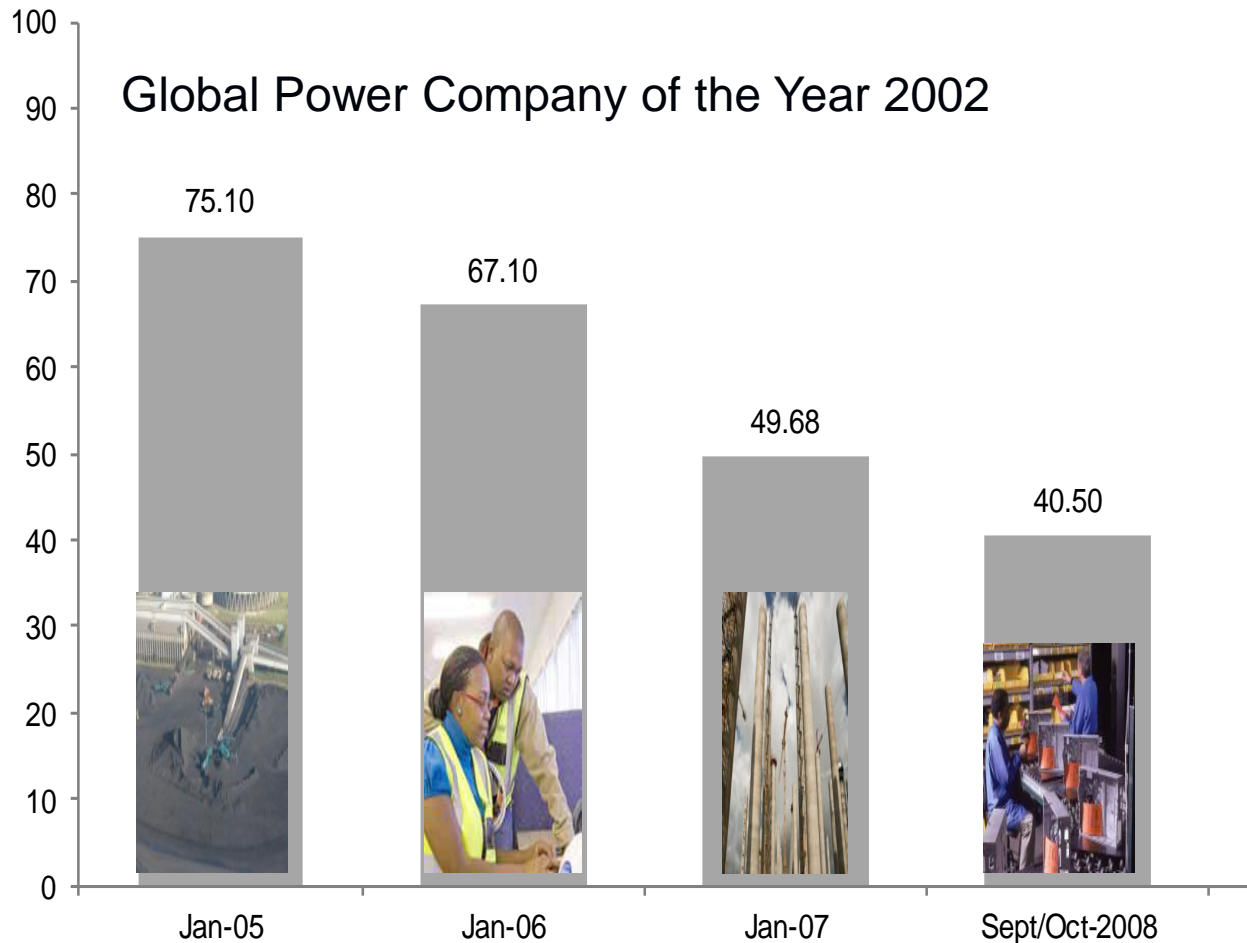
## January 2008 Load shedding

- Government Policy at the time was to increase competition in the market and bring in Independent Power Producers. Eskom received the **mandate to build new Power stations only in 2004.**
- **Insufficient capacity** to meet demand, limited **coal supply** and handling at power stations, **increase failures** on aged power stations, bad **weather conditions** in summer (wet coal)
- Starting January 18, rotational load shedding during the day for up to four hours
- Mines were asked to shut down for safety reasons
- Significant impact to **lifestyle**
- Significant impact to **economy**
- Significant impact to **Eskom's Reputation**

## RepTrak™ Pulse Scores

Eskom 2005-2011

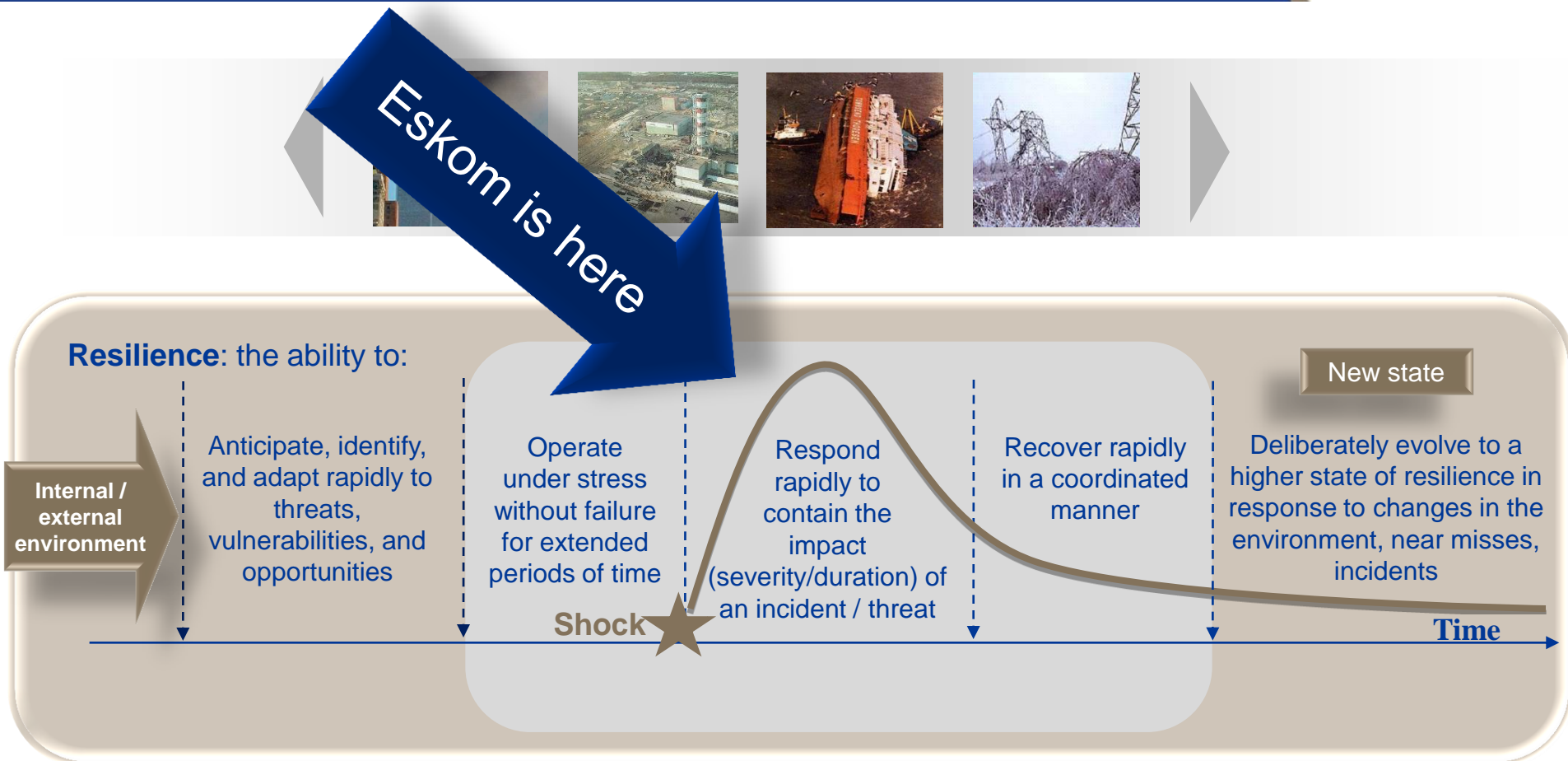
Global Power Company of the Year 2002





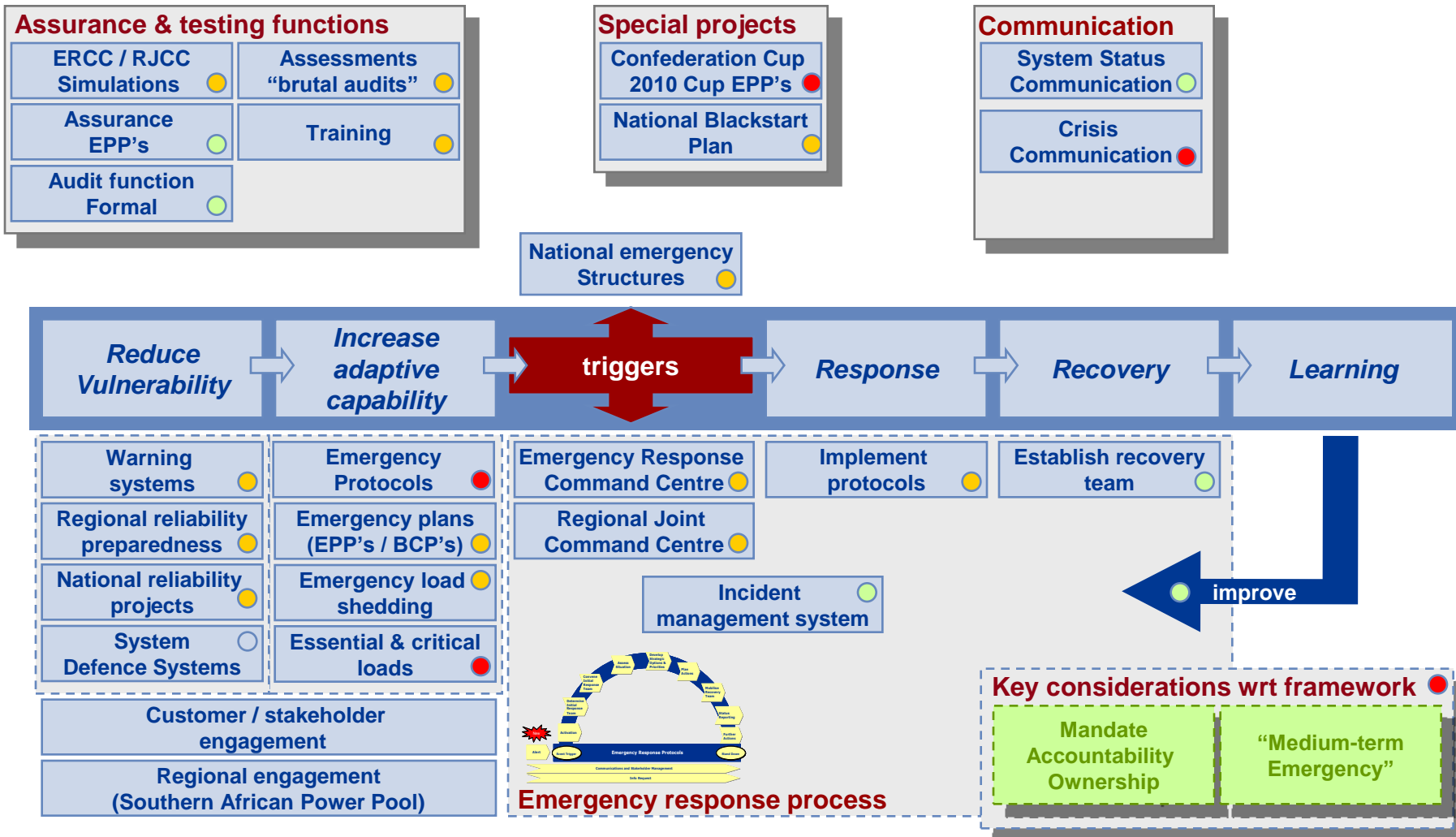
**No load shedding since  
April 2008**

# A Risk-intelligent and resilient organisation by March 2015



Structures and activities to proactively assess system vulnerabilities, to minimise, and to develop greater adaptive capacity in the face of a system that is being operated at its limits on many days of the year

# Emergency preparedness framework



# Emergency Structures & Protocols

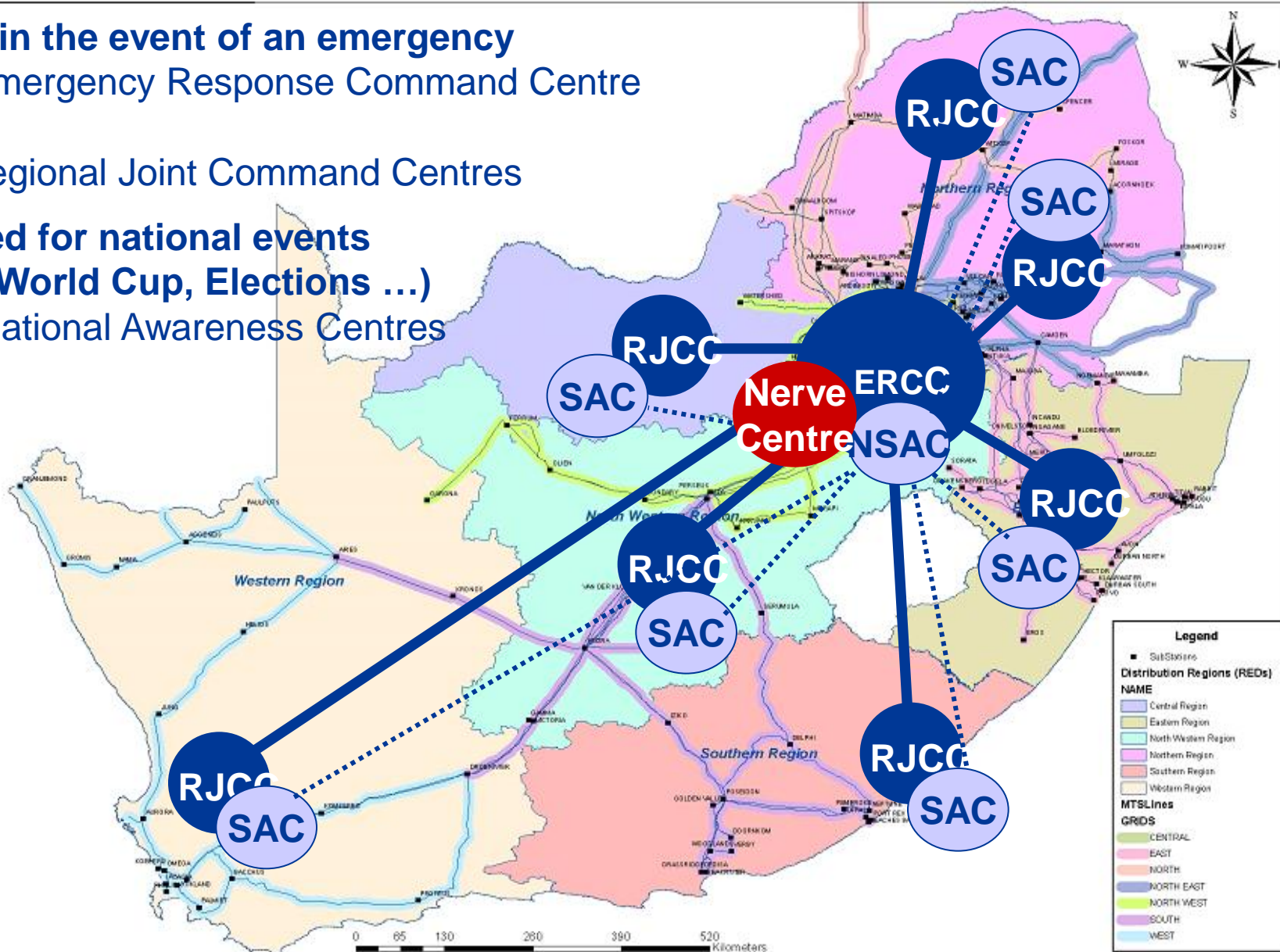
## National/regional structures & situational awareness

**Triggered in the event of an emergency**  
 ERCC = Emergency Response Command Centre  
 (National)

RJCC = Regional Joint Command Centres

**Established for national events**  
 (e.g. FIFA World Cup, Elections ...)

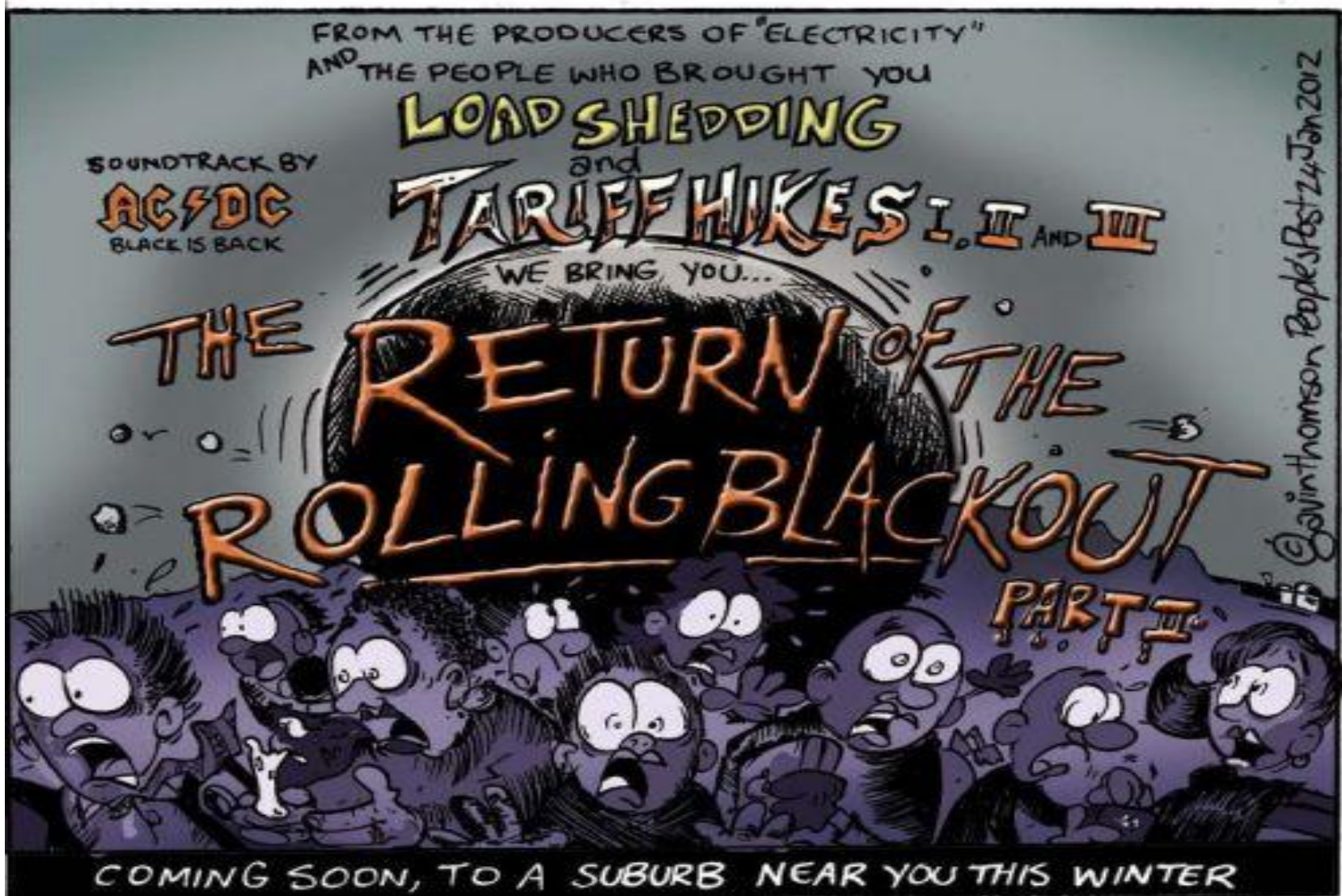
SAC = Situational Awareness Centres



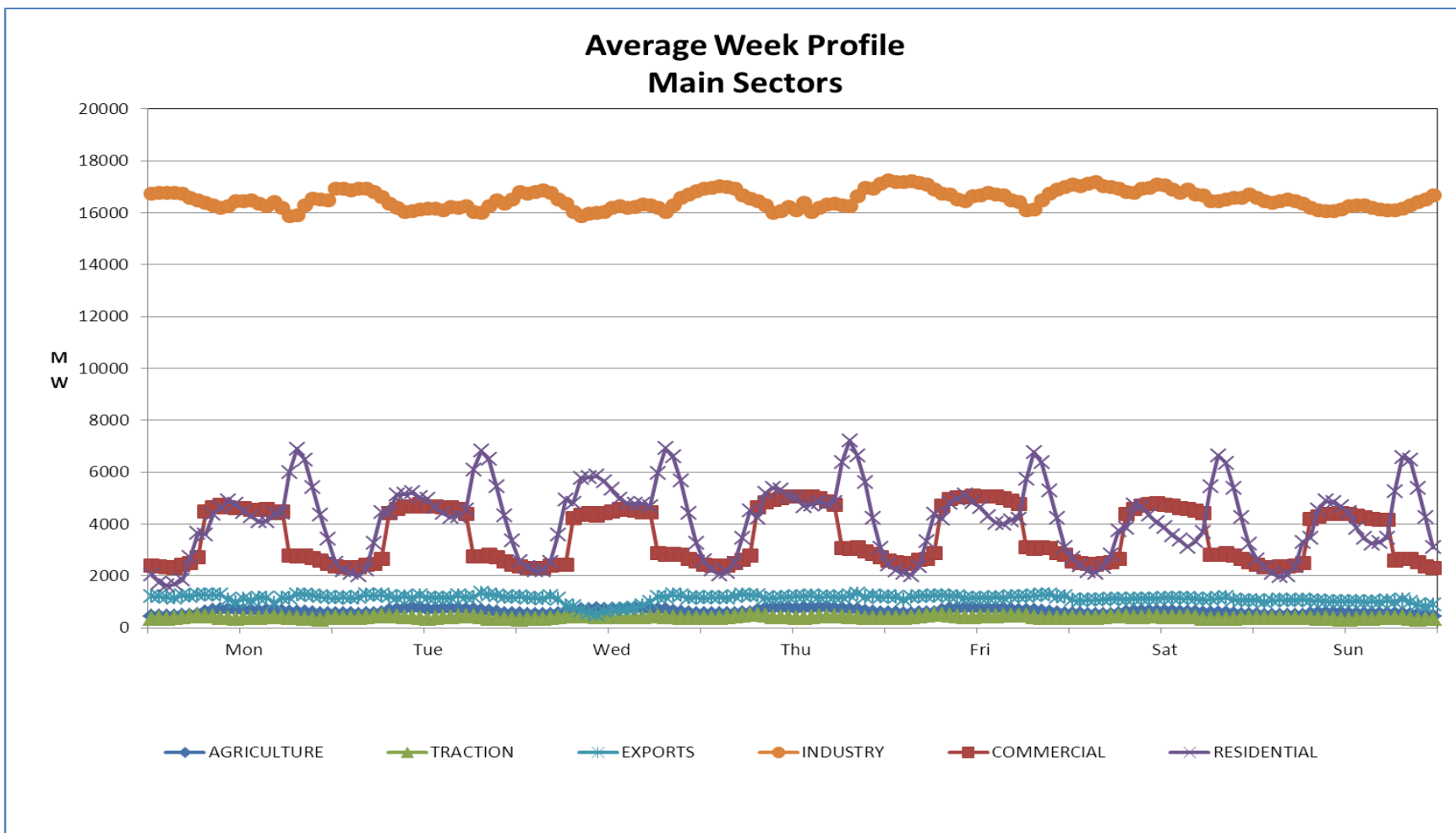
Where are we now...



# The sentiment .....



# Sectorial summer load profile



Sector	Agriculture	Industrial	Residential	Commercial	Other	Total
Annual Contribution	5,905.46GWh (2.4%)	148,559.94GWh (60.7%)	41,840.43 GWh (17.1%)	33,617.55GWh (13.7%)	14 759 GWh 15 (6.0%)	244683 GWh (100.0%)

# Customer complexity

	Linearly impacted	Exponentially Impacted	Essential/Critical loads
Description	Customers for whom a 1-hour outage is unacceptable	Customers for whom a 1-hour outage is unacceptable	Customers who rely on electricity to keep life-supporting equipment alive or to prevent damage to the environment
Typical examples	Customer loses 100% power supply for pre-determined time period, typically 2 hours. Then the next set of customers are shed, maintaining a certain amount of load off the system	Customer loses supply for a short period of time, typically 1 hour. Customer is called and asked to reduce their load by 10% or 20%, for the full duration of the emergency, possibly many hours. Failure to comply will put them on the load shed schedule	Customer is called and asked to reduce their load by 10% or 20%, for the full duration of the emergency, possibly many hours. Failure to comply will put them on the load shed schedule
Typical supply situation	Embedded in a network - not uniquely controlled	Dedicated network supply controlled remotely	Either embedded or uniquely controlled.
Load reduction solution	Load shed	Load curtailed	Unique protocol designed to avoid impact

# Communication complexity

Customer type	Typical communication system	Typical supply system	Envisaged load reduction communication system
Large Industrial	Dedicated customer service executive	Dedicated supply, remotely controlled	Phone call requesting specific amount of load curtailment
Small Industrial/ Commercial	1 customer service executive covering +- 100 customers	Dedicated supply, manual control	Some calls, information through the media
Residential incl. high and low income	Contact Centre	Embedded in the supply network	High- Website Low- mobi-site
Critical Essential loads	Special interest customer executive in charge of segment	Embedded/ dedicated	If protocol requires it- phone call Otherwise website

# Current Load shedding website view



Quick Search for Eskom Customers Redhill

Status: No load shedding

Load S

Eastern Cape Kouga

Area being enquired on can be chosen in two simple ways

The schedule meaning is explained in a simple table

Schedules		
Stage 1 Up to 1000 MW to be shed	Stage 2 Up to 2000 MW to be shed	Stage 3 Up to 4000 MW to be shed
From 06:00-22:30 Monday to Saturday		24hrs from Sunday

Schedule displayed, and the display can be printed for a hard copy-

"magnet on the fridge" reminder view

City: Kouga Suburb: Redhill

If you are an Eskom customer and cannot find, or do not understand your load shedding schedule, please log onto [CS Online](#) or contact us on 0860037566, to verify your load shedding schedule.

Suburb: Redhill	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
25-Oct to 31-Oct	14:00 - 16:30	-	-	14:00 - 16:30	-	14:00 - 16:30	-
01-Nov to 07-Nov	14:00 - 16:30	-	-	14:00 - 16:30	-	14:00 - 16:30	-
08-Nov to 14-Nov	14:00 - 16:30	-	-	14:00 - 16:30	-	14:00 - 16:30	-
15-Nov to 21-Nov	14:00 - 16:30	-	-	14:00 - 16:30	-	14:00 - 16:30	-
<a href="#">Print Schedule</a>							<b>Stage 1</b>

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Stage	Type	Reduction required from end-use customers by <i>load shedding</i>	Reduction required from customers eligible for <i>curtailment</i>
Stage 0	Unscheduled (pre-agreed)	Load offered for curtailment (ad hoc)	Load offered by customers under the <i>immediate</i> curtailment option
Stage 1	Scheduled / Notified	5% of national non-curtailment load (e.g. 1000 MW at peak)	10% of normal demand within 2h of <i>notification</i>
Stage 2	Scheduled / Notified	10% of national non-curtailment load (e.g. 2000 MW at peak)	
Stage 3	Scheduled / Notified	20% of national non-curtailment load (e.g. 4000 MW at peak)	20% of normal demand within 2hrs of <i>notification</i>
Stage 4	Unscheduled (instructed)	>20% of national non-curtailment load (e.g. >4000 MW at peak)	As <i>instructed</i> by the National System Operator at the time.

## Convenience only-

- In the beginning of load shedding Eskom shed only when and as much as necessary.
- **Customers complained about the unpredictability- on occasion preparations were wasted since load shedding was avoided**

## Predictability only-

- Load was shed every day in a completely predictable manner-
- **Damage to the economy was immense**

## Current plan-

- Shed only **when** necessary, but shed a **entire** stage if called, not only the amount deemed necessary
- **Impact still to be tested since there has been no load shedding since 2008**

**“The value of planning  
is not necessarily in the outcome**



**... but in the quality of the thought process”**



## Alerting the public



Alert Phase 1



Alert Phase 2



Emergency  
Communicate



## System Status Bulletins

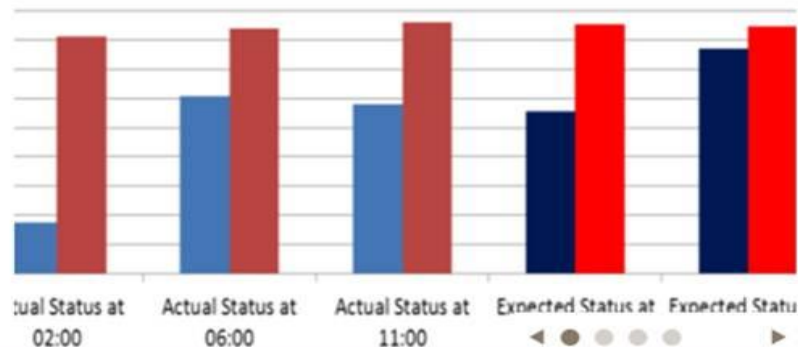
Published Mondays & Thursdays

An overview of the system status for the past five days and a forecast for the next week.

[Read the bulletin >>](#)

## Typical daily demand & supply profile

Legend: Actual Demand (Red), Actual Available Capacity (Blue), Forecasted Demand (Dark Blue), Expected Available Capacity (Light Blue)



### Online Customer Service

Our online service allows you to do the following and much more!

- [Submit your meter readings online ▶](#)
- [View your bill online ▶](#)
- [Log faults](#)

[Register](#) [Login](#)

### Latest News Media Room

www.poweralert.co.za

Yellow means the electricity supply is under strain. Please switch off your geyser, pool pump and non-essential appliances.

### Latest News What we're doing

- Follow us on Facebook (NEW)
- Sasol and Eskom signs research agreement
- Residential mass roll out (NEW)
- Heat pumps
- 49M electricity savings campaign
- Solar water heating
- 2012 - 2013 Tariff book
- Follow us on Twitter
- Operation Khanyisa

### Latest Video Beat the peak



### Contacts Get in touch

#### Contact

086 00 ESKOM  
086 00 37566

[Full Contact List](#)

Sms [+](#)

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## Power Alert

### State of the Power System

Eskom is currently managing an extremely tight system. Eskom needs your help to reduce electricity usage from 17:00 to 21:00

[Read more >>](#)

The risk of power outages is **high** and we are asking all South Africans to switch off all non-essential electrical equipment immediately

### Online Customer Service

Our online service allows you to do the following and much more!

- Submit your meter readings online ▶
- View your bill online ▶
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# Communication campaigns to manage load reduction

Apr 2013

Jun – Sep '13

Oct – Mar '13

Current and sustainable in 2013

## Power Alert

- Encouraging consumers to 'Switch Off' appliances dependent on colour code
- Power Alert Education

Switch Off!  
Be Power Alert

## 5 to 9 campaign

- Print, radio adverts and billboards on what to "Switch Off"
- Focus on geysers and space heating

Pool Pumps  
& Geysers  
not welcome

## 49M

- Case studies on energy efficiency – schools, businesses, consumers
- Activations
- Soapies

The Power  
to save

## Pre-winter

- focus on how to insulate
- Alternatives to heating

Switching to more efficient ways  
of keeping warm this winter

## Beat the Peak

- to reduce usage over the peak period
- 4 tips for 4 hours

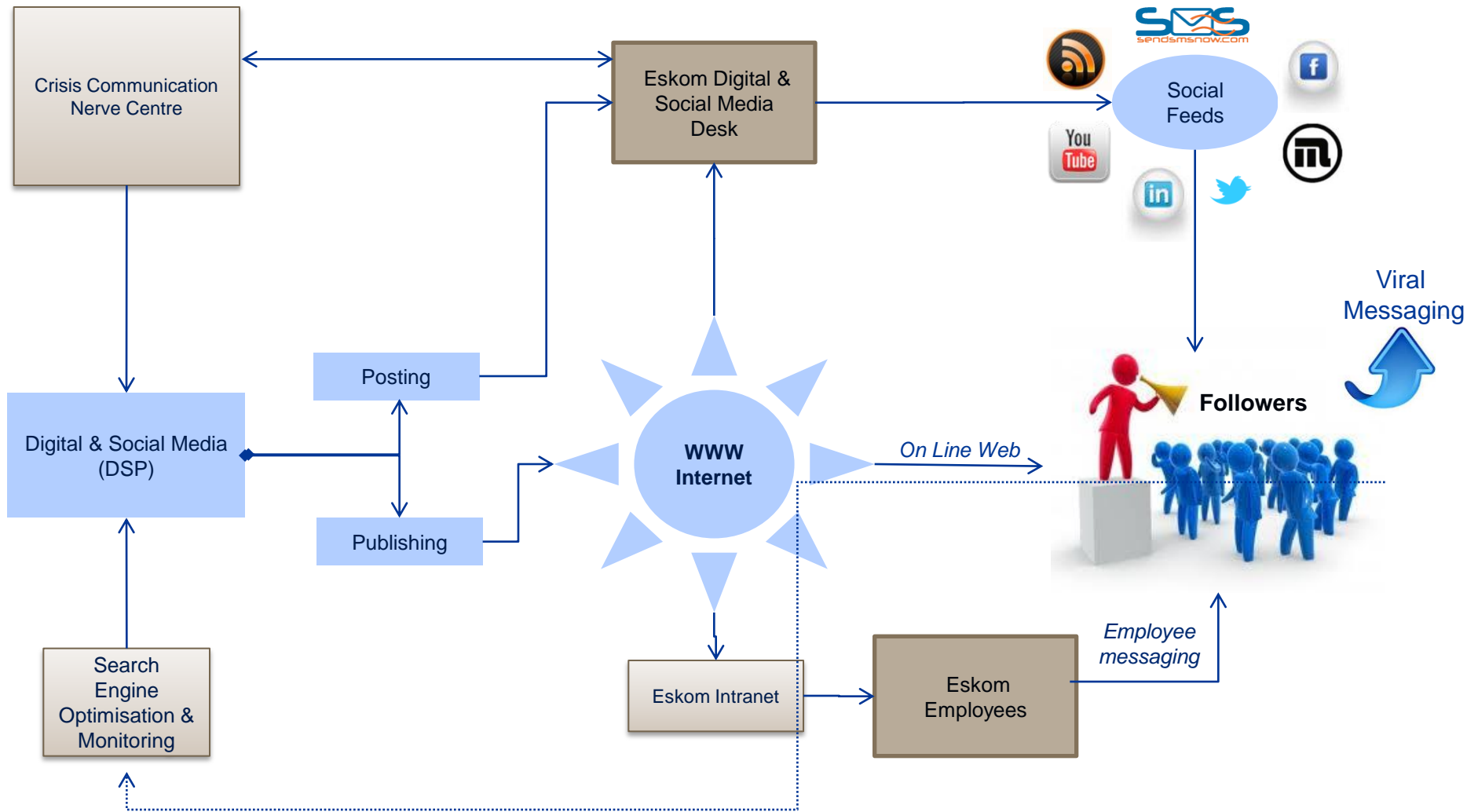
## Live Lightly ... Less is more

- Call to re-assess our wasteful and unsustainable everyday life behaviours

Lifestyle in  
Summer = less  
electricity

Stakeholder engagement

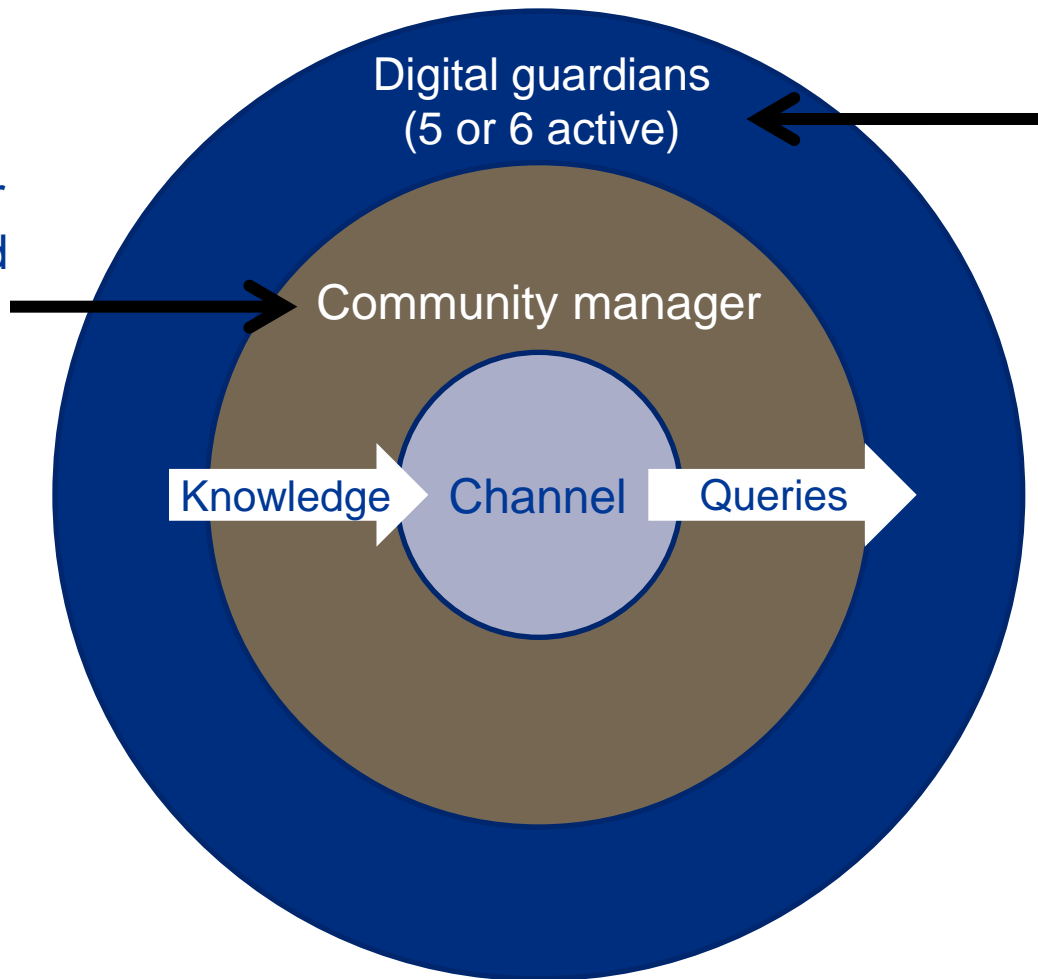
# Digital & Social Media protocol



On line Digital & Social Media Monitoring & First Line Engagement

# HOW THE PROCESS WORKS

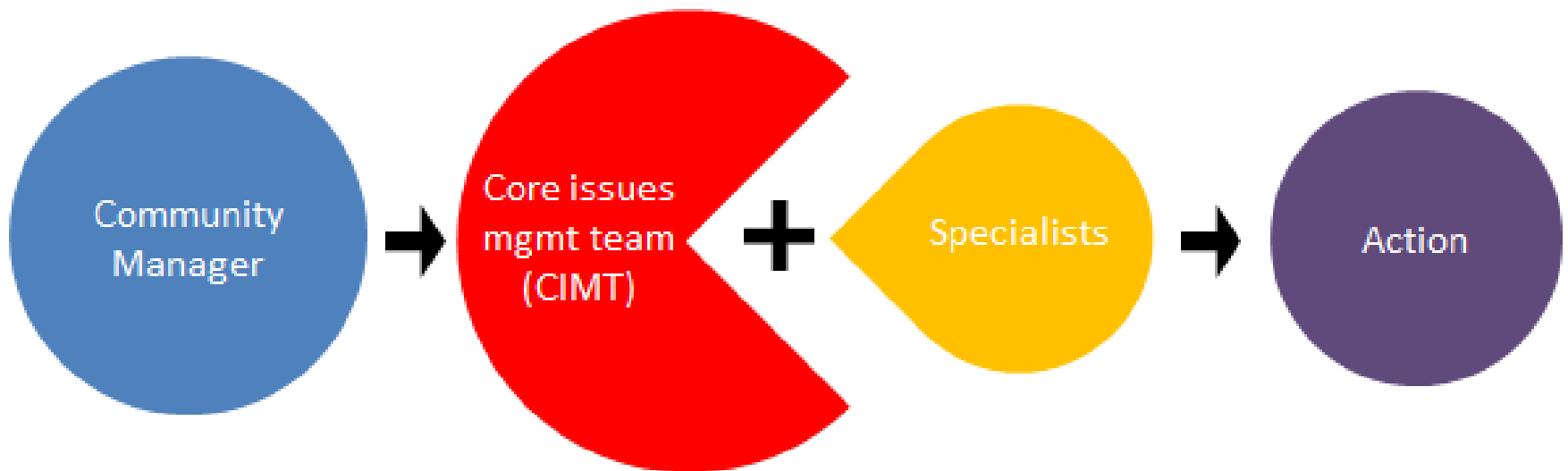
Community manager is responsible for monitoring and posting to the page. The community manager will have general knowledge to answer basic questions and issue responses.



Digital Guardians are contacted by the community manager if their expertise are required for a response. DGs draft/approve responses for the community manager to post.

When new issues arise in social media, the community manager will flag to the Core Issues Management Team (CIMT), which will identify the internal stakeholders necessary to formulate a response.

## TOP LINE WORKFLOW





# Platform Roles

















Platform	What Is It?	Strategic Role
Digital Social Content Hub	Mobile-friendly platform for long form and rich media content	<ul style="list-style-type: none"> <li>• Central social hub.</li> <li>• Primary platform for social content &amp; rich media</li> <li>• Hosts expert content and conversions</li> </ul>
Twitter	Real-time communication in 140 characters	<ul style="list-style-type: none"> <li>• Real-time messaging</li> <li>• Real-time response</li> <li>• Engagement with influencers</li> <li>• Proactive messaging</li> <li>• Links to content across social ecosystem</li> </ul>
YouTube	Video hosting	<ul style="list-style-type: none"> <li>• Primary home for video content</li> <li>• Entry point through search</li> <li>• Videos must be hyper-optimized</li> </ul>
Facebook	Real-time communication	<ul style="list-style-type: none"> <li>• Real-time messaging</li> <li>• Real-time response</li> <li>• Engagement with influencers</li> <li>• Proactive messaging</li> <li>• Links to content across social ecosystem</li> </ul>
Slideshare	Hosts pdf material	<ul style="list-style-type: none"> <li>• Increase transparency by increasing discoverability</li> <li>• Driven to Slideshare via Twitter, Social hub, Facebook and YouTube.</li> </ul>

## The Application Integrates:

- *Beat the Peak*
- *Location Services*
- *Crowd Sourcing*
- *CS Online*
- *Loadshedding*
- *Tips*
- *Alerts*
- *Rewards*
- *Cross Platform functionality*
- *Mobility*



# Channel Interaction Environments

<b>CHANNEL</b> Link from → Link to ↓					
		Permanent cross promotion via hyperlink	Direct users back to central engagement channel	Permanent cross promotion via hyperlink	Permanent cross promotion via hyperlink
	Tweet links out to video content		Pull video content through to Posterous from YouTube	Permanent cross promotion via hyperlink	Permanent cross promotion via hyperlink
	Tweet links to longer form content created by experts	Permanent cross promotion via hyperlink		Permanent cross promotion via hyperlink	Permanent cross promotion via hyperlink
	Tweet links to MYPD3 documentation	Permanent cross promotion via hyperlink	Permanent cross promotion via hyperlink		Permanent cross promotion via hyperlink
Eskom.co.za	Tweet links to relevant MPYD3 content	Permanent cross promotion via hyperlink	Permanent cross promotion via hyperlink	Permanent cross promotion via hyperlink	



In conclusion...



The explosion of social media and the growth of social networking have a huge impact on the ability of an organisation to manage communication that affects them



Social media can be the cause of a crisis situation for an organisation (both advertently and inadvertently)



Case studies of crisis on a global scale have highlighted the need to respond via social media within seconds.



Proactive content is required




In South Africa we have to utilise all communication channels to enable the reach to all electricity customers

The only real way to mitigate the impact to customers being load shed is to inform them as early and accurately as possible

Being prepared for this crisis will enable speedy communication, resulting in limited damage to our reputation and containing some level of trust

Damage to our reputation will occur but badly handled load shedding will exacerbate our reputational damage.



***“The best highly reliable organisations know that they have not experienced all of the ways that their system can fail...***

***They also know that they have not deduced all possible failure modes... and have a deep appreciation for the liabilities of overconfidence.”***





**Thank you**