

Domestic Load Research Seminar

Overview of DLR

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Powering your world



- Background
- Objective
- Process
- Sample Design
- Technology
- Sites
- IT Systems
- Example of profile
- Role Players
- Challenges
- Acknowledgements

- **Historically:** Gather information for the purpose of electrification - design
 - Meter data (voltage and current)
 - Socio-demographic survey
- **2008** Load-shedding – Expansion of Scope of work
 - Load Forecasting
 - Research
 - Dx Planning – network refurbishment
 - Pricing
 - Power Quality (QoS)
- **2009** New Technology – Remote downloading
- **Current:** 14 Sites installed (milestone achieved)

OBJECTIVE

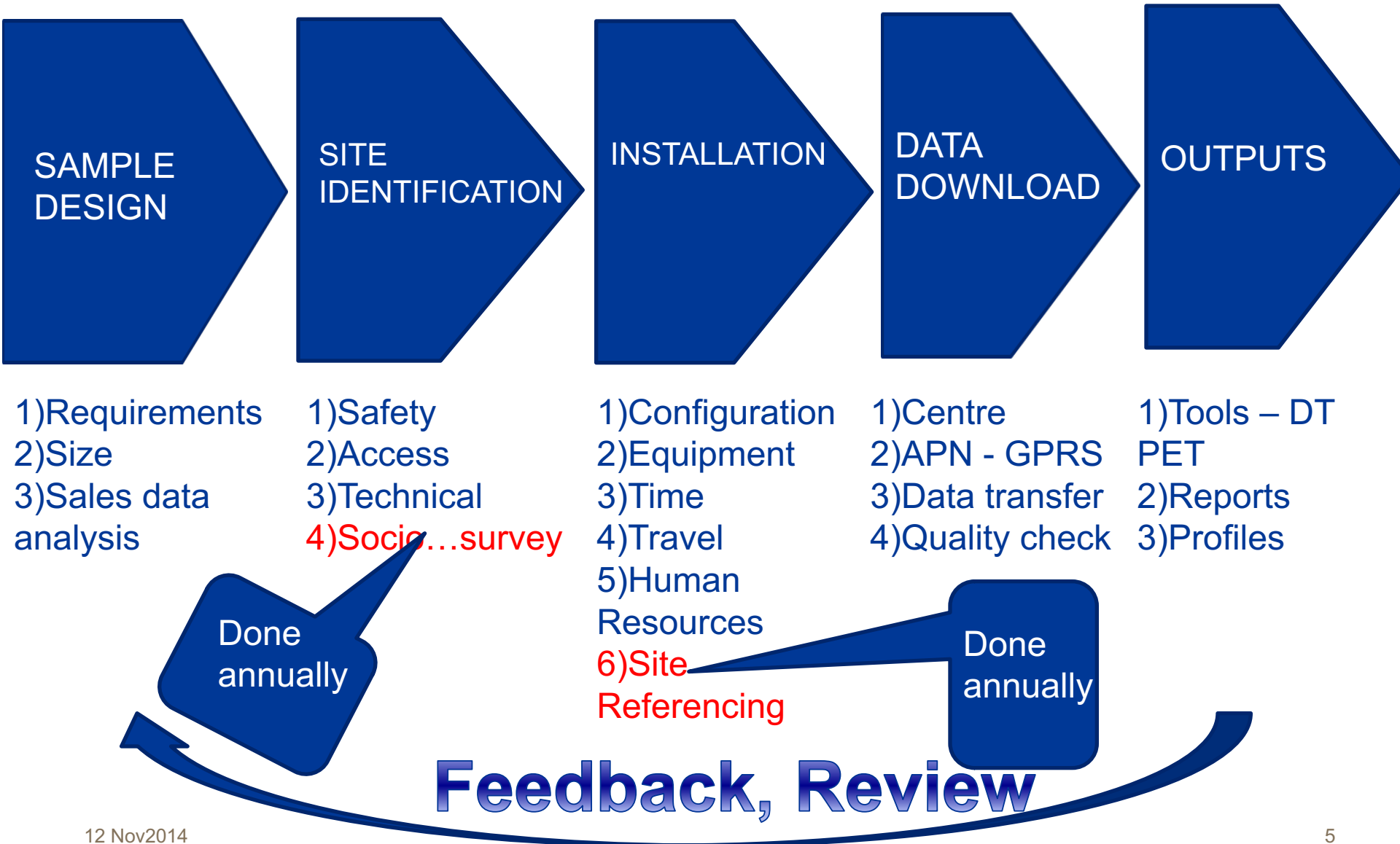
- To enhance decision makers in:
 - Accurate load forecasting
 - Network design
 - Pricing / tariff design
 - Research
 - Etc.

DATA =

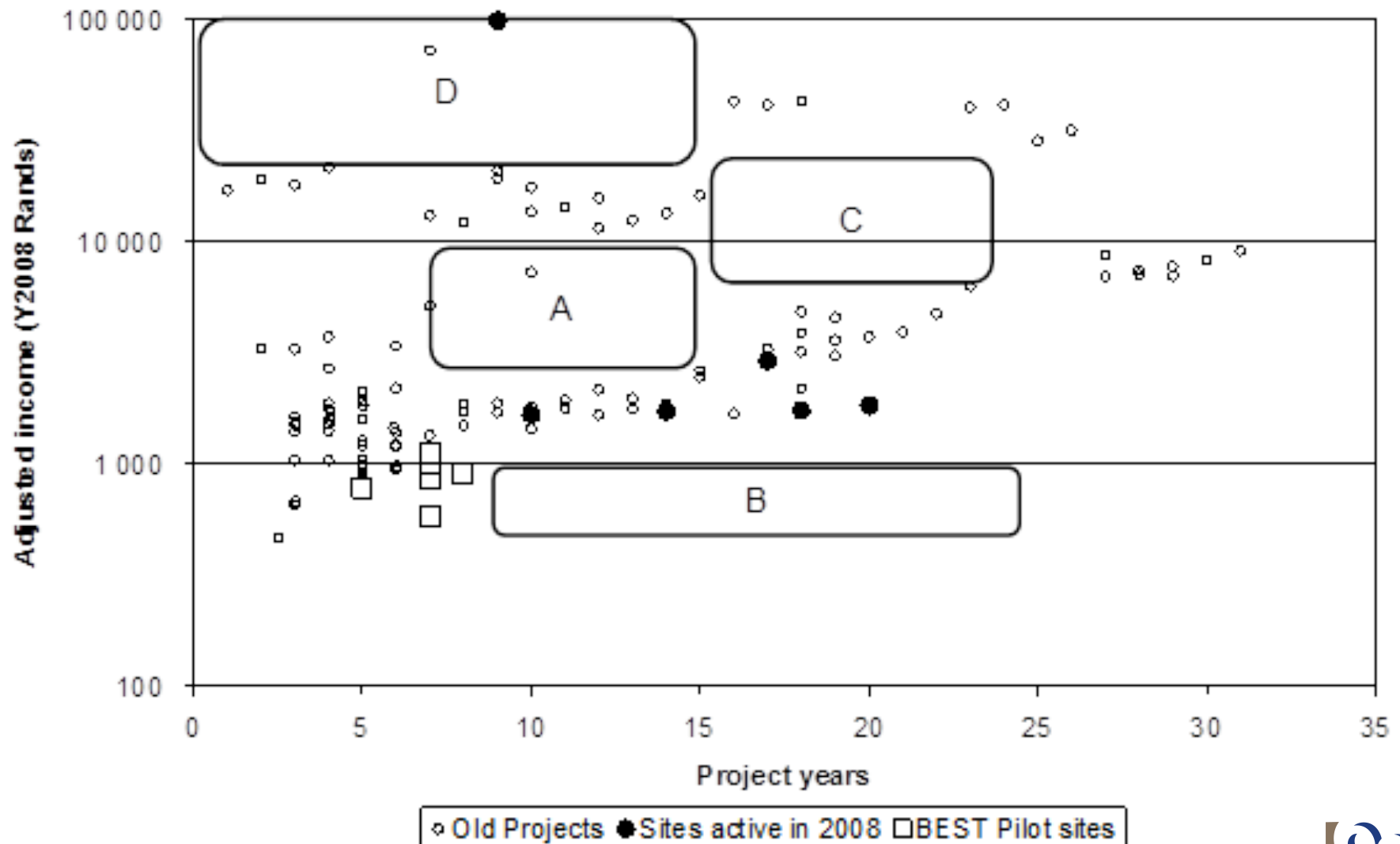


Beneficiation!!!

Remember information is power!



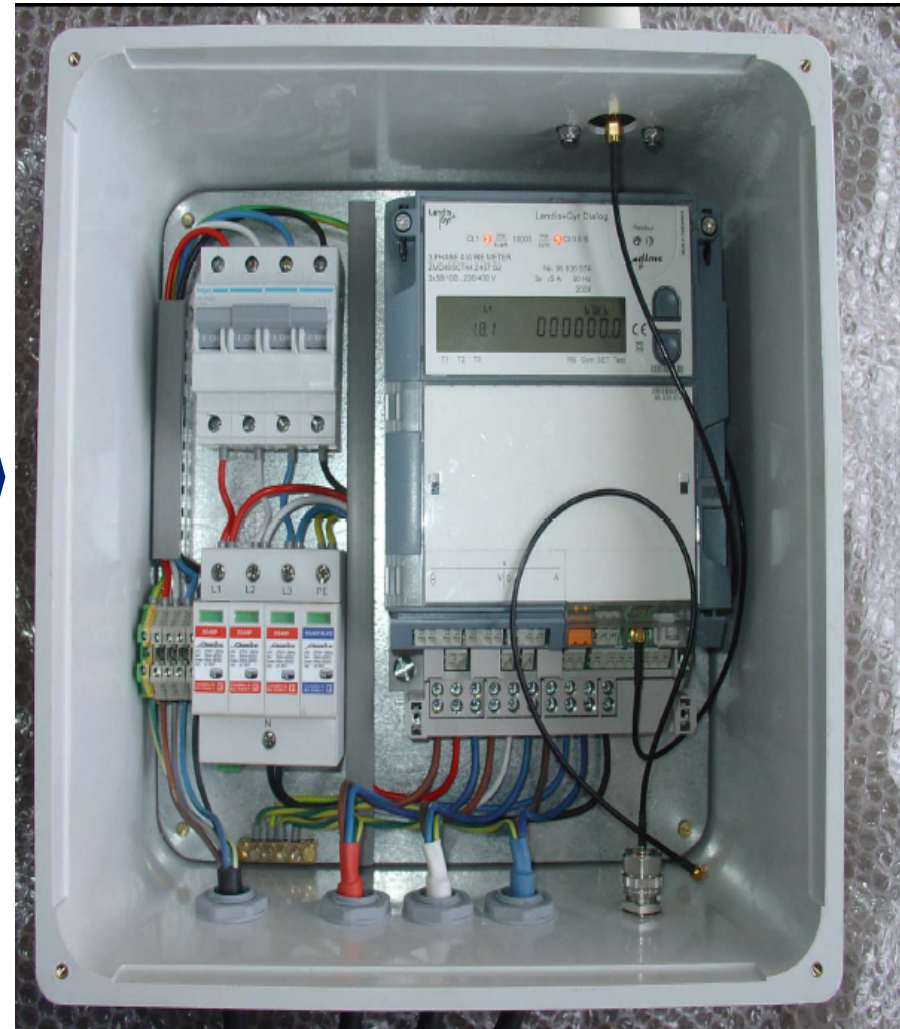
Sample – Four Areas Low Penetration



Old Data logger



New Data Logger



New Data Logger in Service

Wooden
Pole



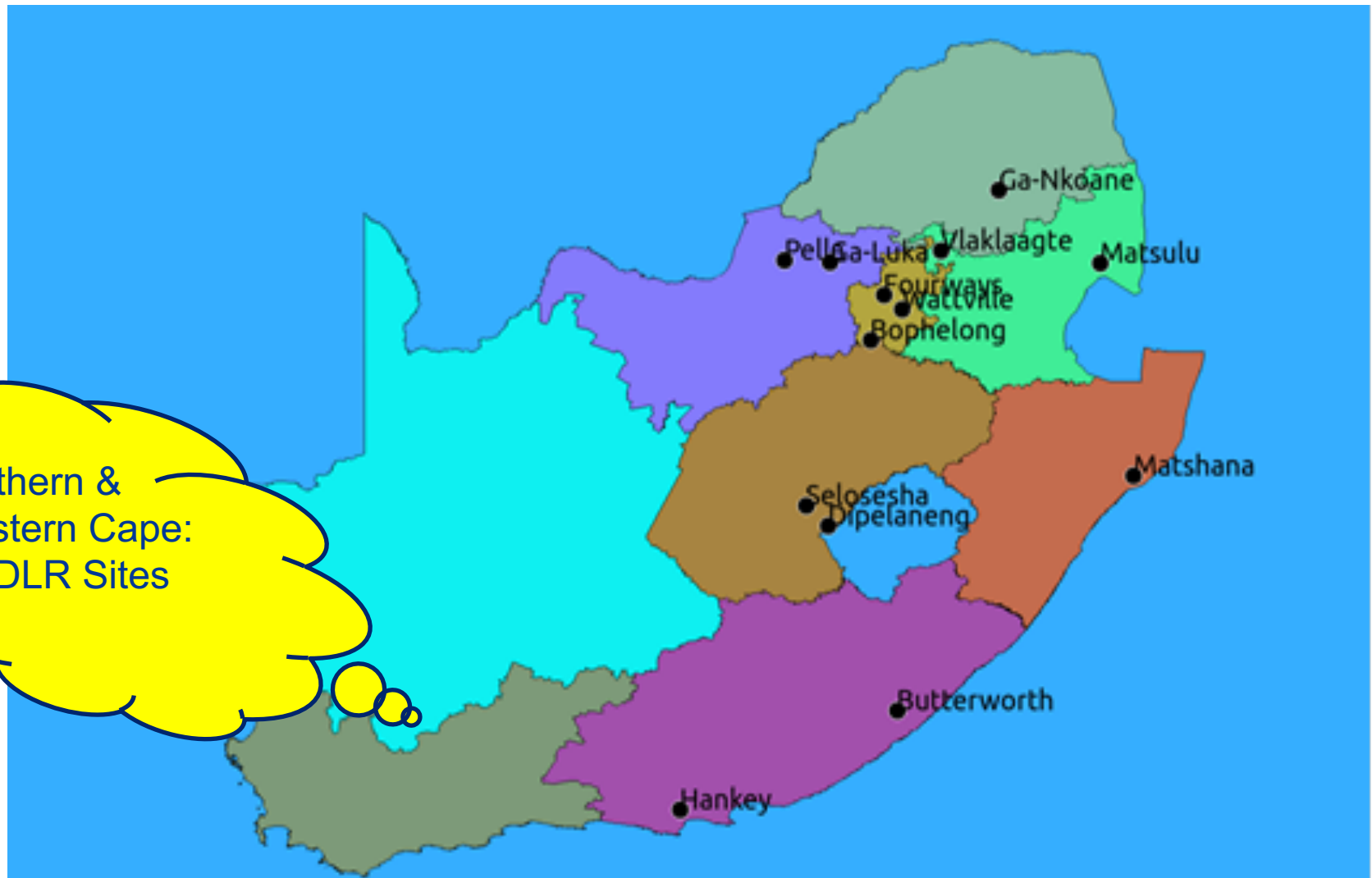
Concrete
Pole



SITES

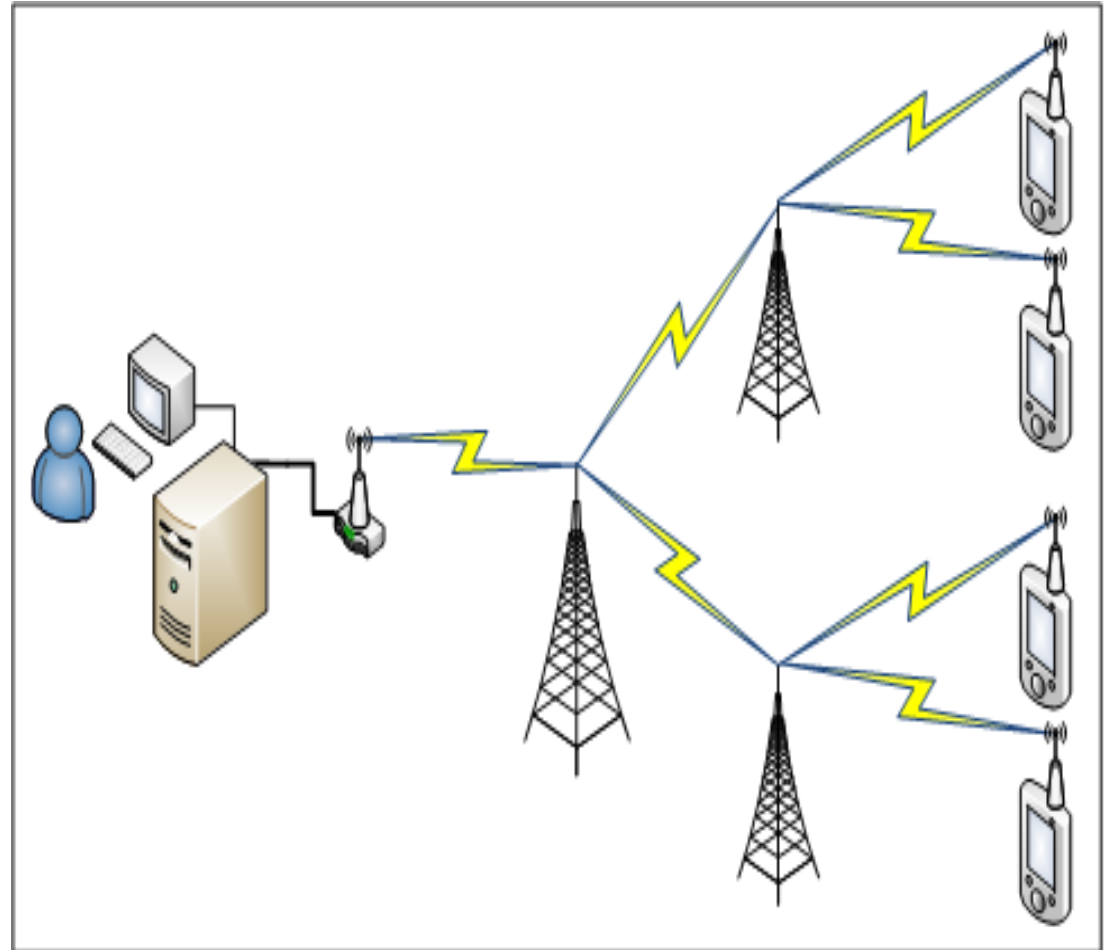


PROVINCE	SITE NAME	RESPONSIBLE CNC	NO. OF LOGGERS
Eastern Cape	Butterworth	Butterworth	31
	Hankey	Humansdorp	27
Free State	Dipelaneng	Zastron	30
	Phomolong	Riebocksfontein	30
	Selosesha	Selosesha	30
Gauteng	Bophelong	Vanderbijlpark	30
	Wattville	Daveyton	27
Limpopo	GaNkoana	Jane Furse	30
Mpumalanga	Matsulu	Kanyamazane/Matsulu	30
	Vlaklaagte	Kwaggafontein	30
North West	Morokweng	Morokweng	30
	Luka	Tlhabane	30
Kwa-Zulu Natal	Hopewell	Richmond	30
	Matshana	Empangeni	30

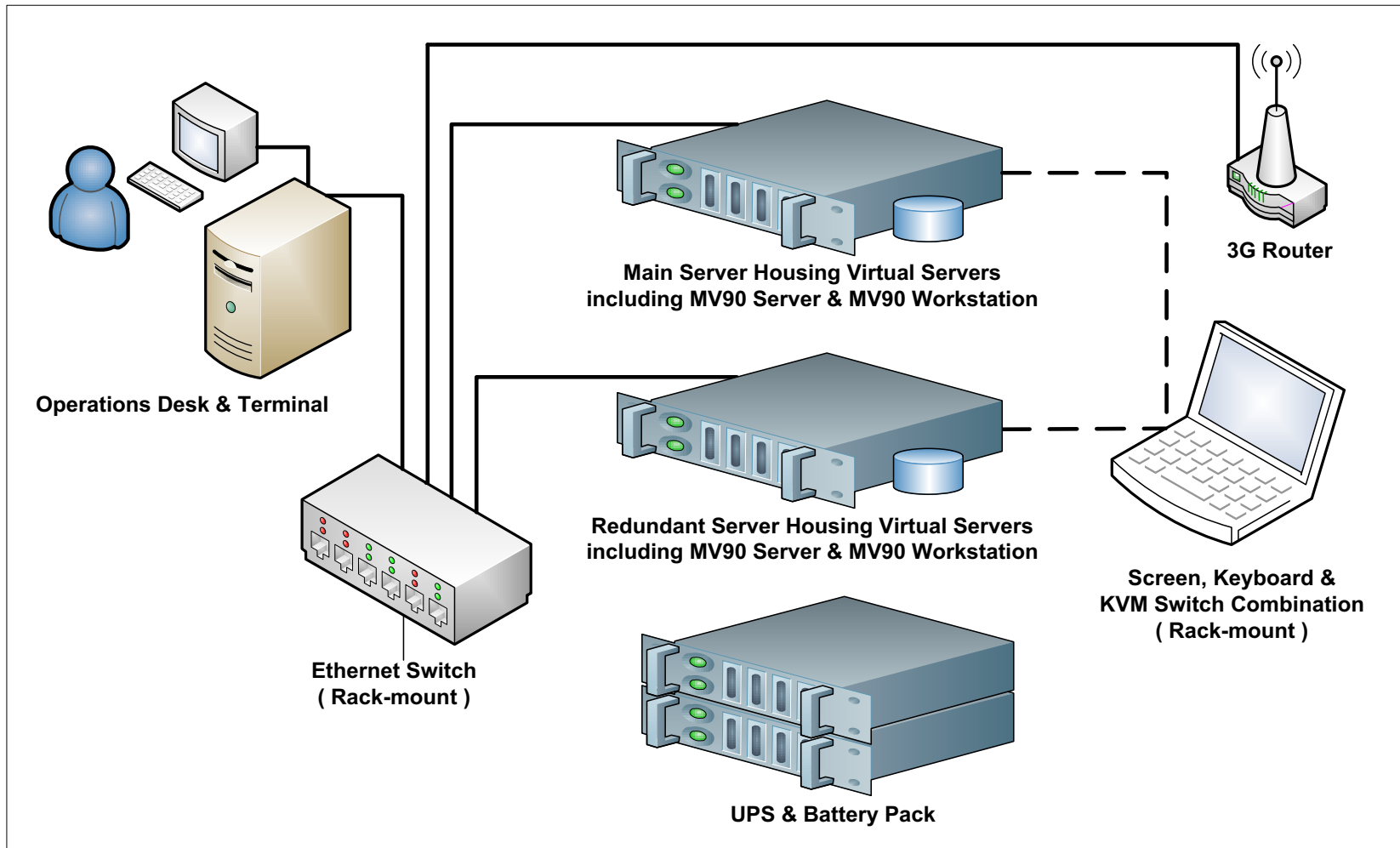


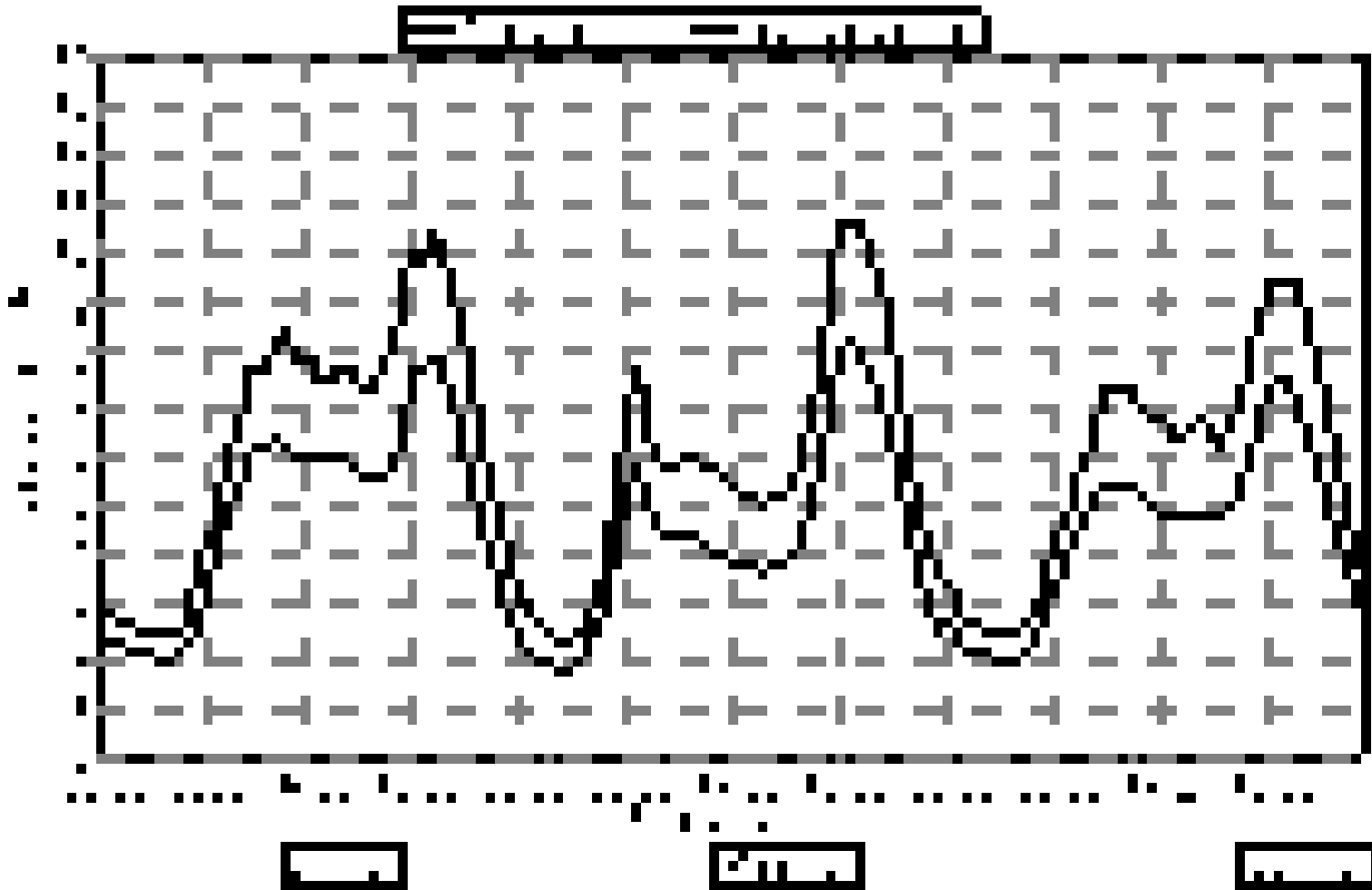
Northern &
Western Cape:
No DLR Sites

GPRS - APN



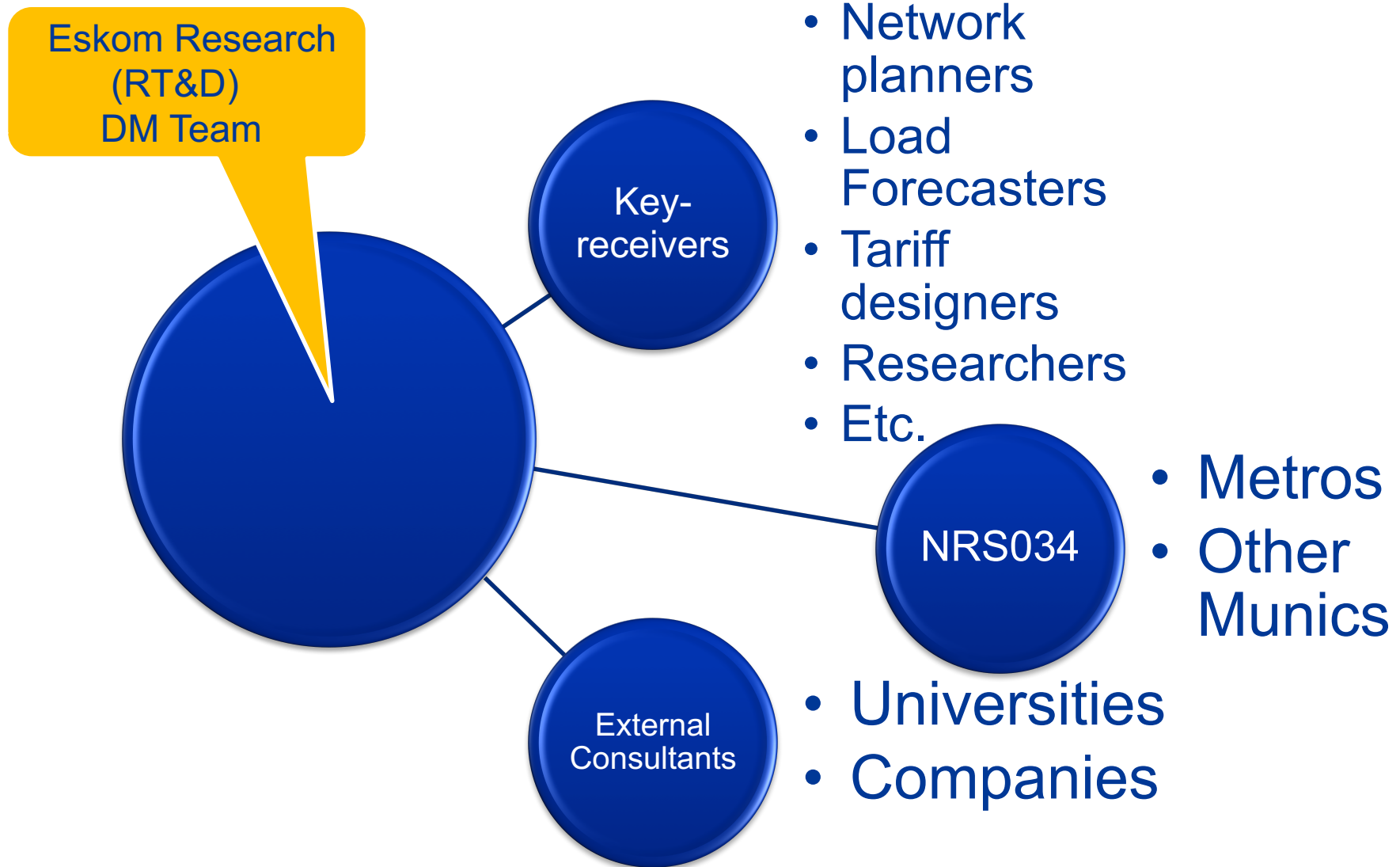
IT SYSTEM: DOWNLOADING CENTRE





Mean winter day profile for Wattville (an urban, long-electrified site)

- LSDS
- ELECTRIFICATION PERFORMANCE ASSESSMENT
- NETWORK CONNECTIVITY
- Dx – QUALITY OF SUPPLY
- MARKET INTELLIGENCE
- GEO-BASED LOAD FORECASTING
- END – USE DOMESTIC PROFILES



- Communication – Modems
- Compliance to Group IT – Standards
- Technology advancement
- Disconnection of CTs
- Funding



- Eskom Team:

- Dr Hendri Geldenhuys Leadership and advisory
- Ronel Clarke Section manager
- Amal Khatri Research Manager

DLR Team (Installation):

- Tando Figlan Mmika Mampuru
- Harry Mhlarhi Lebogang Moeketsi
- Eric Mahloko Tebogo Mvimbi

- External

- Marcus Dekenah Pieter Prinsloo Wendy van der Bank
- Wayne Giles

THANK YOU!!!