



South African Reserve Bank

Business Systems and Technology Department

Network and Electrical Cabling Naming Convention Standard

Version:	1.5
Effective Date	20 March 2017

All rights reserved. No part of this document may be reproduced, translated, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission from the owner.

Document Control

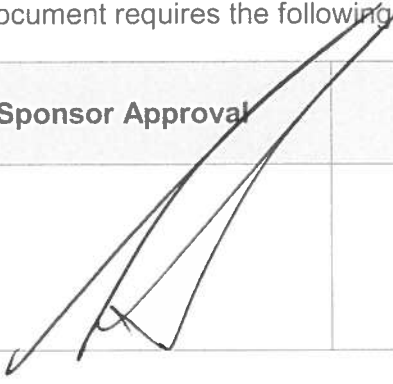
Organisation	South African Reserve Bank
Document Type	Standard
Title	SARB Datacentre, Network & Electrical Cabling Naming Convention
Author	Riaan Strydom / Koos Buys
Filename	SARB Network Cabling Naming Convention Standard
Owner	Data Centre Manager
Subject	SARB Network & Electrical Cabling Naming Convention Standard
Protective Marking	Restricted
Review date	20 March 2017

Revision History

Revision Date	Reviser	Previous Version	Description of Revision
23 November 2015	Koos Buys	0	Initial draft document creation
25 November 2015	Sam Sibeko	1.0	Distribution List, Review Date, electrical cables and additional abbreviations
02 December 2015	Thabang Motapane	1.1	Power naming conventions and colour coding
18 October 2016	Hannes Fouche	1.2	POD Rack Naming
11 November 2016	Hannes Fouche	1.3	Cable Colour Update
20 March 2017	Sam Sibeko	1.4	Document Distribution and Cable Colour Change

Document Approvals

This document requires the following approvals:

Sponsor Approval	Name & Surname	Date
	Sam Sibeko	2017-03-23

Document Distribution

This document will be distributed to:

Name	Job Title
Siphiwe Mkwanaazi	Head of Service Delivery and Customer Relationship Management
Koos Buys	Service Delivery Manager
Brian Ngobeni	Data Centre Manager
Fanie Prinsloo	Senior Lead : Production Support
Riaan Vermaas	Network Manager
Sam Sibeko	Head of IT Operations
Callie Smit	Chief Architect

1 Contributors

Development of this standard was assisted through information provided by the following people:

1. Riaan Strydom
2. Koos Buys
3. Fanie Prinsloo
4. Hannes Fouche

2 Purpose of this document

The purpose of this document is to create a single **Standard** for future network and power cabling installations to ensure that all network cables are correctly marked, labelled and numbered as per the guidelines in this document.

This Standard Document will assist the Network Support and Electrical Engineers to diagnose and trace faulty cables during failures which will have the least impact and downtime to the business.

3 Special Notice

This document is uncontrolled once printed.

Table of Contents

1	Contributors	3
2	Purpose of this document	3
3	Special Notice	3
4	Cabling Labelling Conventions	5
5	Cabinet Label and Sizes	9
6	Label on an electrical cable in the Data Centre	15
7	Network Cable Colour Coding	16
8	Abbreviations	17

4 Cabling Labelling Conventions

There are 10 different naming & labelling conventions:

1. Label on a cable between Core Distribution Switches and Core Distribution Patch Panels.
2. Label on a cable between patch panels
3. Label on a patch lead
4. Label on a field / floor point
5. Label on a Fibre patch panel
6. Label on a Copper patch panel
7. Label of a Long run Copper cable
8. Label on a field / floor point (field termination box) linked to CONSOLIDATION BLOCKS
9. Label on a Copper Patch Panel linked to CONSOLIDATION BLOCKS
10. Label on a Long Run Copper Cable using CONSOLIDATION BLOCKS [Horizontal Cable]

4.1 Label on a cable between Core Distribution Switches and Core Distribution Patch Panels

KEY:

[from Room Number] - [Cabinet number] - [patch panel number or switch number or P/PE node or server number or san number] - [port number/unique Slot number] ←→to Room Number] - [Cabinet number] - [patch panel number or switch number or P/PE node or server number or san number] - [port number / unique Slot number] →

From			
Room Number	Cabinet Number	Core Patch Panel Number or Core Switch Number	Port/Slot Number
HO DC	C01	CDPP01	05

To			
Room Number	Cabinet Number	Core Patch Panel Number or Core Switch Number	Port/Slot Number
HO DC	C03	CDSW03	05

Example: <HODC-C01-CDPP01-05<
>HODC-C03-CDSW03-05>

4.2 Label on a cable between 2 Patch Panels

KEY:

← [from Room Number] - [Cabinet number] - [patch panel number or switch number or P/PE node or server number or san number] - [port number/unique Slot number] ↔ to Room Number] - [Cabinet number] - [patch panel number or switch number or P/PE node or server number or san number] - [port number / unique Slot number] →

From

Room Number	Cabinet Number	Patch Panel Number or Switch Number	Port/Slot Number
HO DC	C01	CDPP01	05

To

Room Number	Cabinet Number	Patch Panel Number or Switch Number or P/PE node or Server number or San number	Port/Slot Number
HO DC	C03	PP03	01

Example: <HODC-C01-CDPP01-05<
>HODC-C03-PP03-01>

4.3 Label on Patch Leads

KEY:

← [Cabinet number] - [patch panel number or switch number or P/PE node or server number or san number] - [port number/unique Slot number] ↔ Cabinet number] - [patch panel number or switch number or P/PE node or server number or san number] - [port number / unique Slot number] →

From

Cabinet Number	Patch Panel Number or Switch Number or P/PE node or Server number or San number	Port/Slot Number
C01	PP01	01

To

Cabinet Number	Patch Panel Number or Switch Number or P/PE node or Server number or San number	Port/Slot Number
C1	SRVxxx	01

Example: <C01-PP01-01<
>C01-SVRxxx-01>

4.4 Label on a field / floor point

KEY:

→ [to Room Number] - [Cabinet number] - [patch panel] - [port number]

Room Number	Cabinet Number	Patch Panel	Port number
212	C03	05	12

Example: 212-C03-PP05-12

4.5 Label on a Fibre patch panel

KEY:

→ [to Building Location] - [Room Number] - [Cabinet number] - [patch panel] - [port number]

Building Location	Room Number	Floor	Cabinet Number	Patch Panel	Port number
HO	212	02	C03	CDPP05	12

Example: HO-212-02-C03-CDPP05-12

4.6 Label on a Copper patch panel

KEY:

→ [Building Location] - [Floor] - [Functional Area description] - [End point description] - [unique identifier]

E.g.: Cat7 cable running to finance offices on the 3rd floor of the Northern Office block within the Admin Block for the 5th of the 10 desktop PC been installed.

Building Location	Floor	Functional Area	End Point Description	Unique identifier
HO Admin Block	03	Finance	Northern Office Block	05

Example: HOAB-03-FIN-NOB-05

4.7 Label of a long run copper cable

KEY:

← [to Room Number] - [Cabinet number] - [patch panel]-[port number] ↔ Building Location] - [Floor] - [Functional Area description] - [end point description] - [unique identifier] →

Room Number	Cabinet Number	Port Number	
HO DC	C03	13	
Building Location	Floor	End Point Description	Unique Identifier
HO	03	Floor 0 4	05

Example: ←HODC-C03-PP01-13 ←
→ HOAB-03-FIN-NOB-05 →

Standard Statement: - Long copper / fibre cables to be labelled every five metres

4.8 Label on a field / floor point (field termination box) linked to a CONSOLIDATION BLOCKS

KEY:

→ [Building. Location] - [Floor] - [Consolidation Block Number] - [port unique identifier]
→

Building Location	Floor	Consolidation Block Number	Port Unique Identifier
HO	03	A1	02

Example: →HOAB-03-A1-02→

4.9 Label on a Copper Patch Panel linked to a CONSOLIDATION BLOCKS

KEY:

→ [Building. Location] - [Floor] - [Consolidation Block Number] - [port unique identifier]
→

Building Location	Floor	Consolidation Block Number	Port Unique Identifier
HO	03	A1	02

Example: →HOAB-03-A1-02→

4.10 Label on a Long Run Copper Cable using CONSOLIDATION BLOCKS [Horizontal Cable]

KEY BETWEEN WIRE ROOM AND CONSOLIDATION BLOCK:

← [to Building Location] - [Room Number] - [Cabinet number] - [patch panel]-[port number] ↔ [Building. Location] - [Room Number] - [Floor] - [Consolidation Block Number] - [port unique identifier] →

From

Building Location	Room Number	Cabinet Number	Patch Panel	Port/Slot Number
HO	321	C01	03	12

To

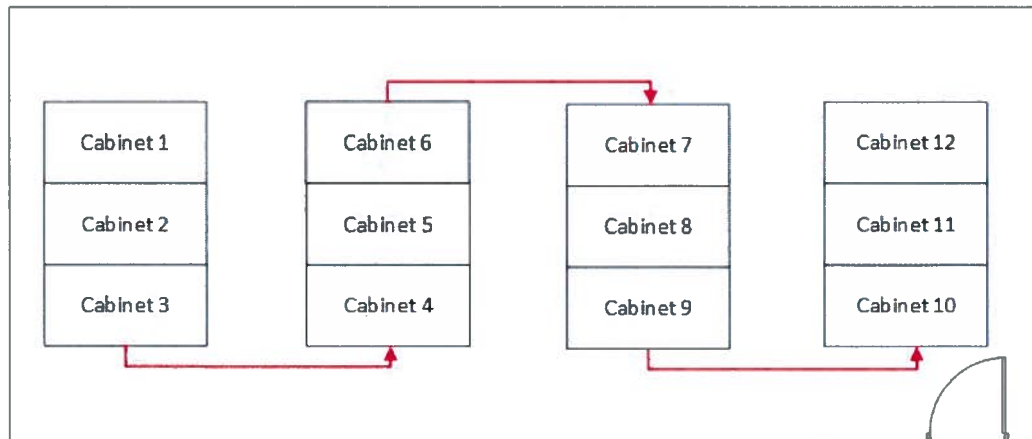
Building Location	Room Number	Floor	Consolidation Block Number	Port/Slot Number
HO	301	03	A1	06

Example: ←HO-321-C01-PP03-12←
→HOAB-301-03-A1-06→

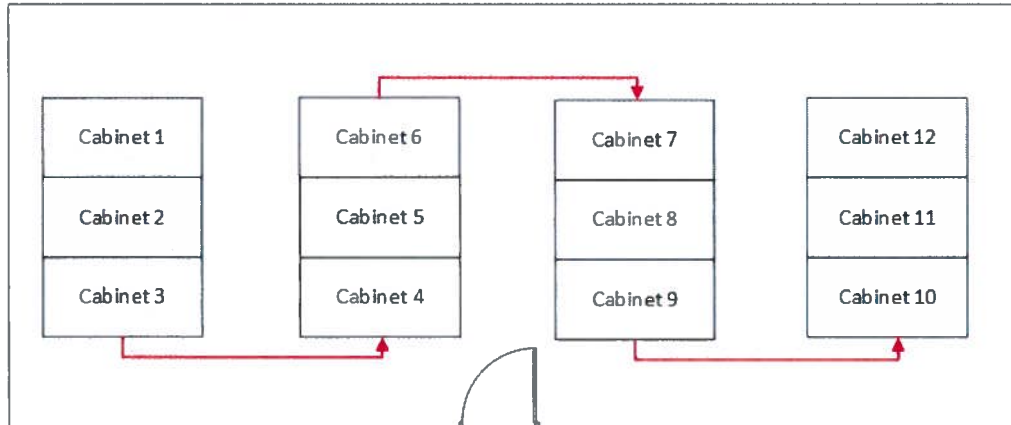
5 Cabinet Label and Sizes

5.1 Labels and Cabinet Layout Numbering

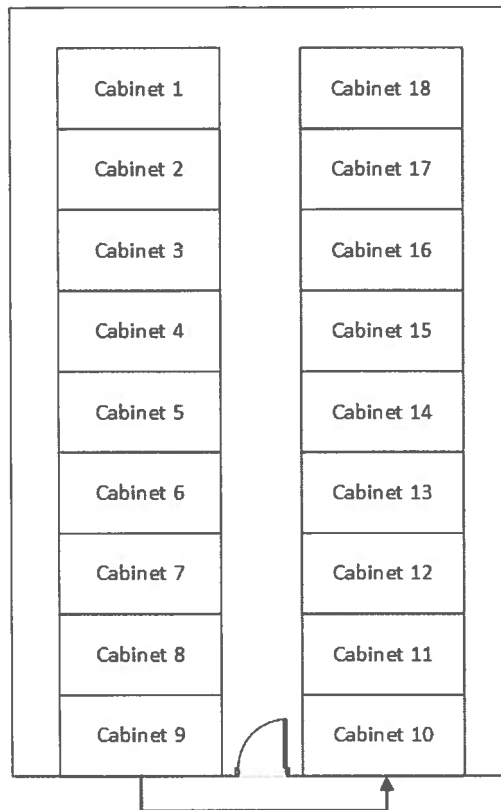
Cabinets to be populated and numbered furthest from door. Further left if door is central
Cabinet 1 located furthest from door. Numbered in S-formation towards door



Cabinet 1 located furthest LEFT when door is centrally located Numbered in S- formation



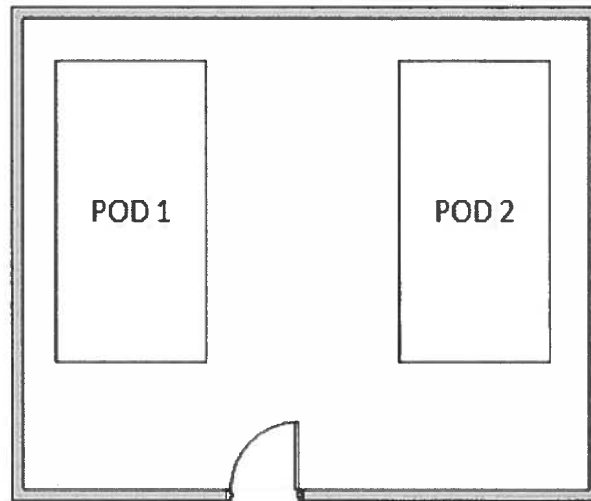
Cabinet located LEFT furthest from door. Numbered in S-formation



5.2 Cabinet Labelling for POD's

This section refers specially to the labelling of the POD's and POD Cabinets in the Data Centre.

POD located directly to the left of the entrance door will be POD 1, thereafter numbering increase from left to right.



5.3 Cabinet numbering inside the POD:

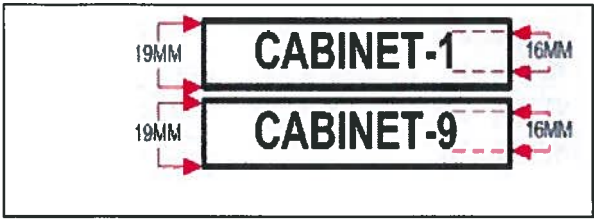
As per Data Centre layout, numbering will start at the far side of the POD from the entrance.

KEY:

[POD Number – Row - Cabinet Number]

Row A Cabinet 1	POD 1	Row B Cabinet 1
Row A Cabinet 2		Row B Cabinet 2
Row A Cabinet 3		Row B Cabinet 3
Row A Cabinet 4		Row B Cabinet 4
Row A Cabinet 5		Row B Cabinet 5
Row A Cabinet 6		Row B Cabinet 6
Row A Cabinet 7		Row B Cabinet 7
Row A Cabinet 8		Row B Cabinet 8
Row A Cabinet 9		Row B Cabinet 9

5.4 Cabinet Label



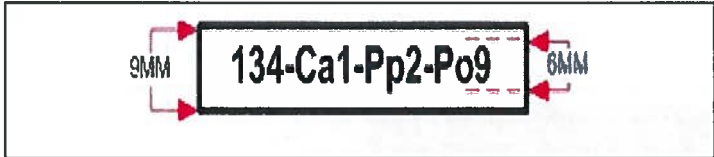
5.5 Patch panel Port Label



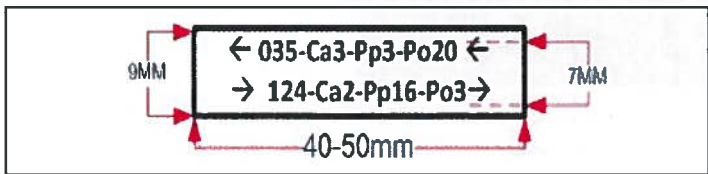
Labels above each patch panel port. Panel label on upper left



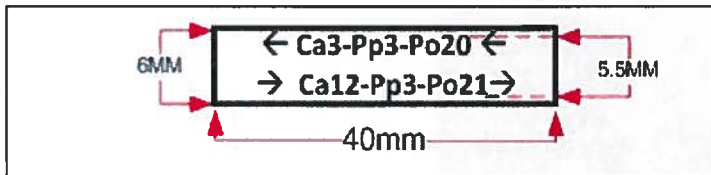
5.6 Termination/Floor Point Label



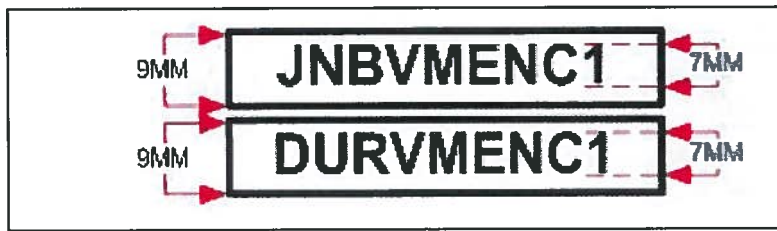
5.7 Cable Label



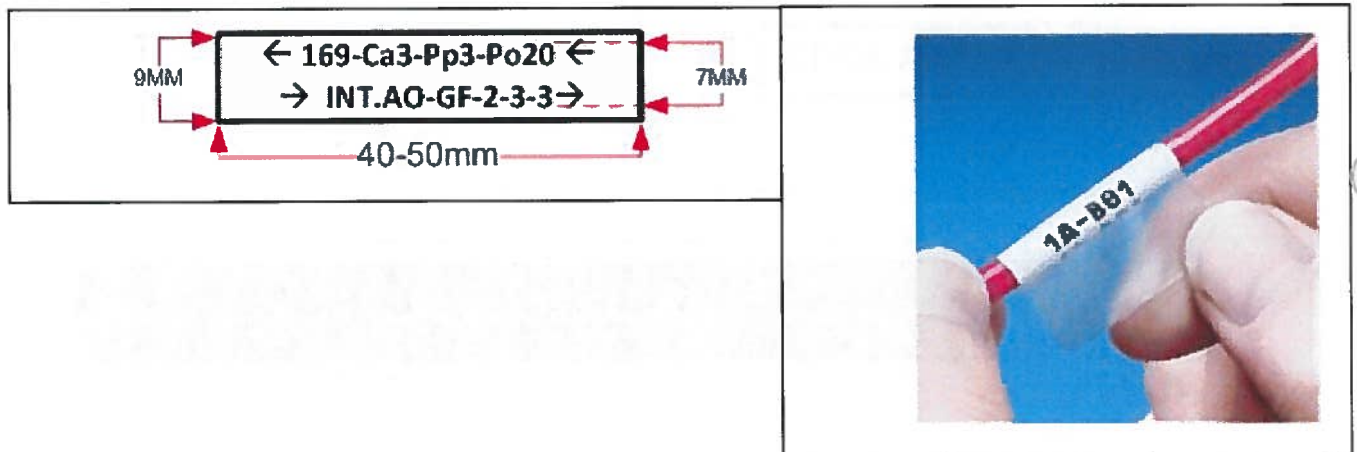
5.8 Patch Cable Label



5.9 Equipment Label



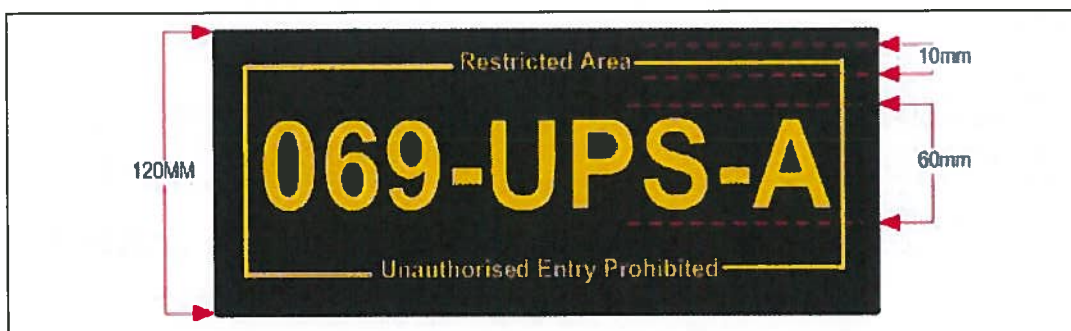
5.10 Cable Label



5.11 Outer Capsule Door Label



5.12 Inner Capsule Door Label



6 Label on an electrical cable in the Data Centre

6.1 Power Distribution Units (PDU)

Key:

← [Room No] – [Primary Power Distribution Unit] – [Primary Power Distribution Breaker No] ←
 ↔ [Room No] – [Cabinet No] – [Power Distribution Unit] – [Distribution Point No]
 →

From

Room Number	Primary Power Distribution Unit	Primary Power Distribution Circuit Breaker No
HO PPDR -2	PPDU-A01	PPD-ACB001

To

Room Number	Cabinet Number	Power Distribution Unit	Power Distribution Point Number
HO DC POD1	C01	PDU-A01	PDP-A01

Example:

← HOPPDR-2 – PPU-A01 – PPD-ACB001 ←
 → HODCPD1 - C01 – PDU-A01 – PDP-A01 →

6.2 Power Supply Cords

Key:

← [Cabinet No] – [Power Distribution Unit] – [Distribution Point No] ↔ [C01 – SRVxxx – PSU] →

From

Cabinet Number	Power Distribution Unit	Power Distribution Point Number
C01	PDU-A001	PDP-A01

To

Cabinet Number	Server / Switch	PSU
C01	SRVxxxx	PSU-A

Example:

← C01 – PDU-A001 – PDP-A01 ←
 → C01 – SRVxxx – PSU-A →

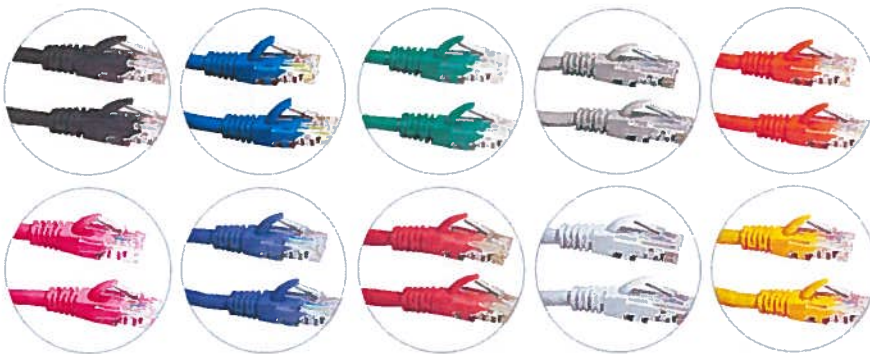
Note: The Primary and Secondary power cables may be colour coded for easy identification.

7 Network Cable Colour Coding

There is no documented Standard on Network Cable Colours. However, it is good practice to use different colours for the Network to ease fault finding and maintenance.

The Network Cable Colour standard must be adhered to.

Cable Colour	Cable Type	Application	A - Network Label Colour	B - Network Label Colour
Blue	OM4 Fibre	SAN/LAN	Green	Gold
Aqua	OM3 Fibre	LAN/SAN Device to Device	Green	Gold
Yellow	Single Mode Fibre	LAN/SAN Device to Device over Long Distance	Green	Gold
Orange	OM1 or OM2 Fibre	LAN/SAN Device to Device	Green	Gold
Copper				
Red	Copper (CAT-6)	DMZ	Green	Gold
Blue	Copper (CAT-6)	WAN - Internet	Green	Gold
Green	Copper (CAT-6)	LAN	Green	Gold
Grey	Copper (CAT-6)	Voice	Green	Gold
White	Copper (CAT-6)	Security Cameras	Green	Gold
Yellow	Copper (CAT-6)	General / Other	Green	Gold
Purple	Copper (CAT-6)	Swift	Green	Gold
Orange	Copper (CAT-6)	SARBLINK	Green	Gold
Black	Copper (CAT-6)	Management	Green	Gold



8 Abbreviations

* Note: New abbreviations to be added as per requirements.

Abbreviation	Full Description
PP	Patch Panel
CDPP	Core Distribution Patch Panel
SW	Switch
CDSW	Core Distribution Switch
C	Cabinet
SRV	Server
AS	Alternate Site
FW	Firewall
HO	Head Office
PTN	Pretoria North
PEB	Port Elizabeth
ELB	East London
BFN	Bloemfontein
JHB	Johannesburg
DBN	Durban
CTN	Cape Town
P	POD
DC	Data Centre
R	Room
CB	Circuit Breaker
DB	Distribution Board
PDU-A	Power Distribution Unit (A = Primary)
PDU-B	Power Distribution Unit (B = Secondary)
PPDR	Primary Power Distribution Room
PPDU-A	Primary Power Distribution Unit (A = Primary)
PPDU-B	Primary Power Distribution Unit (B = Secondary)
PPD-ACB	Primary Power Distribution Circuit Breaker No (A = Primary)
PPD-BCB	Primary Power Distribution Circuit Breaker No (B = Secondary)
PDP-A	Power Distribution Point (A = Primary)
PDP-B	Power Distribution Point (B = Secondary)

