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Transnet Projects Execution Technology

Business Codification

SYS-P-0001

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1. Document Purpose

This document defines the known numbering conventions of the Transnet Projects Division. It is a living document that will be subject to adjustment to fit the specific needs of the business as it progresses.

2. Scope

The document applies to all disciplines/functions and applications used by the Transnet Projects and will form that basis of all know numbering conventions.

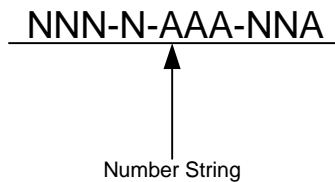
3. References

- ISO 9001

4. Terminology

4.1 Number String Example

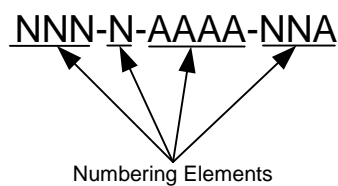
This is the whole number with all its Numbering Elements.



4.2 Number Elements

These are the separable groups of numbers or alpha's within the number string that are used for identification. See below for a definition of numbering elements symbology used in this document.

- N – Numeric (0-9)
- A – Alpha (A-Z, do not use O, I and L)
- X - Numeric/Alpha (0-9 then A-Z, do not use O, I and L)



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4.3 Mask

The numbering mask defines the maximum length of the numbering element within the number string.

NNN-N-AAA-NNA
 ↑
 Mask

4.4 Numbering Conventions

- Between each numbering element within a number string a “-“ delimiter will be used to allow the easy recognition of the elements and also to facilitate data manipulation
- Within the numbering elements if the numbering mask is NNN and the current number is 22 then put a zero in front of the number to fill out the mask i.e. 022 = NNN

4.5 Optional Characters

If a number element shows a character enclosed in brackets (i.e. (N)) it indicates that the character is optional. The brackets are not to be shown.

- Redundant delimiters created as a result of not including an optional character are not to be shown

5. Project Numbering

5.1 Purpose

A numeric project identifier for all ‘small’ projects executed by Transnet Projects.

A project must keep the same identifier irrespective of which Transnet Projects divisions are executing work on it. E.g. if Design services and Projects are working on a common project both would use the same project number.

5.2 Mask

The mask for the Project Number will be as follows:

NNNNNNN

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Table 1 – Project Number Mask Breakdown

Part in order of Mask	Description	Examples of Valid Data
NNNNNNN	7 digit sequential number	Allocated by the Transnet Project Services – Project Controls Manager.

Table 2 – Project Number Example

Example Number	Description
2220266	The Y-Site Expansion Project.

Table 3 – Key Project Codification Attributes (Reporting flexibility)

Character Position	Description	Source of Data	Examples of valid data
1	Controlling Office Identification Codes	Annexure A – Table A1 Controlling Office ID Code	2 (KZN – Durban)
2	Transnet Project Services Client	Annexure B – Table B1 – Division Code	2 (SAPO)
3	Transnet Projects – Executing Party	1 = Transnet Project Services 2 = RME	1 = Transnet Project Services 2 = RME
4	Spacer	0	0
5-7	Sequential Number	Project Controls Manager and Dimensions DB	266 – Y site

6. Work Breakdown Structure (WBS)

6.1 Purpose

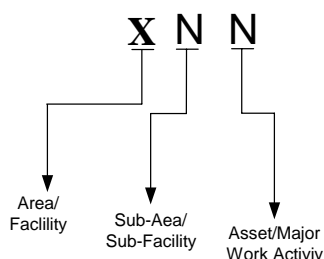
Project Management principles mandate that a project be broken down into manageable entities of work; this is the purpose of the Work Breakdown Structure (WBS).

As well as defining a Project’s primary breakdown structure the WBS will facilitate integration between Transnet Projects systems, it will be the primary integration element.

Note: *This will be project specific although it is recommended that we tend towards developing standard/Templates to expedite creating new project on the systems.*

6.2 Mask

The WBS mask will be NNN, which will be built on the following logic;



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Table 4 – WBS Examples

Example Number	Description
110	Plant
111	STS Cranes
112	Straddle Carriers
200	Ben Schoeman Dock
210	Berth Deepening
211	Dredging
220	Key Extension
221	Piling
222	Key Wall and Scour Protection
300	Platform Expansion
310	Demolition

7. Package Breakdown Structure (PBS)

7.1 Purpose

Procurement requires their work to be broken down according to the Project’s Procurement Strategy into enquiries i.e. Package Breakdown Structure (PBS).

The PBS structure must facilitate reporting at the required levels as well as meet the needs of Procurement.

7.2 Mask

The mask for the PBS is as follows:

- NNNNNN-ANNN

Table 5 – PBS Numbering Convention

Part in order of Mask	Description	Examples of valid data
NNNNNNN	Project Number	Section 5
ANNN	<u>Package number</u> . This is the enquiry number where possible. If not possible then it is composed of an alpha which is the discipline code (contract code selected based on majority of work to be completed in package) with a 3 digit sequential number	C002 (Annexure D - Table D2)

Table 6 – An Example of the PBS Numbering Convention

Example Number	Description
2220266-C002	The 2 nd Civil Order/Contract on the Y-Site Expansion Project

Note: *It is critical to ensure that the project number is carried in the mask. This will ensure that a package number is always unique across the business for all projects.*

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If this was not the case then there would be several C002 packages on several projects. It could then become confusing in discussion knowing which C002 package was being referred to.

8. Segment (Cost Center)

8.1 Purpose

The segment defines the business cost centres. This is required for high level grouping of costs and expenses for business management reporting.

8.2 Mask

The mask for the segment is as follows:

NNN-NN-NN-(NNN)

Table 7 – Segment Numbering Convention

Part in order of Mask	Description	Examples of valid data
NNN	Department	045 – (Annexure A - Table A12)
NN	Controlling Office and Branch	12 – (Annexure A - Table A1 & A13)
NN	Market and business type	31 – (Annexure A - Table A2 & A3)
(NNN)	Sub Account number, further breakdown of the segments if required, default '000'	

Table 8 – An Example of the Segment Numbering Convention

Example Number	Description
045-12-31-800	Civils, Cape Town Controlling Office, Executed by the Durban Branch. This is pipeline construction work.

9. Client Code/Divisions

9.1 Purpose

A project will be executed for one or more of Transnet’s Divisions. It is critical for invoicing/journal transactions to identify to which client, Transnet Divisions , the job belongs.

In the instance that a project is for more than one Division the Project must also have a definition of the ‘split’ in order that the correct journal can be placed on the respective Division.

Please refer to Annexure B, [Table B1](#).

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10. Commodity Codes

10.1 Purpose

The purpose of this code is to group like cost items be they labour, expense or capital expenditure. ***This will only be used to compile the estimates in Candy and not be used in any other of the systems.***

10.2 Mask

The mask for the commodity code is as follows:

A-NN-NNNN-NNN

Table 9 – The Commodity Code Numbering Convention

Part in order of Mask	Description	Examples of valid data
A	Category	L – Labour (Annexure A - Table A4)
NN	Project Phase	05 – Construction (Annexure A - Table A7)
NNNN	Object Account	5022 – Salaries
NNN	Activity	110 - P&G Time Related

Table 10 – An Example Commodity Code Numbering Convention

Example Number	Description
L-05-50022-110	P&G time related salaries for labour during the construction phase of the project.

11. Time & Expense Activity Codes

11.1 Purpose

This is the level at which Transnet Project’s effort will be measured and managed. Resources will be required to book time against activities defined in the time sheeting system. Similarly there must also be expense activities in order that all costs can be accrued against a project, total effort time and money.

Note: *These activities will be defined in Primavera Project Management (schedule) as ‘Level of Effort Activities’. These will be imported into Dimensions for a given project. Resources will capture their time against these activities in Dimension, the actual hours will then be imported into the schedule to allow for progress verse effort reporting.*

11.2 Mask

The suggested mask for time sheeting and expense activities is as follows:

NNNNNNN-XNN-XXXX

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Table 11 – Time and Disbursement Activity Numbering Conventions

Part in order of Mask	Description	Examples of valid data
NNNNNNNN	Project Number	Section 5
NNN	WBS element	Section 6
XXXX	Activity, free format as defined by project. This is a further breakdown of the work.	Allows for flexibility in defining what the ‘level of effort activities’ will be defined in the schedule.
(A)	Discipline	(Annexure D - Table D1)

Table 12 – An Example of the Time and Disbursement Activity Numbering Convention

Example Number	Description
2220266-311-001D-A	A design activity for the Architectural delivery of plant area 311 on the ‘Y-Site Expansion Project’.
2220266-311-001M-A	A management activity on the Architectural delivery of plant area 311 on the ‘Y-Site Expansion Project’.
2220266-999-9999	Activity/Code where all expenses/disbursements for the ‘Y-Site Expansion Project’ must be booked/captured.
2220266-000-0001-Z	Project Management Effort on the ‘Y-Site Expansion Project’.

12. Financial Data Elements

These data elements are already defined and owned in Dimensions. As Dimensions, the financial system, will be used to capture Transnet Project’s effort on a project there is little need to carry this information in Primavera Project Management.

12.1 Staff Categories

See Annexure A - [Table A5](#) (Project Staff Categories) and [Table A6](#) (Construction Staff Categories)

12.2 Disbursement Types

See Annexure A - [Table A11](#)

12.3 Billing Types

See Annexure A - [Table A9](#) and [A10](#)

12.4 Time Types

See Annexure A - [Table A8](#)

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13. Engineering Codes

13.1 Equipment Numbering

13.1.1 Purpose

This convention will apply for process, mechanical and electrical equipment.

13.1.2 Mask

The mask for equipment is as follows:

NNN-AA-NNNA

Table 13 – Major Equipment Number Convention

Part in order of Mask	Description	Examples of valid data
NNN	WBS element	Section 6
AA	<u>Equipment Type</u>	(Annexure C – Table C1)
NNN	<u>Equipment Sequence Number.</u> Uniqueness by WBS and equipment type.	001, 002, 003, etc
A	<u>Parallel Equipment Indicator</u>	A, B, C, etc. if required.

Table 14 – Major Equipment Number Example

Example Number	Description
112-CV-001C	Conveyor 1 in area 3112, in which there are 3 conveyors operating in parallel.

Equipment Number uniqueness is a function of the Equipment Type, sequence number and (if applicable) the parallel indicator.

13.2 Cable Numbering

13.2.1 Purpose

Cables shall be identified with a coded number generally fixed at both ends of the cables. The coded number uniquely identifies the cable to the equipment to which it is connected or the lighting circuit to which it is connected. The cable number will also identify the service that the cable performs to the equipment.

13.2.2 Mask

The mask for cable numbering is as follows:

- Major Equipment – NNN-AA-NNNA-A-N-AA-N

Those elements of the cable number that are not necessary for positive identification shall be eliminated.

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Table 15 – Cable Numbering Convention

Part in order of Mask	Description	Examples of valid data
NNN-AA-NNNA	Major Equipment Prefix	111-BN-001A
Then		
A	Phase Identifier (optional)	R
N	Suffix for multiple circuits (optional)	
AA	Cable Service Identifier for cable types	HV
N	Suffix for multiple cables of the same type (optional)	

Table 16 – Service Identifier Description

Abbreviation	Service Identifier Description
HV	Power systems above 1000 V a.c. or 1500 V d.c.
P	Power systems not exceeding 1000 V a.c. or 1500 V d.c.
IP	Instrument Power
E	Earthing systems (Power & Lightning)
IE	Earthing system (Instrument)
C	Control systems (Digital)
I	Instrumentation systems 9 (Analogue)
OD	Optic Data Systems
CD	Copper Data Systems
T	Telephone systems

Table 17 – Phase Identifier Description

Abbreviation	Phase Identifier Description
R	Red
W	White
B	Blue
N	Neutral

Table 18 – Cable Numbering Convention Example

Example Number	Service Description
112-CV-001C-01A-I-02	2 nd Instrument Cable to conveyor 3112-CV-001C.

Cable Number uniqueness is a function of all data elements described in table 15.

13.3 Control System Tag Numbering

The following provides for the convention that will be used for numbering of all Control System Tag Numbers.

13.3.1 Convention

NNN-AAAA-NNNA-AAAA

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Table 19 – Control System Tag Numbering Convention for Equipment

Number Elements	Description	Examples of valid data
NNN	WBS element	Section 6
AAAA	Component Equipment Type	
NNN	Component Equipment Sequence downstream from the Major Equipment.	1, 2, 3 etc
A	Component equipment parallel indicator.	A, B, C
AAAA	Function Qualifier (Optional)	RUN, STOP, FLT

Control System uniqueness by region is a function of the Component Equipment Type, sequence number and (if applicable) the parallel indicator.

13.4 Instrument Numbering

The convention for numbering of instruments is as follows:

NNN-AAAA-NNNA

Table 20 – Instrument Numbering Convention

Part in order of Mask	Description	Examples of valid data
NNN	WBS	(Annexure B)
AAAA	Instrument Types	(Annexure G – Table G1)
NNN	Loop Number	1, 2, 3, etc., minimum of 1 maximum of 3.
A	Parallel Instrument Indicator	A, B, C, etc. if required.

Table 21 – Instrument Numbering Convention Example

Valid Number Example	Description
111-3112-FIT-003C	A flow transmitter in area 3112, belonging too loop 003. This is the third flow transmitter in the loop.

Instrument Number uniqueness by region is a function of all data elements.

14. Document Numbering

The document numbering convention applies to all documents that are created by Transnet Projects.

Project specific documents must be saved in the appropriate project and be numbered accordingly.

All documents will be numbered based on the masks described. The purpose of the masks is to ensure that the essential meta data per document category is visible in the document number when it is no longer associated with the EDMS.

14.1 Technical Project Documents

All engineering drawings and technical documents shall be numbered according to the following convention.

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NNNNNNN-N-NNN-A-AAAA-NNNN

Table 22 – Technical Document Numbering Convention

Part in order of Mask	Description	Examples of valid data
NNNNNNN	Project Number	Section 5
N	Division	3 – (Annexure B - Table B1)
NNN	WBS element	Section 6
A	Discipline Code	F – Process (Annexure D - Table D1)
AAAA	Document Type (for drawings this will be limited to 2 characters)	SP – Specification (Annexure E - Table E1)
NNNN	Sequential Number by document category.	
(NN)	Sheet no – note: only for drawings	

Table 23 – Technical Document Numbering Example

Example Number	Definition
2220266-3-112-F-SP-0003	The third Process specification in WBS area 112 for SPOORNET on the Y-Site Expansion Project.
2220266-2-211-M-GA-0012-02	The 2 nd sheet of the 12 th mechanical GA for the Y-Site Expansion Project.

The technical document uniqueness will be a combination of the project number, division, WBS, document type, sequential document number and in the case of drawings the sheet number. The document’s revision number and vendor ID ([Annexure F](#)) will be attributes of the document. The vendor ID is only applicable to drawings.

14.2 General and Commercial Project Documents

NNNNNNN-AAAA-NNNN

Table 24 – General Document Numbering Convention

Part in order of Mask	Description	Examples of valid data
NNNNNNN	Project Number	Section 5
AAAA	Document Type	RPT – Report (Annexure E – Table E1)
NNNN	Sequential Number by document category.	

Table 25 – General Document Numbering Example

Example Number	Definition
2220266-RPT-0005	The 5 th report on the ‘Y-Site Expansion Project’.

The document uniqueness will be a combination of the project number, document type and sequential document number. The document’s revision number will be an attribute of the document.

14.3 Contract and Package Related Project Section Documentation

As per the relevant procurement procedures the mask for contract and package related documentation will be:

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NNNNNNN-ANN-AAAA-NNNN

Table 26 – Contract and Package Document Numbering Convention

Part in order of Mask	Description	Examples of valid data
NNNNNNN	Project Number	Section 5
ANNN	Package Number	S002
AAAA	Document Type	ENQ – Enquiry (Annexure E – Table E1)
NNNN	Sequential Number by document category.	

Table 27 – Contract and Package Document Numbering Example

Example Number	Definition
2220266-S002-ENQ-0005	The 5 th enquiry for contract/enquiry S002 on the ‘Y-Site Expansion Project’.

The document uniqueness will be a combination of the project number, package number, document type and sequential document number. The document’s revision number will be an attribute of the document.

14.4 General Organisational Documents

The mask for general organisational document will be as follows:

AAA-AAAA-NNNN

Table 28 – Organisational Document Numbering Convention

Part in order of Mask	Description	Examples of valid data
AAA	Functional Category	ENG – Engineering (Table E3)
AAAA	Document Type	P – Procedure (Annexure E – Table E1)
NNNN	Sequential Number by type	

Table 29 – Organisational Document Numbering Example

Example Number	Definition
ENG-P-0005	The 5 th engineering procedure for Transnet Projects.

14.5 Transmittal Numbering

The mask for transmittal will be as follows: NNNNNNN-AAA-NNNN

Table 30 – Transmittal Numbering Convention

Part in order of Mask	Description	Examples of valid data
NNNNNNN	Project Number	Section 5
AAA	Document Type	Internal – ITR External – ETR
NNNN	Sequential Number by type	

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Table 31 – Transmittal Document Numbering Example

Example Number	Definition
2220266-ITR-0005	The 5 th internal transmittal on the 'Y-Site Expansion Project'.

15. Planning (TBC)

GT:kbs
Annexure(s)/Enclosure

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Annexure A – Existing Transnet Projects’ Codes

Table A1 – Controlling Office Identification Codes

Ctrl Office Code	Office Description
0	Corporate Office
1	Cape Town
2	Durban
3	Johannesburg
4	Open
5	Open
6	Design Office
7	Business Development
8	Open
9	Open

Table A2 – Market Codes

Market Code	Market Description
0	Any Market
1	Rail
2	Port
3	Pipelines
4	Roads
5	Marine

Table A3 – Business Type Codes

Business Code	Business Type Description
0	Support
1	Construction
2	Project Engineering
3	Maintenance
4	Design
5	Business Development
8	Balance Sheet Accounts
9	Income Statement Suspense Accounts

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Table A4 – Cost Categories

Category Code	Category Description
L	Labour
P	Plant
M	Material
C	Sub-Contracts
T	Contract/Casual Labour
S	Sundries
I	Intra Recoveries
O	Segment Overhead Cost
B	Burden
R	Revenue
D	Disbursements

Table A5 – Project Staff Categories

Phase Code	Phase Description
A11	Recognized Expert
B11	Senior Management
C11	Registered Engineers, Technologists & Arch. Technologists (Senior)
C12	Registered Engineers, Technologists & Arch. Technologists (Junior)
D11	Registerable Technicians & Unregistered Engineers (Senior)
D12	Registerable Technicians & Unregistered Engineers (Junior)
D21	Unregistered Technicians (Senior)
D22	Unregistered Technicians (Junior)
D31	Project Supervisors
D41	Other Technical Staff (Senior)
D42	Other Technical Staff (Junior)
S11	Support Services

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Table A6 – Construction Staff Categories

Phase Code	Phase Description
1	Top Management
2	Senior Management
3	Middle Management
4	Technical Worker
5	Senior Tech Worker
6	Artisan
7	Supervisor
8	Technician
9	Professional in Training
10	Administrator
11	Senior Administrator

Table A7 – Project Phases

Phase Code	Phase Description
01	Report Stage
02	Preliminary Design
03	Design
04	Tendering
05	Construction
06	Commission
07	Maintenance

Table A8 – Time Types

Time Code	Time Description
NT	Normal Time
OT	Overtime
ST	Sunday Time
RT	Straight Time
UP	Unproductive Time
UT	Unavailable Time
TT	Training
ET	Extra Time

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Table A9 – Billing Rate Numbers

Phase Code	Billing Rate Description
0	Special/Negotiate Rate
1	Current Billings Rate
2	Previous Billing Rate
3	Current Billings Site Rate
4	Previous Billings Site Rate
5	Coal Link Rate

Table A10 – Billing Types

Bill Type Code	Bill Type Description
A	Hourly Based Fees
F	% Fee Based Fee
M	Marketing Time
N	Extra Billable Time
R	Time Spent on Risk
T	Training Time
W	Rework Time
X	Extra Non-Billable
Z	Other Non-Billable

Table A11 – Disbursement Types

Bill Type Code	Bill Type Description
ACC	Accommodation
AIR	Air Travel
CAR	Vehicle Hire
PLA	Plans
STA	Stationery
TRA	Kilometres Travelled
OTH	Other

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Table A12 – Departments Types

Department Code	Department Description
001	Management
002	Finance
003	Marketing
004	Admin/ ecretariat
005	General
006	M.I.S.
007	Costing
008	New Financial System
010	Human Resources
011	Human Resources: Training
012	Risk Management
013	Quality Assurance
020	Tendering Department
021	Building
022	Equipment Pools
024	Workshops
030	Contract & Legal Services
031	Project Related Costs
032	Project Management
040	Mechanical
041	Consulting Services
042	Income Segment - Nitres Cape
045	Civil
046	Quantity Surveyors
047	Architects
050	Services
060	Geotechnical
061	Bridges
062	CADD
063	Structures
064	Water
065	Plan Room
070	Earthworks
071	PERWAY
072	Buildings and Services
073	Track Welding

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074	PERWAY Maintenance
075	Infrastructure
076	Special Project - Maputo Corridor
077	Special Project - Zambia Project
080	Signals
090	Electrical
097	Consolidation of Intra Accounts

Table A13 – Branch Codes

Branch Code	Branch Description
0	Local
1	Cape Town
2	Durban
3	Johannesburg
4	Richards Bay
5	Port Elizabeth
6	East London
7	Elandsfontein
8	Nquara

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Annexure B – Division and Regional Codes

Table B1 – Division Codes

Division Code	Division
0	General EPCM activities that are non Division specific
1	NPA
2	SAPO
3	SPOORNET
4	Petronet
5	Transwerk
6	Transnet Projects

Table B2 – Regional Codes

Region Code	Region
CP	Cape Town Port
CR	Cape Town Rail
SP	Saldanha Port
SR	Saldanha Rail
NP	Ngqura Port
NR	Ngqura Rail
EP	East London Port
ER	East London Rail
DP	Durban Port
DR	Durban Rail
RP	Richards Bay Port
RR	Richards Bay Rail

Note: If hardcopy, check electronic system for latest revision

Annexure C – Equipment Types (TBC)

Table C1 – Equipment Type Codes.

Equipment Code	Description
AB	Air Blower
AC	Air Conditioner
AG	Agitator
AL	Air lift
AM	Amalgam drum
AS	Absorber
AT	Activator
AW	Analysing Probe or Well
BA	Battery Charger
BC	Burner Control Panel
BE	Bucket Elevator
BK	Brake
BL	Building
BM	Briquetting Press
BN	Bin
BP	Bypass
BR	Burner
BU	Bunker
BW	Beltweigher
CA	Carriage
CB	Circuit Breaker
CC	Control Panel/DCS Cubicle
CD	Car Dumper
CE	Combustion Engine
CG	Condenser
CH	Chute/Diverter
CI	Control Power Supply
CL	Column
CM	Cabinet (Miscellaneous)
CN	Crane
CP	Compressor
CQ	Communication Equipment
CR	Crusher
CS	Classifier/Clarifier
CT	Cooling Tower
CV	Conveyor
CX	Capacitor Bank
CO	Concentrator
CY	Cyclone
DA	Damper
DB	Distribution Board
DC	Dust Collector

Note: If hardcopy, check electronic system for latest revision

DE	Detector
DG	Degasser
DI	Distributor
DK	Control Desk
DM	Dam
DO	Dosing System
DR	Drier
DS	Dust Suppression
DT	Draft Tube
DU	Deducting Unit
DV	Drive Components
ED	Eductor
EW	Electrowinning Cell
EJ	Expansion joint
FA	Fan
FB	Fluidised Bed
FC	Flow Controller
FE	Feeder
FH	Fume Hood
FL	Filter
FO	Fibre Optic Equipment
FS	Fire Services
FT	Flotation Cell
FU	Furnace
GA	Gate
GB	Gear Box
GC	Gas Cooler
GE	Generator
GM	Grinding Machine
GR	Grizzly
GS	Gas Analyser
HC	Hypo Chlorinator
HD	Header
HE	Heater
HM	Hammer Mill
HO	Hood
HP	Hopper
HT	Hoist
HV	Piping Manual Valve (Hand Valve)
HX	Heat Exchanger
IS	Isolation Switch
JB	Junction Box
KN	Kiln
LR	Inductor, Reactor (Electrical)
LA	Launder
LI	Lift
LU	Lubrication Unit
MA	Magnet

Note: If hardcopy, check electronic system for latest revision

MC	Motor Control Centre
ME	Mist Eliminator
ML	Grinding Mill
MO	Motion Detector
MR	Mercury Retort
MN	Monitor
MT	Motor/Drive
MW	Moisture Cutter
MX	Mixer Settler
OV	Oven
PD	Pond
PK	Package Plant
PL	Belt Plough
PN	Control Panel
PP	Pump
PE	Precipitator
PR	Power Conditioner
PT	Pontoon
PV	Pressure Vessel
QU	Quench Unit
RB	Rock Breaker
RC	Reclaimer
RD	Rod Charger
RE	Rectifier Panel
RF	Retractor
RG	Regenerator
RM	Roller Mounting Device
RO	Reverse Osmosis Unit
RR	Reactor
RV	Rotary Valve
SA	Sampler
SB	Switchboard
SC	Screen/Vibrating Screen
SR	Scrubber
SE	Shower/Eyewash
SG	Slide Gate (or Stage)
SH	Shuttle
SJ	Silencer
SY	Spray System
SK	Stack
SL	Ship Loader
SM	Static Mixers
SN	Separator
SP	Special Piping Item (SP)
SQ	Shop/Maintenance Equipment
SS	Sample Station
ST	Stacker/Stockpile
SU	Sump

Note: If hardcopy, check electronic system for latest revision

TB	Terminal Box (Field)
TF	Transformer
TH	Thickener
TK	Tank
TM	Thickener Mechanism
TR	Trommel
TU	Tunnel
TV	Video Monitor/TV System
UP	UPS
VB	Vibrator
VT	Venturi

Note: If hardcopy, check electronic system for latest revision

Annexure D – Discipline/Contract Codes and Procedure Categories

Table D1 – Discipline Codes

Discipline Code	Description
A	Architectural
B	Building & Infrastructure
C	Civil
E	Electrical
F	Process Engineering
G	General – non discipline specific
H	Geotechnical
J	Control and Instrumentation
K	Security
L	Environmental
M	Mechanical
N	PERWAY
P	Piping
S	Structural Steel
Z	Project Management

Table D2 – Contract/Package Codes

Discipline Code	Description
A	Architectural Contract
B	Building & Infrastructure Contract
C	Civil/Construction Contract
E	Electrical Contract
H	Geotechnical Contract
J	Control and Instrumentation Contract
L	Environmental Contract
M	Mechanical Equipment Contract
P	Piping Supply Contract
S	Structural Steel Contract
Y	Consultant Services Contract
Z	Project Management

Table D3 – Functional Categories

Functional Cat. Code	Functional Cat. Description
COM	Commissioning Management
CON	Construction Management
CNT	Contracts Administration
DOC	Document Management
ENG	Engineering
ENV	Environmental Management
FIN	Finance
HAS	Health and Safety Management

Note: If hardcopy, check electronic system for latest revision

Functional Cat. Code	Functional Cat. Description
HR	Human Resources
IR	Industrial Relations
PRO	Procurement
PRM	Project Management
PRS	Project Services
SYS	Systems/IT
QAL	Quality Management
RIS	Risk Management
TRN	Training

Note: If hardcopy, check electronic system for latest revision

Annexure E – Document Types

Table E1 – Document Types

Code	Document Type	Doc Type
AG	Agenda	General & Commercial
AGR	Agreement	General & Commercial
BG	Bank Guarantees	General & Commercial
BS	Bending Schedule	Technical
BIDL	Bidders List	Contract
BOQ	Bill of Quantities	Technical
MAP	Business Process Map	General & Commercial
CS	Cable Schedules	Technical
CT	Cable Termination	Technical
CAL	Calculation Sheet	Technical
CERT	Certificate	General & Commercial
COI	Certificate of Insurance	General & Commercial
CK	Checklist	General & Commercial
CC	Claim-Contract	General & Commercial
CE	Compensation Event	General & Commercial
CHS	Course User Guide	General & Commercial
CGD	Course Trainer Guide	General & Commercial
CTA	Contract Addendum	General & Commercial
CTD	Contract Document	General & Commercial
CP	Contract Plan	General & Commercial
CTV	Contract Variation	General & Commercial
DS	Data Sheets	Technical
DBS	Design Basis	Technical
DC	Design Criteria	Technical
HD	Diagram - Hook-up	Technical
HF	Diagram - Hydraulic Flow	Technical
PI	Diagram - Piping and Instrumentation	Technical
PD	Diagram - Power Distribution	Technical
PF	Diagram - Process Flow	Technical
SL	Diagram - Single Line	Technical
AR	Drawing - Arrangement	Technical
DE	Drawing - Detail	Technical
GA	Drawing - General Arrangements	Technical
LD	Drawing - Loop	Technical
LA	Drawing - Layout	Technical
PL	Drawing - Power Distribution Layouts	Technical
SD	Drawing - Schematic	Technical
IS	Drawings - Piping Isometric (Routing Layouts)	Technical
SC	Drawings – Schedule	Technical
SK	Drawings – Sketch	Technical
MOD	Drawings – 3D Model	Technical
EW	Early Warning	General & Commercial

Note: If hardcopy, check electronic system for latest revision

EM	Email	General & Commercial
ER	Engineering Requisition	Contract
EN	Enquiry	Contract
EL	Equipment List	Technical
ES	Estimate	General & Commercial
FD	Fabrication Details (by Fabricator)	Technical
FX	Facsimile	General & Commercial
FM	Form	General & Commercial
FEP	Functional Execution Plan	General & Commercial
FS	Functional Specifications	Technical
FGL	Application Functional Guideline	General & Commercial
GL	Guideline	General & Commercial
IO	I/O Schedules	Technical
I-P	Images & Photographs	General & Commercial
ITP	Inspection and Test Plan	General & Commercial
IOM	Installation and Operations Manual	General & Commercial
II	Instrument Index	Technical
INV	Invoice	Contract
CO	Correspondence	General & Commercial
LL	Line List	Technical
LIS	Lists	General & Commercial
LSDS	Load Summary Data Sheet	Technical
MA	Manual	General & Commercial
MDL	Module	General & Commercial
MTO	Material Take Off	Technical
MI	Memo (Internal)	General & Commercial
MP	Memo (Project)	General & Commercial
MPR	Module Presentation	General & Commercial
MM	Minutes of Meeting	General & Commercial
ML	Motor list	Technical
NO	Note	General & Commercial
PB	Performance Bond	General & Commercial
POL	Policy	General & Commercial
PRS	Presentation	General & Commercial
P	Procedure	General & Commercial
PP	Procurement Plan	General & Commercial
PRM	Process Map	
PPES	Programme Procurement Execution Strategy	General & Commercial
PEP	Project Execution/Work Plan	General & Commercial
PO	Purchase Order	Contract
RD	Reinforcing Detailing	Technical
RPT	Report	General & Commercial
RFI	Request for Information	General & Commercial
SCH	Schedule	General & Commercial
SOW	Scope of Work	General & Commercial
SI	Site Instruction	General & Commercial
SP	Specification	Technical
STD	Standard	General & Commercial
ETR	External Transmittal	General & Commercial

Note: If hardcopy, check electronic system for latest revision

ITR	Internal Transmittal	General & Commercial
TQ	Technical Queries	General & Commercial
TMP	Template	General & Commercial
TN	Tender	Contract
TEA	Tender Addendum	Contract
TE	Tender Evaluation	Contract
VL	Valve List	Technical
WA	Warranty	General & Commercial
WI	Work Instruction	General & Commercial
WPP	Work Package Plan	General & Commercial

Note: If hardcopy, check electronic system for latest revision

Annexure F – Contractor Ids (TBC)

Contractor Code	Description
MR	Murray and Roberts etc.

Note: If hardcopy, check electronic system for latest revision

Annexure G – Instrument Types

Table G1 – Instrument Types

First Letters	Description	Well	Radiation Source	Primary Element (if remote from Tx)	Transmitter	Indicating Transmitter	Sight Glass	Indicator	Controller	Control Valve	On/Off Valve	Solenoid Valve	Pilot Valve or Positioner (if remote from valve)	Calculate or Convert	Self Regulating Valve	Safety Valve	Bursting Disks	Switch (add HH, H, L, LL, HL as required)	Alarm (add HH, H, L, LL, HL as required)
A	Analysis (eg. pH, ORP, Conductivity, H2S ppm)	-	-	AE	AT	AIT	-	AI	AIC	AV	-	-	-	AY	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	Density	-	DX	DE	DT	DIT	-	DI	DIC	DV	-	-	-	DY	-	-	-	-	-
E	Voltage	-	-	-	ET	-	-	EI	-	-	-	-	-	-	-	-	-	-	-
F	Flow	-	-	FE	FT	FIT	-	FI	FIC	FV	-	FX	FY	FY	FCV	-	-	FSxx	FAxx
FF	Flow Ratio	-	-	-	-	-	-	FFI	-	-	-	-	-	FFIC	-	-	-	-	-
G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	Hand (ie. operator initiated)	-	-	-	-	-	-	-	-	-	HV	-	-	-	-	-	-	-	-
I	Current	-	-	-	IT	-	-	II	-	-	-	-	-	-	-	-	-	-	-
J	Power	-	-	-	JT	-	-	JI	JIC	-	-	-	-	JY	-	-	-	-	-
K	Time	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L	Level	-	LX	LE	LT	LIT	LG	LI	LIC	LV	-	-	-	LY	-	-	-	LSxx	LAxx
M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N	Torque	-	-	-	NT	-	-	NI	-	-	-	-	-	-	-	-	-	NSxx	NAxx
O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P	Pressure	-	-	-	PT	PIT	-	PI	PIC	PV	-	PX	-	PY	PCV	PSV	PSE	PSxx	PAxx
PD	Pressure Differential	-	-	-	PDT	PDIT	-	PDI	PDIC	PDV	-	-	-	PDY	-	-	-	-	-
Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	Speed	-	-	SE	ST	-	-	SI	SIC	-	-	-	-	SY	-	-	-	-	-
T	Temperature	TW	-	TE	TT	TIT	-	TI	TIC	TV	-	TX	-	TY	-	-	-	TSxx	TAxx
U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V	Vibration	-	-	VE	VT	-	-	VI	-	-	-	-	-	-	-	-	-	VSxx	VAxx
W	Weight	-	-	WE	-	WIT	-	WI	WIC	-	-	-	-	WY	-	-	-	-	-
X	On/Off Valves	-	-	-	-	-	-	-	-	-	XV	XV	XV	-	-	-	-	-	-
Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z	Position	-	-	-	ZT	-	-	ZI	-	-	-	-	-	-	-	-	-	ZSC, ZSO	-