

# DeltaV System Upgrade Otumara

## Presentation

*to*

SPDC

# PROJECT BACKGROUND AND OBJECTIVE

## *Project Scope*

- The objective of this project is to Carry out DeltaV System Upgrade at Otumara.
- EATECH shall;
  - Engineer, Procure Hardware and software for the DeltaV Upgrade.
  - Carry out System Configuration, Migration and Testing.
  - Set up Database, Graphics Migration and Testing.
  - Carry out Factory Acceptance Test at Emerson FZE
  - Carry out Site Installation at OTUMARA
  - Carry out Site Acceptance Test and Commissioning at OTUMARA

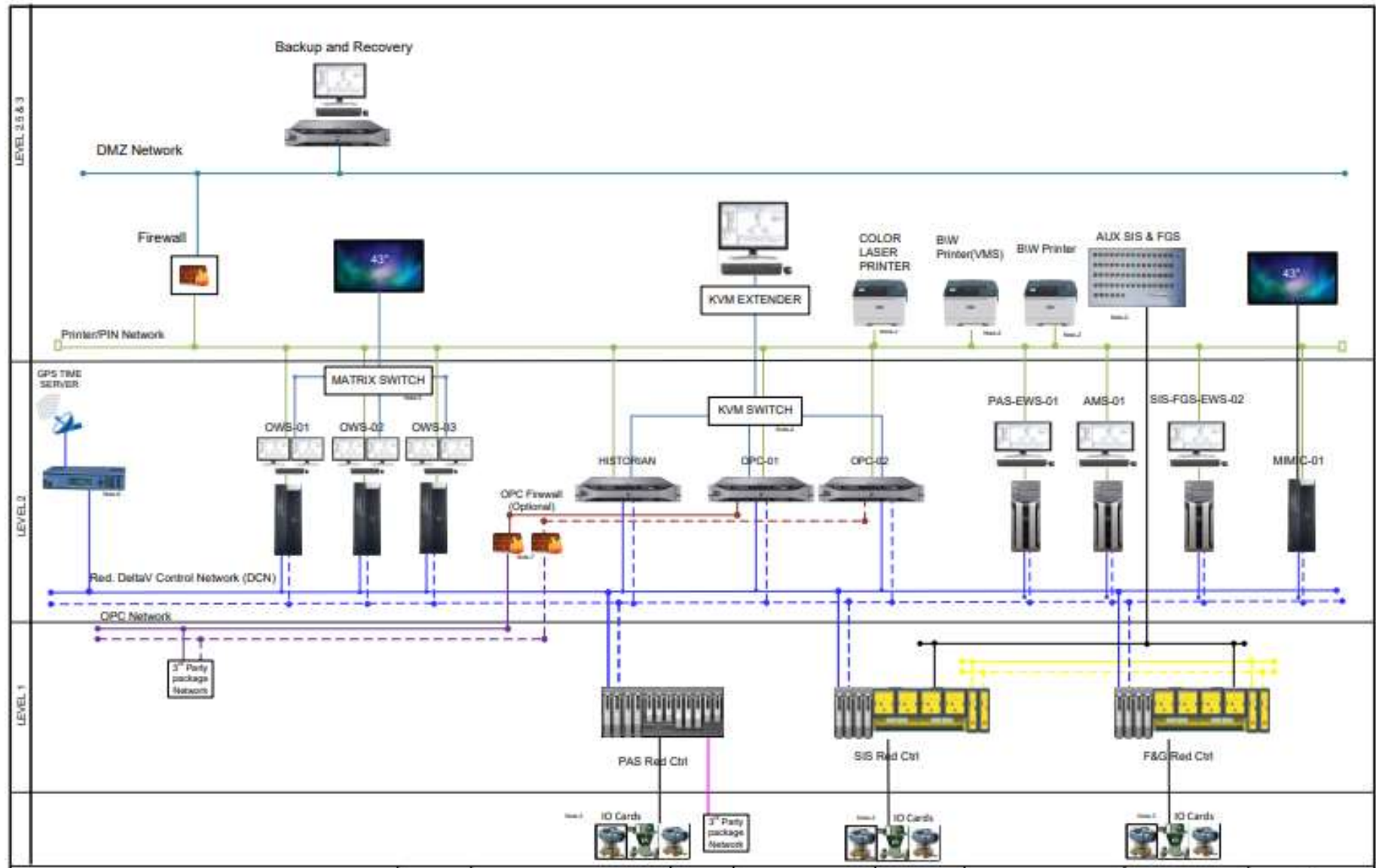
# PROJECT BACKGROUND AND OBJECTIVE

## *Contract Overview*

- Contractual documents to be referenced for this project is “DeltaV System Upgrade Otumara”.
- Contract Execution date – TBD
- Project Start Date – August 12, 2024
- Project Estimated Duration: 10 Months (Ten) from Project Start date.
- Invoicing Format; Invoice submission will be done based on milestone completion; all services rendered will be billed by milestones. Electronic invoices shall be submitted.
- Payment Milestones - TBD

# PROJECT BACKGROUND AND OBJECTIVE

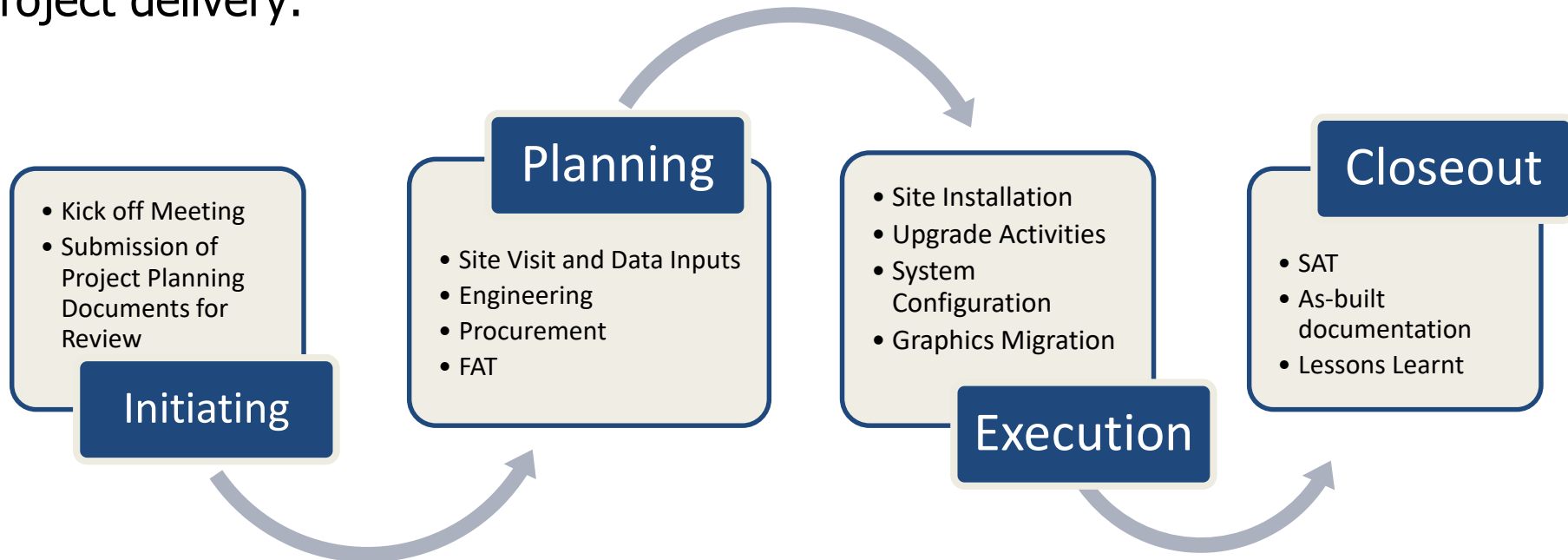
## *System Architecture*





# PROGRAM EXECUTION STRATEGY

The execution strategy shall be in line with EATECH's standard project delivery:



## ***Project Locations***

### ***EATECH Project Office***

- Project Management
- Engineering Design Reviews

### ***EMERSON Dubai***

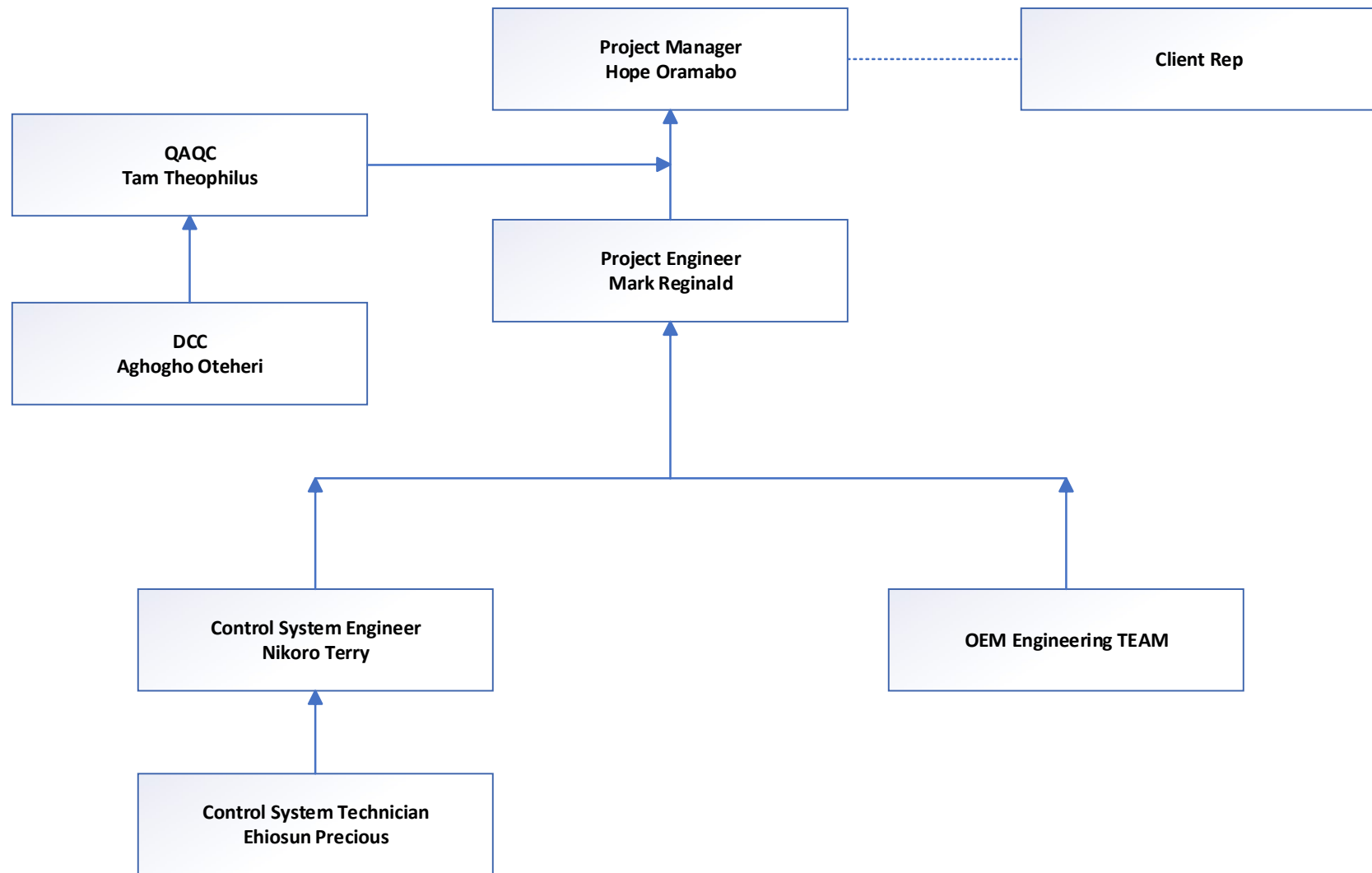
- Engineering
- System Configuration, Migration and Testing
- FAT

### ***OTUMARA Onshore***

- Site Installation works.
- Firmware Upgrade DeltaV controllers, I/O cards.
- Replacement of DeltaV machines and monitors.
- Site Acceptance Tests.

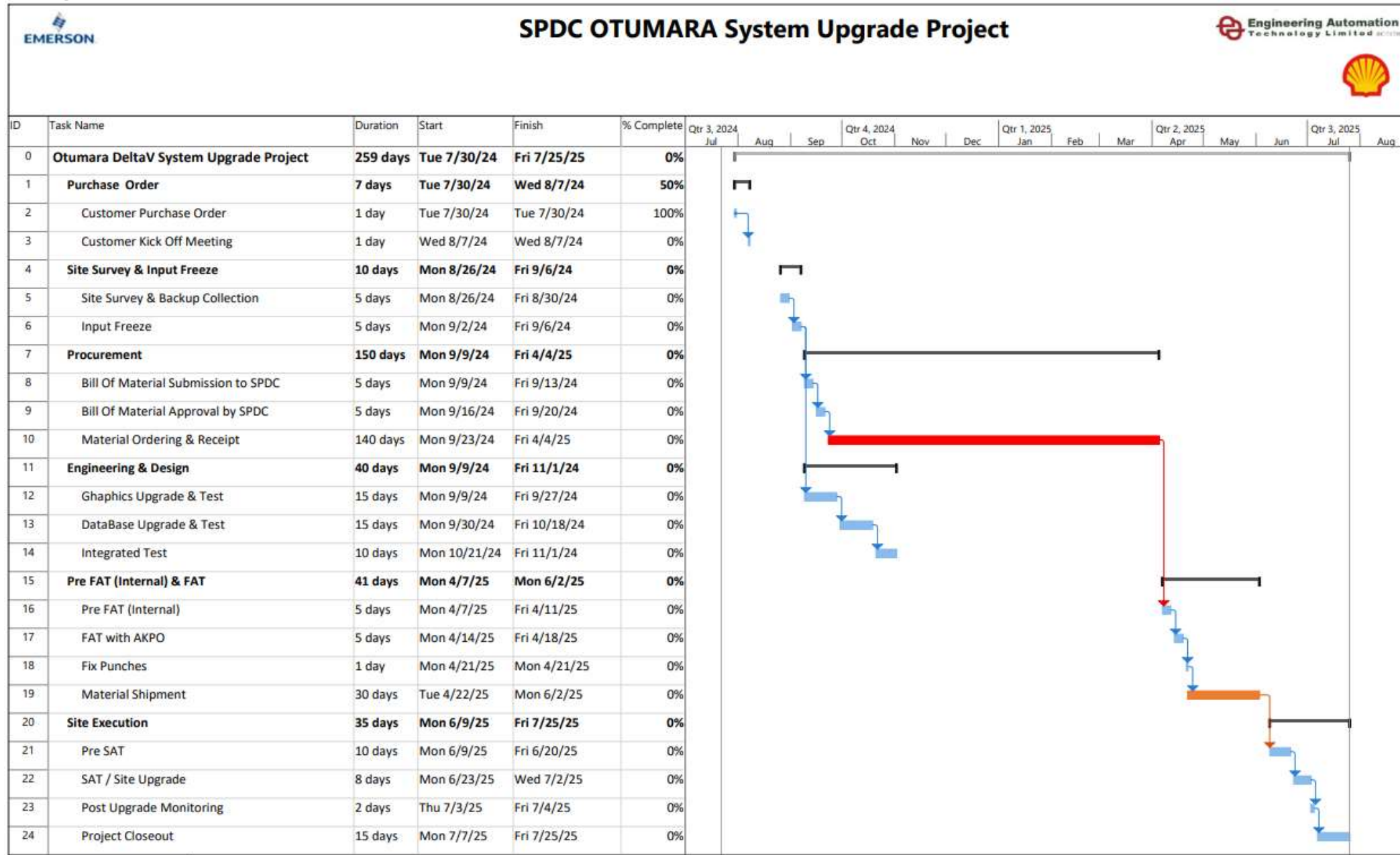
# PROGRAM EXECUTION STRATEGY

A dedicated project team has been assigned for the execution of the Project.



# PROGRAM EXECUTION STRATEGY

## Project Schedule



# PROJECT EXECUTION STRATEGY

## *Critical Activities*

The following activities have been identified to be on the critical path of the Project. Adequate resources and controls shall be put to ensure these activities go according to schedule;

- Engineering
- Procurement

Procurement for the DeltaV Hardware will commence after the Design Freeze dates to minimize the impact of any technical changes.

The Final BOM revised after the Site Survey is to be formally approved by SPDC. Order will be placed when the specifications are made available after Site Visit in the case of the DeltaV Upgrade.

Orders for long lead item (Delta V Upgrade) will be placed using the received technical specification. Any supplementary orders will be placed after receipt and review of all technical input documents on or before Document Freeze & BOM approval.

Ordering, shipping and delivery will be monitored closely to avoid any potential delays.



# PROGRAM EXECUTION STRATEGY

## *Data Requirements, Freeze Dates and Constraints*

### *Data Freeze Dates*

- Site Visit shall be carried out to confirm site realities.
- All necessary data inputs for the design must be received on or before 6th September, 2024
- All New design changes after freeze date will be processed in accordance with the change management.

### *Constraints*

- Plant Shut down
- Field schedule from Client

### *Key Risks:*

- Delays in comments and feedbacks from SDPC. **Mitigation** – Ensure adequate follow up to ensure prompt response for documentation reviews.
- Global Supply Chain challenges. **Mitigation** – All order for Long Lead Items will be placed early enough.
- Updated technical information after Data Freeze will lead to delays and rework which will attract Variation Orders. **Mitigation** – Supply System Architecture

# PROGRAM EXECUTION STRATEGY

## *Data Requirements, Freeze Dates and Constraints*

### *Key Risks (contd.):*

- Community and Security Challenges. **Mitigation** – Community engagements and requirements for security will be established during the site visit. Community engagements will include number of community personnel to be hired. Planning will be done based on the gathered requirements
- Logistics. **Mitigation**.

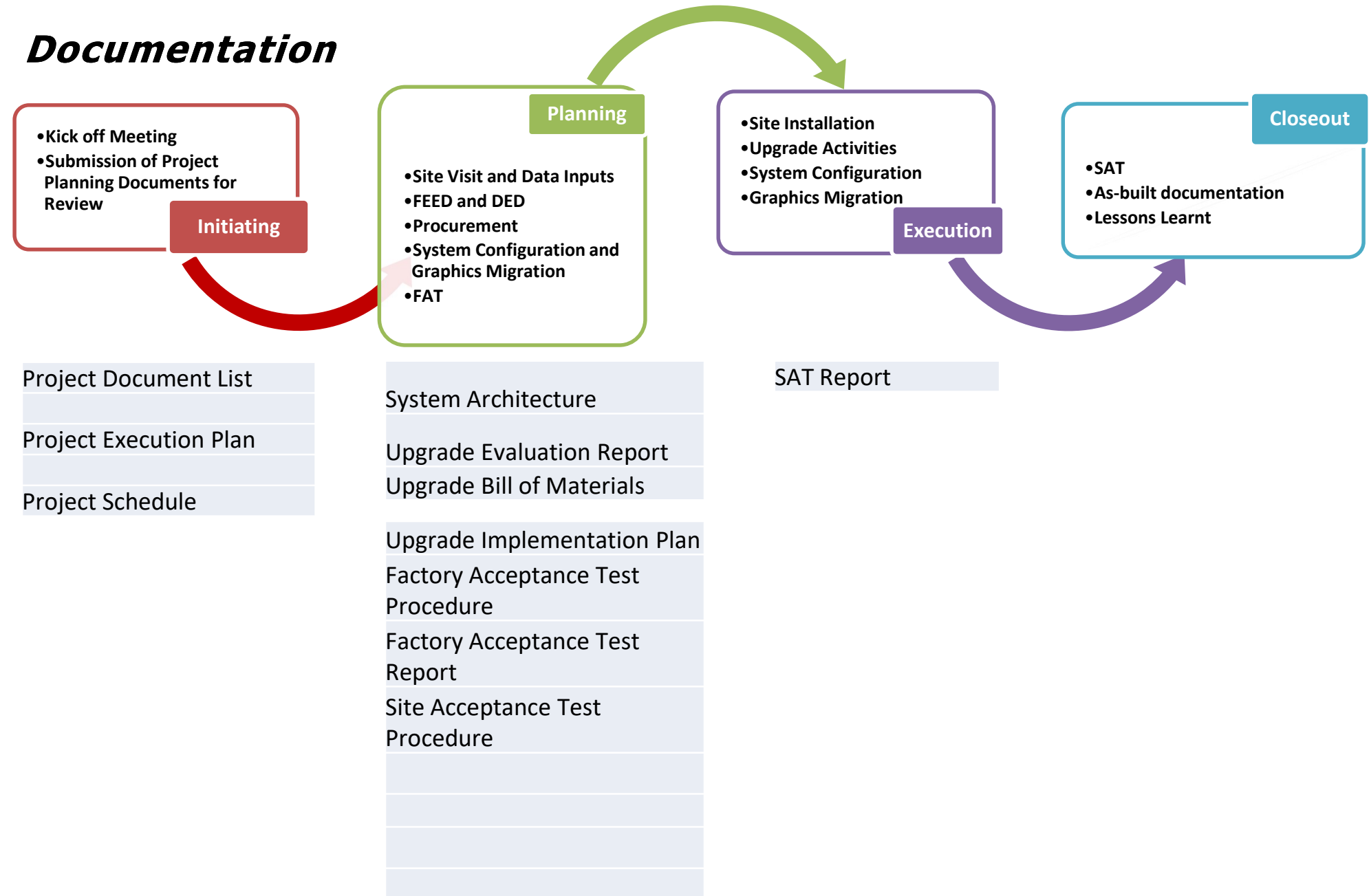
# **PROGRAM EXECUTION STRATEGY**

## ***Communication***

- All verbal communication shall be confirmed in writing, via emails or letters as the case demands.
- Weekly Meetings shall be held to review progress of the Project.
- Project Meetings will be held virtually using Microsoft Teams.
- Progress Reports will be issued on a Weekly and Monthly basis.
- All communications on documents shall be through Document Transmittals to be managed between SPDC and EATL Document Controllers.
- Documentation shall be as per agreed review cycles – IFR, IFA, AFC, As Built.
- Technical Workshops shall be scheduled to review Engineering documents during the Engineering Phase of the Project.

# PROJECT DELIVERABLES AND SPECIFICATION

## *Documentation*



# PROJECT DELIVERABLES AND SPECIFICATION

## Bill of Materials - Preliminary

Item No.	Part No.	Description	Qty.
<b>Server Replacement (OPCDA, OPCDA ,HISTORIAN)</b>			
1	SE2712C14	DeltaV Rack Mount Server; Win Server 2022 Std Emb; 2x Xeon 4112 2.6G CPUs;16GB RAM; Six 800GB Solid State Drives; RAID 10; DVD; 4 Ethernet Ports; Red. Pwr; No Monitor; 5 yr warranty	3
2	SE2816	24-inch LED Widescreen Monitor - Dell Monitor P2423; 16:10 Aspect Ratio; 1920x1200 at 60Hz Resolution; VGA/DVI/HDMI/DP; 3 yr warranty, 1 DP, 1 VGA and 1 USB cable included.	1
<b>Server Replacement (EWS, AMS replacement)</b>			
3	SE2718C02	DeltaV Tower Server with Windows Server IoT 2022; Six 800GB Solid State Drives; RAID 10; 5-year warranty	2
4	SE2816	24-inch LED Widescreen Monitor - Dell Monitor P2423; 16:10 Aspect Ratio; 1920x1200 at 60Hz Resolution; VGA/DVI/HDMI/DP; 3 yr warranty, 1 DP, 1 VGA and 1 USB cable included.	2
<b>Server Replacement (SIS_FGS_EWS)</b>			
5	SIS_FGS_EWS	DeltaV Tower Server with Windows Server IoT 2022; Six 800GB Solid State Drives; RAID 10; 5-year warranty	1
6	SE2816	24-inch LED Widescreen Monitor - Dell Monitor P2423; 16:10 Aspect Ratio; 1920x1200 at 60Hz Resolution; VGA/DVI/HDMI/DP; 3 yr warranty, 1 DP, 1 VGA and 1 USB cable included.	1
<b>WKS Replacement (OWS-01, 02, 03)</b>			
7	SE2612C06	DeltaV Tower Dual/Quad Monitor Workstation; Win10 Ent IoT LTSC 2021; Intel Xeon Processor W-2123 (4C, 3.6GHz, 5.5M, 120W); Two 500GB SATA Drives; RAID 1; 16GB RAM; DVD; 3 E-net Ports; No Monitor; 5 yr warranty	3
8	SE2816	24-inch LED Widescreen Monitor - Dell Monitor P2423; 16:10 Aspect Ratio; 1920x1200 at 60Hz Resolution; VGA/DVI/HDMI/DP; 3 yr warranty, 1 DP, 1 VGA and 1 USB cable included.	6
9	SE2818	43-inch LED Ultra HD 4K Quad Monitor; Connect up to four independent clients to a single monitor; 16:9 Aspect Ratio; 3840 x 2160 at 60 Hz (HDMI & DP only) Resolution; /2xHDMI/2xDP; 3 yr warranty	1
10	VE2104K01	Quad-Monitor Workstation License	2

Item No.	Part No.	Description	Qty.
<b>WKS Replacement (MIMIC)</b>			
11	SE2612C06	DeltaV Tower Dual/Quad Monitor Workstation; Win10 Ent IoT LTSC 2021; Intel Xeon Processor W-2123 (4C, 3.6GHz, 5.5M, 120W); Two 500GB SATA Drives; RAID 1; 16GB RAM; DVD; 3 E-net Ports; No Monitor; 5 yr warranty	1
12	SE2818	43-inch LED Ultra HD 4K Quad Monitor; Connect up to four independent clients to a single monitor; 16:9 Aspect Ratio; 3840 x 2160 at 60 Hz (HDMI & DP only) Resolution; /2xHDMI/2xDP; 3 yr warranty	1
<b>Standard Upgrade Offering Software's</b>			
13	BO_MS Office	Office Professional Plus 2021	7
14	BO_MS SQL	Microsoft SQL Server	1
15	BO_XL Reporter	XL1PM \ XLR Professional + HDA - Single Station	1
<b>Mc-Afee AV_Unmanaged Mode</b>			
16	VE9126WYUM	1st-year Endpoint Security Unmanaged for DeltaV Systems, for DeltaV workstation or server with Guardian Support contracts, License pack	11
17	VE9126UM	Endpoint Security, Unmanaged, for DeltaV Systems, v2.3 Media Pack only. Not compatible with 32-Bit Operating Systems	1
<b>Controller Replacement</b>			
18	SE3008	SQ Controller	16
19	SE5109	System Power Supply, 24 Vdc Input	16
<b>DCS Guardian</b>			
20	VE9041S1900-3	Product Support for One System up to 1900 DST, Annual Price for 3 Years	3
<b>AMS Guardian</b>			
21	AW7040ST00800-3	+ PRODUCT SUPPORT WITH 24 HOUR TELEPHONE SUPPORT, ANNUAL PRICE FOR 3-YEARS, 800 TAGS	3
<b>GPS Hardware</b>			
22	BO_GPS	GPS SecureSync 2400 Time & Frequency synchronization system	1
<b>Network Setup for B&amp;R</b>			
23	VE6206TX	Emerson NextGen Smart Firewall; Copper Ethernet Ports	1
24	VE6102	Control Network Cable 305 meters (1000 Feet)	1
25	BO_DMZ Switch	Switch DMZ Level	1
26	BO_Server Cabinet	Server cabinet, Size: 800 mm (W) x 1000 mm (D) x 2000 mm (H), IP 20, Front and rear Access, Front Side	1
<b>DeltaV Switches Replacement</b>			
27	VE6073R2P2	DeltaV Smart Switch; 19-inch Rack mount modular model with 6x10/100BASE-TX RJ45 ports, 4x100/1000 Combo Ports, 2 Module Slots; Redundant PSU ; UK Power Cord (RM200-Base Module-RP)	4



**THANK YOU**

