

Logistics Operations - Inventory Planning

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SA Power Networks

www.sapowernetworks.com.au



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1. PURPOSE

The purpose of this document is to provide an operating framework for Suppliers when supplying materials to SA Power Networks, and specifies the minimum end to end supply chain requirements. This specification forms a part of the terms and conditions when supplying goods and services to SA Power Networks.

This document is to be read subject to any Supply Agreement in place with SA Power Networks, and to the extent of any inconsistencies, the Supply Agreement takes precedence. This document may not contain all of SA Power Networks' requirements in relation to the supply.

2. SCOPE

This document applies to Suppliers of SA Power Networks Supply Chain engaged in planning, manufacturing, sub-contracting, storage, transport, handling, processing administration and invoicing of goods and services to SA Power Networks.

3. DEFINITIONS, ABBREVIATIONS AND ACRONYMS

Term		Definition			
AS/NZS ISO 9000:2006	-	Quality management systems - Fundamentals and vocabulary			
AS/NZS ISO 9001:2008	-	Quality management systems - Requirements			
Calendar Days	-	This is the basic time unit used to calculate delivery lead-times in a supply chain process.			
		1 week = 7 calendar days (Note: SAP uses Calendar days)			
CoR	-	Chain of Responsibility			
		The aim of CoR is to make sure everyone in the supply chain shares responsibility for ensuring breaches of the Heavy Vehicle National Law (HVNL) do not occur. Under CoR laws if you exercise (or have the capability of exercising) control or influence over any transport task, you are part of the supply chain and therefore have a responsibility to comply with the HVNL.			
HVNL	-	Heavy Vehicle National Law, commenced on 10 February 2014.			
Delivery Lead-time	-	The number of Calendar days in SAP that is required to deliver materials from placement of PO to receipt into SAPN Warehouse or designated delivery address as stated on the PO.			
Material Schedule		An appendix to this document that defines the materials subject to this specification and details any specific requirements for the support of these materials by the Vendor to SAPN in addition to this specification.			
MOS	-	Months of Stock. Used to express stock coverage and calculate inventory levels.			
NCR	-	Non-Conformance Report			
РО	-	Purchase Order			



QA	- Quality Assurance
QTY	- Quantity of a material (usually expressed in the stated UoM)
SAP	- The name of SA Power Networks' business management system
SAPN	- SA POWER NETWORKS "SA POWER NETWORKS" means a partnership of Spark Infrastructure SA (No.1) Pty Ltd ABN 54 091 142 380, Spark Infrastructure SA (No.2) Pty Ltd ABN 19 091 143 038, Spark Infrastructure SA (No.3) Pty Ltd ABN 50 091 142 each incorporated in Australia, CKI Utilities Development Limited ABN 65 090 718 880, PAI Utilities Development Limited ABN 82 090 718 951 each incorporated in The Bahamas;
Supplier or Vendor	 The party whom which SAPN is engaging a contract with, to deliver goods or services for SAPN. For the purpose of this document the Supplier and Vendor have the same meaning.
UoM	- Unit of Measure
VHS	 Vendor Held Stock. This is material held by the Vendor as part of an agreement to service SAPN's requirements to the agreement.

4. METHOD OF ORDERING

A duly authorised officer of SA Power Networks will advise details of specific requirements/deliveries via the issue of an SAPN Purchase Order, referencing details of existing agreements and/or SAPN commercial terms and conditions.

The PO will be sent via E-mail/Fax/Post from SAPN's SAP system.

Where a PO acknowledgement is requested it must be returned within 24 hours. Where this is not possible the supplier must contact SAPN.

5. VENDOR HELD STOCK

SA Power Networks requests the Supplier to commit to holding VHS in accordance with the quantities or levels stated in the Material Schedule and/or its subsequent updates and amendments.

Vendor held stock is usually required for materials critical to SAPN business to cover the risk of supply shortages that may occur due to fluctuations in demand or instability in supply of materials.

The range and depth of the VHS shall be determined and agreed to by both parties. Any unapproved departures to this shall be at the Vendor's own risk.

6. INDICATIVE QUANTITIES

Any quantities stated as "Indicative" are an approximate indication only to assist both parties in the calculation of estimates, forecasting, or for production planning purposes. It is understood that SAPN will not be liable to commit to indicative quantities.

7. DELIVERY LEAD TIME

Delivery lead-times are to be stated in Calendar Days. When converting delivery weeks into delivery days SAP uses Calendar days (i.e. 1 week = 7 calendar days)



SAP will calculate a delivery date for PO's based on the lead-times provided in the Materials Schedule.

Advance notice of vacation periods, factory shutdowns or any other events that may cause delays that impact on delivery lead-times, must be provided to SAPN.

8. FORECASTING

Where material supply forecasting is necessary to ensure supply reliability, it is expected that a process between both parties will be established at the time of implementation of the contract and managed in accordance with operational requirements by both parties.

9. SERVICE LEVEL

It is expected that minimum service levels will be achieved with agreed KPI targets as stated in this document.

10.ACCOUNTS

All invoices shall be sent to SAPN Accounts Payable via the following methods and in order of preference:

- Electronic PDF format, emailed to accountspayable@sapowernetworks.com.au
- Facsimile to 08 8404 5035
- Postal mail to SA Power Networks, GPO Box 77, Adelaide 5001

11.TRANSPORTATION DETAILS

11.1 Chain of Responsibility (CoR)

The aim of CoR is to make sure everyone in the supply chain shares responsibility for complying with the Heavy Vehicle National Law (HVNL). Under CoR laws if you exercise (or have the capability of exercising) control or influence over any transport task, you are part of the supply chain and therefore have a responsibility to comply with HVNL.

SAPN is required to comply with legislation applicable to CoR. This requirement extends to its Suppliers (including a Supplier's employees, agents, representatives and sub-contractors) to also comply with this legislation and any other instructions as stipulated by SAPN. CoR places responsibilities as well as obligations on all parties engaged within SAPN supply chains.

SAPN or its independent advisers may perform investigations and audits on our Suppliers. Without limitation, these investigations and audits may relate to the Supplier's systems on drugs/alcohol; vehicles, equipment and personnel; load safety; licensing; driver performance; work scheduling; fleet management; fatigue management; driving hours and speeding; CoR compliance program; Subcontractor assessment and control; record keeping and reporting and incident notification. Any non-compliance uncovered as a part of these investigations and audits may be treated as a breach of the legislation, this specification and to your Supply Agreement with SA Power Networks.

11.2 Preparation of goods for transport

All goods are to be packaged suitable for transport and/or storage, mitigating any risk of product damage during transport and/or risk of environmental or safety hazards.



11.2.1 Weather proofing:

The equipment shall be suitably packed to prevent damage, deterioration and the ingress of moisture and dust during transport from the works to its destination. If the equipment is to be shipped through places where extremes of climatic conditions will occur (e.g. the tropics), then it shall be suitably packed to prevent damage and deterioration due to these conditions.

Where components, small parts or accessories are supplied with equipment, and the equipment has been identified for outside storage, the components' packaging must be designed such that its contents are protected from deterioration.

11.2.2 Palletising:

Where an individual material is supplied in full pallet quantities, the pallet must be wrapped or strapped in a manner that the contents do not move on the pallet.

All wrapping and strapping must be securely fastened and trimmed in order to minimise risk of injury during transport and receipt.

For rack storage, any pallets used shall be of a **non-returnable** Australian standard hardwood type. The dimensions of the pallet including its contents shall not exceed (W) $1220 \, \text{mm} \times \text{(D)} 1220 \, \text{mm} \times \text{(H)} 1550 \, \text{mm}$ and maximum weight shall not exceed 1 metric tonne.

11.2.3 Identification:

Every package shall be marked with:

- the name of the SAPN Purchaser
- SAPN material number (stock item number)
- SAPN Purchase Order number
- SAPN serial number (where applicable)
- the Manufacturer's serial number (where applicable)
- gross mass

11.2.4 Load Restraint, Mass & Dimension

All goods must be packaged and/or presented in a manner to ensure that they can be appropriately restrained and secured during transport. This includes, but is not limited to:

- Restraint points must be clearly marked on the goods or load restraint instructions attached to the goods.
- Any points on the goods or packaging that must not be used as restraint points must be clearly marked as such.
- Lifting points (if applicable) must be clearly marked on the goods.
- The base of the item must be such that the goods remain stable during transport.
- The gross mass must be clearly marked on the goods.
- The centre of gravity must be clearly marked on the goods and/or crates.



- The goods and/or packaging must be free of sharp edges or marked that they must be restrained with protection for webbing straps or chains if suitable.
- If goods are packaged in crates or boxes the crates or boxes must be substantial
 enough to allow the transfer of appropriate restraint pressure to the bearers and
 the truck or trailer deck to ensure that the goods can be adequately secured
 during transport without damage.
- Goods must be secured inside crates or boxes.
- Goods supplied in crates or boxes must have restraint, lifting and handling methods clearly marked on both the crate/box and the individual goods indicating methods for transport and handling once the goods have been removed from the crate/box.
- Appropriate vehicles must be selected for transport to ensure that the vehicles
 mass and dimension limits are not exceeded and that loads can be secured and
 do not become unstable or fall from the vehicle during transport.

The supplier must provide guidelines detailing appropriate restraint, lifting and handling methods for the goods prior to supply of the goods. These instructions must be re-submitted in the event that there are any changes to these methods.

11.2.5 PACKING LISTS AND TRANSPORT DOCUMENTS

11.2.5.1 Sub-assemblies:

Where a shipment consists of or requires the identification of sub-assemblies, the Supplier, before the unit is despatched from the works, shall inform SA Power Networks of:

- The sub-assemblies and separate parts into which the unit will be dismantled for transport.
- The description of each sub-assembly or part as will appear in the packing list together with sufficient information (e.g. by reference to contract assembly drawings) to enable the goods recipient/inspector to readily identify each subassembly or separate part.

11.2.5.2 Documentation

A delivery note shall accompany each consignment of equipment and be located so that it can be examined without having to open up any crates or packages.

The following information shall be shown on each delivery note:

- the name of the SAPN Purchaser
- delivery point
- shipment date
- shipment quantity
- SAPN material number (stock item number)
- SAPN Purchase Order number
- A description of the goods
- SAPN serial number (where applicable)
- the Manufacturer's serial number (where applicable)



- the crate or package identification number
- the gross weight of each crate or package

12.DELIVERY

12.1 Delivery to Central Warehouse

12.1.1 Receiving times

The hours for deliveries are:

7.00am and 1.00pm Mondays to Fridays inclusive

(Excluding public holidays)

Deliveries may be arranged outside of normal working hours but the cost, at overtime rates, of providing any unloading and receiving facilities shall be borne by the Contractor.

12.1.2 Delivery Point

Materials are to be delivered to:

SA POWER NETWORKS Central Warehouse

Gate 2, 500 Grand Junction Road, Angle Park, South Australia

Or; as specified on individual Purchase Orders and other call-ups.

12.2 Direct to Site Deliveries

Deliveries to non-SAPN sites are by arrangement only.

For direct to site deliveries, SAPN will provide reasonable notice of the required delivery date.

Some SAPN sites are unmanned. In all cases (and to facilitate access to such sites) the Supplier will provide final confirmation of the actual delivery time being given on the day prior to delivery.

12.3 Personal Safety

Any personnel delivering goods to SAPN sites must wear appropriate personal protective equipment (PPE) including safety footwear, high visibility vests and hard hats (for unloading suspended loads).

12.4 Shipping Containers

Goods delivered in shipping containers must be by arrangement only. When goods are transported in shipping containers, the Supplier shall be responsible for unloading and, where necessary, palletising or re-packaging of goods prior to delivery to SAPN.

13.QUALITY ASSURANCE

13.1 Standards of Reference

Quality Assurance principles are based on AS/NZS ISO 9000:2006 series or an equivalent National Standard or equivalent Industry Standard

13.2 QA Requirements

Quality Assurance requirements for this agreement are based on compliance with AS/NZS ISO 9001:2008 or an equivalent National Standard or equivalent Industry Standard.

Upon request the Supplier must have available a QA Manual(s) or internal processes covering the organisational responsibilities and system elements of the Manufacturer and



Sub-contractor(s) to SAPN. It is the responsibility of the Supplier to ensure that the Manufacturer and Sub-contractor quality systems are consistent with the requirements of this Specification.

SAPN may conduct an audit of these systems.

13.3 Monitoring & Inspection

The Supplier, Manufacturer and any Sub-contractor shall assure the goods supplied of acceptable quality and fit for purpose.

During the contract period, SAPN or its agent will monitor the effectiveness of the quality system employed by the Supplier. This may include physical inspection of materials and audits of QA procedures.

SAPN may arrange independent verification of products at the manufacturer's or sub-contractor's premises before delivery.

13.4 QA Process Flow

Prior to the commencement of production SAPN may request the Supplier to provide a manufacturing process flowchart covering inspection test points and product QA test plans for the materials to be manufactured.

SAPN may also conduct a QA audit of the Suppliers manufacturing prior to, or during the manufacturing process to verify the above.

13.5 Site and Product Specific QA systems

QA systems are site and product specific. Where the product source is difference to the direct supplier, the QA requirements of this specification extend to the supply source.

13.6 Warranty Response and NCR's

If a Non-Conformance report (NCR) is raised against the Supplier, the Supplier must:

- Acknowledge in writing to SAPN responsible officer with 24 hours of receiving the NCR
- Propose an action plan to address the immediate non-conformance
- Ensure all warranty and standard NCR's are resolved with fourteen (14) calendar days (or as otherwise agreed by both parties).
- Unless otherwise agreed by both parties, goods requiring return to the Supplier must be resolved within twenty one (21) days from the date the good were returned.
- Close out actions and advise SAPN in writing, including any findings or corrective actions to mitigate recurrence.

14.DRAWINGS/ SPECIFICATIONS

Where the Supplier makes changes to product drawings or specifications, these changes must be communicated to SAPN and agreed prior to manufacture of product.

15.TOOLING

15.1 Retention of Title

SAPN retains title to any tooling that it supplies to the Vendor; or any tooling that is manufactured by the Vendor (but paid for by SAPN) for the manufacture of SAPN products.

SAPN owned tooling that is held by the Supplier must be clearly marked "PROPERTY OF SA POWER NETWORKS" or something similar to clearly distinguish it from other items in the Supplier's possession.



15.2 Duty of Care

The Supplier has a duty of care to keep SAPN owned tooling in good condition and working order. Reasonable wear and tear as part of the tooling's intended use is taken into consideration. However tooling that is lost or damaged due to misuse by the Supplier shall be replaced at the Supplier's cost. Any relocation or disposal of SAPN tooling must first be authorised by SAPN.

15.3 Access and Right of Access

SAPN reserves the right to conduct periodic inspections and audits of its tooling, and reserves the right to take possession of its own tooling at any time, without prejudice to any rights or obligations by either party. It is clearly understood that the Supplier must grant access to SAPN representative for such purpose.

16.KEY PERFORMANCE INDICATORS (KPI's)

Delivery performance and product quality are a key focus in a supply chain process. The following KPI's are used to measure how well the Supplier is performing in these areas.

SAPN will also consider other value adding measures proposed by the Supplier.

<u>Measure</u>	Reporting responsibility	<u>Target</u>	Explanation
On time Delivery	SAPN	95% (H. Best*)	Percentage of goods delivered on time and in full. On time = Goods are delivered to the requested destination on the agreed delivery date as stated on the PO.
QA Performance (NCR)	SAPN	95% (H. Best*)	Based on 100% of NCR's responded to within agreed timeframe.
Product Quality (NCR)	SAPN	95% (H. Best*)	Based on the percentage of defect free products delivered in a given period against total number of products delivered.

^{*}H. Best means that a high score is the best score.

Material Schedule

SAPN	Short Text Description	Unit of		Delivery Lead-time		SAPN Indicative*	Agreed Vendor Held Stock (VHS)					Pack Unit
Material Number	(max 40 Characters)	Measure (UoM)	Supplier Part No.	(Calendar Days)	Min Order Qty (if applicable)	Monthly Usage QTY	MOS	QTY	Weight (Kg)	Dimensions (LxWxH)	Pack/ Lot QTY	of Measure

^{*}refer to paragraph 6 (INDICATIVE QUANTITIES) of the Supply Chain Specification.

Note: Changes in any of the above need to be communicated in writing to SAPN.

This form is a template only. A spreadsheet may be substituted to better manage a larger volume of data, or additional information as necessary.