



NATIONAL POST CENTRE (NPC)/ HEAD OFFICE

GENERAL SCOPE OF WORK:

NPC HVAC SYSTEM

NAME OF CONTRACTOR

1. PREAMBLES

The National Post Centre (NPC) is South African Post Office headquarters situated in Tshwane accommodating all business units, subsidiary entities and tenancy that provides critical support, leadership, control and executive management to regional structures countrywide.

The Heating Ventilation & Air Conditioning (HVAC) Dunham-Bush 2001 centralized packaged system require an urgent replacement upgrade with similar modern technology and regular service to maintain optimum performance. All units located on the roof (third floor) flat slab.

2. OBJECTIVE

The objective is to secure services of a certified/ accredited and experienced HVAC packaged system supplier to replace and upgrade all redundant (9) Dunham-Bush centralized packaged units, service & maintain for a period of 36 Months, including engineer's professional service to ascertain correct replacement capacity/ specification and project sign-off as per these specification.

3. LEGISLATIVE AND TECHNICAL REQUIREMENTS

- 3.1 The bidder must be in position of a valid registration ed and be compliant with the Construction Industry Development Board minimum grade 6ME on the date of bid closing – HVAC installer ONLY.
- 3.2 The supplier must be an accredited & certified installer of a centralized HVAC system on the date of bid closing.
- 3.3 The equipment supplied and installed must comply with current legislated refrigerant requirements. The supplier is not to supply discontinued or soon to be phased out gas component technology that will not be available beyond warrantee, life span and reasonable period as may be determined by the National Environmental Management Act. (Ineluctable force majeure)
- 3.4 The supplier is expected to comply in full with all legislative and Occupational Health and Safety Act. & requirements relating to the service provision.
- 3.5 The Electrical installation must adhere to the SABS 0142 and in accordance with the ECB code of conduct.

The bidder must provide proof of Public liability insurance to the minimum amount of Thirty Million Rand (R30 million). If the bidder does not have this currently, the bidder must submit a **letter** from the bidder's insurance company **confirming** that they will insure the bidder for this amount upon contract appointment/award. (A quote from the insurance will not be accepted).

4. BUILDING & HVAC INFORMATION

Province	Gauteng Province
SAPO Region	Head Office
Area	City of Tshwane
Town / City	Pretoria
Location / Suburb	Pretoria CBD
Building Name	National Post Centre (NPC)
Building Physical Address	Cnr. Jeff Masemola & Sophie De Bryun, Pretoria.
Property Occupancy Description Detail	<p>- Head Office. National Post Centre NPC</p> <p>- 3 Storey Building Plus Basement Parking</p> <p>- The Following Key Areas For HVAC System:</p> <ul style="list-style-type: none"> • SA Post Office Executive Suite. • SA Post Office Senior Management & Regional Support Structures, All Business Units. • Post Bank Executive. • Docex Executive & Management. • NCC (National Conference Centre). • National Support Call Centre • Department of Communications and Digital Technologies (DCDT) Ad-Hoc Meetings. • Risk Management & Finance (Extended Not Covered Area)
Current Redundant HVAC Detail	<p>9 x Dunham Bush Packaged Central Unit:</p> <p>Each fitted with (but not limited to, only key elements detailed)</p> <ul style="list-style-type: none"> • Year Installed 2001 • Model: ACPS640P (S) 492,100 BTU/HR • Model: ACPS760P (S) • Model: ACPS740P (S) • 12 Filters per unit • 4 Compressors per Unit • 4 Condenser fans per unit • 1 Fan motor per unit • 1 Impeller fan per unit • 1 Digital controller with 10 relays • Cooling coil. • Built-In Electrical DB

5. SCOPE OF WORKS

5.1 The scope of works will be as set out below:

5.2 The general scope of work as detailed, but not limited, below:

- 5.2.1** Services of a professional registered engineer.
- 5.2.2** Decommission redundant equipment.
- 5.2.3** Installation of new units.
- 5.2.4** Hoisting and rigging.
- 5.2.5** Electrical connectivity.
- 5.2.6** Electronic digital HVAC only BMS replacement.
- 5.2.7** Statutory compliance and Sundry.
- 5.2.8** Service Maintenance.
- 5.2.9** Making good on roof slab
- 5.2.10** Basic Training and commissioning of the system.

5.3 GRANULAR SCOPE:

ITEM
5.3.1 PRELIMANRIES & GENERAL
<p>5.3.1.1 Professional Services: Supplier to obtain certified engineer for the installation certification, approval and “as built” drawings at Risk Management & Finance Section.</p> <p>Note 1: SAPO will provide basic building layouts post compulsory briefing session and site inspection.</p> <p>Note 2: Engineer must be a member in good standing with Engineering Council of South Africa (ECSA) Not a candidate.</p>
<p>5.3.1.2 Site establishment and Sundry as per these specification.</p> <p>Note: Duct cleaning, Finance & Risk Management area installation shall be after hours and/ or weekends including public holidays</p>
<p>5.3.1.3 Scaffolding: Supply, operate and manage temporary mobile scaffolding with suitable mobility for the extension of ventilation to specified double volume area (Finance & Risk Management area, as will be shown on site) for the duration of the installation.</p> <p>Note: Scaffolding must comply the OHS Act. & regulation. The scaffolding must bear a 'safe to use' sign.</p>

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5.3.1.4 Rigging: Rig all redundant (out of site & cart away) and rig in new equipment on to site at roof LVL.

Note: *It is the supplier's responsibility to comply with Tshwane municipal by-laws during rigging and road lane closures where applicable. SAPO will not take responsibility for non-compliance penalties.*

5.3.1.5 Contractor must provide a safety file all in accordance to the Occupational Health and Safety Act, 1993(Act No 85 of 1993) Construction Regulations 2014 (As Amended)

5.3.2.1 Removal

Remove and cart away from site, obsolete DUNHAM-BUSH packaged unit complete. Make good on roof slab to receive new as detailed below.

5.3.2.2 Ground Floor South Wing Unit

Replace existing redundant Dunham Bush unit, with new current technology or similar in brand, equivalent or better in capacity and performance: Replace with an Inverter packaged HVAC situated at roof LVL supplying Ground floor South Wing, a completely installed new unit with heating and cooling. Included must be all electrical DB wiring connections using existing cableways, ducting infrastructure & issue applicable CoCs; Warrantees (i.e. minimum of 12 months).

5.3.2.3 Ground Floor North Wing Unit

Replace existing redundant Dunham Bush unit, with new current technology or similar in brand, equivalent or better in capacity and performance: Replace with an Inverter packaged HVAC situated at roof LVL supplying Ground floor North Wing, a completely installed

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new unit with heating and cooling. Included must be all electrical DB wiring connections using existing cableways, ducting infrastructure & issue applicable CoCs; Warrantees (i.e. minimum of 12 months).

5.3.2.4 Ground Floor East Unit

Replace existing redundant Dunham Bush unit, with new current technology or similar in brand, equivalent or better in capacity and performance: Replace with an Inverter packaged HVAC situated at roof LVL supplying Ground floor East Wing, a completely installed new unit with heating and cooling. Included must be all electrical DB wiring connections using existing cableways, ducting infrastructure & issue applicable CoCs; Warrantees (i.e. minimum of 12 months).

5.3.2.5 First Floor South Unit

Replace existing redundant Dunham Bush unit with new current technology or similar in brand, equivalent or better in capacity and performance: Replace with an Inverter packaged HVAC situated at roof LVL supplying First floor South Wing, a completely installed new unit with heating and cooling. Included must be all electrical DB wiring connections using existing cableways, ducting infrastructure & issue applicable CoCs; Warrantees (i.e. minimum of 12 months).

5.3.2.6 First Floor North Unit

Replace existing redundant Dunham Bush unit, with new current technology or similar in brand, equivalent or better in capacity and performance: Replace with an Inverter packaged HVAC situated at roof LVL supplying First floor North Wing, a completely installed new unit with heating and cooling. Included must be all electrical DB wiring connections using existing cableways, ducting infrastructure & issue applicable CoCs; Warrantees (i.e. minimum of 12 months).

5.3.2.7 First Floor East Unit

Replace existing redundant Dunham Bush unit, with new current technology or similar in brand, equivalent or better in capacity and performance: Replace with an Inverter packaged HVAC situated at roof LVL supplying First floor East Wing, a completely installed new

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unit with heating and cooling. Included must be all electrical DB wiring connections using existing cableways, ducting infrastructure & issue applicable CoCs; Warrantees (i.e. minimum of 12 months).

5.3.2.8 Second Floor South Unit

Replace existing redundant Dunham Bush unit, with new current technology or similar in brand, equivalent or better in capacity and performance: Replace with an Inverter packaged HVAC situated at roof LVL supplying South floor Wing, a completely installed new unit with heating and cooling. Included must be all electrical DB wiring connections using existing cableways, ducting infrastructure & issue applicable CoCs; Warrantees (i.e. minimum of 12 months).

5.3.2.9 Second Floor North Unit

Replace existing redundant Dunham Bush unit, with new current technology or similar in brand, equivalent or better in capacity and performance: Replace with an Inverter packaged HVAC situated at roof LVL supplying Second floor North Wing, a completely installed new unit with heating and cooling. Included must be all electrical DB wiring connections using existing cableways, ducting infrastructure & issue applicable CoCs; Warrantees (i.e. minimum of 12 months).

5.3.2.10 Second Floor East Unit

Replace existing redundant Dunham Bush unit, with new current technology or similar in brand, equivalent or better in capacity and performance: Replace with an Inverter packaged HVAC situated at roof LVL supplying Ground floor East Wing, a completely installed new unit with heating and cooling. Included must be all electrical DB wiring connections using existing cableways, ducting infrastructure & issue applicable CoCs; Warrantees (i.e. minimum of 12 months).

5.3.2.11 Risk Management & Finance Section

Supply and install ducted Hide Away split units, complete and suspended from roof beams. Covering an area of 650m² with double volume height of 11m open plan with skylight.

Note: It is the supplier's responsibility to calculate number of units and capacity (BTU) as per information provided above (Rationale design Calculation).

Annexure 'D'

<p>5.3.2.12 Ground; Second and Third Floor: Commercial duct cleaning, sanitizing and disinfecting of central packaged unit to eliminate dirt, dust & debris by means of air duct fogging or similar non water moisture based and environmentally safe proven method. Note: <i>Allow for closing and covering up of supply air vents & return grills with paper based towels/ micro particles catching material. Reopening of vents on completion.</i></p>
<p>5.3.2.13 BMS</p> <p>Replace redundant Building Management System with an electronic digital BMS capable for plant monitoring and temperature area control, On/Off timed programmability. The system must be capable of future additional features (E.g. remote control of the system)</p>
<p>5.2.2.14 Service Maintenance</p> <p>Service and maintain newly installed units, all in accordance to the manufacture's specifications and recommendations, for a period of 36 months/ 3 years.</p>