

**19 August 2024**

**ERRATUM**

**(RFP NO: 3648/05/09/2024)**

**The supply of Adtran/ADVA equipment and support for a period of 36 months to the CSIR for the South African National Research Network (SANReN)**

On the 14 August 2024, the Council for Scientific and Industrial Research (CSIR) invited suitably qualified and experienced service providers to submit proposals for the above-mentioned RFP. The original closing/submission date for the tender is the 05 September 2024.

The CSIR appreciates your interest in responding to the Request for Proposal.

Please note the following changes in the advertised tender documents:

- Table 3 full specifications
- Table 5 pricing schedule

Table 3 Full Specification

Component Name	Description	Part Number	Quantity
<b>CSIR 96 ACE BOM Amplifier</b>			
EDFA-S20H	Optical amplifier, high variable gain EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual monitor ports, VOA at the output, 96 channels in C-band, Fiber Map Detector	1063709072-01	2
EDFA-S20L	Optical amplifier, low variable gain EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual monitor ports, VOA at the output, 96 channels in C-band, Fiber Map Detector	1063709073-01	6
<b>Channel Module</b>			
MP-2B4CT&2P	Bundle of QuadFlex (F8/MP-2B4CT. HW2.01) and card license for two client ports (2P). Quadflex: Any line format, 2 QSFP28 clients with any combination of OTU-4/100GE services.	BC00000371	2
<b>Jumper</b>			
J/MM62/LC/DUP/0090/RED	Duplex Cable - Multimode 62.5, LC, 90 cm	0051002118	1
J/MM62/LC/DUP/0500/RED	Duplex Cable - Multimode 62.5, LC, 500 cm	0051002123	1
J/SM/LC/0035	Jumper for internal cabling - Single Mode, LC, 35 cm	0051002399	6
J/SM/LC/0045	Jumper for internal cabling - Single Mode, LC, 45 cm	0051002402	2

J/SM/LC/0100	Jumper for internal cabling - Single Mode, LC, 100 cm	0051002092	1
J/SM/LC/0110	Jumper for internal cabling - Single Mode, LC, 110 cm	0051002403	2
J/SM/LC/0120	Jumper for internal cabling - Single Mode, LC, 120 cm	0051002404	1
J/SM/LC/DUP/0100	Duplex Cable - Single Mode, LC, 100 cm	1051002503	5
J/SM/LC/DUP/0200	Duplex Cable - Single Mode, LC, 200 cm	1051002513	5
J/SM/LC/DUP/0210	Duplex Cable - Single Mode, LC, 210 cm	1051002519	14
<b>Plug</b>			
QSFP28/112G/LR4/SM/LC	QSFP28-LR4, LC, 4x28G, 10km, LAN-WDM around 1310nm, grey, 100GBE (no FEC) and OTN	1061800720-01	2
SFP/FE/D1528.77E/SM/LC	pluggable client I/F for 1528.77nm, extended reach, 125Mbit/s only	1061706083	2
<b>ROADM</b>			
9ROADM-RS	ROADM 9 degree, Flexgrid in C-Band, WSS based, route and select architecture with integrated optical channel monitor	1063708328-01	3
<b>Software and License</b>			
ENC/NMCL/F8/MP	ENC License for one High Speed Muxponder Card, such as QuadFlex (MP-2B4CT) and its variants and Teraflex sleds (e.g. MP-2D12CT or T-MP-2D8CT or T-MP-2D3DT) and its variants, or OpenFab1200 (OF-2D16DCT) applicable to ENC 12.1 and later versions	1091007080	2
FW 22.6.1 PREINST	SW for Release 22.6.1 preinstalled	1091703082-01	3
<b>CSIR 100G_UKZNPMB_TeracoDbn Accessory</b>			

CBL/AC/250/EXT/C13-C14	AC Power Cable, Extension, 2.5m length, C13 to C14	1036000680	2
CBL/AC/250/RA/C14	AC Power Cable, C14, 2.5m length, right angled equipment end	1036000682	2
CBL/CAT6/RJ45/0300/BK	Ethernet cable CAT6 RJ45, 3m, black	1036006013	1
DM/5HU	Dummy card 5HU	0063709901	1
SA-BRACKET-SH1-MID	19"/23" and ETSI brackets for 2 post mid mount position for SH1R (complies with ETSI 300 119-6/7 new standard 210mm bracket /rack distance); used for 2 post instead of guide rail kit (4 post)	1013800060-01	1
SA-GUIDE-SH1-L	19"/23" and ETSI Guide Rail kit for SH1R with 4 post racks 534 to 800mm post distance	1013800068-01	1
SC-TM	Slot cover for traffic module	1063801091-01	1
SC-XCM3	Slot cover for ECM-3/SCM-3 slot in SH1R shelf	1063801098-01	1
STAGING-ASSEMBLED L1	Staging Option Assembled	7022459001	2
<b>Channel Module</b>			
MP-2B4CT&2P	Bundle of QuadFlex (F8/MP-2B4CT. HW2.01) and card license for two client ports (2P). Quadflex: Any line format, 2 QSFP28 clients with any combination of OTU-4/100GE services.	BC00000371	1
<b>Common Module</b>			
CEM-6	Common Equipment Module for SH1R with 2xRJ45 and 2x SFP Ethernet front access, no Display	1063801084-01	1
ECM-6	Element controller module, Main	1063801066-01	1

	shelf/NE controller module. for SH1R.		
FTM-3	Fan Tray Module for SH1R	1042800083-01	3
NCU-3	Network Element Control Unit with ultra performance processor, 2.5 HU high, 3 x RJ45 Ethernet ports, 1x RJ45 serial interface and 1x USB 3.0 type C port	1063708415-02	1
PSM-AC3	Power Supply Module, 480W, AC 110V/240V for SH1R	1040800093-01	2
PSU/1HU-R-AC	Power Supply Module (120W) AC for SH1HU-R	0040700010	2
SCU-II	Shelf Control Unit for high availability set-up, 2.5 HU high for small slots	1063708423-01	1
<b>Jumper</b>			
J/SM/LC/0050	Jumper for internal cabling - Single Mode, LC, 50 cm	0051002389	4
<b>Plug</b>			
QSFP28/112G/LR4/SM/LC	QSFP28-LR4, LC, 4x28G, 10km, LAN-WDM around 1310nm, grey, 100GBE (no FEC) and OTN	1061800720-01	2
<b>Shelf</b>			
SH1HU-R	1HU Slimline Shelf for rear access power supply modules, unequipped	0078700061	1
SH1R	Shelf 1HU 600mm deep for DC or AC rear access. Includes rack adaptor brackets, Grounding cables and air filters.	1078800081-02	1
<b>Software and License</b>			
ENC/EOD/CL/S	Ensemble Optical Director Connection Licenses for one small shelf of type FSP3000, applicable to ENC	1091009110	2

	13.1 and later versions		
ENC/NMCL/F7/S	Optical Connection License F7 Small: ENC License for one shelf of type FSP 3000R7 small only, applicable to ENC 12.1 and later versions	1091007010	1
ENC/NMCL/F8/MP	ENC License for one High Speed Muxponder Card, such as QuadFlex (MP-2B4CT) and its variants and Teraflex sleds (e.g. MP-2D12CT or T-MP-2D8CT or T-MP-2D3DT) and its variants, or OpenFab1200 (OF-2D16DCT) applicable to ENC 12.1 and later versions	1091007080	1
ENC/NMCL/F8/S	Optical Connection License F8 Small: ENC License for one small shelf of FSP 3000 C (1HU or 2HU or Teraflex shelf), only applicable from ENC 12.x onwards	1091007050	1
FW 22.6.1 PREINST	SW for Release 22.6.1 preinstalled	1091703112-01	1
SW BASIC 1HU ACTIVE	System software license per active 1HU shelf. Access to Maintenance, Minor and Major Releases is subject to a valid Maintenance agreement covering this product.	1091701201	1
SW BASIC SH1R	System software license per SH1R shelf. Access to Maintenance, Minor and Major Releases is subject to a valid Maintenance agreement	1091701205	1

	covering this product.		
<b>CSIR ZR100 Plugs Sensors</b>			
QSFP28/112G/#DCTC/SM/LC	QSFP28 112G, coherent, C-Band tunable DWDM network IF, 0 till 70°C	1061800600-01	4
<b>Extras Bom Amplifier</b>			
F7/AMP-S20H-C15	Optical amplifier (line in RAMAN/line out EDFA) with variable Raman gain and high variable gain EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual monitor ports, VOA at the output, 96 channels in C-band, Fiber Map Detect	1063709070-01	2
F7/AMP-S20L-C15	Optical amplifier (line in RAMAN/line out EDFA) with variable Raman gain and low variable gain EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual monitor ports, VOA at the output, 96 channels in C-band, Fiber Map Detect	1063709071-01	2
<b>Plug</b>			
QSFP28/103G/SR4/MM/MPO	QSFP28-SR4, MPO, 4x28G, 100m, 850nm, grey, 100GBE (requires 802.3bj FEC)	1061800744-01	8
SFP/FE/D1528.77E/SM/LC	pluggable client I/F for 1528.77nm, extended reach, 125Mbit/s only	1061706083	2
<b>Software and License</b>			
RTU/MP-2B4CT/CLIENT PORT	Right to use one F8/MP-2B4CT (Quadflex) or	1091802104-01	2

	F8/MP-2B4CT-S (Quadflex-S) client port		
FW 22.6.1 PREINST	SW for Release 22.6.1 preinstalled	1091703082-01	1
<b>Support and Maintenance</b>			
ADVA MAINTENANCE EXTENDED + Software Assure for CSIR	Support and maintenance for all the above	36 months	



Table 5 Pricing Schedule.

Part Code	Description	Device Quantity	Unit Price (VAT Excl)	Total Price (VAT Excl)
1063709072-01	Optical amplifier, high variable gain EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual monitor ports, VOA at the output, 96 channels in C-band, Fiber Map Detector	2		
1063709073-01	Optical amplifier, low variable gain EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual monitor ports, VOA at the output, 96 channels in C-band, Fiber Map Detector	6		
<b>Channel Module</b>				
BC00000371	Bundle of QuadFlex (F8/MP-2B4CT. HW2.01) and card license for two client ports (2P). Quadflex: Any line format, 2 QSFP28 clients with any combination of OTU-4/100GE services.	2		
<b>Jumper</b>				
0051002118	Duplex Cable - Multimode 62.5, LC, 90 cm	1		
0051002123	Duplex Cable - Multimode 62.5, LC, 500 cm	1		
0051002399	Jumper for internal cabling - Single Mode, LC, 35 cm	6		
0051002402	Jumper for internal cabling - Single Mode, LC, 45 cm	2		
0051002092	Jumper for internal cabling - Single Mode, LC, 100 cm	1		
0051002403	Jumper for internal cabling - Single Mode, LC, 110 cm	2		
0051002404	Jumper for internal cabling - Single Mode, LC, 120 cm	1		
1051002503	Duplex Cable - Single Mode, LC, 100 cm	5		
1051002513	Duplex Cable - Single Mode, LC, 200 cm	5		

1051002519	Duplex Cable - Single Mode, LC, 210 cm	14		
<b>Plug</b>				
1061800720-01	QSFP28-LR4, LC, 4x28G, 10km, LAN-WDM around 1310nm, grey, 100GBE (no FEC) and OTN	2		
1061706083	pluggable client I/F for 1528.77nm, extended reach, 125Mbit/s only	2		
<b>ROADM</b>				
1063708328-01	ROADM 9 degree, Flexgrid in C-Band, WSS based, route and select architecture with integrated optical channel monitor	3		
<b>Software and License</b>				
1091007080	ENC License for one High Speed Muxponder Card, such as QuadFlex (MP-2B4CT) and its variants and Teraflex sleds (e.g. MP-2D12CT or T-MP-2D8CT or T-MP-2D3DT) and its variants, or OpenFab1200 (OF-2D16DCT) applicable to ENC 12.1 and later versions	2		
1091703082-01	SW for Release 22.6.1 preinstalled	3		
<b>CSIR 100G_UKZNPMB_TeracoDbn Accessory</b>				
1036000680	AC Power Cable, Extension, 2.5m length, C13 to C14	2		
1036000682	CBL/AC/250/RA/C14	2		
1036006013	Ethernet cable CAT6 RJ45, 3m, black	1		
0063709901	Dummy card 5HU	1		
1013800060-01	19"/23" and ETSI brackets for 2 post mid mount position for SH1R (complies with ETSI 300 119-6/7 new standard 210mm bracket /rack distance); used for 2 post instead of guide rail kit (4 post)	1		
1013800068-01	19"/23" and ETSI Guide Rail kit for SH1R with 4 post racks 534 to 800mm post distance	1		
1063801091-01	Slot cover for traffic module	1		
1063801098-01	Slot cover for ECM-3/SCM-3 slot in SH1R shelf	1		

7022459001	Staging Option Assembled	2		
<b>Channel Module</b>				
BC00000371	Bundle of QuadFlex (F8/MP-2B4CT. HW2.01) and card license for two client ports (2P). Quadflex: Any line format, 2 QSFP28 clients with any combination of OTU-4/100GE services.	1		
<b>Common Module</b>				
1063801084-01	Common Equipment Module for SH1R with 2xRJ45 and 2x SFP Ethernet front access, no Display	1		
1063801066-01	Element controller module, Main shelf/NE controller module. for SH1R.	1		
1042800083-01	Fan Tray Module for SH1R	3		
1063708415-02	Network Element Control Unit with ultra performance processor, 2.5 HU high, 3 x RJ45 Ethernet ports, 1x RJ45 serial interface and 1x USB 3.0 type C port	1		
1040800093-01	Power Supply Module, 480W, AC 110V/240V for SH1R	2		
0040700010	Power Supply Module (120W) AC for SH1HU-R	2		
1063708423-01	Shelf Control Unit for high availability set-up, 2.5 HU high for small slots	1		
<b>Jumper</b>				
0051002389	Jumper for internal cabling - Single Mode, LC, 50 cm	4		
<b>Plug</b>				
1061800720-01	QSFP28-LR4, LC, 4x28G, 10km, LAN-WDM around 1310nm, grey, 100GBE (no FEC) and OTN	2		
<b>Shelf</b>				
0078700061	1HU Slimline Shelf for rear access power supply modules, unequipped	1		
1078800081-02	Shelf 1HU 600mm deep for DC or AC rear access. Includes rack adaptor brackets, Grounding cables and air filters.	1		
<b>Software and License</b>				

1091009110	Ensemble Optical Director Connection Licenses for one small shelf of type FSP3000, applicable to ENC 13.1 and later versions	2		
1091007010	Optical Connection License F7 Small: ENC License for one shelf of type FSP 3000R7 small only, applicable to ENC 12.1 and later versions	1		
1091007080	ENC License for one High Speed Muxponder Card, such as QuadFlex (MP-2B4CT) and its variants and Teraflex sleds (e.g. MP-2D12CT or T-MP-2D8CT or T-MP-2D3DT) and its variants, or OpenFab1200 (OF-2D16DCT) applicable	1		
1091007050	Optical Connection License F8 Small: ENC License for one small shelf of FSP 3000 C (1HU or 2HU or Teraflex shelf), only applicable from ENC 12.x onwards	1		
1091703112-01	SW for Release 22.6.1 preinstalled	1		
1091701201	System software license per active 1HU shelf. Access to Maintenance, Minor and Major Releases is subject to a valid Maintenance agreement covering this product.	1		
1091701205	System software license per SH1R shelf. Access to Maintenance, Minor and Major Releases is subject to a valid Maintenance agreement covering this product.	1		
<b>CSIR ZR100 Plugs Sensors</b>				
1061800600-01	QSFP28 112G, coherent, C-Band tunable DWDM network IF, 0 till 70°C	4		
<b>Extras Bom Amplifier</b>				
1063709070-01	Optical amplifier (line in RAMAN/line out EDFA) with variable Raman gain and high variable gain EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual monitor	2		

	ports, VOA at the output, 96 channels in C-band, Fiber Map Detect			
1063709071-01	Optical amplifier (line in RAMAN/line out EDFA) with variable Raman gain and low variable gain EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual monitor ports, VOA at the output, 96 channels in C-band, Fiber Map Detect	2		
<b>Plug</b>				
1061800744-01	QSFP28-SR4, MPO, 4x28G, 100m, 850nm, grey, 100GBE (requires 802.3bj FEC)	8		
1061706083	pluggable client I/F for 1528.77nm, extended reach, 125Mbit/s only	2		
<b>Software and License</b>				
1091802104-01	Right to use one F8/MP-2B4CT (Quadflex) or F8/MP-2B4CT-S (Quadflex-S) client port	2		
1091703082-01	SW for Release 22.6.1 preinstalled	1		
<b>Support type</b>		<b>Device Quantity</b>	<b>Price (per annum for 3 years)</b>	<b>Price (Once-off for 3 years)</b>
Adtran/ADVA MAINTENANCE EXTENDED + Software Assure for CSIR	Support and maintenance for a period 36 months.	For all the above		
<b>Delivery to CSIR Pretoria</b>				
<b>Total Price (VAT Excl)</b>				
<b>VAT (15%)</b>				
<b>Total Price (VAT Incl)</b>				

Description	Pricing including VAT once off for a 36 month period
Call out fee rate senior engineer daily rate ad hoc basis	
Call out fee rate engineer daily rate ad hoc basis	
Call out fee per KM (AA rate CSIR Rate)	
Accommodation	
Other costs	

Description	Pricing including VAT for the first 12 month period	Pricing including VAT for the second 12 month period	Pricing including VAT for the third 12 month period
Call out fee rate senior engineer daily rate ad hoc basis			
Call out fee rate engineer daily rate ad hoc basis			
Call out fee per KM (CSIR Rate)			
Accommodation			
Other costs			

Due to the above change, the closing date has been moved from 05 September 2024 at 16H30 to 16 September 2024 at 16:30.

The CSIR wishes to encourage you to submit a response to this tender, and to apologise for any inconvenience that might be caused.

Enquiries may be directed to [tender@csir.co.za](mailto:tender@csir.co.za)