INLAND NETWORK AUTOMATION PROJECT

TPL/2024/06/0005/68787/RFP

COMPULSORY TENDER CLARIFICATION MEETING

FOR THE PROVISION OF DESIGN, ENGINEERING, SUPPLY, PROCUREMENT, FABRICATION, SOFTWARE DEVELOPMENT, TESTING, INSTALLATION, COMMISSIONING AND HANDOVER OF PROCESS CONTROL, INTEGRATED CUSTODY METERING AND PIPELINE MONITORING SYSTEMS TO ALL TRANSNET PIPELINES INLAND STATIONS, MASTER AND SECONDARY CONTROL CENTERS FOR A PERIOD OF SIX (6) YEARS

MAIN AUTOMATION CONTRACT

Date: 17 September 2024

TIME: 10H00 -14H00

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Inland Network Automation Project – Tender Briefing Presentation

Please note that this meeting is recorded for meeting minutes purposes

Alrode Operations: Area Designation

Alrode Operations: Area Designation

Admin Building

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Inland Network Automation Project – Tender Briefing Presentation

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Inland Network Automation Project – Introduction TPL Team Members

Neresh Thoolsiram	:	Project Manager
Mabjana Percy Matenchi	:	MC&I HOD
Chris Murray	:	Technical Specialist
Nomcebo Ncgobo	:	Strategic Sourcing Specialist
Fanie Scholtz	:	Hatch Africa Project Manager (ECM)
Stuart Florence	:	Hatch Africa Project Engineer (ECM)
Charlotte Stobber	:	Transnet Internal Audit

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Inland Network Automation Project – Tender Briefing Presentation

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Inland Network Automation Project – Purpose

Transnet is calling for proposals from experienced Automation System contractors with a proven track record for the provision of design, engineering, supply, procurement, fabrication, software development, testing, installation, commissioning and handover of Process Control, Integrated Custody Metering and Pipeline Monitoring Systems to all Inland Stations, Master, and Secondary Control Centers – Main Automation Contract, related to the execution of all the *Works* associated with the Inland Network Automation Project.

Period of Contract is envisaged to be for a period of six (6) years.

Background:

Transnet Pipelines (TPL) requires a reliable Process Control System, Custody Metering System and Pipeline Monitoring System that can be deployed throughout the inland pipeline network to ensure stable, reliable, and safe transportation of fuel to customers.

The existing Process Control Systems on the Inland Stations comprises of a mix of Siemens LSX and PCS7 SCADA Systems and Siemens S7 Programmable Line Controllers (PLCs), interfaced to Daniels micro5000 and Emerson S600 Flow Computers for custody metering. AtmosTM Pipe PLMS Software installed within the MCC currently provides pipeline monitoring functionality.

These systems are currently at various stages of obsolescence, resulting in high maintenance costs and high failure rates, leading to performance and reliability issues.

Inland Network Automation Project – Purpose

In order to address these risks, a project was recently undertaken by Transnet Pipelines to develop a new automated control, metering and pipeline monitoring system suitable for deployment to all intake, delivery and pump stations, as well as at a central master control centre (MCC), from where operation of all pipelines is controlled, managed and supervised.

The new Automation System (AVEVA OASyS DNA SCADA, Schneider m580 PLCs, Emerson S600+ FC's, SimSuite PLMS) was successfully developed and deployed to all Crude Oil Pipeline stations as well as to the Master Control Centre as part of the Crude Automation Project, with the last station commissioned in Q1 2021.

The Inland Network Automation Project entails further development of the Automation System to incorporate Inland Station functionality, as well as the subsequent deployment of this Automation System to the Inland Stations, central Master Control Centre (MCC) and Secondary Control Centre (SCC), from where these operations are controlled, managed and supervised.

The full scope of the Project extends to successful delivery and execution of the following systems:

- Process Control System (PCS)
- Custody Metering System (CMS)
- Pipeline Monitoring System (PLMS)
- HMI Training System
- Field E&I Works (LOP, TOF, Metering)

The PCS, CMS and PLMS Systems comprise of hardware, OEM System licenses and application software development.

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Inland Network Automation Project – Tender Briefing Presentation

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Inland Network Automation Project – Contents of RFP

THE TENDER DOCUMENTS ISSUED BY TPL COMPRISE:

Part T1: Tendering Procedures

T1.1 Tender Notice and Invitation to Tender

T1.2 Tender Data

Part T2: Returnable Documents

T2.1 List of Returnable Document

T2.2 Returnable Schedules

Part C1: Agreements and Contract Data

C1.1 Form of Offer and Acceptance

C1.2 Contract Data (Parts 1 & 2)

Part C2: Pricing Data

C2.1 Pricing Instructions (Option A)

C2.2 Activity Schedule

Part C3: Works Information

C3.1 Works Information

Inland Network Automation Project – Tender Procedures

1. PROPOSAL SUBMISSION

Only those tenderers who satisfy the following criteria are **eligible** to submit tenders:

a) Attend a compulsory briefing session.

b) Submit all compulsory returnables.

c) Submits a tendered price in the form of the Pricing Schedule.

d) Submits proof of completion of OEM certified courses (OEM Certification) for the proposed Senior Control Engineer – SCADA.

2. The Tenderer is also required to submit with his tender:

a) Tenderers to provide Transnet with a TCS PIN to verify Tenderers SARS Tax compliance status;

b) A valid B-BBEE Certificate from a Verification Agency accredited by the South African Accreditation System [SANAS], or a sworn affidavit confirming annual turnover and level of black ownership, in line with the code of good practice, together with the tender;

c) Proof of registration on the Central Supplier Database;

d) Letter of Good Standing with the Workmen's compensation fund by the tendering entity or separate Letters of Good Standing from all members of a newly constituted JV.

Note: Refer to Section T2.1 for the List of Returnable Documents

Inland Network Automation Project – New Electronic Submission Procedures

Transnet has implemented a new electronic tender submission system, the e-Tender Submission Portal, in line with the overall Transnet digitalization strategy where suppliers can view advertised tenders, register their information, log their intent to respond to bids and upload their bid proposals/responses on to the system.

SUBMITTING YOUR BID

- Log on to the Transnet eTenders management platform website (https://www.transnet.net);
- Click on "TENDERS";
- Scroll towards the bottom right hand side of the page;
- On the blue window click on "register on our new eTender Portal";
- Click on "ADVERTISED TENDERS" to view advertised tenders;
- Click on "SIGN IN/REGISTER – for bidder to register their information (must fill in all mandatory information);
- Click on "SIGN IN/REGISTER" - to sign in if already registered;
- Toggle (click to switch) the "Log an Intent" button to submit a bid;
- Submit bid documents by uploading them into the system against each tender selected.
- No late submissions will be accepted. The bidder guide can be found on the Transnet Portal transnetetenders.azurewebsites.net

Considerations

- Time your submissions so that if there are any issues, there is time to escalate & resolve
- Nobody has access to the bids until after the bid has closed
- There is no physical tender box.
- Should you experience challenges with the system, urgently contact: nomcebo.ngcobo@transnet.net

Inland Network Automation Project – Communication

- Respondents are warned that a Proposal will be liable to disqualification should any attempt be made by a Respondent either directly or indirectly to canvass any officer or employee of Transnet in respect of this RFP between the closing date and the date of the award of the business.
- For specific queries relating to this RFP should be submitted onto the system and to Nomcebo.Ngcobo@transnet.net 5 working days after tender briefing.
- In the interest of fairness and transparency, Transnet's response to such a query will be published on the e-tender portal and Transnet website.
- After the closing date of the RFP, a Respondent may only communicate with (Nomcebo Ncgobo), at telephone number (083 517 0433), email Nomcebo.Ngcobo@transnet.net on any matter relating to its RFP Proposal. Respondents are to note that changes to its submission will not be considered after the closing date.

Respondent found to be in collusion with one another will be automatically disqualified and restricted from doing business with Transnet in the future.

Inland Network Automation Project – Evaluation Methodology

STAGE 1: PREQUALIFICATION		STAGE 2 TECHNICAL ASSESSMENT	STAGE 3			
Step 1	**Step 2**	**Step 3**	**Step 4**	**Step 5**	**Step 6**	**Step 7**
Administrative responsiveness Returnable documents / schedules	Substantive responsiveness Pre-qualification	MINIMUM THRESHOLDS TECHNICAL Desktop & Interview **70 points** Minimum Threshold Technical criteria & weightings are stipulated in the tender document	**Weighted scoring / 100***** Price (90) B-BBEE scorecard (10) WEIGHTED SCORE	Selection of the preferred bidder. (Objective criterion to justify award to someone other than the highest ranked bidder must have been stated in the bid documents and can be used at this stage, if applicable)	Post tender negotiation with preferred bidder [2nd and 3rd ranked bidders (if required) in a sequential and not simultaneous manner] if pricing is not market-related	Award of business and conclusion of contract

Inland Network Automation Project - Technical Threshold

Thresholds	Minimum Threshold
Technical / functionality	70

Inland Network Automation Project - Pricing & Specific Goals

Only tenders that achieve the minimum qualifying score for functionality will be evaluated /Only tenders that are Administratively and Substantively Responsive will be evaluated) further in accordance with the 90/10 points systems as described in Preferential Procurement Regulations.

90 where the financial value of one or more responsive tenders received have a value equal to or exceed R50 million, inclusive of all applicable taxes,

Evaluation Criteria	Final Weighted Scores
Price	90
Specific goals - Scorecard	10
TOTAL SCORE:	**100**

Inland Network Automation Project - Selected Specific Goals

Selected Specific Goal	Number of points allocated (10)
B-BBEE Level of contributor (1 or 2)	5
Job Creation	5

Inland Network Automation Project - Evidence For Specific Goals

Selected Specific Goal	Acceptable Evidence
B-BBEE Level of contributor (1 or 2)	B-BBEE Certificate / Sworn-Affidavit B-BBEE Certificate (in case of JV, a consolidate scorecard will be accept) as per DTIC guidelines
Job Creation	T2.2-14 Job Creation Schedule, submitted as part of the RFP Returnables

Inland Network Automation Project – Closing Date & Time

CLOSING DATE AND TIME:

Monday, 07th October 2024

at 14H00

NO EXTENSIONS TO THIS DATE WILL BE ENTERTAINED WITHOUT GOOD CAUSE SHOWN

Inland Network Automation Project – Tender Validity Period

Tender offer validity period of 180 Days after the closing date

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Inland Network Automation Project – Project Context

Existing Inland Network Automation Challenges

The existing Automation Systems is currently challenged by obsolescence of the existing systems; high maintenance costs and frequent failure rates leading to performance and reliability issues; and lack of skilled personnel within the Original Equipment Manufacturers (OEM's) to support these obsolete systems.

New Control System developed to address Challenges

New Control System, Aveva OASyS DNA, was developed and deployed on the Crude Oil pipeline to address the challenges. The project was completed Q1 2021 and have been in operation for more than 2 years.

Pipeline Control System Projects are Complex

Control system projects are complex and require specific skills, control and quality management.

Pipelines Requires Specialized skills not easily available

Petrochemical pipelines required specialized product skills which are not easily available in the market. International resources are often required.

Well Resourced and Experienced MAC

A well resourced and experienced MAC is essential to a successful project. Leveraging international contacts and experiences is essential. Experience on Crude Automation Project showed the MAC underestimated the complexity of the Crude project.

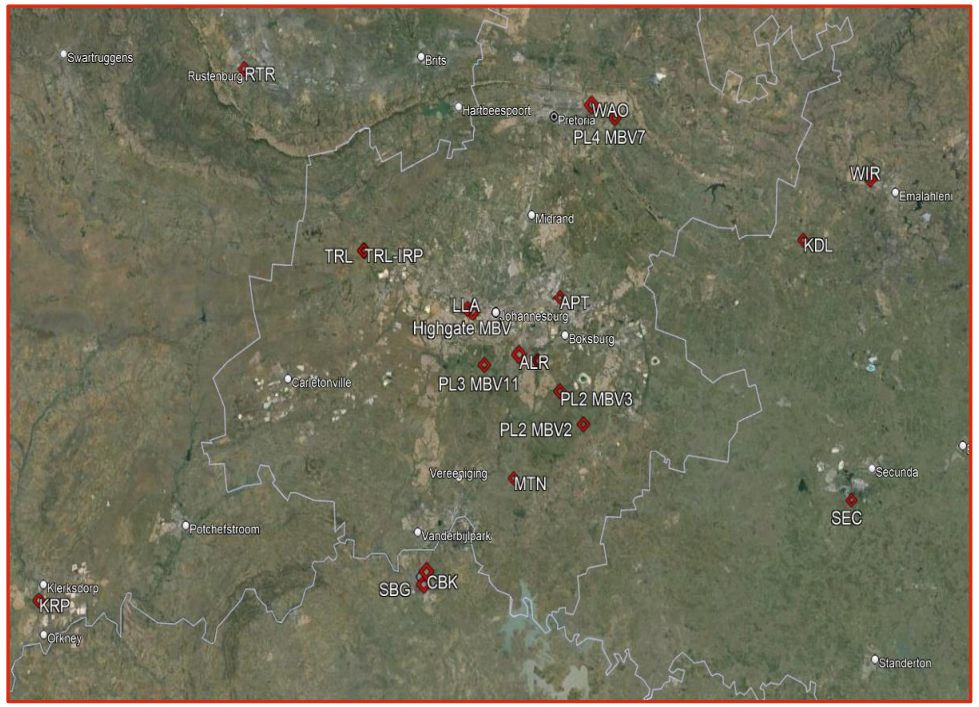
Inland Network Automation Project – Project Scope

- Scope of services entails the design, engineering, supply, procurement, fabrication, software development, testing, installation, commissioning and handover of the process control, integrated custody metering, and pipeline monitoring systems to all Inland stations.

- The full scope of the Project extends to successful delivery and execution of the following systems:
  - Process Control System (PCS)
  - Custody Metering System (CMS)
  - Leak Detection System (LDS)
  - HMI Training System
  - Field E&I Works

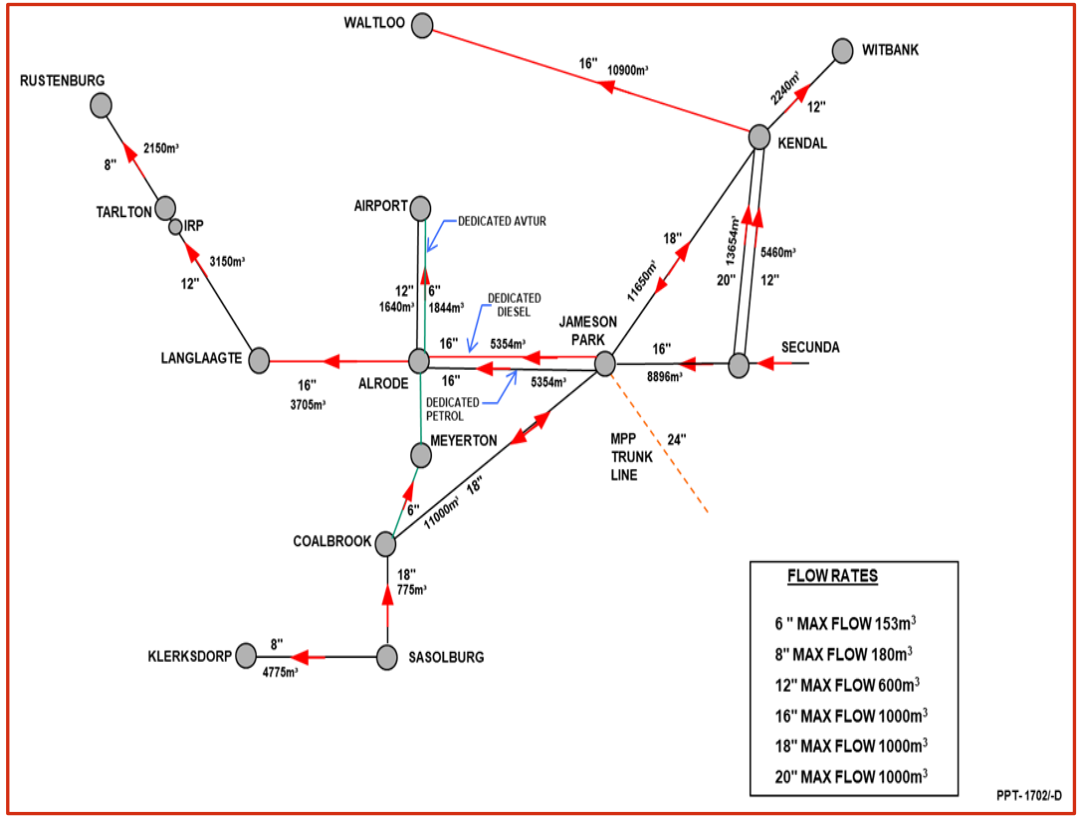
- The PCS, CMS and LDS comprise of Hardware, OEM Licenses and application software development

- Field E&I work includes:
  - Safety instrumentation (Line over pressure, tank overfill protection)
  - Installation of PCS Hardware in control rooms



Inland Network Automation Project – Project Scope

- The following TPL pump stations and depots are included:
  - Alrode (Delivery, Pump Station, Storage Depot)
  - Kendal (Switching Station)
  - Klerksdorp (Delivery Station)
  - Langlaagte (Delivery, Pump Station, Storage Depot)
  - Rustenburg (Delivery Station)
  - Sasolburg (Intake, Pump Station)
  - Secunda (Intake, Pump Station)
  - Tarlton (Delivery, Pump Station, Storage Depot, Road & Rail Offloading, Additive Dosing, Refractionator)
  - Waltloo (Delivery Station, Storage Depot)
  - Witbank (Delivery Station, Storage Depot)
  - Meyerton (Booster Pump Station) (Avtur)
  - Alrode (Pump Station) (Avtur)
  - Airport (Delivery Station) (Avtur)
  - Master Control Centre
  - Secondary Control Centre
  - Transnet Academy



Inland Network Automation Project – Project Timelines

2024
ECM Contract Award February 2024
Site Validation June 2024

Q3 2024
Feasibility Phase Completion December 2024
FEL3 Gate Review and Approval September 2024

Q1 2025
MAC Appointment February 2025
Software development Commence February 2025
Procure Hardware

2025
Procure Hardware
Software Typicals Developed
Full Staging Hardware Delivered
Muti-Station Execution Commence

H1 2026
Ph2A APT Completed
Ph2A MTN Completed

H2 2026
Ph2A ALR-AV Completed
Ph2B RTR Completed
Ph 2A PLMS Completed

H1 2027
Ph2B LLA Completed

H2 2027
Ph2B TLR Completed
Ph2B ALR Completed
Ph2C KDL Completed

H1 2028
Ph2C SEC Completed
Ph2B PLMS Completed

H2 2028
Ph2C WIR Completed
Ph2D KRP Completed

H1 2029
Ph2C WAO Completed
Ph2C PLMS Completed

H2 2029
Ph2D SBG Completed
Ph2E TLR-IRP Completed
Completion of Site Works

H1 2030
Ph2D PLMS Completed
Completion of the whole of the Works

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Inland Network Automation Project - **Contract Data**

- Conditions of Contract – NEC 3 ECC
- Main Option A – Priced contract with activity schedule

Duration of the contract is 6 years

Inland Network Automation Project - **Contract Data**

- Secondary Options

o X2 – Changes in Law	
o X5 – Sectional Completion	
o X7 – Delay damages	**R 25 000.00 per day**
o **X13: Performance Bond**	**5% of the total of the Prices**
o X16 – Retention	10% on all payment's certificates
o X18 – Limitation of Liability	

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Inland Network Automation Project – Technical Evaluation Criteria

THE OBJECTIVE OF THIS PHASE OF EVALUATION IS TO ESTABLISH WHETHER THE BIDDER HAS THE REQUISITE SKILLS, EXPERIENCE AND EXPERTISE TO DELIVER THE PRESCIRBED SERVICE

- Failure to provide supporting documentation to support an assertion will result in a score of 0 being awarded for that particular criterion
- Failure to achieve a minimum score of 70 points (out of 100) will result in disqualification

ELIGIBILITY CRITERIA			
T.2.2.01 Key Personnel: Senior Control Engineer - SCADA has completed the relevant intermediate, and advanced level process control system specialist courses (OEM certified) for either AVEVA OASyS DNA or AVEVA Enterprise SCADA Systems, as listed in the Works Information Section 6.3.3		**YES/NO**	
Technical criteria (Desktop)	**Sub-criteria**	Sub-criteria points	Maximum number of points
T2.2-02: Key Persons Experience & Qualifications: Project Manager, Engineering Manager, Senior Control Engineer – SCADA, Senior Control Engineer – PLC, Senior Control Engineer – PLMS, Senior Systems Engineer	Key Persons Experience & Qualifications	35	**35**
T2.2-03: Company's Project Related Experience: in process control system development and deployment in petroleum pipeline environment	Number of successfully completed projects related to the development and deployment of process control systems within a petrochemical pipeline environment.	10	**20**
	Number of experienced, competent, and qualified resources to complete the Works using multiple teams.	10	

Inland Network Automation Project – Technical Evaluation Criteria

THE OBJECTIVE OF THIS PHASE OF EVALUATION IS TO ESTABLISH WHETHER THE BIDDER HAS THE REQUISITE SKILLS, EXPERIENCE AND EXPERTISE TO DELIVER THE PRESCIRBED SERVICE

ELIGIBILITY CRITERIA			
T2.2-04: Project Schedule	Project Schedule submitted has a realistic and logical execution activity structure reflecting the different phases of the project, and lists all the main activities, required deliverables, key dates. Critical path scheduling is reflected and the Project Schedule is resource loaded. Basis of Schedule is provided.		**10**
T2.2-05: Method statement/ Execution Plan	A clear and concise Method Statement which covers all technical and project management aspects relevant to the project	10	**20**
	AVEVA Centre of Excellence Involvement	10	
T2.2-06: Presentation & Interview Tenderers will be required to attend a interview session with the Employer. The presentation should demonstrate and in depth understanding of both technical and project management aspects related to successfully completing a project of this nature within a petroleum pipeline environment.	The Tenderer is required to present a presentation covering all aspects of the bid submitted, including the following: 1. An introduction to the Contractor's team, including key personnel, their experience, and qualifications. 2. An overview of the Company's project related experience in successfully completing control system development and deployment projects within a petroleum pipeline environment. 3. An overview of the salient points associated with the Method Statement and Project Programme submitted.		**15**
Maximum possible score for Functionality			**100**

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Thank you