



TRANSNET NATIONAL PORTS AUTHORITY

an Operating Division of **TRANSNET SOC LTD**

[hereinafter referred to as **Transnet**]

REQUEST FOR INFORMATION (RFI) IN RESPECT OF THE PROCUREMENT OF THE PROVISION OF TECHNICAL AND COMMERCIAL SERVICES FOR TECHNICAL ASSESSMENT OF EXISTING/OLD TUGBOATS AND THE CONVERSION/RETROFIT TO UTILISE ALTERNATIVE FUELS (INCLUDING NATURAL GAS, BIODIESEL, HYDROGEN/AMMONIA AND METHANOL).

RFI NUMBER	TNPA/2024/10/0008/80711/RFI
ISSUE DATE:	28 OCTOBER 2024
BRIEFING SESSION:	06 NOVEMBER 2024 at 10:00 AM (NON-COMPULSORY)
CLOSING DATE:	29 NOVEMBER 2024 at 16:00 PM

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1 Disclaimer

- 1.1 While all reasonable care has been taken in preparing this RFI, the information has been prepared by Transnet SOC Ltd, through its operating division of Transnet National Ports Authority ("TNPA") in good faith, based on information obtained from various sources. However, neither TNPA nor any of its advisors accept any liability or responsibility for the adequacy, accuracy or completeness of any of the information or opinions stated herein. Save where expressly stipulated otherwise, no representation or warranty (whether express or implied) is or will be given by TNPA or any of its officers, employees, servants, agents, advisors or any other person with respect to the information or opinions contained in this RFI, or in relation to this RFI.
- 1.2 TNPA reserves the right to amend, modify or withdraw this RFI or any part of it, or terminate or amend the plans for the introduction of Prospective Respondents for its Renewable Energy Programme, at any time, without prior notice and without liability to compensate or reimburse any person/entity pursuant to such amendment, modification, withdrawal or termination.
- 1.3 The terms and conditions set out in this RFI are stipulated for the express benefit of TNPA and, save as expressly stated to the contrary, may be waived at TNPA's sole discretion at any time.
- 1.4 TNPA reserves the right to adopt any proposal made by any person/entity responding to this RFI at any time and to include such proposal in any documents which may or may not be made available at any stage to any other persons responding to this RFI, without the obligation or liability to pay any compensation or reimbursement of any nature to any person/entity pursuant to such adoption.
- 1.5 This RFI is provided solely for the purpose set out herein and is not intended to form any part or basis of any investment decisions by prospective Respondents, their shareholders, members or lenders.
- 1.6 Prospective Respondents that access this RFI must make its own independent assessment of the information provided, taking such advice (whether professional or otherwise) as it deems necessary.

1.7 No prospective Respondents to this RFI, its shareholders, members, contractors, suppliers or lenders shall have any claim against TNPA, its officers, employees, servants, agents or Transaction Advisors, under any circumstances whatsoever, arising out of any matter relating to this RFI of any nature whatsoever, including where such claim is based on any act or omission by TNPA, or any of its officers, employees, servants, agents or Transaction Advisors of any nature whatsoever, or where such claim is based on the content of, or any omission from, this RFI of any nature whatsoever.

2 DEFINITIONS AND INTERPRETATION

In this RFI, except as otherwise defined herein, the following terms shall have the following meanings:

- 2.1. **Tugboats** – in the case of this RFI, Tugboat refers to a tugboat or tug as a marine vessel that manoeuvres other vessels by pushing or pulling them, with direct contact or a tow line. TNPA has prioritised and listed ten (10) earmarked diesel Tugboats for retrofitting to alternative fuel;
- 2.2. **Alternative Fuels** – refers to the targeted alternative fuels such as Natural Gas (in either Liquid or Gas phase), Biodiesel, Methanol, Hydrogen/Ammonia (in either Liquid or Gas phase) for use as fuel in the retrofitted Tugboats;
- 2.3. **Respondent** – any entity or consortium that submits a RFI Response in response to this RFI;
- 2.4. **RFI** – Request for Information inclusive of technically substantiating documentation validating, in this case, the adequate:
 - (a) Scope of work and cost (resources) for technical assessment of ten (10) old diesel Tugboats located at TNPA's Port premises;
 - (b) Scope of work and cost (resources and consumables) for the actual retrofitting of a Tugboat from diesel operation to Natural Gas and Biodiesel and Methanol and Hydrogen/Ammonia; and
 - (c) Scope of work and cost (resources) for stakeholder mapping including which public sector entities, educational institutions, research institutions and international ports must be partnered with to guarantee success of the tugboat alternate fuel pilot trial and the future of a fully transformed alternate fuelled tugboat fleet.

- 2.5. **RFI Response** – the completed Response Form, together with all necessary supporting documentation; and
- 2.6. **Technical Assessment** – Technical assessment of the ten (10) Tugboats for (but not limited to):
 - (a) Structural integrity of the Tugboats for adequacy to retrofitting the Engine or Engine components of alternative fuels;
 - (b) Ergonomics, operability and safety checks for retrofitting the Engine, Engine compartment or Engine components for alternative fuels; and
 - (c) Overall tugboat technical assessment for fit for services and continued operation of the vessel; and
 - (d) All additional local and/or international licensing/permits required to operate an alternate fuelled tugboat during and after the pilot trial period.

3 BACKGROUND

3.1 Transnet National Ports Authority – TNPA

- 3.1.1 Transnet National Ports Authority (National Ports Authority or TNPA) is an operating division of Transnet SOC Ltd, (registration number 1990/000900/30) established through the National Ports Act, No. 12 of 2005 (“the Ports Act”) and provides a regulatory service in terms of its proclamation as defined in the National Ports Act;
- 3.1.2 An internal energy audit conducted by TNPA indicates that there is a strong need to stabilise energy costs and availability into the future. As well as for TNPA to reduce its carbon footprint related to its marine fleet predominantly from Diesel consumption and promote its Desire end State (DES) objectives of smart ports and cleaner/sustainable environment;
- 3.1.3 In the South African context of the global decarbonization drive, TNPA is the key gatekeeper of the ocean-land interface in terms of marine traffic and cargo movements at a national scale;
- 3.1.4 Retrofitting TNPA’s marine fleet with low-to-no carbon fuel alternatives to the current fossil fuel-based products is a key step in the decarbonization journey of port-related equipment and vessels;
- 3.1.5 TNPA seeks to develop a precise, fact-fuelled basis of information to elucidate the comparison between the marine fuel options for its marine fleet (Tugboats); and
- 3.1.6 TNPA is exploring opportunities to test and operate marine fleet on alternate fuels (i.e. Biodiesel, LNG, Ammonia, Methanol and Hydrogen) on tugboat. The listed Tugboats are earmarked for disposed and TNPA seeks to retrofit a minimum of four (4) of Tugboats to utilise alternative fuels as listed above. This initiative is of immense importance and value in TNPA’s decarbonization journey.

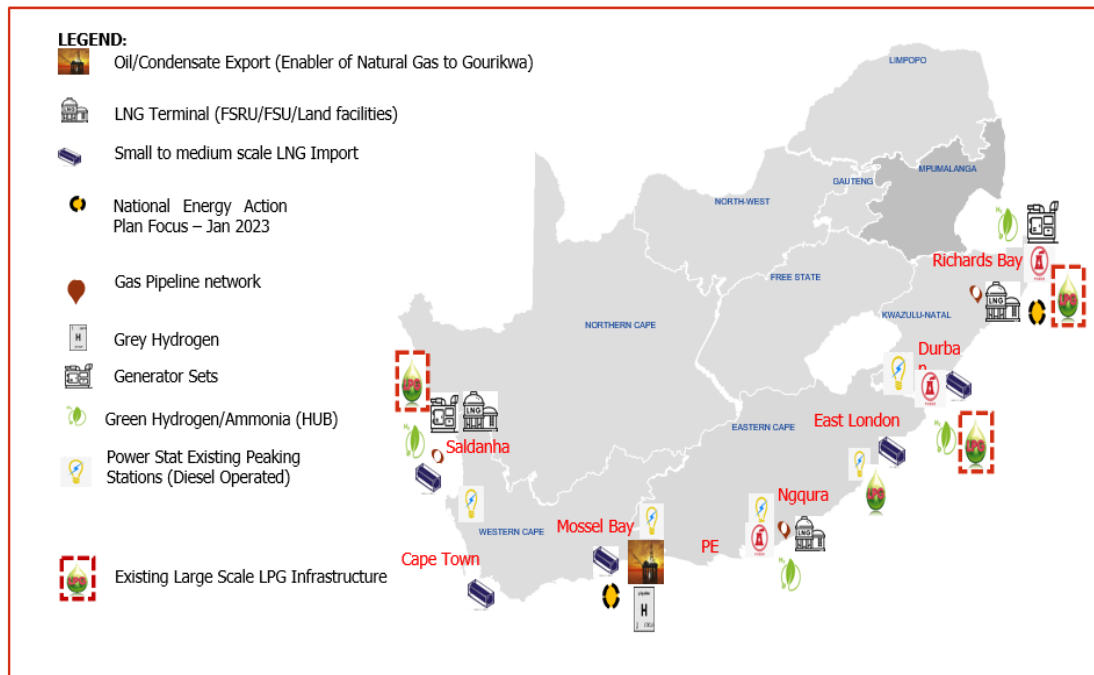


Figure 1: TNPA Oil and Gas Overview (Plans)

3.1.7 In this context, TNPA has decided to invite interested parties to support with technical and commercial information required to establish:

- (a) Scope of work and cost (resources) for technical assessment of ten (10) old (>35 years) diesel Tugboats located at TNPA's Port premises;
- (b) Scope of work and cost (resources and consumables) for the actual retrofitting of a tugboat from diesel operation to Natural Gas and Biodiesel and Ammonia/Hydrogen and Methanol – inclusive of the nature and extent of alternate fuel storage, handling and dispensing facilities, as well as quantitative risk assessments for the on land and water unit operations of the initiative; and
- (c) Scope of work and cost (resources and consumables) for stakeholder mapping including which public sector entities, educational institutions, research institutions and international ports must be partnered with to guarantee success of the tugboat alternate fuel pilot trial and the future of a fully transformed alternate fuelled tugboat fleet.

4 TNPA ALTERNATE FUEL FOR TUGBOATS – OVERVIEW

4.1 TNPA Liquid fuels are imported through TNPA's 7 commercial ports in South Africa. TNPA has a total of 20 berths with total installed capacity of 91,4 million kilolitres for liquid bulk commodities and an approximately 37.4 % of that in use (34,2 million kilolitres per annum). Liquid bulk import component is approximately 83 % of the actual volumes handled (28,6 million kilolitres). Liquid Bulk Commodity includes Petroleum, Chemicals, animal vegetable Oil, Molasses, etc.

4.2 Global oil longer-term outlook is uncertain because of challenges from alternative fuels and the automotive industry. Oil use for transportation is expected to go into a decline by 2026-2030, while oil's role as a key ingredient in plastics and other chemicals will continue to drive global consumption (Source IEA).

4.3 In the Net Zero Emissions by 2050 Scenario, behaviour changes and increases in low emissions liquid fuels mean oil demand will barely increase (Source IEA).

4.4 Included in this RFI Scope of Work as explained above in Clause 2 and 3.1.7, is for a technical and suitability assessment to determine which and how many of the ten (10) Tugboats available in Port System (listed in Table 1 below) are optimally suited for retrofitting to pilot trial the following alternate marine fuels:

- Biodiesel;
- Liquefied Natural Gas (LNG or CNG);
- Methanol; and
- Hydrogen/ Ammonia (Liquid).



Table 1: Tugboat Specifications (Part 1)

NAME OF CRAFT	HOME PORT	YEAR BUILT	TYPE	PROPULSION	CLASS
UMVOTI	Durban	1983	TWIN-UNIT SRP TRACTOR TUG	DIESEL-SCHOTTEL	B
INYALAZI	Durban	1984	TWIN-UNIT SRP TRACTOR TUG	DIESEL-SCHOTTEL	B
UMHLALI	Durban	1985	TWIN-UNIT SRP TRACTOR TUG	DIESEL-SCHOTTEL	B
IMPUNZI	East London	1978	TWIN-UNIT SRP TRACTOR TUG	DIESEL-Z-PELLER	B
UMTHWALUME	East London	1978	TWIN-UNIT SRP TRACTOR TUG	DIESEL-Z-PELLER	B
PINOTAGE	Cape Town	1980	TWIN-UNIT CYC. TRACTOR TUG	DIESEL-VOITH SCHNEIDER	B
MERLOT	Cape Town	1980	TWIN-UNIT CYC. TRACTOR TUG	DIESEL-VOITH SCHNEIDER	B
CHARDONNAY	Cape Town	1980	TWIN-UNIT CYC. TRACTOR TUG	DIESEL-VOITH SCHNEIDER	B
MARCUS	Saldanha Bay	1976	TWIN-UNIT CYC. TRACTOR TUG	DIESEL-VOITH SCHNEIDER	B
MEEUW	Saldanha Bay	1977	TWIN-UNIT CYC. TRACTOR TUG	DIESEL-VOITH SCHNEIDER	B

Table 2: Tugboat Specifications (Part 2)

NAME OF CRAFT	BOLLARD PULL	GT	BUILDER	ENGINE	KILOWATT	OVERALL	BREATH	DRAFT
UMVOTI	40 TON	295	DORBYL	2 X MAK	2206	32,5	9,5	6,07
INYALAZI	34 TON	295	DORBYL	2 X MAK	1805	32,5	9,5	6,07
UMHLALI	34 TON	295	DORBYL	2 X MAK	1805	32,5	9,5	6,07
IMPUNZI	43 TON	431	DORBYL	2 X NIIGATA	2312	35,62	11,0	5,56
UMTHWALUME	43 TON	431	DORBYL	2 X NIIGATA	2312	35,62	11,0	5,56
PINOTAGE	43 TON	430	DORBYL	2 X MAN/SULZER	3209	35,6	11,0	5,69



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MERLOT	43 TON	430	DORBYL	2 X MAN /SULZER	3209	35,6	11,0	5,69
CHARDONNAY	43 TON	430	DORBYL	2 X MAN /SULZER	3209	35,6	11,0	5,69
MARCUS	43 TON	486	ATELIERS CHAN ZIEG	2 X MAN/SULZER	2932	37,3	11,0	5,29
MEEUW	43 TON	486	JAMES BROWN & HR	2 X MAN/SULZER	2932	37,3	11,0	5,29

5 Required Information

5.1 Objectives of the RFI

The objective of this RFI is to:

The objective of this RFI is to establish relevant technical information for the exploration of technically substantiating documentation, in this case, the adequate:

- 5.1.1 Scope of work and cost (resources) for technical assessment of ten (10) old (>35 years) diesel Tugboats located at TNPA's Port premises; and
- 5.1.2 Scope of work and cost (resources and consumables) for the actual retrofitting of a tugboat from diesel operation to Natural Gas and Biodiesel and Ammonia/Hydrogen and Methanol – inclusive of the nature and extent of alternate fuel storage, handling and dispensing facilities, as well as quantitative risk assessments for the on land and water unit operations of the initiative.
- 5.1.3 Scope of work and cost (resources) for stakeholder mapping including which public sector entities, educational institutions, research institutions and international ports must be partnered with to guarantee success of the tugboat alternate fuel pilot trial and the future of a fully transformed alternate fuelled tugboat fleet – with demonstrable validation per proposed stakeholder.
- 5.1.4 Obtain further information on nature and type of potential modifications to be done to retrofit the final four (4) Tugboats to alternative uses listed on this RFI;
- 5.1.5 Part of the Scope of Work is post the technical assessment to select or propose which and how many of the ten (10) Tugboats are suitable for final retrofitting to alternative fuels on the basis of optimum cost and time to retrofit;
- 5.1.6 Engineering technical assessment of Tugboats which will include but not limited to the Engine and its components, mechanics & electronics, structural condition, compartment for new components or modification, etc;
- 5.1.7 Compliance of tugboat with all applicable legislative requirements; and
- 5.1.8 Any site special access and information that will be required by the bidder(s) to conduct the technical assessment of the Tugboats at the four (4) Ports as shown on Table 1 above.

5.2 Site Location

5.2.1 The Tugboats are located across four (4) Ports i.e. Port of Durban, Port of East London, Port of Cape Town and Port of Saldanha Bay.

6 Information to be provided by the Respondent in its RFI Response

6.1 Respondents are requested to ensure the following:

6.1.1 The RFI Response should be as comprehensive as possible and include the information requested below and any supporting documentation in respect thereof.

6.1.2 Respondents are required to provide as much detail as possible about their Project(s). Such information will assist TNPA in determining the readiness of the market for the mainstream usage of such an alternate marine fuel and may inform the design of a procurement process.

6.2 Details of the Respondent;

6.2.1 Respondents will be required to provide the following information about the Project:

6.2.1.1 Name of the Respondent;

6.2.1.2 Name of the Project; and

6.2.1.3 The name and contact details of the person appointed by the Respondent as its representative for all further engagements related hereto.

6.3 Information related to the Project Overview

The Respondent is required to provide the following details:

6.3.1 Provide details of the suitability of the Tugboats in relation to the technical viability of retrofitting the Tugboats;

6.3.2 Provide overview of the technical proposal;

- 6.3.3 Provide the information regarding parts and utilities requirements for the retrofit of the Tugboats, inclusive of electrical, structural, engine parts installations connecting the shaft etc;
- 6.3.4 Estimated technical assessment cost (resources) for the total of ten (10) Tugboats;
- 6.3.5 Estimated retrofit cost (resources and consumables) for the proposed four (4) Tugboats;
- 6.3.6 Provide the high-level operating cost and/or fuel consumption for the four (4) Tugboats;
- 6.3.7 Indications of any Permits, certifications, and authorisations required (for the retrofit and operation of the Tugboats) and anticipated timelines;
- 6.3.8 High-level project plan (schedule) for both technical assessment (10 tugboats) and the actual retrofit (4 Tugboats);
- 6.3.9 Jobs to be created (operational and management); and
- 6.3.10 The Respondent is to provide any additional information in respect of its Project which it may deem necessary to bring to the attention of TNPA.

6.4 TNPA intends, through this RFI to:

- 6.4.1 Better understand the Respondents' analysis of the market relevant to scope of work mentioned in the document.
- 6.4.2 Obtain information to better define the scope, cost/budgeting and extent for the envisaged Request for Proposal for the retrofit as informed by the outcome of this RFI should TNPA decide to proceed with the RFP.

6.5 As such, TNPA encourages and requests any, and all Prospective Respondents to:

- 6.5.1 Respond to this RFI in the manner and form herein specified. The submission of an RFI Response is, however, not and will not be a compulsory requirement for responding to the envisaged RFP in future.
- 6.5.2 Respond to this RFI in the manner and form herein specified. The submission of an RFI Response is, however, not and will not be a compulsory requirement for responding to the envisaged RFP in future.

6.6 Respondents are to note the following:

6.6.1 Respondents are required to provide capability statements demonstrating their previous experience in a similar project.

7 Format and Submission of RFI Responses

7.1 Submission of RFI Responses

7.1.1 The RFI Responses must be submitted to TNPA by no later than 16h00, on Friday 29 November 2024 in the manner specified in 8.1 below;

7.1.2 RFI Responses reaching TNPA later than the date and time specified above may, in TNPA's sole discretion, not be considered by TNPA;

7.1.3 All costs incurred by a Respondent in connection with this RFI and the preparation of its responses hereto shall be borne by the Respondent;

7.1.4 The Respondent will not have to pay any monies in order to submit an RFI Response;

7.1.5 The Respondent is encouraged to submit any additional information that, in its view, would assist TNPA in this project.

7.1.6 Each RFI Response is required to be delivered to TNPA by way of 1 (one) soft copy of the entire RFI Response, and the documents contained therein must be:

7.1.7 All RFI Submissions must be in latest version of Microsoft PDF;

7.1.8 The RFI Submissions must be properly indexed, readable and capable of being opened;

7.1.9 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; and

7.1.10 Respondents are to upload their RFI response proposals onto the Transnet system against each RFI selected;

7.1.11 The Transnet e-Tender Submission Portal can be accessed as follows:

- 7.1.11.1 Log on to the Transnet eTenders management platform website/ Portal (transnetetenders.azurewebsites.net) Please use Google Chrome to access Transnet link/site);
- 7.1.11.2 Click on "ADVERTISED TENDERS" to view advertised tenders;
- 7.1.11.3 Click on "SIGN IN/REGISTER – for bidder to register their information (must fill in all mandatory information);
- 7.1.11.4 Click on "SIGN IN/REGISTER" - to sign in if already registered;
- 7.1.11.5 Toggle (click to switch) the "Log an Intent" button to submit a bid;
- 7.1.11.6 Submit bid documents by uploading them into the system against each tender selected;
- 7.1.11.7 No late submissions will be accepted. The bidder guide can be found on the Transnet Portal transnetetenders.azurewebsites.net.

8 Format of RFI Responses

8.1 The Respondent is requested to complete the RFI Response and provide all the information required in terms of this RFI;

8.1.1 All pages should be numbered consecutively from beginning to end and there should be an index to the entire RFI Response;

8.1.2 The RFI Response can be contained in more than one document and with annexures as the Respondent may consider appropriate to provide the information requested. All documents comprising the RFI Response must be visible from the index to the RFI.

8.2 Language of the RFI Response

- 8.2.1 The RFI Response and all documents forming part of it must be in English;
- 8.2.2 Any printed literature submitted with the RFI Response may be in another language so long as it is accompanied by an English translation (made by an accredited translator) of the entire document;
- 8.2.3 For the purpose of interpretation of the RFI Response, TNPA will rely on the English translation provided;
- 8.2.4 All correspondence and any other documentation and oral communication exchanged between the Respondent and TNPA shall be in English.

8.3 Signing of the RFI Response

- 8.3.1 The Respondent is requested to provide a cover letter that includes details on company profile with its RFI Response.

8.4 Further Information

- 8.4.1 TNPA reserves the right to seek additional information from the Respondent regarding its RFI Response, as it may, in its sole discretion, determine, whether such information has been requested under this RFI or otherwise, and may request the Respondent to present supplementary information, in respect of its RFI Response;
- 8.4.2 The Respondents may, following the submission of an RFI Response, be requested to engage with TNPA and/or other relevant government stakeholders to discuss matters relevant to its RFI Response. Any meetings will take place via MS Teams unless otherwise arranged.

9 Contact with the Project Manager

- 9.1 The Respondent must give the name and contact details of the person whom it appoints to undertake all contact with the Project Officer in its RFI Response, as provided for above (Information to be provided by Respondents in their RFI Responses);

- 9.2 After the submission of its RFI Response, the Respondent may only communicate with TNPA through such person and TNPA shall be entitled, at its sole discretion, to disregard any communication from the Respondent, that does not come from such contact person, and that does not go directly to the Project Officer.
- 9.3 Where engagement is required with the Respondent as highlighted above, other representatives of TNPA and the Respondent will be requested to be available for such engagement.

10 Formal Briefing

- 10.1 A non-compulsory briefing session meeting will be conducted via Microsoft Teams on 06 November 2024 @ 10h00. Interested parties can join the briefing session by using a link that will be provided below:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_NWZkNmJiY2ItNWxNC00NTg0LWI5MTItM2YyNGVhNGJjZTkz%40thread.v2/0?context=%7b%22id%22%3a%22a1a39996-f913-4016-a58a-361c60dec580%22%2c%22oid%22%3a%2234daaf63-6857-4647-a047-b2edbd87e4fe%22%7d

- 10.2 Interested parties who wish to submit an RFI Response and who did not participate in the non-compulsory information-sharing session will not be excluded from submitting an RFI Response.

11 Requests and Clarifications

- 11.1 The Respondent may request clarification on any item contained in this RFI by no later than 21 November 2024;
- 11.2 All enquiries, queries, and requests for clarification in respect of this RFI must be in writing and addressed to the Project Manager and emailed to Tugboatsalternativefuelrfi@transnet.net
- 11.3 TNPA will endeavour to respond to all reasonable written queries and requests for clarification raised by any Respondent.

12 General

- 12.1 The information contained in this RFI is confidential and proprietary to TNPA. In accepting this RFI, "suppliers", "service providers" and/or "Agents" agree to the following conditions, under the applicable legislation:
- 12.2 By submitting an RFI Response, each Respondent acknowledges that TNPA will process all such information that is contained in the RFI Response, and which may constitute personal information as defined in the Protection of Personal Information Act No. 4 of 2013 and each Respondent consents to such processing.
- 12.3 Each party recognises and agrees that the Confidential Information has been compiled, created, and maintained by special effort and expense of the other party;
- 12.4 Each party recognises and agrees that disclosing or disseminating Confidential Information to a third party will have a materially adverse effect on the other party and agrees not to disclose or disseminate the Confidential Information to any third party. Except as necessary to perform its obligations hereunder, each party shall not use, reproduce, or draw upon the Confidential Information or circulate it within its own organisation.
- 12.5 Each party shall provide notice to the other party of any demand made upon it under lawful process to disclose or provide the other party's Confidential Information. Such party agrees to co-operate with the other party if it elects to seek reasonable protective arrangements or oppose such disclosure, at the expense of the party that is seeking the protective arrangements or opposing the disclosure;
- 12.6 Any Confidential Information disclosed pursuant to such lawful process shall continue to be Confidential Information, the access to such Confidential Information shall be limited to those persons:
- a) only with a need to review such information for the purposes for which the disclosure was required; and
 - b) who agree in writing to keep the Confidential Information confidential.

12.7 If a Respondent, or any person employed by him, is found to have either directly or indirectly offered, promised, or given to any person in the employ of TNPA, any commission, gratuity, gift, or other consideration, TNPA shall have the right and without prejudice to any other legal remedy which it may have in regard to any loss or additional cost or expenses, to disqualify the RFI Respondent from further participation in this process and any other subsequent processes in this regard;

12.8 In such an event, the Respondent will be responsible for all and any loss that TNPA may suffer as a result thereof. In addition, TNPA reserves the right to exclude such a Respondent from future business with TNPA.