

Tender 0045/2015

Volume 1 – Part I

Invitation to Bid (ITB)

**Assurance Management and Technical
Auditing Services**

for the

**Metropolitan Tel Aviv Mass Transit
System**

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1. **DEFINITIONS**

Unless otherwise expressly provided hereunder, all capitalized terms used in this Instruction to Bidders and the Appendices thereto, shall have the meaning ascribed to them in the Tender Documents:

- Addendum** or - Means as set out in Sub-Clause 3.8.1.
Addenda
- Authorized Representative** - Means as set out in Sub-Clause 5.2.1.
- Bidder** - Means as set out in Sub-Clause 2.3.
- Bidders' Conference** - Means as set out in Sub-Clause 2.6.
- BDS** - Bid Data Sheet attached hereto as Volume 1 Part II to the Tender Documents.
- Control** - Shall have the meaning ascribed thereto in Section 1 of the Securities Law 1968.
- Financial Proposal** - All documents indicated in Sub-Clause 6.7.
- FTP Server** - <http://ftp.nta.co.il>
- ICA** - Means as set out in Sub-Clause 3.3.1.
- Interested Parties** - Shall have the meaning ascribed thereto in Clause 1 of the Companies Law 5759-1999.
- JV** - Means as set out in Sub-Clause 2.3.2.
- Law(s)** - Means all laws, statutes, ordinances, regulations and orders of the State of Israel and any by-laws of any municipal or public authority of the State of Israel, including municipal by-laws, procedures and permits, directives, specifications, standards, safety requirements; decisions of any Ministry of the Government of the State of Israel and all rules, applicable standards and administrative orders in effect in the State of Israel, and all as may be amended, updated or replaced from time to time.
- Letter of Award** - A notice issued by NTA to the Successful Bidder approving the selection of his Successful Proposal.
- Member** - Means as set out in Sub-Clause 2.3.2.

NTA	- N.T.A. – Metropolitan Mass Transit System Ltd.
NTA's Notification	- Means as set out in Sub-Clause 8.8.1.
NTA's Website	- http://www.nta.co.il/
NIS	- New Israeli Shekel.
PAO	- Means as set out in Sub-Clause 2.2.
PAO Member	- Means as set out in Sub-Clause 2.3.2.
Performance Security	- As such term is defined in the Services Agreement.
PMCs	- Means as set out in Sub-Clause 2.2.
Program	- Means as set out in Sub-Clause 2.1.
Project	- Means as set out in Sub-Clause 2.1.
Proposal	- The proposal submitted by a Bidder in accordance with the provisions of this ITB.
Quality Proposal	- All documents indicated in Sub-Clause 6.6.
Regulations	- Means as set out in Sub-Clause 3.1.1.
Second Eligible Bidder	- The Bidder who submitted the highest overall ranking Proposal excluding the Successful Bidder.
Services	- As such term is defined in the Services Agreement.
Services Agreement	- Volume 2 Part VI to the Tender Documents and any attachment or appendix thereto.
SE Notification	- Means as set out in Sub-Clause 8.8.2.
Sub-Contractor	- Means as set out in Sub-Clause 2.3.2.
Submission Date	- As detailed in the BDS.
Successful Proposal	- The Proposal which will be selected by NTA as the awarded Proposal of the Tender. The Successful Proposal will be the highest overall ranking Bid, unless otherwise determined by NTA pursuant to Sub-Clause 8.7.3.
Successful Bidder	- The Bidder who submitted the Successful Proposal.

TAT	- Means as set out in Sub-Clause 2.2.
TAT Member	- Means as set out in Sub-Clause 2.3.2.
Tender	- Tender number 0045/2015 for the purpose of providing the Services.
Tender Documents	- All documents listed in Appendix A attached hereto, any appendices, attachments and addenda thereto, and any other document published by NTA in accordance with Sub-Clause 3.8 (<i>Addenda</i>) prior to the Submission Date.
Tender Fee	- Means as set out in Sub-Clause 2.4.1.
Tender Form(s)	- Shall mean each and every form attached to the Tender Documents including all appendices thereto.
Tender Security	- An autonomous Security, in the Tender Form attached to Volume 1 Part V.
Tender Security Draft	- Means as set out in Sub-Clause 4.10.11.
Third Eligible Bidder	- The Bidder who submitted the second highest overall ranking Proposal excluding the Successful Bidder.
Threshold Criteria	- Volume 1 Part III to the Tender Documents.

2. OVERVIEW

NTA – Metropolitan Mass Transit System Ltd. (NTA), is a government-owned company responsible for the construction of mass transit systems in the Tel Aviv metropolitan area.

This Program is currently one of the most important infrastructure projects in Israel and will transform the metropolitan area significantly. It will provide an integrated high quality public transport network that will connect all the major conurbations that make up the metropolitan area and will be fully integrated with the train, bus, cycle, pedestrian and highway network that serves the area to create a world class fully integrated public transport system. NTA hereby invites companies to participate in the Tender process according to the terms and conditions of the Tender Documents, for the provision of the Services, all in accordance with the requirements of the Tender Documents.

Without derogating from the provisions of Sub-Clause 3.11 (*Reservation of Rights*),

Bidders' attention is drawn to the following indicative description of the Program and the Services.

2.1. **General Description of the Program**

The mass transit system network includes 8 lines out of which 5 are Light Rail Transit (LRT) lines and 3 lines are Bus Rapid Transit (BRT) lines.

The mass transit system network comprises a total of 215km from Rehovot in the south to Netanya in the north and up to Kfar-Saba, Rosh-Haayin and Lod in the east.

The goal of NTA is to deliver a safe, high-capacity, state-of-the-art, reliable, attractive, accessible and environmentally-friendly Mass Transit System

Description of the lines:

The Red Line (LRT): From Petah Tikva in the East to Bat Yam in the south, the Red Line is 23km long, of which 12km is underground and the remain is at grade. The Red Line depot is designed to accommodate 104 trains in its stabling area and has light and heavy maintenance capabilities.

Design – between final and detailed design. The Rail Systems design is being tendered as Design Build (DB).

The Green Line (LRT): From Herzliya in the north to Rishon Lezion in the south, the Green Line is 39km long, of which 4km are planned to be underground and the rest at grade.

Design – there are three (3) design packages which are nearing the completion of the final design.

The Purple Line (LRT): From Yehud and Petah Tikva in the east to Tel Aviv in the south, the Purple Line is 36km, all of which is at grade.

Design – one (1) design package, nearing completion of final design.

The Yellow Line (LRT): From Herzliya in the north to Mikve Israel in the south and Petah Tikva in the east, the yellow line is of 34 Km long, all of which is at grade.

Design – one (1) design package, nearing completion of preliminary design.

The Brown Line (LRT): From Rishon Lezion in the west to Lod in the east, the Brown Line is 28km long, all of which is at grade.

Design – two (2) design packages preliminary design is ongoing.

The Blue Line (BRT): From Mikve Israel in the north to Rehovot in the south, the Blue Line is 21km long.

Design – completed.

The Pink Line (BRT): From Herzliya in the west to Kfar-Saba in the east, the pink line is of 18km.

This line is on hold.

The Orange Line (BRT): This is a line that goes through the city of Netanya (circular line).

Design – completed.

Each Line described above shall be refer to as the "**Project**", and all together as the "**Program**".

2.2. **General Description of the Services**

NTA has chosen to adopt an extensive rail transit program assurance approach embracing quality, systems engineering, Reliability Availability, Maintainability and Safety (RAMS), sustainability, human factors and safety & technical assurance processes as well as other good industry practice and processes as applicable.

To assist with this approach, NTA has elected to engage a consultancy company to conduct an external independent program and quality assurance role and create and manage a program assurance office ("**PAO**"), on behalf of NTA, throughout the lifecycle of the Program.

In addition to this role, such consultancy company will carry out a role of a technical audit team ("**TAT**") to ensure that the Program is world class and is performed according to agreed requirements duly reviewed and validated by the Project Management Consultants ("**PMCs**") dedicated for each line of the Program.

The detailed Scope of Services is attached as Volume 2 Appendix 1 (*Scope of Services*).

Without derogating from Sub-Clause 3.9 (*Information Supplied to Bidders*) The information presented here above in Sub-Clauses 2.1 (*General Description of the Program*) and 2.2 (*General Description of the Services*) is for indicative purposes only, and shall not be deemed as conclusive or binding, and contain a summarized description of the Program solely for the Bidders' convenience. A more detailed description of the Services can be found in the Services Agreement and its appendices, and in particular Volume 2 Appendix 1 (*Scope of Services*).

Bidders are required to make themselves familiar with all Tender Documents.

None of the information stated above in Sub-Clauses 2.1 (*General Description of the Program*) and 2.2 (*General Description of the Services*) shall derogate

from any or all of the Bidder's obligations, liabilities and undertakings arising out of or in connection with the Tender Documents and/or their Proposals.

2.3. **The Bidder**

A Bidder means either:

2.3.1. A duly incorporated company that purchased the Tender Documents and participates in this Tender; or

2.3.2. A joint venture, consortium or other legal entity specifically established for the submission of a Proposal that purchased the Tender Documents and participates in this Tender and subject to the provision of Section 9.1.1 (*Formation of a Special Purpose Company*) (such sole purpose joint venture, consortium or other legal entity shall be referred to as "**JV**").

The JV shall consist of two (2) legal entities committed to hold shares or other interests in the Bidder as evidenced by Tender Form "A3" (each a "**Member**"). The rights and obligations of the JV's Members under this Invitation to Bid shall be joint and several.

One Member shall be: (i) responsible for the TAT roles and responsibilities; (ii) required to demonstrate compliance with relevant Threshold Criteria as specified in Volume 1 part III (*Threshold Criteria*); and (iii) required to present relevant experience as specified in Volume 1 part IV (*Evaluation Criteria*) (the "**TAT Member**")

The other Member shall be: (i) responsible for the PAO roles and responsibilities; (ii) required to demonstrate compliance with relevant Threshold Criteria as specified in Volume 1 part III (*Threshold Criteria*); and (iii) required to present relevant experience as specified in Volume 1 part IV (*Evaluation Criteria*), (the "**PAO Member**").

It is hereby clarified that a Bidder may engage competent third party/ies in order to demonstrate compliance with part of the Threshold Criteria as specified in Volume 1 part III (*Threshold Criteria*), such third party/ies shall be engaged by the Bidder for the provision of the relevant Services indicated therein ("**Sub-Contractor**").

2.4. **Tender Documents**

2.4.1. Any entity that wishes to participate in the Tender is required to purchase all Tender Documents in order to participate in the Tender

process. Access to the Tender Documents shall be granted upon a non-refundable payment of NIS 5,000 (five thousand) (the "**Tender Fee**").

2.4.2. Following the payment of the Tender Fee, Bidders will be provided with an access code to the Tender Documents via NTA's FTP Server.

2.4.3. The Tender Fee must be paid prior to the Submission Date, by check payable to NTA, through wire transfer IBAN: IL640110140000112810162, or to NTA's bank account at Discount Bank, Branch 14 (Tel-Aviv), Account No. 96664. A receipt confirming the payment shall be submitted by the Bidder to the email as stated in the BDS, and shall bear the Bidder's details and contact information.

Issuance of requests for clarifications in accordance with Sub-Clause 3.7 (*Clarification of the Tender Documents*) shall be subject to payment of the Tender Fee.

2.5. **Access to Documents**

2.5.1. A username and password allowing access to the full set of Tender Documents on NTA's FTP server shall be issued to the Bidder within ninety six (96) hours of NTA's confirmation of payment.

2.5.2. Bidders being provided with the aforesaid username and password and thereby with access to the Tender Documents shall not constitute any recognition of a Bidder's eligibility, qualification or competence to meet the requirements and terms of this Invitation to Bid, or any of the other Tender Documents.

2.5.3. NTA will not be responsible for the completeness of the Tender Documents and their Addenda if they were not obtained in accordance with Sub-Clause 2.5 (*Access to Documents*).

2.5.4. Bidders will carefully examine all instructions, forms, terms, specifications and drawings included in the Tender Documents. Failure to furnish the information or documentation required by the Tender Documents or submission of a Proposal not fully compatible with the Tender Documents in every respect may result in the rejection of the Proposal in accordance with Sub-Clause 8.4 (*Rejection of the Proposals*) or Sub-Clause 8.5 (*Disqualification of the Proposals*).

2.5.5. By using NTA's Website and/or FTP Server as indicated, each

Bidder acknowledges that NTA is not responsible for:

- 2.5.5.1. The loss of any documentation in transit from the Bidder to NTA, utilizing NTA's Website and/or FTP Server; or
- 2.5.5.2. The quality of downloading or uploading files and information from and to NTA's Website and/or FTP Server, or the loss of data during any such transfer.
- 2.5.6. Subject to any applicable Laws, NTA, and anyone acting on its behalf, shall not be liable and shall bear no responsibility towards any Bidder or anyone on its behalf, for any damages, liabilities and expenses (including, without limitation, legal costs and settlement costs) whatsoever, arising out of or attributable to any content or other material or loss or corruption of documents or information provided by NTA, any third party or by any Bidder, using NTA's Website and/or FTP Server.
- 2.5.7. Notwithstanding NTA's efforts to ensure that NTA's Website and/or FTP Server are secure, each Bidder acknowledges that all electronic and telephonic data transfers are potentially susceptible to interception by others.
- 2.5.8. Addenda, updates, changes or modifications regarding the Tender Documents and/or the Services shall be published by NTA on the FTP Server. Bidders are required to review the FTP Server on a regular basis for any Addenda, updates, changes or modifications. NTA shall have no responsibility to inform the individual Bidders of any such publications.
- 2.5.9. By submitting its Proposal, the Bidder is deemed to have: (i) carefully reviewed all Tender Documents; (ii) conducted all examinations and deliberations, by experienced experts on its behalf with regard to its participation in the Tender process and the Submission of its Proposal; and (iii) acknowledged, given consent and to have waived any claim and/or right or any other remedy or relief with regard to the Tender process, Tendering rules and the Tender Documents in this regard.

2.6. **Bidders' Conference**

- 2.6.1. It is the intention of NTA to hold a Bidders' conference (the "**Bidders' Conference**") on the date indicated in the BDS. NTA shall be entitled, at its sole discretion, to refrain from holding such

Bidders' Conference and/or to convene additional conference in which event a proper notice shall be published on the FTP Server.

2.6.2. The participation of Bidders through their authorized representatives, in the Bidders' Conference shall be mandatory. At least 1 (one) of the participants on behalf of a Bidder shall be a senior officer employed by the Bidder.

2.6.3. Each Bidder is requested to confirm its attendance and advise the number of participants on its behalf, by notifying NTA at least ten (10) days prior to the Bidders' Conference date.

2.6.4. At the Bidders Conference, NTA may answer questions referred to it by Bidders in accordance with the provisions of Sub-Clause 8.3 (*Request for Clarifications*).

Moreover, NTA may ask Bidders to opine on the methods and the scope of the Services contained in the Tender Documents.

2.6.5. Should NTA answer or relate to any questions referred to it by a Bidder, or any clarification, interpretation or amendment resulting from any request for clarification or interpretation submitted to it by a Bidder, the identity of that Bidder shall not be disclosed.

2.6.6. Following the Bidders' Conference, NTA may issue minutes of the Bidders' Conference to all Bidders, and may issue an Addendum to the Tender Documents. Bidders must note that only the written minutes issued by NTA following the Bidders' Conference or any Addenda to the Tender Documents issued thereafter shall be binding. NTA shall not be bound by, and Bidders shall not rely on, any oral information provided by NTA or any one on its behalf or by Bidders during the Bidders' Conference

2.6.7. The fact that questions, clarifications, interpretations and amendments to the Tender Documents will be presented by NTA at the Bidders' Conference does not, in any way, restrict NTA's right to issue an Addendum to the Tender Documents or to postpone any of the dates contained therein.

3. **TENDERING RULES**

3.1. **Governing Law**

3.1.1. The Tender process shall be governed and construed in accordance with the provisions of all applicable Laws, including the Mandatory Tenders Law 5752-1992, and the Mandatory Tender Regulations

5753-1993 ("**Regulations**").

3.1.2. The applicable court of Tel Aviv shall have the sole and exclusive jurisdiction over all matters and all disputes arising in connection with the Tender process.

3.2. **Conformity with All Applicable Laws**

Each Bidder is assumed to have obtained legal advice. The Bidders and the Proposals submitted by them shall abide by the Law. Bidders shall be subject to any changes in the Law, should such changes be introduced during the Tender process.

3.3. **Mandatory Industrial Cooperation**

3.3.1. Each Bidder confirms and undertakes that it will comply with and fulfill the requirements of the Israeli Ministry of Economy, in accordance with the Mandatory Tenders Regulations (Mandatory Industrial Cooperation) 5767 – 2007, represented by the Industrial Cooperation Authority's ("**ICA**") with regard to industrial cooperation procurement which is to be carried out in connection with the scope of the Services Agreement.

3.3.2. As of the date of publishing this Tender, the extent of industrial cooperation shall equal to 35% (for suppliers of non-excluded products and services from GPA member states, the extent of industrial cooperation is 20%) of the total value of the Successful Proposal.

3.3.3. Each Bidder shall furnish along with the submission of its Proposal, a Foreign Supplier's Industrial Cooperation Undertaking and a Preliminary Fulfillment Program, all in accordance with the details provided in Volume 1 Part V.

3.3.4. The Foreign Supplier's Industrial Cooperation Undertaking and the Preliminary Fulfillment Program (provided in Volume 1 Part V including all attachments thereto) must be signed by an authorized officer of behalf of the Bidder.

3.3.5. The ICA is in charge, on behalf of the Government of Israel, with the assessment of the industrial cooperation fulfillment program. Such assessment will be conducted following the submission of Proposals.

3.3.6. Further to the Letter of Award, the Successful Bidder shall submit a detailed fulfillment program to the ICA. The ICA requires such submission to be made within ninety (90) days as of the Effective

Date (as such term is defined in the Services Agreement). All submissions to the ICA will be made by the Successful Bidder directly to the ICA and in coordination therewith.

For the avoidance of doubt, it is emphasized to Bidders that the detailed fulfillment program is not to be submitted within the Proposal, but is only to be submitted by the Successful Bidder.

3.3.7. In the event that during the course of the ICA's examination of a Bidder's Preliminary Fulfillment Program, it shall be found that the Preliminary Fulfillment Program is not in compliance with the ICA's requirements and/or with applicable regulations, the Bidder will be obliged to make amendments to its Preliminary Fulfillment Program in accordance with the instructions of the ICA.

3.3.8. In the event that a Bidder does not amend its Preliminary Fulfillment Program in accordance with the ICA's requirements, NTA may, at its sole discretion, disqualify that Bidder's Proposal.

3.3.9. For additional information concerning the ICA requirements, Bidders may address the ICA at:

ICA, Ministry of Economy:

86 Menachem Begin Rd.

P.O. Box 36049

Tel Aviv 67138, Israel.

Tel.972-3-734 7515

Fax.972-3-734 7639

3.4. **Severability**

The invalidity or unenforceability of any part, provision or clause of the Tender Documents shall not affect the validity or enforceability of any other parts, provisions or clauses. Any invalid or unenforceable part, provision or clause shall be deemed severed from the Tender Documents, and the Tender Documents shall be construed and enforced as if the Tender Documents did not contain such invalid or unenforceable part, provision or clause.

3.5. **Cost incurred by the Bidders' Participation in the Tender process**

Other than as explicitly provided for in the Tender Documents, any and all costs and expenses incurred by the Bidders and anyone on their behalf with respect to and/or in connection with their participation in the Tender process (including, without limitation, preparation and submission of the Proposal, and including changes and requests for further clarifications), will be borne by such Bidders

regardless of the conduct or outcome of the Tender process. Bidders and anyone on their behalf will not be reimbursed for such costs and expense.

3.6. **Confidentiality and Intellectual Property**

3.6.1. The Tender Documents and any and all intellectual property right therein are exclusively owned by NTA, and are entrusted with the Bidders for the sole purpose of the participation in the Tender process.

3.6.2. By participating in this Invitation to Bid, each Bidder, its Members and Sub-Contractor/s (if applicable) are deemed to have agreed to keep in strict confidence, not to disclose and not to make any use of any information or data, in any form or media, partial or complete, provided to it by NTA or made known to it otherwise as a result of or in connection with this Invitation to Bid; except that each Bidder, its Members and Sub-Contractor/s (if applicable) may use such information or data solely for the purpose of preparing their Proposal. It is hereby clarified that this Sub-Clause does not apply to documents and/or information published by NTA on NTA's Website.

3.6.3. By submitting a Proposal, each Bidder, its Members and Sub-Contractor/s (if applicable) are deemed to represent and warrant to NTA that (i) it is not bound by any contractual or statutory obligation which would preclude the Bidder, its Members and Sub-Contractor/s (if applicable) from providing the data and information contained in their Proposal or any portion thereof; and (ii) they have the right to make all disclosures that are made in their Proposal; and (iii) the data and information contained in their Proposal do not include confidential information, trade secrets or other proprietary information of the Bidder, its Members and Sub-Contractor/s (if applicable) and/or any third party (except as and to the extent that the Bidder, its Members and Sub-Contractor/s (if applicable) may otherwise clearly indicate in writing) that NTA is prevented from using.

3.7. **Clarification of the Tender Documents**

3.7.1. In the event of any discrepancy, ambiguity or inadequacy in the Tender Documents, the Bidders are required to immediately notify NTA.

3.7.2. Bidders, in accordance with the provisions of this Sub-Clause 3.7 (*Clarification of the Tender Documents*), may raise questions and

request clarifications or interpretations to the Tender Documents, in writing, from NTA by no later than the date stated in the BDS.

- 3.7.3. Any such requests will be submitted to the e-mail as stated in the BDS, on the prescribed Tender Form attached hereto as Appendix B, in PDF and in Word files, which Word file shall be open to editing.
- 3.7.4. Although NTA has no obligation to clarify or interpret the Tender Documents, NTA may issue an Addenda for the purposes of clarification or interpretation in response to such question or request, in accordance with the provisions of Clause 3.8 (*Addenda*).
- 3.7.5. NTA shall not be bound by, and Bidders shall not rely on, any oral interpretation or clarification to the Tender Documents. The Bidders may only rely upon written Addenda published by NTA.
- 3.7.6. Any question or any request for clarification or interpretation of the Tender Documents raised by Bidders at a later date than the deadline for the submission of questions as provided in the BDS will be accepted or rejected at the sole discretion of NTA.

3.8. **Addenda**

- 3.8.1. Notwithstanding any of the provisions of the Tender Documents and without derogating from the discretion of NTA under the provisions of Sub-Clause 3.11 (*Reservation of Rights*), NTA reserves the right to revise, modify, amend, clarify, add, eliminate or otherwise change the provisions of the Tender Documents or any part thereof, including any instruction, requirement, specification, evaluation criteria or date contained therein. Such revisions, if any, shall be announced by written addenda to the Tender Documents and published on the FTP Server ("**Addendum**" or "**Addenda**").
- 3.8.2. It is hereby clarified, that when replying to a question or clarification, NTA will not necessarily use the exact wording of the submitted request for clarification, and will not disclose its source. It is further clarified that any response or non-response by NTA to any submitted request for clarification by a Bidder shall not be construed as approval or agreement unless explicitly stated so by NTA.

It is hereby emphasized that Addenda shall not be furnished individually to each Bidder and Bidders are required to review the FTP Server for any Addenda and updates.
- 3.8.3. Bidders are required to acknowledge receipt of all Addenda, notices

or announcements in writing no later than two (2) days following receipt thereof by a written notice to NTA through the e-mail as stated in the BDS that unless NTA determines a different date by which acknowledgment should be sent by the Bidders.

3.9. **Information Supplied to Bidders**

3.9.1. The attention of all Bidders is drawn to the fact that the information contained in the Tender Documents, is preliminary general information that did not undergo any independent verification by NTA and is provided for the purpose of Bidders' convenience only; The information may be incomplete or inaccurate and significant differences may be found between the information provided under the Tender Documents and the information necessary to the Bidders for the purpose of submitting their Proposal.

3.9.2. It is expressly clarified that any reliance by the Bidders or anyone on their behalf on any such information in their Proposals, the signing of the Services Agreement and the performance of the Services, and the making of any deductions, interpretations or conclusions from information which is made available by NTA, is at Bidders' sole responsibility.

3.9.3. NTA shall not be responsible in any respect for any loss or damage whatsoever suffered by Bidders, their employees, officers, agents, or any other persons for whom Bidders may be contractually or legally responsible or accountable, by reason of any use of information contained in the Tender Documents or provided in connection therewith, or any act or omission in reliance thereon.

3.10. **Advisors to NTA – Conflict of Interest / Participation in Other Tenders**

3.10.1. A Bidder, each of the Members and any of the Sub-Contractor/s, if applicable (hereinafter in this Sub-Clause, jointly and severally- the "**Tendering Parties**"), may participate in other tenders published by NTA but it is hereby clarified that: (i) in the event that any of the Tendering Parties will be awarded with any other such tender, it will be obligated to notify NTA and to withdraw its Proposal for this Tender, unless otherwise instructed by NTA; or (ii) in the event that any of the Tendering Parties will receive a Letter of Award in this Tender, each of them will be obligated to withdraw its participation in any other tender published by NTA, unless otherwise instructed by NTA. Without derogating the above-mentioned, in the event that

any of the Tendering Parties will be awarded with more than one tender (including this Tender), NTA reserves the right to determine, at its sole discretion, which of the two (2) tenders will be awarded to such Tendering Party, and any of the Tendering Parties' award in the other tender will be then cancelled.

3.10.2. Bidders acknowledge that none of the Tendering Parties comprising the Successful Bidder shall participate in any future bidding procedure (or any similar procedure) published by NTA or anyone on its behalf in relation to the Program, and shall not be nominated, provide any services, or be otherwise engaged in the implementation of the Program (for the avoidance of doubt, the aforementioned will also apply to project management companies and/or control companies). If any of the Tendering Parties comprising the Successful Bidder are in doubt as to whether a procedure, a project and/or service is prohibited, they shall request NTA's prior written approval.

3.10.3. Each of the Tendering Parties acknowledge that in the performance of the Services, it and any of its employees, consultants and/or subcontractors are strictly prohibited from any conflict of interest between their obligations, undertakings and responsibilities under the Services Agreement or resulting therefrom and their other activities and/or their other obligations. If any of the Tendering Parties is in doubt as to whether a certain engagement or employment is in conflict of interest with the Services, it shall request NTA's prior written approval.

3.10.4. Without derogating from the aforementioned, the Tendering Parties acknowledge that the Successful Bidder may not employ or engage, with respect to the performance of the Services, any consultant, former employee or expert who was or still is employed or engaged by NTA without NTA's prior written approval, which approval shall not be unreasonably withheld. Said approval shall be requested prior to submission of the Proposal.

3.11. **Reservation of Rights**

3.11.1. Without derogating from Sub-Clauses 2.1–2.2 (*General Description of the Program, General Description of the Services*) and Volume 2 Appendix 1 (*Scope of Service*), all Bidders acknowledge that the description of the Services and the Program as specified in this

Invitation to Bid is general and indicative only. The issuance of this Invitation to Bid is not intended to give rise to or create any representation, undertaking or warranty on behalf of NTA with respect to the Services or the Program.

- 3.11.2. Without in any way limiting their rights under Law or under Sub-Clauses 8.4 (*Rejection of the Proposals*), and 8.5 (*Disqualification of the Proposals*), and notwithstanding the provisions of Clause 7 (*Examinations and Evaluation of the Proposals*), NTA reserves the right to cancel the Tender process or any part thereof or to reject any Proposal, all subject to the provisions of the Law.
- 3.11.3. Without derogating from the provisions of Sub-Clause 3.5 (*Cost Incurred by the Bidders' Participation in the Tender Process*), NTA shall not be responsible in any respect to any loss or damage whatsoever suffered by any Bidder, its employees, officers, agents, or any other person for whom any Bidder may be contractually or legally responsible or accountable, and shall not be required to compensate any Bidder, its employees, officers, agents or any other person for whom the Bidder may be contractually or legally responsible or accountable.

4. **METHOD OF SUBMISSION**

The Proposals shall be submitted in accordance with the following provisions:

4.1. **Compliance with the Requirements of the Tender Documents**

Bidders shall prepare their Proposals in strict conformity with the requirements of the Tender Documents. Bidders shall answer all parts relevant to the Proposals in an accurate and detailed manner, disclosing all the information requested, as well as any additional information or data required to clarify, substantiate and, in general, support the Proposal by the Bidder.

4.2. **No Unauthorized Modification**

Bidders shall not modify or supplement any of the Tender Documents including Tender Forms. Unauthorized conditions, limitations, modifications, supplements, reservations, disclaimers or provisions made in or attached to a Proposal may be subject to disqualification, at NTA's sole discretion. In the event that such Proposal has not been disqualified, for any reason whatsoever, NTA will ignore such unauthorized conditions, limitations, modifications, supplements, reservations, disclaimers or provisions.

4.3. **Language**

- 4.3.1. The Proposals and the statements contained therein and all other documents constituting the Proposal are to be submitted in English, in typed form.
- 4.3.2. Supporting documents and printed materials furnished by a Bidder may be in English or in Hebrew.
- 4.3.3. Supporting documents and printed materials furnished by a Bidder in any other language than English or Hebrew, should be accompanied by a translation to Hebrew or English, accompanied by a notarized statement of translation, in which case, for purposes of interpretation, the translation to Hebrew or English (as the case may be), shall prevail.

4.4. **Signing of the Proposals**

- 4.4.1. The Proposals shall be duly signed by the person/persons duly empowered and authorized to sign on behalf of the Bidder, Memebrrs and/or Sub-Contractors and to bind such Bidder, Memebrrs and/or Sub-Contractors for all required matters in connection with the Proposal. The name and position held by each person signing on behalf of the Bidder, Memebrrs and/or Sub-Contractors must be typed or printed below the signature.
- 4.4.2. Each Tender Form and information submitted therein shall be duly signed by the relevant entity detailed in such Tender Form.

4.5. **Identification of Sensitive Information**

Without derogating from the generality of the provisions of Regulation 21(e) of the Regulations (and the discretion of NTA), Bidders may (but are not required to) submit, a sensitive information copy (an additional, separate copy of its Proposal), with masked clauses considered by said Bidder as commercial secrets, confidential information, trade secrets or other proprietary information which should be protected from disclosure. General confidentiality statements will be disregarded. Nevertheless, any such indication will not bind NTA, and it is hereby emphasized that NTA, at its sole discretion, may disclose any document of any Proposal that, in its professional opinion, does not constitute a commercial secret, trade secrets or other proprietary information and which is required to be disclosed in order to meet said requirements of the Law.

For the avoidance of doubt it is hereby emphasized that the Financial Proposal shall not be deemed to constitute information of a commercially sensitive or

secret nature.

4.6. **Number of Copies**

- 4.6.1. The Proposal documents must be submitted, and clearly marked so, as one (1) original and three (3) identical copies (four (4) altogether) and, as applicable, additional copy of sensitive information as described in Sub-Clause 4.5 (*Identification of Sensitive Information*) above. In addition, each copy shall include a CD containing a copy of the Proposal documents, in PDF format (Tender Forms shall be submitted in original PDF format, and other documents may be submitted in scanned PDF format).
- 4.6.2. The Financial Proposal shall be submitted as one (1) original and three (3) identical copies (four (4) altogether).
- 4.6.3. In the event of a discrepancy between any original copy and other copies, the original shall prevail.

4.7. **Sealing and Marking the Proposal**

- 4.7.1. Envelope No. 1: Bidders shall seal the original and each of the copies of the Threshold Criteria (and, as applicable, additional copy for sensitive information as described in Clause 4.5 (*Identification of Sensitive Information*) above), in an envelope clearly marked with the name and number: "***Envelope No. 1 – Threshold Criteria for Assurance Management and Technical Auditing Services 0045/2015***", and no other markings shall be made.
- 4.7.2. Envelope No. 2: Bidders shall seal the original and each of the copies of the Quality Proposal (and, as applicable, additional copy for sensitive information as described in Clause 4.5 (*Identification of Sensitive Information*) above), in an envelope clearly marked with the name and number: "***Envelope No. 2 – Quality Proposal for Assurance Management and Technical Auditing Services 0045/2015***", and no other markings shall be made.
- 4.7.3. Envelope No. 3: Bidders shall seal the original and each of the copies of the Financial Proposal in an envelope clearly marked with the name and number: "***Envelope No. 3 – Financial Proposal for Assurance Management and Technical Auditing Services 0045/2015***", and no other markings shall be made.
- 4.7.4. Envelope No. 4: Bidders shall seal the original and each of the copies of the Foreign Contractor's Industrial Cooperation

Undertaking in an envelope clearly marked with the name and number: "*Envelope No. 4 – Foreign Contractor's Industrial Cooperation Undertaking for Assurance Management and Technical Auditing Services 0045/2015*", and no other markings shall be made.

4.8. **Submission Date**

4.8.1. All Proposals must be submitted no later than the Submission Date as specified in the BDS.

4.8.2. The envelopes containing the Proposals shall be delivered, up to the Submission Date, on week days, Sunday to Thursday, during opening hours 09:00-17:00 Israel time (GMT+2) to the tender box located at the following address (an ID card is required in order to enter the building and NTA's offices):

1 Azrieli Center,
Harokmim and Halahav Street
Building A, 9th Floor
Holon, Israel
Reception: 03-7243000

4.8.3. Proposals are not allowed to be submitted on a date that falls earlier than seven (7) days prior to the Submission Date.

4.8.4. NTA may, at its sole discretion, extend the Submission Date by issuing an Addendum in accordance with the provisions of Sub-Clause 3.8 (*Addenda*).

4.9. **Validity of the Proposals**

4.9.1. The Proposal shall be valid for a period of twelve (12) months as of the Submission Date.

4.9.2. NTA may request one or more of the Bidders to extend the validity of their Proposals for a specified additional period, provided, however, that the consent of Bidders will be required in the event that such extension exceeds three (3) months.

4.9.3. Concurrently with the extension of the period of validity of the Proposals, the Bidders shall also extend the validity of the Tender Security. Bidders shall not be permitted to modify their Proposals due to such extension of the validity period.

4.10. **Tender Security**

4.10.1. The Tender Security shall be in the amount of US\$ 1,500,000 (one million and five hundred thousand United States Dollars), issued by a licensed Israeli bank or by a licensed Israeli insurer provided that such bank or insurer holds at least one of the following credit ratings, dated no later than 12 months prior to the issuance of the Tender Security (i) (ilAA) published by S&P Maalot; or (ii) (Aa3) published by Midroog. A Tender Security issued by a licensed Israeli insurer shall be signed by the licensed Israeli insurer itself and not by its agent.

4.10.2. In this Sub-Clause 4.10 (*Tender Security*), a licensed Israeli bank shall include a foreign bank that holds a valid 'foreign bank license' ('בנק חוץ') according to the Israeli Banking (Licensing) Law, 5741-1981 (1981-התשמ"א (רישוי) - חוק), ה"בנקאות (חוק) ("Licensed Foreign Bank"), and has a credit rating by one of the local rating firms as detailed above, or a credit rating (the credit rating shall be dated not earlier than 12 months prior to the Submission Date) by one of the following rating firms, of at least (i) (A2) in the rating scale published by Moody's Investor Service; (ii) (A) in the rating scale published by Standard & Poor's Corporation; or (iii) (A) in the rating scale published by Fitch Investor Service.

In cases in which the Bidder seeks to provide a Tender Security from a Licensed Foreign Bank such Tender Security will be issued by a branch of the Licensed Foreign Bank which is located within the State of Israel.

4.10.3. The Bidder may submit up to two (2) Tender Securities amounting to the total amount of the Tender Security (both shall be regarded as "**Tender Security**"), provided that all provisions of this Sub-Clause 4.10 (*Tender Security*) are kept and fulfilled. The aforementioned shall not affect any of NTA's rights under the Tender Documents and shall not obligate NTA to forfeit the Tender Securities in any specific order, pro-rata or otherwise.

4.10.4. NTA shall have the right, at any time and under its sole discretion, to demand a replacement of the Tender Security for a Tender Security issued by a different institution, inter alia, as a result of a change in the credit rating of the issuer. The Bidder shall submit such Tender Security within fourteen (14) days from any such requirement.

- 4.10.5. Bidders are informed that NTA may reject the Tender Security and disqualify the relevant Proposal if the Tender Security is not in accordance with the requirements detailed in this ITB. Without derogating from the above-mentioned, NTA reserves the right to disregard, and/or ask any Bidder to correct any typos, minor errors or technical irregularities in the Tender Security which, at NTA's discretion, will not provide such Bidder with an illegitimate advantage over the other Bidders.
- 4.10.6. The Tender Security shall guarantee the Bidder's fulfillment of all the requirements of the Tender process and it may be exercised, at NTA's discretion, upon the occurrence of any of the events specified in Sub-Clause 4.10.10.
- 4.10.7. The Tender Security shall be valid for the period as stated in the BDS. The Bidders shall extend the validity period of the Tender Security in accordance with NTA's requirements in accordance with Sub-Clause 4.9.2 or under any other provision specified in this ITB, at their own cost.
- 4.10.8. Upon the receipt of the Letter of Award, NTA reserves the right to request the Successful Bidder extend the validity period of the Tender Security until replacement with a Performance Security.
- 4.10.9. The Tender Security of the unsuccessful Bidders will be returned as promptly as possible after the receipt of the Letter of Award by the Successful Bidder.
- 4.10.10. NTA shall be entitled, at its sole and absolute discretion, to exercise the Tender Security, or any part thereof, in case one of the following occurs: (i) during the Tender process the Bidder acted in a misleading manner or with lack of good faith; (ii) the Bidder provided misleading information or deliberate omission of important information; (iii) the disqualification of the Bidder for any of the reasons stipulated in Sub-Clauses 8.5.1.2, 8.5.1.6 and 8.5.1.9; (iv) after being selected as the Successful Bidder, the Bidder did not follow the instructions of the Invitation to Bid which constitute a pre-requisite for the engagement by NTA of the Successful Bidder.
- 4.10.11. Bidder shall be permitted (but not required) to submit, no later than one (1) month prior to the Submission Date, as applicable, a copy of the Tender Security intended to be submitted with their Proposal ("**Tender Security Draft**").

4.10.12. NTA shall examine the Tender Security Draft, and may, with respect to each such Bidder:

4.10.12.1. Request, if necessary, and to the extent it deems fit, the Bidder to edit, alter or adjust the Tender Security Draft and/or provide the Bidder with its comments all in order to ensure the compliance of the (final) Tender Security with the provisions of this Invitation to Bid and the form attached in Volume 1, Part V; or

4.10.12.2. Confirm and approve the Tender Security Draft for its submittal so long as it is satisfactory and compatible with the provisions of this Invitation to Bid and the form attached in Volume 1, Part V.

NTA's correspondence with any Bidder with respect to the Tender Security Draft will not be made public, and will not be transmitted to the other Bidders.

The provisions of Sub-Clauses 4.10.11 and 4.10.12 shall not impose any responsibility and/or liability, whatsoever on NTA.

5. **GENERAL PROVISIONS RELATING TO THE PARTICIPATION OF BIDDERS**

5.1. **One Submission for Each Bidder**

5.1.1. Each Bidder may submit only one Proposal.

5.1.2. Each Member may participate in only one JV.

5.1.3. Each Sub-Contractor may participate in only one Bid.

For the purpose of this Sub-Clause 5.1, the terms "Bidder" "Member" and/or "Sub-Contractor" shall be deemed to include any entity which exercises Control over such Bidder, Member or Sub-Contractor, any entity under the common Control of such Bidder, Member or Sub-Contractor, and any entity Controlled by such Bidder Member or Sub-Contractor,.

5.2. **Authorized Representative**

5.2.1. Each Bidder must appoint an authorized representative to act on behalf of and legally bind the Bidder, and evidence such appointment in Tender Form "A2" ("**Authorized Representative**"). The Bidder may replace the Authorized Representative by providing prior written notice to NTA.

5.2.2. The Authorized Representative must be vested with the authority to represent, act on behalf of and legally bind the Bidder, and shall be authorized to receive instructions, incur liabilities and make representations for and on behalf of the Bidder during the Tender process.

5.2.3. In the event of a JV, the Authorized Representative shall be a TAT Member.

6. CONTENTS OF THE PROPSALS

6.1. For Bidders' convenience and without derogating from the generality of the provisions of Sub-Clause 3.9 (*Information Supplied to Bidders*) and 4 (*Method of Submission*), Volume 1 Part V includes a detailed list of the content of the Proposals and the documentation to be included therein.

6.2. Proposals shall be submitted on the Submission Date and in accordance with the provisions of this Invitation to Bid and the provisions of Volume 1 Part V.

6.3. Bidders shall complete Volume 1 Part V and all appendices attached thereto, in sufficient detail to demonstrate full compliance of the Proposal with the Tender requirements and shall sign such completed documents. All Tender Forms and documents furnished by NTA must be completed as instructed in each Tender Form.

6.4. Each Proposal shall comprise of four (4) separate sealed envelopes:

6.4.1. Envelope No. 1 - Threshold Criteria

6.4.2. Envelope No. 2 - Quality Proposal

6.4.3. Envelope No. 3 - Financial Proposal

6.4.4. Envelope No. 4 - Foreign Contractor's Industrial Cooperation Undertaking

6.5. Content of the Threshold Criteria

Envelope No. 1 (Threshold Criteria), shall consist of:

6.5.1. Tender Form A1 - Proposal Submission Letter

6.5.2. Tender Form A2 - Power of Attorney - Authorized Representative

6.5.3. Tender Form A3 - The Bidder

6.5.4. Tender Form A4 - The Members (if applicable)

6.5.5. Tender Form A5 - The Bidder and its Sub-Contractors (if applicable)

6.5.6. Tender Form A6 - The Sub-Contractors (if applicable)

6.5.7. Tender Form A7 - Tender Security

- 6.5.8. Tender Form B1 - Management of Rail Transit Projects
- 6.5.9. Tender Form B2 - Assurance Services for Rail Transit Project
- 6.5.10. Tender Form B3 - ISO Certificates
- 6.5.11. Tender Form B4 - Technical Auditing Manager
- 6.5.12. Tender Form B5 - Deputy Technical Auditing Manager
- 6.5.13. Tender Form B6 - PAO Manager
- 6.5.14. Tender Form B7 - Deputy PAO Manager
- 6.5.15. Tender Form B8 - Financial Threshold
- 6.5.16. Tender Form B9 - CFO Certificate
- 6.5.17. Tender Form B10 - Parent Company's Letter of Guarantee (if applicable)
- 6.5.18. Tender Form B11 - Format for CV Submission
- 6.5.19. Signed Services Agreement
- 6.5.20. The Bidder shall complete and submit its Threshold Criteria in strict compliance with the terms, instructions and provisions set forth in Volume 1 Part III (*Threshold Criteria*).

6.6. **Contents of the Quality Proposal**

Envelope No. 2 (Quality Proposal), shall consist of:

- 6.6.1. Tender Form C1 - Proposed Methodology for the performance of the Services (as such term is defined in the Services Agreement) with respect to LRT projects.
- 6.6.2. Tender Form C2 - Proposed Methodology Drafting and Assimilating Quality Management Systems (QMS).
- 6.6.3. Tender Form C3 - Project Management of Rail Transit projects.
- 6.6.4. Tender Form C4 - Project Quality Assurance.
- 6.6.5. Tender Form C5 – Technical Auditing
- 6.6.6. Tender Form C6 – Technical Auditing Manager's and Deputy Technical Auditing Manager's Professional Experience
- 6.6.7. Tender Form C7 – PAO Manager's and Deputy PAO Manager's Professional Experience
- 6.6.8. Tender Form C8 - Auditing Team Leaders
- 6.6.9. The Bidder shall complete and submit its Quality Proposal in strict compliance with the terms, instructions and provisions set forth in

Volume 1 Part IV (*Evaluation Criteria*).

6.7. **Contents of the Financial Proposal**

Envelope No. 3 (Financial Proposal), shall consist of:

6.7.1. Tender Form D1 - Financial Proposal

6.7.2. The Bidder shall complete and submit its Financial Proposal in strict compliance with the terms, instructions and provisions set forth in Volume 1 Part IV (*Evaluation Criteria*).

6.8. **Contents of Envelope No. 4**

Envelope No. 4 (Foreign Contractor's Industrial Cooperation Undertaking) shall consist of the Bidder's Industrial Cooperation Undertaking, in the Tender Form attached to Volume 1 Part V and all attachments thereto including a Preliminary Fulfillment Program.

7. **EXAMINATION AND EVALUATION OF THE PROPOSALS**

The examination and evaluation of the Proposals will be carried out in stages, as detailed in Volume 1 Part III (*Threshold Criteria*) and Volume 1 Part IV (*Evaluation Criteria*), in accordance with the provisions of the Tender Documents and internal procedures.

8. **GENERAL PROVISIONS RELATING TO EXAMINATION AND EVALUATION OF THE PROPOSALS**

As part of the evaluation process, and without derogating from any other prerogatives of NTA pursuant to the Tender Documents, NTA may, at any time, conduct an independent inquiry regarding any matter connected with the Proposals.

8.1. **Opening the Proposals**

8.1.1. NTA will NOT open any Proposals received after the Submission Date. All unopened Proposals will be promptly returned to the Bidders.

8.1.2. The opening of the Proposals shall be documented in a protocol.

8.2. **Request for Presentation**

Without derogating from the provisions of Sub-Clause 3.7 (*Clarification of the Tender Documents*), and the provisions of Sub-Clause 8.3 (*Request for Clarifications*), NTA reserves the right to request any or all Bidders to hold a presentation of their Proposals, or any part thereof, for any purpose NTA deems appropriate.

8.3. **Requests for Clarifications**

8.3.1. NTA may request of one or more Bidders to clarify, correct, modify,

supplement or amend any item contained in the respective Proposals and/or to delete, disregard, withdraw, or correct any part of the Proposal and/or to submit any additional information necessary, in the opinion of NTA, for the evaluation of the respective Proposal.

- 8.3.2. Bidders will comply with the requests of NTA and will submit all clarifications and additional information requested within the time period stipulated by the request.
- 8.3.3. The requests for clarifications will be in writing, delivered to the Bidders by mail, facsimile or E-mail. Their receipt should be confirmed by return mail, to the E-mail stated in the BDS within forty-eight (48) hours of receipt.
- 8.3.4. Unless otherwise requested by NTA, Bidders' responses to the requests for clarifications will be submitted in one (1) original copy and three (3) copies (four (4) hard copies all together) and in a CD containing a scanned copy of the response, and will form an integral part of their Proposals, as the case may be. Bidders' responses to the requests for clarifications will be attached to the Proposals original and copies, along with copies of the requests for clarifications.
- 8.3.5. Bidders may be invited to meet NTA and/or to supply clarifications and/or additional information to NTA. For that purpose, NTA may meet any of the Bidders in either separate or joint meetings, and/or request clarifications and/or additional information and documents from any of the Bidders and, in addition, NTA may ask any of the Bidders to modify, amend, correct, withdraw and/or delete any part of their Proposals.
- 8.3.6. NTA may exercise its right under this Sub-Clause 8.3 any number of times during course of the evaluation of the Proposals.

8.4. **Rejection of the Proposals**

Without derogating from NTA's rights under the Tender Documents and under any Law:

- 8.4.1. NTA reserves the right to reject any Proposal in the event that NTA is of the opinion that such Proposal or any part thereof does not conform to the requirements of the Tender Documents.
- 8.4.2. Provided the affected Bidder was given an opportunity to present arguments in support of its Proposal, NTA may reject any Proposal that, at its discretion, (1) does not reflect the actual ability of the

Bidder to perform the Services, or (2) if the Financial Proposal or any part thereof, is not realistic in the business judgment of NTA or (3) if, at NTA's sole discretion, the Bidder will not be able to perform the Services or any part thereof at such consideration, or (4) if the Bidder materially breaches the provisions of the Tender Documents, including the submission of any false or incomplete information to NTA and (5) any other event or circumstances which NTA shall consider, at its sole discretion, as justifying disqualification of any Bidder.

8.4.3. Without derogating from NTA's rights under the Tender Documents and under Law, NTA reserves the right to waive or correct minor, technical or other irregularities or errors in any Proposal.

8.5. **Disqualification of the Proposals**

8.5.1. Without derogating from the rights of NTA under the Tender Documents and under applicable Law, NTA will be entitled, in any of the following events, to disqualify any Bidder. It is hereby clarified that any reference to a Bidder in this Sub-Clause 8.5.1 shall include and apply to any of its Members and/or Sub-Contractors (if applicable):

8.5.1.1. The Bidder failed to meet or demonstrate compliance with the Tender Documents.

8.5.1.2. Any changes in the holdings of the Bidder without the prior notification and approval of NTA for the new structure of the Bidder.

8.5.1.3. The commencement of proceedings, in any court of competent jurisdiction, of bankruptcy, receivership, liquidation or reorganization proceedings against a Bidder or any similar situation, as determined by NTA, or if the Bidder has become insolvent, or if a permanent or an interim receiver or liquidator has been appointed over a Bidder, unless such proceedings are discharged within a reasonable period of time, as determined by NTA at its sole discretion.

8.5.1.4. The commencement of any voluntary action for the liquidation of any Bidder, except for the purposes of merger or reconstruction on terms approved by NTA in writing.

- 8.5.1.5. In the event that any Bidder (including Interested Parties therein, directors or managers thereof) is a resident or national of a country which does not have diplomatic relations with the State of Israel and/or of a country which does not have proper and reliable trade relations with the State of Israel.
 - 8.5.1.6. Employment or engagement of any entity as defined under Sub-Clause 3.10 (*Advisors to NTA – Conflict of Interest/Participation in Other Tenders*) by any Bidder, directly or indirectly, for the purposes of the Tender process, without the prior written approval of NTA;
 - 8.5.1.7. In the event of unusual events which materially and adversely affect, in NTA's judgment, the Bidder's ability to perform the Services and/or the their financial ability to perform the Services.
 - 8.5.1.8. The submission of any false or misleading information to NTA.
 - 8.5.1.9. The withdrawal of any of the Members and/or Sub-Contractor (if applicable) from the Tender process, including following the issuance of a Letter of Award to the Bidder, unless such withdrawal results from the circumstances described in Sub-Clause 3.10 (*Advisors to NTA – Conflict of Interest/ Participation in Other Tenders*).
 - 8.5.1.10. Any material change which occurred following the Submission Date concerning the Bidder (including Interested Parties therein, directors or managers thereof), which, in NTA's opinion, may hinder its participation in the Proposal and/or the Tender process, or the performance of the Services under the Services Agreement.
- 8.5.2. The Bidder shall be required to promptly notify NTA of the existence, during the Tender process, of any of the events described in this Sub-Clause 8.5. NTA may base its decision under this Sub-Clause 8.5 on the information provided by the Bidder as well as on any other information available to it, and may request the Bidder to provide it with additional

information, as NTA deems necessary.

8.6. **Negotiation**

- 8.6.1. NTA reserves the right, at its sole discretion, to conduct or refrain from conducting negotiations with the Bidders, in any manner NTA deems appropriate (including with respect to their technical proposals and/or financial proposals), all in accordance with the Law. NTA may exercise its rights under this Sub-Clause 8.6.1 any number of times.
- 8.6.2. Without derogating from NTA's rights under Law, during the course of the negotiations or as a result thereof, NTA will be entitled to modify, alter or change any of the requirements of the Tender Documents, including, *inter alia*, to request Bidders to extend, modify, change or improve their Proposals or any part thereof (including any financial aspect and including the Financial Proposal or any part thereof).
- 8.6.3. At each negotiation stage, if any, NTA may provide or request additional information.
- 8.6.4. At the end of the negotiation stage, if conducted, Bidders who opted to participate in the negotiations shall be entitled to submit an updated Proposal (technical and/or financial), which shall replace any prior Proposal and shall be considered their final and binding Proposal.

8.7. **Successful Bidder**

- 8.7.1. Subject to Sub-Clauses 3.10 (*Advisors to NTA- Conflict of Interest/ Participation in Other Tenders*) and 8.7.3, upon the completion of the evaluation process of the Proposals and prior to the expiration of the period of Proposal validity, NTA shall select the Successful Bidder.
- 8.7.2. Subject to receipt by NTA of all required approvals, NTA shall issue a Letter of Award, acknowledging the Successful Bidder's Proposal as being the awarded Proposal of the Tender
- 8.7.3. NTA, at its sole discretion, may decide not to select any of the Proposals or may decide to cancel the entire Tender process at any time. Furthermore, NTA is not bound to accept the lowest priced Proposal, the highest overall ranking Proposal or any Proposal whatsoever.

8.8. **Second Eligible Bidder and Third Eligible Bidder**

Concurrently with the Letter of Award, NTA may notify in writing the Second Eligible Bidder and the Third Eligible Bidder that their Proposals were rewarded the highest overall ranking, excluding the Successful Proposal.

It is hereby clarified that the Proposal of the Second Eligible Bidder and the Third Eligible Bidder may remain valid for an additional period of one (1) year following the election of the Successful Proposal, subject to their consent as detailed below.

8.8.1. In the event the Successful Bidder: (1) fails to sign the Services Agreement, for any reason whatsoever, or (2) fails to timely fulfill any of the Successful Bidder's obligations pursuant to Sub-Clauses 9.2.1.1- 9.2.1.3, or (3) in the event the Service Agreement will be terminated by NTA (following its execution by the Successful Bidder and NTA) for any reason whatsoever, within 1 (one) year following the election of the Successful Proposal, then NTA reserves the right to invite the Second Eligible Bidder to sign the Services Agreement, subject to its consent, by sending to the Second Eligible Bidder a replacing notification ("**NTA's Notification**"), provided however, that at such time, the Second Eligible Bidder demonstrate compliance, to NTA's satisfaction, with the particulars set forth in the Threshold Criteria and the Quality Proposal of its Proposal.

8.8.2. In the event the Second Eligible Bidder agrees to sign the Services Agreement it shall so notify NTA in writing, within fourteen (14) days following receipt of NTA's Notification ("**SE Notification**"). The Second Eligible Bidder shall then be required to provide NTA, with the documents specified in Sub-Clauses 9.1.2.1-9.1.2.4 within forty five (45) days following the issuance of the SE Notification. In case of refusal or non-response by the Second Eligible Bidder to NTA's Notification, or in the event the Second Eligible Bidder fails to provide NTA with the documents specified in Sub-Clauses 9.1.2.1-9.1.2.4 within forty five (45) days following the issuance of the SE Notification, for any reason whatsoever, then NTA reserves the right to invite the Third Eligible Bidder to sign the Services Agreement. In such event the provisions of this Sub-Clause 8.8 shall apply to the Third Eligible Bidder, mutatis mutandis.

8.8.3. It is hereby clarified that the Second Eligible Bidder and the Third Eligible Bidder shall not be required to extend the validity period of

their Tender Security which will be returned to them after the receipt of the Letter of Award by the Successful Bidder as provided for in Sub-clause 4.10.7.

- 8.8.4. Notwithstanding the aforementioned, NTA reserves the right, upon failure of the Successful Bidder, not to sign the Services Agreement with the Second Eligible Bidder or the Third Eligible Bidder, as applicable, and to procure the Services from any other consultant and/or supplier, or to conduct a new bidding procedure, as permitted by Law.

9. TENDER AWARD

9.1. Post Award Requirements

9.1.1. Formation of a Special Purpose Company:

In the event that the Successful Bidder is a JV, it shall be obliged, immediately after the issuance of the Letter of Award and not later than within 30 (thirty) days therefrom, as a condition precedent for the execution of the Services Agreement, to incorporate a special purpose company (if not already incorporated), in the State of Israel, under the Laws of the State of Israel and for the sole purpose of performance of the Services.

- 9.1.2. The Successful Bidder shall be required, within thirty (30) days of the issuance of the Letter of Award, to provide NTA the following documents:

- 9.1.2.1. All Services Agreement documents (Volume 2), including any addenda or appendices thereto, duly executed by the authorized signatories of the Bidder.
- 9.1.2.2. Performance Security in accordance with the Services Agreement.
- 9.1.2.3. Insurance policies in accordance with Clause 8 (*Insurance*) of the Services Agreement.
- 9.1.2.4. Any other document the Successful Bidder should provide NTA in accordance with the terms and conditions of the Services Agreement.
- 9.1.2.5. Subject to the proper execution and provision of all the above documents, NTA will execute the Service Agreement within 60 (sixty) days following receipt of the same.

9.2. **The Services Agreement**

- 9.2.1. The Services Agreement and any attachment or appendix thereto shall govern the contractual relations between NTA and the Successful Bidder.
- 9.2.2. By submitting its Proposal, each Bidder acknowledges its irrevocable and unconditional consent to the Services Agreement and undertakes to perform the Services in strict compliance with the Services Agreement, in the event it is declared a Successful Bidder.
- 9.2.3. For the avoidance of doubt, it is hereby clarified that the Services Agreement will not come into force until it is duly signed by NTA, and subject to all preconditions set forth in Sub-Clause 9.1 (*Post Award Requirements*) above.



Appendix A

List of Tender Documents

VOLUME 1

Part I	Instructions to Bidders (ITB)
Part II	Bid Data Sheet (BDS)
Part III	Threshold Criteria (TC)
Part IV	Evaluation Criteria (EC)
Part V	Tender Forms

VOLUME 2

Part VI	Services Agreement
Appendix 1	Scope of Services
Appendix 2	Remuneration and Payment
Appendix 3	Time Schedule
Appendix 4	Key Personnel
Appendix 5	Performance Security
Appendix 6	Agreement Particulars
Appendix 7	NTA's Ethical Code
Appendix 8	Insurance
Appendix 9	Confidentiality Undertaking
Appendix 10	Non Conflict of Interest Undertaking

Appendix B

Request for Clarifications Form

From*: _____	Date: _____
Address*: _____	Email Address*: _____

Note * THIS INFORMATION WILL NOT BE FORWARDED TO BIDDERS

Request Number	Name of Document	Clause Reference	Subject	Clarification Request
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Appendix C

Currencies Conversion

** Any capitalized terms used and not defined herein shall have the meaning given such terms in the Tender Documents.*

The data (such as project value and financial data) included in the Tender Forms will be converted by NTA to US\$ based on the following:

1. Project value – the official relevant annual (calendar year) average exchange rate with respect to the calendar year in which the project was Completed shall apply.
2. Turnover – the official relevant annual (calendar year) average exchange rate with respect to the calendar year of the most recent Financial Statements.
3. Equity – the official relevant exchange rate with respect to the date of the most recent Financial Statements.
4. The relevant average exchange rate or exchange rate shall be in accordance with the exchange rates published by the Bank of Israel.

For convenience purposes only, please find hereunder the average exchange rates based on the exchange rates published by the Bank of Israel with respect to NIS, GBP, Canadian Dollar (CAD) and EURO. Please note that the Bank of Israel publishes exchange rates with respect to additional currencies.

	2007 (USD)	2008 (USD)	2009 (USD)	2010 (USD)	2011 (USD)	2012 (USD)	2013 (USD)	2014 (USD)	1-6/2015 (USD)
NIS	0.243	0.279	0.254	0.268	0.279	0.259	0.277	0.279	0.255
GBP	2.001	1.844	1.561	1.546	1.603	1.585	1.565	1.646	1.523
CAD	0.934	0.940	0.877	0.971	1.011	1.001	0.971	0.905	0.810
EURO	1.369	1.466	1.391	1.327	1.391	1.285	1.328	1.327	1.117

5. Currencies which are not officially published by the Bank of Israel, will be converted by NTA to USD on the basis of the official relevant exchange rate (in accordance with the principals specified in Sections 1-4 hereto) published by the Bank of Canada.
6. Information regarding exchange rates published by the Bank of Israel and Bank of Canada is available at the following websites:

Bank of Israel: <http://www.bankisrael.gov.il/deptdata/mth/average/average.htm>

Bank of Canada: <http://www.bankofcanada.ca/rates/exchange/exchange-rates-in-pdf/>

Tender 0045/2015
Volume 1 – Part II
Bid Data Sheet (BDS)

**Assurance Management and Technical
Auditing Services**
for the
**Metropolitan Tel Aviv Mass Transit
System**

Clause of the Invitation to Bid	Specifications	Dates
2.4.3; 8.3.3; 3.7.3; 3.8.3	e-mail address: ZDahan@nta.co.il	NA
2.6	Bidders' Conference	July 22 nd , 2015 at 09:30 AM in Israel at a location to be published by NTA on NTA's Website
3.7.2	Clarification submission deadline	August 6 th , 2015
4.8.1	Submission Date	October 7 th , 2015 until 2:00 PM (Israel time)
4.10.7	The Tender Security shall be valid for a period of one (1) year of the Submission Date and in accordance with Tender Form A7	October 7 th , 2016

Tender 0045/2015

Volume 1 – Part III

Threshold Criteria (TC)

**Assurance Management and Technical
Auditing Services**

for the

**Metropolitan Tel Aviv Mass Transit
System**

1. DEFINITIONS

All capitalized terms used in this document and not defined hereunder, shall have the meaning ascribed to them in the Tender Documents:

- Deputy Technical Auditing Manager** - Means as set out in Sub-Clause 3.5.
- Deputy PAO Manager** - Means as set out in Sub-Clause 3.7.
- Engineer** - Means a certified engineer in accordance with the laws of its jurisdiction.
- Financial Statements** - Means the Bidder's annual audited and duly signed consolidated financial statements.
- Financial Threshold Criteria** - Means as set out in Sub-Clause 4.1.
- Parent Company** - Means a legal entity, which exercises control (as such term is defined in Section 1 of the Israeli Securities Law 1968) over the Bidder.
- PAO Manager** - Means as set out in Sub-Clause 3.6.
- Rail Transit** - Shall mean light rail transit (LRT) and/or metro.
- System Engineering Field** - Means the Rail Transit systems engineering field including but not limited to such disciplines as signaling, communication systems, electricity systems for rails or train control systems, etc.
- Technical Auditing Manager** - Means as set out in Sub-Clause 3.4.
- Weighted Average Annual Cash Flow** - Means as calculated in Sub-Clause 4.3.
- Weighted Turnover** - Means as set out in Sub-Clause 4.2.1.

2. GENERAL PROVISIONS RELATING TO BIDDERS

- 2.1. The Bidder is required to demonstrate compliance with all of the requirements specified in Tender Form "A1", "A2" and "A3".
- 2.2. In the event the Bidder is a JV, the Members of the Bidder are required to complete Tender Form "A4".
- 2.3. In the event that part of the Threshold Criteria are demonstrated by a Sub-Contractor/s, the Bidder and the Sub-Contractor/s are required to complete Tender Form "A5" and Tender Form "A6"

3. THRESHOLD CRITERIA

- 3.1. The Bidder, or in the event of a JV the TAT Member, has managed for at least three (3) consecutive years, the design and construction phases of one (1) Rail Transit project during the ten (10) years immediately preceding the Submission Date. The total project value shall not be less than USD 300,000,000 (Three Hundred Million United States Dollars) excluding VAT.

It is hereby clarified that in order to demonstrate compliance with the above criterion, Bidder, or in the event of a JV the TAT Member, may present two (2) Rail Transit projects - one for the management of the design phase and the other for the management of the construction phase with the same criteria stated above.

In order to demonstrate compliance with the above criterion the Bidder is required to complete Tender Form "B1".

- 3.2. The Bidder, or in the event of a JV the PAO Member or a Sub-Contractor, has provided assurance services for at least three (3) consecutive years during the design and construction phases, in one (1) Rail Transit project during the ten (10) years immediately preceding the Submission Date. The total project value shall not be less than USD 300,000,000 (Three Hundred Million United States Dollars) excluding VAT.

In order to demonstrate compliance with the above criterion the Bidder is required to complete Tender Form "B2".

- 3.3. The Bidder, or in the event of a JV the TAT Member, the PAO Member, and any Sub-Contractor (if applicable) have ISO 9001:2008 Quality Management Systems Requirements certification.

In order to demonstrate compliance with the above criterion the Bidder is required to complete Tender Form "B3".

3.4. Technical Auditing Manager:

The Bidder, or in the event of a JV the TAT Member, shall present a proposed technical auditing manager (the "**Technical auditing Manager**"). The Technical Auditing Manager shall meet **all** of the following requirements:

- 3.4.1. The Technical Auditing Manager is an Engineer with at least 20 years' of practical experience as an Engineer.
- 3.4.2. The Technical Auditing Manager has at least 10 years' experience in managing the design and construction phases in infrastructure projects.
- 3.4.3. The Technical Auditing Manager has managed, for at least three (3) consecutive years, the design and construction phases of one (1) Rail Transit project during the ten (10) years immediately preceding the Submission Date. The total project value shall be not less than USD 1,000,000,000 (One Billion United States Dollars) excluding VAT.

In order to demonstrate compliance with the above criterion the Bidder is required to complete Tender Form "B4".

3.5. Deputy Technical Auditing Manager:

The Bidder, or in the event of a JV the TAT Member, shall present a proposed deputy technical auditing manager (the "**Deputy Technical Auditing Manager**"). The Deputy Technical Auditing Manager shall meet **all** of the following requirements:

- 3.5.1. The Deputy Technical Auditing Manager is an Engineer with at least 10 years' of practical experience as an Engineer.
- 3.5.2. The Deputy Technical Auditing Manager has at least 5 years' experience in managing the design and construction phases in Rail Transit projects or in managing the civil engineering field or the System Engineering Field of Rail Transit projects.
- 3.5.3. The Deputy Technical Auditing Manager has managed, for at least three (3) consecutive years, the civil engineering field and/or the System Engineering Field during the design and construction phases of one (1) Rail Transit project during the ten (10) years immediately preceding the Submission Date. The total project value shall be not less than USD 300,000,000 (Three Hundred Million United States Dollars) excluding VAT.

In order to demonstrate compliance with the above criterion the Bidder is required to complete Tender Form "B5".

* The Technical Auditing Manager and the Deputy Technical Auditing Manager are required to demonstrate, collectively, compliance with the experience requirements in **both** the civil engineering field and the Systems Engineering Field.

3.6. PAO Manager:

The Bidder or in the event of a JV the PAO Member or a Sub-Contractor, shall present a proposed program assurance office manager (the "**PAO Manager**"). The PAO Manager shall meet **all** of the following requirements:

- 3.6.1. The PAO Manager has at least 10 years' experience in managing the quality assurance in Rail Transit projects.
- 3.6.2. The PAO Manager has managed, for at least three (3) consecutive years, the development and the implementation of Assurance Management and the Quality Management System (QMS), during the design and construction phases of one (1) Rail Transit project during the ten (10) years immediately preceding the Submission Date. The total project value shall be not less than USD 300,000,000 (Three Hundred Million United States Dollars) excluding VAT.

In order to demonstrate compliance with the above criterion the Bidder is required to complete Tender Form "B6".

3.7. Deputy PAO Manager:

The Bidder, or in the event of a JV the PAO Member or a Sub-Contractor, shall present a proposed deputy program assurance office manager (the "**Deputy PAO Manager**"). The Deputy PAO Manager shall meet **all** of the following requirements:

- 3.7.1. The Deputy PAO Manager has at least 5 years' experience in managing the quality assurance in infrastructure projects.
- 3.7.2. The Deputy PAO Manager has managed, for at least three (3) consecutive years, the development and the implementation of assurance management and the Quality Management System (QMS), during the design and construction phases of one (1) Rail Transit project during the ten (10) years immediately preceding the Submission Date. The total project value shall be not less than USD 300,000,000 (Three Hundred Million United States Dollars) excluding VAT.

In order to demonstrate compliance with the above criterion the Bidder is required to complete Tender Form "B7".

** It is hereby emphasized that the Technical Auditing Manager, the Deputy Technical Auditing Manager, PAO Manager and the Deputy PAO Manager

demonstrating compliance with the threshold criterion specified in Sections 3.2-3.6 above must constitute part of the Successful Bidder's team and shall be required to relocate to Israel for a period of at least 3 years.

4. FINANCIAL THRESHOLD CRITERIA

The Bidder shall comply with the following financial threshold criteria:

4.1. General Provisions:

To qualify as a Bidder in this threshold stage, each Bidder is required to meet the financial threshold requirements as set forth in Sub-Clauses 4.2 (*Weighted Average Annual Turnover*) and 4.3 (*Weighted Average Annual Cash Flow*), ("**Financial Threshold Criteria**").

4.1.1. For the purpose of compliance with the Financial Threshold Criteria, the Bidder, or in the event that the Bidder is a JV, any Member thereof, may seek to rely on its Parent Company, provided that the Parent Company duly completes and signs Tender Form "B10".

4.1.2. Reliance upon a Parent Company by the Bidder, or in the event that the Bidder is a JV, any Member thereof, as set forth in Sub-Clause 4.1.1 above, shall require that the Bidder, or in the event that the Bidder is a JV, any Member thereof, relies upon the aforesaid Parent Company for the purpose of compliance with **all** Financial Threshold Criteria.

4.1.3. In the event that the Bidder is a JV, should the Parent Company be a Member thereof, for the purpose of determining compliance with all the Financial Threshold Criteria, the holdings of such Parent Company in the JV will be deemed to include all holdings of the Member seeking to rely on such Parent Company, i.e. such Parent Company's financial data shall be examined with respect to the aggregate holdings of the said Parent Company in the JV (in its capacity as a Member thereof), together with the holdings of the Member of the JV seeking to rely on such Parent Company.

4.2. Weighted Average Annual Turnover

4.2.1. A Bidder is required to have a weighted average annual turnover ("**Weighted Turnover**") of at least USD 30,000,000 (thirty million United States Dollars) calculated based on the values stated in its three (3) latest Financial Statements, which shall be not earlier than 2010.

4.2.2. The Bidder's Weighted Turnover shall be calculated in the following manner:

$$\text{Weighted Turnover} = (3 * TO_t + 2 * TO_{(t-1)} + TO_{(t-2)}) / 6$$

Where:

TO = Turnover

t = the fiscal year of the most recent available Financial Statements

- 4.2.3. Since the Services might be broadened in accordance with the progress of the construction and design of additional lines under NTA's management, Bidders are required to demonstrate compliance with such minimal annual turnover as to demonstrate their financial capability given that the scope of services required under this Tender increases.
- 4.2.4. In the event the Bidder is a JV, the Bidder is required to demonstrate that each of its Members has, for every one percent (1%) of its holdings in the Bidder, a Weighted Turnover of at least three hundred thousand (300,000) USD, according to the formula presented in Sub-Clause 4.2.34.2.2 above.
- 4.2.5. For the purpose of calculating the Bidder's Weighted Turnover in the event of a JV, the Weighted Turnover of each of the Members of the Bidder shall be referred to as follows:
- 4.2.5.1. The Bidder's Weighted Turnover shall be calculated in accordance with the Weighted Turnover of its Members, based on their respective most recent available Financial Statements, *pro-rata* to their holdings in the Bidder.
- 4.2.5.2. For a Member whose holdings in the Bidder are lower than ten percent (10%), the Weighted Turnover as shall be indicated in Tender Form "B8" shall not be taken into account for the purpose of this Financial Threshold Criteria.
- 4.2.5.3. For a Member whose holdings in the Bidder are equal to or greater than ten percent (10%) and lower than or equal to fifty percent (50%), the Weighted Turnover shall be calculated as described in Sub-Clauses 4.2.14.2.2 and 4.2.4.
- 4.2.5.4. For a Member whose holdings in the Bidder are greater than fifty percent (50%), the Weighted Turnover shall be calculated in accordance with Sub-Clause 4.2.2 and shall be at least USD 30,000,000 (thirty million United States Dollars), as required under Sub-Clause 4.2.1.

4.3. Weighted Average Annual Cash Flow

- 4.3.1. The weighted average annual cash flow from operating activities shall be positive.

The weighted average annual cash flow from operating activities will be calculated as follows:

$$\text{Weighted Average Annual Cash Flow} = (3*CF_t + 2*CF_{t-1} + 1*CF_{t-2})/6$$

Where:

CF = Cash Flow from operating activities

t = the fiscal year of the most recent available Financial Statements

- 4.3.2. In the event that Bidder, or in the event of a JV, any Member thereof, fails to demonstrate a positive Weighted Average Annual Cash Flow as described in Sub-Clause 4.2 (*Weighted Average Annual Turnover*) above, the Bidder, or any Member thereof, as applicable, shall be required to comply with at least one of the following criteria:

4.3.2.1. Capital Erosion Test

The Weighted Average Annual Cash Flow from operating activities (absolute value) of the Bidder, or any Member thereof, as applicable, shall be equal to, or lower than 25% of the Bidder's equity.

$$|CF_{AVG}|/E_t \leq (25)\%$$

Where:

CF_{AVG} = Weighted Average Annual Cash Flow from operating activities in the last three years, weighted as described in Sub-Clause 4.3.14.2 above.

E = equity.

t = the fiscal year of the most recent available Financial Statements

4.3.2.2. Debt to EBITDA

The ratio between the Bidder's, or any Member thereof, as applicable, net financial debt at the last day of the fiscal year of the most recent available Financial Statements to its weighted average annual EBITDA is lower than, or equal to eight (8), calculated as follows:

$$\text{Net Debt} / \text{Weighted Average Annual EBITDA} \leq 8$$

Where:

Net Debt = the Bidder's current financial liabilities + long term financial liabilities – cash & equivalents

EBITDA = the Bidder's earnings before interest, tax, depreciation and amortization

Weighted Average Annual EBITDA = $(3*EBITDA_t + 2*EBITDA_{t-1} + EBITDA_{t-2}) / 6$

t = the fiscal year of the most recent available Financial Statements

To demonstrate compliance with the Financial Threshold Criteria the Bidder is required to complete Tender Form "B8".

4.4. The Bidder, the Members and the Sub-Contractor (to the extent applicable) are not under any voluntary or involuntary bankruptcy process (liquidation or reorganization), or receivership or commencement of a similar insolvency proceeding, and the Bidder's, the Members', the Sub-Contractor's (to the extent applicable) last audited annual financial statement does not include any Going Concern notice. For this purpose, the Bidder, and the Members, shall submit Tender Forms "B8" and "B9". The conditions of this Section 4.4 shall remain true and valid throughout the term of the Tender, until the selection of the Consultant.

4.5. If the Bidder, or in the event of a JV, any Member thereof seeks to rely on its Parent Company, both shall demonstrate compliance to the Terms specified in Sub-Clause 4.4 here above.

4.6. Currencies Conversion

All data included in the Tender Forms shall be submitted in the **original currency**.

The data shall be converted by NTA to USD, as applicable, in accordance with the provisions of Appendix C (Currencies Conversion).

Bidders may use Appendix C (Currencies Conversion) for the purpose of verifying whether the amounts quoted in the original currency meet the required amounts which are quoted in USD.

4.7. Demonstrating Compliance with the Financial Threshold Criteria

4.7.1. The Bidder's, or in the event of a JV, any Member thereof, compliance with the Financial Thresholds as described in Clause 4 (*Financial Threshold Criteria*) shall be demonstrated through information

provided by the Bidder or the Members, as applicable, in Tender Form "B8". The information contained in such Tender Form and submitted by the Bidder, or the Members, as applicable, shall be based on Financial Statements prepared according to one of the following accounting principles:

- 4.7.1.1. Israeli GAAP (including, with respect to the cash flow statements, Standard No. 51 of the Institute of Certified Public Accountants in Israel);
 - 4.7.1.2. US GAAP (including, with respect to the cash flow statements, ASC (Financial Accounting Standards Codification) No. 230); or
 - 4.7.1.3. International Financial Reporting Standards (IFRS), (including, with respect to the cash flow statements, IAS (International Accounting Standards) No. 7;
- 4.7.2. The information contained in Tender Form "B8" shall be duly completed and submitted, in accordance with one of the accounting principles set out in Sub-Clause 4.7.1, and shall be duly signed by the Certified Public Accountant (CPA) who audited the Bidder's relevant Financial Statements.
- For the removal of doubt, 'duly signed' shall mean the CPA's stamp and/or signature.
- 4.7.3. No additional accounting principles shall be sufficient in order to demonstrate compliance with Financial Thresholds. However, a Bidder or a Member, as applicable, whose Financial Statements are presented based on different accounting principles than those listed in Sub-Clause 4.7.1 above, is required to submit a specific request to NTA in order to approve submission of such Financial Statements, at least thirty (30) days prior to the Submission Date. NTA shall consider each request on a case by case basis and may issue an Addenda as a result thereof.

**Assurance Management and Technical Auditing
Services for the Metropolitan Tel Aviv Mass
Transit System**

Tender Agreement

Appendix 1 - Scope of Services

APPENDIX 1

SCOPE OF SERVICES

The Employer has chosen to adopt an extensive rail transit program assurance approach embracing Quality, systems engineering, reliability, availability, maintainability and safety (RAMS), sustainability, human factors and safety & technical assurance processes as well as other good industry practice and processes, as applicable. To assist with this approach, the Employer has elected to engage the Consultant to conduct an external independent program and quality assurance role and create and manage a Program Assurance Office (PAO) on behalf of the Employer, throughout the lifecycle of the Program. In addition to this role, the Consultant will carry out a role of a Technical Audit Team (TAT) to ensure that the program is performed according agreed requirement duly reviewed and validated by the PMCs dedicated for each project.

The Role of the PAO:

The PAO will be responsible for:

- Establishing governance processes;
- Supporting the Employer in planning and coordinating quality assurance activities;
- Supporting the Employer in coordination of quality assurance activities with external parties including the Government of Israel and the Monitoring company on its behalf;
- Running internal process performance audits;
- Providing 'challenge and support' to the Project Management Consultants ("PMCs")

The PAO has no direct delivery responsibility regarding the design and the construction of the Program but is responsible for challenging and overseeing the effectiveness and integrity of the PMCs.

The Role of the TAT:

The TAT will provide assurance that the designs being proposed by each of the individual PMC's for their project meet the client's requirements and achieve all specified quality standards. The TAT will also assure that design of different lines is properly coordinated. Technical assurance will be carried out during all phases of the project from design of the lines and associated infrastructure, to construction, operation and maintenance.

The TAT will not be responsible for providing any design solutions.

The scope of the TAT will include:

- Assuring tender procurement processes and procedures and contract administration meet client requirements Assuring design quality and

engineering specifications achieve minimum agreed standards: at each stage of the Program across all projects and engineering deliverables;

- Assuring construction and testing phases meet agreed standards and ensuring integrity of the construction and testing carried out at each stage of the Program across all projects and the deliverables;
- Assuring operation and maintenance assurance plans comply with the client's requirements.

The TAT will be ultimately accountable for providing assurance on the safety and integrity of design and delivery for the Projects and Program to date. The TAT is required to assure and audit technical processes and products throughout the lifecycle of the Program. A team of experts with extensive experience in assurance, systems engineering and its implementation on large railway infrastructure projects are required to provide confidence that the Employer is receiving world class design and assets.

The Role of the PMCs

To manage the Program, the Employer intends to separately engage with PMCs to manage, control, guide, oversee, coordinate, integrate and do everything within the scope of works defined as the professional responsibility of the PMCs for each of the lines of the Program.

- The PMCs will be managing the designers, contractors and suppliers of each line of the Program;
- The PMCs will document, implement and monitor a project Quality Management System, compliant with the principles of ISO 9001:2008 Quality Management Systems Requirements for the duration of each line of the Program;
- The PMCs will be acting as the Project managers, accountable for managing the delivery of the program to time, budget and the agreed requirements;
- The PMC will perform the first line of assurance with a duty to perform periodic audits to monitor the contractor's QMS for effective implementation and compliance.

At the end of this document presented a matrix of roles and responsibilities of the PMC, PAO and the TAT

Employer Quality Management System (QMS):

Over the past year the Employer, with one of its consultants, has defined the processes for establishing a quality plan to provide a means of relating specific requirements of the Program/ Project work methods and practices that support service realization, suggesting proven management systems for planning, performing, controlling and evaluating the work by which the lines of the Program

are to be built. These processes are intended to be part of a wider Quality Management System (QMS) for the Employer, the PMCs and other companies working for and on behalf of the Employer on this Program to follow. As part of the Consultant's role, the QMS is to be developed and completed based on the Employer processes available to date. The employer processes as detailed above are attached hereto as **Annex "A"**. Once accepted by the Employer, the PMCs (and other relevant project supply chain companies) will be required to implement these processes, and the Consultant to support this implementation.

Employer Verification and Validation Process:

To allow the mass transit Program to follow the Employer's required verification and validation (V&V) process, the Consultant will ensure that the required systems/subsystems have been provided, meet the objective of the Program, and demonstrate the ability of all parties to achieve planned results. The V&V process is to be followed first by the PMCs and the role carried out by the PAO will be another level of assurance to be planned and coordinated by the PAO, and the audits are to be carried out by the TAT. Verification methods will include review of inspection and testing, certification and analysis in order to demonstrate compliance by all.

Nature of PAO Assurance:

The PAO's role is to assure that the PMCs for each of the lines are delivering the project to time and budget and meeting other obligations as per their contracts. The PAO will develop, publish and monitor procedures throughout the life of each project.

Nature of TAT Audits:

The TAT role is primarily aimed at conducting audits to assure PMCs and their contractors are meeting the agreed the technical requirements.

Minimum Requirements

It is hereby clarified that the Scope of Services, described here below, is not exhaustive and may be amended, updated or replaced by the Employer from time to time during the term of the Agreement. All relevant services required for the proper performance of the Services and the Employer's instructions with respect to the Program will not be considered a variation. Without derogating from the above, all services commonly required and/or performed by Consultants shall be included in the Scope of Services.

The Consultant will be required to conduct a range of assurance and technical audits as set out in this Scope of Services, on all PMCs as well as on the designers and contractors to ensure requirements are met. When planned results are not achieved, corrective action recommendations shall be made, as appropriate, to

ensure conformity of services.

The Consultant will also be required to execute audits on processes, time schedules and cost.

All assurance activities are to be planned and coordinated by the PAO but when the process/ product is technical in nature then the assurance and audit will be carried out by the specialist TAT function.

The following description of services specifies the Employer's minimum requirements in order to provide the Employer with a quality product:

PAO Function:

1. **Scope of the requirements of the Program Assurance function:**

- 1.1. Work under the supervision of the Quality Director of the Employer to define the challenges and goals that program assurance must deliver on for the Program.
- 1.2. Work under the supervision of the Quality Director of the Employer to develop a series of key priority 'themes' whilst working with the PMCs and others. These key priority 'themes' are to be cascaded to every Project and into every contract through the procurement process (for example: safety, security, accessibility, diversity, aesthetics, cross system integration, Employer design standards, sustainability etc'). In cases where the base for such 'theme' already exists the Consultant will be required to develop the existing.

2. **Framework of Control** – to develop, maintain and periodically review a framework of control and approval. This includes:

- 2.1. Review existing strategies and policies, identifying gaps and inconsistencies and establishing governance;
- 2.2. Support the Employer in maintaining program frameworks and processes;
- 2.3. Support the Employer to ensure alignment between the Employer and the PMCs procedures;
- 2.4. Assure effective policy deployment to projects and functional management framework;
- 2.5. Review PMCs audit reports and challenge as required.

3. **Approval and stage gates** – To act as the guardian for Project approvals and all other aspects of Project governance. This includes:

- 3.1. Facilitate project approvals throughout the lifecycle of each Project. The PAO will provide reports to the Employer on performance against contracts by each of the PMCs as part of the internal approval process;
- 3.2. Facilitate and manage an efficient and streamlined Project approvals process. This will include supporting/ challenging Project approval

- documents in order to provide the Employer with the information required to approve delivery at each stage of the delivery process;
- 3.3. Develop and control an approvals process guide;
 - 3.4. Assemble raw materials for approval process.
4. **Project Assurance** – To challenge and support the PMCs to give assurance that Projects are developed, delivered and reported on in a consistent and compliant fashion. This includes:
- 4.1. Supporting Project sponsors to deliver in accordance with policies and strategies;
 - 4.2. Supporting Project boards through assuring their effectiveness and governance;
 - 4.3. Supporting the Employer in monitoring, challenging and critically reviewing Delivery Performance reporting and testing information provided by the PMCs;
 - 4.4. Challenging Project assumptions, risks, cost, change control interdependencies, stakeholder management, and identify scope/ budget/ funding mismatches;
 - 4.5. Managing ‘deep dive’ reviews of Projects, where initial observations justify the need for more detailed investigations;
 - 4.6. Ensuring compliance to framework of control – proactively checking adherence to process.
5. **Program Assurance** – To challenge Program information to give assurance that the Program is being developed, delivered and reported in a consistent and compliant fashion. This includes:
- 5.1. Supporting the Employer in monitoring, challenging and critically reviewing PMCs delivery performance reporting including the analysis of the trends and testing of information provided;
 - 5.2. Challenging Program assumption risks, cost, change control, interdependencies, stakeholder management, transformation benefits and identify scope/ budget/ funding mismatches;
 - 5.3. Ensuring compliance to framework of control – proactively checking adherence to process;
 - 5.4. Establish performance management framework and maintaining oversight and progress reporting of any Employer commitments;
 - 5.5. Undertaking strategic overview of planning to provide assurance that activities and interdependencies are being clearly mapped and their tasks are being adequately resourced;
 - 5.6. Providing assurance on the effectiveness of the change control process;

- 5.7. Championing best practice within each of the Projects and across the Program;
- 5.8. Assuring the effectiveness of functional areas through attendance at functional boards;
- 5.9. Reviewing and challenging PMCs performance reporting against the key project indicators (KPIs).
6. **Risk Management** – To provide assurance of risk management through:
 - 6.1. Maintaining an oversight role of risk process execution;
 - 6.2. Participating in executive level and program level risk reviews.
7. **External Assurance/ Stakeholder:**
 - 7.1. To support the Employers' quality director interface with external parties to coordinate the issue of outgoing Project/Program reports and review incoming Project/Program reports of onward issues as appropriate.
8. **Development of the Employer's Overall QMS**
 - 8.1. A Team Leader shall be appointed for this duty, managing all roles and responsibilities described herein. The Team Leader, shall work with the QMS team from outside of Israel, but might be required to arrive to Israel during the development of the QMS program and during the implementation of it.
 - 8.2. Planning and developing a Quality Management System (QMS) in coordination with the Employer management, which ensures that all its management and technical responsibilities for achieving quality are effectively executed. Some of these processes have already been defined by the Employer and are attached to this Tender, and these shall form the basis of this work. Where necessary and/or applicable the Consultant may suggest variations to these processes.
 - 8.3. As a minimum, the QMS must comply, in all relevant aspects, with the requirements of the following standards:
 - 8.3.1. ISO 9001:2008 or latest version - Quality Management Systems – Requirements/SI ISO 9001:2008 (SII - Standards Institute of Israel) –Quality Management Systems – Requirements, or the equivalent;
 - 8.3.2. ISO 10005:2005 Quality Management Systems - Guidelines for Quality Plans;
 - 8.3.3. ISO 14001:2004 Environmental Management Systems;
 - 8.3.4. OHSAS 18001:2007 Health and Safety Management Systems;
 - 8.3.5. EN 50126 The Specification of Reliability, Availability,

- Maintainability and Safety;
- 8.3.6. ISO 15288 Systems Engineering – System Lifecycle Process
 - 8.3.7. Any other applicable rail industry standards;
 - 8.3.8. Any other Israeli standards as applicable.
- 8.4. Implementing quality-related work processes in the Employer’s organization as necessary.
 - 8.5. Developing any related procedures for the Employer’s organization.
 - 8.6. Monitoring the implementation process and adoption of the QMS by the PMCs, contractors and as needed, in accordance with the requirements specified below.
 - 8.7. The Employer has recently appointed an Israeli consultant to develop and implement ISO 9001, 14001 and OHSAS 18001 on behalf of the Employer. The PAO will be responsible for assuring that the employer is adhering to these quality, environmental and health and safety management systems as part of the overall assurance process.

9. Delivery Confidence Rating

- 9.1. Following each quality audit, the audit lead (either the PAO or Technical Auditing Manager depending on the type of audit) is required to assign a delivery confidence rating to the aspects of the Program and each of the Projects or sub-project being audited.
- 9.2. Definitions and guidance for the delivery confidence ratings are to be developed by the PAO in conjunction with the Employer and in consultation with PMCs and other relevant stakeholders.
- 9.3. The delivery confidence rating will provide a consistent approach to summarizing the outcomes of all quality and assurance audits.
- 9.4. The table below sets out some indicative definitions for the delivery confidence ratings but it is expected that as part of the PAO set up the Consultant will fully develop a set of definitions.

Delivery Confidence Rating	Suggested definition
Red	Project or sub-project should not proceed in its current state. Corrective actions need to be implemented and a further audit undertaken to determine whether the Project or sub-project can proceed
Amber	Project or sub-project can proceed but recommendations need to be implemented

	within the timeframes outlined in the audit report
Green	Project or sub-project can proceed

10. PAO Role and responsibilities:

10.1. PAO Manager Role:

10.1.1. Manages all Projects and Program assurance activities on behalf of the Consultant performed by the PAO, including but not limited to:

- Framework of control
- Approvals and stage gates
- Project and Program assurance
- Risk Management assurance
- External assurance

10.1.2. Manage the QMS team and provide a single point of contact to the Employer in all related issues;

10.1.3. Appoint a Technical Auditing Team for each audit to ensure that auditors with the right skills and experience are selected for each of the assurance audits.;

10.1.4. Manage all process and/ or schedule and/ or budget and cost estimate audits carried out.

10.2. Deputy PAO Manager Role:

10.2.1. Support the PAO Manager in all of the assurance activities and duties, and serve as a stand-in for the PAO Manager when needed;

10.2.2. Provide support and/ or lead of the audits.

10.3. Assurance team members role (under the PAO):

10.3.1. A team of experts shall be appointed by the Consultant and the PAO Manager for assurance audits (process and/or schedule and/or budget and cost audits. Each audit described in this document shall be appointed with its own team of experts) under the guidance of the PAO Manager and the Deputy PAO Manager upon the request of the Employer.

10.3.2. Skills required form the team members include but are not limited to: governance and process management, major projects, risk management, time schedule, cost and budget etc.

The CVs of each team member shall be provided to the

Employer, who has the right, at his sole discretion to request a replacement to each team member all in accordance with the terms of the Agreement.

10.4. Assurance Team Leader role (Under the PAO):

- 10.4.1. A Team Leader shall be appointed by the Consultant, the PAO Manager and Deputy PAO Manager for each audit or task requested by the Employer;
- 10.4.2. Such Team Leader shall have the skills and expertise required to lead such audit or task;
- 10.4.3. The audit team shall be managed by this Team Leader who will be reporting directly to the PAO Manager and Deputy PAO Manager;
- 10.4.4. The Team Leader shall be managing the audit team and shall be providing all deliverables requested from the audit in accordance with the time frame set for it;

10.5. The CV of the Team Leader are to be approved by the Employer all in accordance with the terms of the Agreement.

11. Assurance and auditing of Time Schedules

- 11.1. For all such audits, an assurance team and an assurance Team Leader with the relevant expertise and experience shall be selected to work with the PAO to carry out the audit.
- 11.2. General or specific time schedules of a Project or sub-projects in the network.
- 11.3. Examination of the time schedule for the design, execution, or T&C phases, with emphasis on assuring:
 - 11.3.1. The assumptions made in order to establish the time schedule are logical and in accordance with good practice in the industry;
 - 11.3.2. The feasibility of the phases and sequence shown in the time schedule, and build ability where execution phases are in question;
 - 11.3.3. The time period assigned in the time schedule to main tasks, free float and contingency where needed;
 - 11.3.4. Critical path analysis as well as review of the mitigation plans suggested. Providing recommendations and courses of actions to shorten this path and reduce the quantity of activities in it. When the actions needed to shorten such critical path or time durations require an additional allocation of resources the financial cost of these

- resources shall be evaluated.
- 11.3.5. Examine the links and dependencies between tasks, reviewing whether these linkages are logical and sequenced as is customary in similar projects in the industry.
 - 11.3.6. Review the free float and total float of a Project to ensure that it accurately represents the execution method of such Project.
 - 11.3.7. Verify that the time schedule is in accordance with the requirements and documents of the Project or sub-project in question.
 - 11.3.8. Challenge performance in relation to time schedules.
 - 11.3.9. Assign a Delivery Confidence Rating to the item(s) being reviewed.
 - 11.3.10. Once the audit recommendations are agreed these will be presented to the relevant forum(s), facilitating decisions on whether the project or sub-project can proceed and move to the next phase.
 - 11.3.11. Review whether the recommendations have been corrected by the relevant contractor.
 - 11.3.12. If an audit was carried out by the monitoring company (appointed by the MOT and MOF), assure that their comments were amended as required.
 - 11.3.13. Any repetitive review of schedule due to the comments provided under this audit shall form part of this audit.
 - 11.3.14. Any additional activities needed for schedule audits.

12. Assurance and auditing of Budget and Cost Estimates

- 12.1. For all audits, an assurance team and an assurance Team leader with the relevant expertise and experience shall be selected to work with the PAO to carry out the audit.
- 12.2. General or specific budget and cost estimations of a Project or sub-projects in the Program.
- 12.3. Examination of the budget and estimation with emphasis on:
 - 12.3.1. Rates allocated to each item;
 - 12.3.2. Quantities allocated to each item;
 - 12.3.3. All line items needed were taken into consideration in accordance with the contractor's or supplier's SOW and/or specifications and/or drawings and/or design of a Project and/or sub-projects;

- 12.3.4. Allocation of contingency and the rate of such contingency;
- 12.3.5. Allocation of risk and assurance that the rate of such risk is logical and in proportion to the need of the Project (where Monte-Carlo model was carried out the rate needs to be in line with the model);
- 12.3.6. Suggest the level of inaccuracy in the budget and/or cost estimation audited and the percentage of such inaccuracy;
- 12.3.7. Challenge performance in relation to the budget and cost estimates;
- 12.3.8. Recommend corrective actions where needed;
- 12.3.9. Assign a delivery confidence rating to the item(s) being reviewed;
- 12.3.10. Once the audit recommendations are agreed these will be presented to the relevant forum(s), facilitating decisions on whether the Project or sub-project can proceed and move to the next phase;
- 12.3.11. Any additional activities needed for budget and cost estimation audits.
- 12.3.12. Examine Project expenditure to ensure it is in accordance with the agreed cash flow and budget and the payments made are in accordance with the works carried out (The PAO will lead this part of the audit);
- 12.3.13. Where the government's independent auditing company carries out an audit or issues a report, the PAO will take the findings into account and ensure the findings have been adhered to by the PMCs.

13. Assurance and auditing of Processes and Procedures in the Employer, the PMCs, contractors and other suppliers:

- 13.1. Assure that procedures are in accordance with the approved processes, and the same applies to the next level down (PMCs and contractors);
- 13.2. Review whether processes and procedures are being implemented effectively and review whether the work carried out is in accordance with the approved processes and procedures;
- 13.3. Confirm that the Project or sub-project is 'doing the right thing' and 'doing things right';
- 13.4. Review and assure the risk and issues management processes, ensuring these are appropriate for the scale and stage of the Project or sub-project;

- 13.5. Review and assure the delivery structures and control frameworks, ensuring these are appropriate for the scale and stage of the Project or sub-project;
- 13.6. Challenge performance in relation to processes and procedures;
- 13.7. Where needed recommend corrective measures, including changes to the process and procedures if needed;
- 13.8. Assure that all documents and file structures are in accordance with the approved template and naming convention;
- 13.9. Assign a delivery confidence rating to the item(s) being reviewed;
- 13.10. Once the audit recommendations are agreed these will be presented to the relevant forum(s), facilitating decisions on whether the Project or sub-project can proceed and move to the next phase;
- 13.11. Review whether the recommendations have been implemented by the audited party;
- 13.12. If an audit was carried out by the monitoring company (appointed by the MOT and MOF), assure that their comments were amended as required;
- 13.13. Any repetitive review or processes and procedures due to the comments provided under this audit shall form part of this audit;
- 13.14. Any additional activities needed under process and procedures audits.

TAT Function:

14. Scope of the requirements of the Technical Auditing function:

- 14.1. Work under the supervision of the Employer's Quality Director to plan and provide an annual work plan for auditing all Projects;
- 14.2. Work under the supervision of the Employer's Quality Director to provide the audit teams for each audit in accordance with the annual work plan.

15. Framework of Control:

- 15.1. Assure the audits required are aligned with the audits carried out by the PMCs to avoid duplication of effort;
- 15.2. Maintain effective reporting management framework in liaison with the PAO;
- 15.3. Review the PMCs technical audit reports and challenge as required;
- 15.4. Support the Employer in reports and liaison with external technical auditing functions.

16. Approval and stage gate:

- 16.1. Facilitate Project technical approval process working with the PAO;
- 16.2. Supporting the Employer in the approval process and stage gate reviews process with the PMCs and the chain of supply;

17. The Technical Auditing Teams:

The Technical Auditing Team will be independent in nature and will ensure that its responsibilities are focused on ensuring due process has been followed and that the content is acceptable, leading to final acceptance.

The TAT will be an acceptance body that has no design authority but will provide confidence to stakeholders and interested parties that all designs comply with standards and satisfy requirements:

17.1. The TAT should verify that sufficient evidence has been presented to show that the specified design and execution processes have been adhered to and that the design output meet the design standards as well as that the execution and testing output meet the Employer's requirement.

18. TAT Roles and responsibilities:

18.1. Technical Auditing Manager:

Manage all the technical auditing activities on behalf of the Consultant performed by the TAT including but not limited to:

- 18.1.1. Managing the design, tender documents, construction phase, testing & commissioning and operations & maintenance audits and serving as the Employer's point of contact for all such audits;
- 18.1.2. Appoint a technical auditing team for each audit to ensure that auditors with the right skills and experience are selected for each of the technical audits. The Team Leader of such panel and the members of it shall be based of shores, unless otherwise agreed with the Employer;
- 18.1.3. Management of TATs (for each audit);
- 18.1.4. Leading all meetings with the Employer and the audited parties regarding the audits performed ;
- 18.1.5. Performing the day to day site audits during the construction phases unless otherwise agreed with the Employer;
- 18.1.6. Make recommendations, based on the audits performed on whether a Project or a sub-project can proceed to the next phase;
- 18.1.7. Attend meetings with the Employer management as needed;
- 18.1.8. Supporting the Employer on supplier evaluation and assessment;
- 18.1.9. Provide monthly and quarterly reports and yearly report;

- 18.1.10. Participate in change committees held by the Employer in accordance with the subject. Such committees are convened to review change requests issued by contractors and/or suppliers and/or the Employer's designers. The role of the Technical Auditing Manager in these committees will be to support the Employer by providing a professional opinion of such change in accordance with the Technical Auditing Manager's expertise;
- 18.1.11. Any other relevant duties as the Technical Auditing manager that might be required by the Employer.
- 18.2. Deputy Technical Auditing Manager:
 - 18.2.1. Support the Technical Auditing Manager in all of the Technical Auditing Manager's duties, and serve as a stand-in for the Technical Auditing Manager when needed;
 - 18.2.2. Manage all audits under his/her specialty, in accordance with the role ascribed to the Deputy Technical Audit Manager (Civil/ Systems);
 - 18.2.3. Participate in change committees held by the Employer in accordance with the subject. Such committees are convened to review change requests issued by contractors and/or suppliers and/or the Employer designers. The role of the Deputy Technical audit Manager in these committees will be to support the Employer by providing a professional opinion of such change in accordance with the Deputy Technical Auditing Manager's expertise.
- 18.3. Technical Auditing Team Members:
 - 18.3.1. A team of experts shall be appointed by the Consultant and the Technical Auditing Manager for a technical audit (each audit described in this document shall be appointed with its own team of experts) under the guidance of the Technical Auditing Manager and Deputy Technical Auditing Manager upon the request of the Employer;
 - 18.3.2. Skills required from the team members include but are not limited to: governance and process management, major projects, engineering, design, landscaping, master-planning, geotechnical, hydrological, construction, environment, procurement, sustainability, fire safety, security, crowd flow, accessibility, transit systems etc';

18.3.3. The CVs of each team member shall be provided to the Employer, who has the right, at his sole discretion to request a replacement to each team member all in accordance with the terms of the Agreement.

18.4. Team Leader Role:

18.4.1. A Team Leader shall be appointed by the Consultant, the Technical Auditing Manager and Deputy Technical Auditing Manager for each audit or task requested by the Employer;

18.4.2. Such Team Leader shall have the skills and expertise required to lead such technical audit;

18.4.3. The technical audit team shall be managed by this Team Leader who will be reporting directly to the Technical Auditing Manager and Deputy Technical Auditing Manager;

18.4.4. The Team Leader shall be managing the technical audit team and shall be providing all deliverables requested from the audit in accordance with the time frame set for it;

18.4.5. The CV of the Team Leader are to be approved by the Employer all in accordance with the terms of the Agreement.

18.5. LRV Factory Auditor:

18.5.1. The Consultant may be appointed to conduct a day to day audit in the LRV factory. The Employer may choose at its own discretion to cancel this role;

18.5.2. Such LRV Factory Auditor shall have the skills and expertise required to lead such technical audit;

18.5.3. The audit shall be carried out in accordance with Sub-Clause 21.7 herein.

18.5.4. The LRV auditor shall provide the Employer with monthly reports of the audits carried out, and shall have the obligation to inform without delay the Employer of any issues arising during the manufacturing of these vehicles.

18.5.5. The LRT Auditor will be obliged to have at least 15 years of experience in LRT Design and/ or LRV Manufacturing management and/ or LRV Manufacturing Technical auditing and/ or monitoring. The CVs of the LRV Factory

auditor are to be approved by the Employer all in accordance with the terms of the Agreement.

19. Technical Auditing of Design:

All outputs managed by the PMCs during the design phase will be subjected to stage gate reviews coordinated and managed by the PAO. The TAT will review the evidence produced in these stages and assure that all the information has been provided at each design stage by each of the Projects.

Design reviews are carried out by the contractors and managed by the PMCs. The stage gate review is put in place to ensure the design is ready to proceed to the next stage with all the assurance evidence in place. This function acts as a gateway with the Project not allowed to progress the designs to the next stage if major issues are outstanding. Review reports are produced and reviewed with all key stakeholders.

19.1. Design Stages definition:

- Concept Design (30% design):
 - ✓ Defines the design options for meeting the need
 - ✓ Tests the overall feasibility of a suitable design solution
 - ✓ Sets the single option for further developmentCan also be referred to as "Initial Design" or "Preliminary Design".
- Scheme design (50% design):
 - ✓ Specifies indicative design solutions to meet the requirements.
 - ✓ Confirmation that the design meets the Employer's priority themes (themes could include safety, security, accessibility, diversity, aesthetics, cross system integration, employer design standards and sustainability etc.).

Can also be referred to as "Final Design".

- Technical design (80% design):
 - ✓ Develops a design sufficient to be approved for construction or approved for manufacture
 - ✓ Specifies the detailed technical solutions to meet the requirements

Can also be referred to as "Detailed Design".

19.2. The scope of design products to be audited shall include but not be limited to:

19.2.1. All audits shall be performed in accordance with the level (stage) of the design being audited;

19.2.2. For all audits, a Technical Auditing Team and a technical

- auditing Team Leader with the relevant expertise and experience shall be selected to work with the Technical Auditing Manager and the Deputy Technical Auditing Manager to carry out the audit;
- 19.2.3. Review whether the level of design is in accordance with the stage of the design and its requirements;
- 19.2.4. When a Preliminary Design review is carried out, the statutory approval and requirements of the relevant municipalities are to be taken into consideration;
- 19.2.5. When Detailed Design is being reviewed, the audit will take into consideration the statutory approval plans and permits granted and their remit and when changes are suggested make sure these changes do not conflict with the permits;
- 19.2.6. The audit should also check that the Employer's priority themes are embedded in the design;
- 19.2.7. Assure that the drawing list matches the drawings issued for auditing;
- 19.2.8. Audit the compatibility between the design requirements and the design carried out, including all deliverables;
- 19.2.9. Assuring that the ISA has carried out all the necessary safety inspections including compatibility of the design to the RAMS requirements, systems assurance requirements, safety assurance requirements and systems safety & hazard analysis. This includes auditing of the developed systems engineering management plan (SEMP), human factors integration plan (HFIP) and requirement management plan (RMP);
- 19.2.10. Audit the compatibility of the design to the operation concept;
- 19.2.11. Audit the compatibility of the design to the maintenance plan;
- 19.2.12. Review the interface log between multiple designers and the number of design packages to include the mitigation plans and actions suggested to resolve such interfaces, as well as assure that multidisciplinary reviews carried out by the designers/design managers have covered all necessary disciplines and actions;
- 19.2.13. Assure that the design complies with the sustainability

- requirements;
- 19.2.14. Assure that the ISA has maintained the design risk register, mitigation plan and closure of risks where relevant and possible (PAO to lead this part of the audit);
 - 19.2.15. Review and audit the time schedule for the Detailed Design stage and execution phases suggested by the designer (PAO to lead this part of the audit);
 - 19.2.16. Assure the design milestones were achieved and payment carried out in accordance with the agreed milestones (PAO to lead this part of the audit);
 - 19.2.17. Assign a delivery confidence rating to the item(s) being reviewed, in accordance with the rating established by the PAO;
 - 19.2.18. Once the audit recommendations are agreed these will be presented to the relevant forum(s), facilitating decisions on whether the Project or sub-project can proceed and move to the next phase;
 - 19.2.19. Review whether recommendations have been implemented by the designers;
 - 19.2.20. If the monitoring company (appointed by the Ministry of Transportation (MOT) and the Ministry of Finance (MOF)) reviewed the design, the implementation of their comments is to be reviewed as part of this audit;
 - 19.2.21. Any repetitive audit due to the comments provided in this audit or in cases where the design was rejected as a consequence of this audit; a repeat review is to be carried out as part of this audit;
 - 19.2.22. Any additional activities needed for design audits.

20. Technical Auditing of Tender Documents:

The scope of tender documents to be audited shall include but not be limited to:

- 20.1. For all audits, a technical auditing team and a technical auditing Team Leader with the relevant expertise and experience shall be selected to work with the Technical Auditing Manager and the Deputy Technical Auditing Manager to carry out the audit;
- 20.2. Assure the correlation between the drawing list and the actual files, and provide comments;
- 20.3. Review the contract documents and all tender documents to assure that they cover all aspects of the scope of work (SOW) for that package,

- including but not limited to the identification of any duplications, errors or omissions;
- 20.4. Assure that the bill of quantities (BOQ) or payment method and the budget estimation for the package are in line with the tender documents by reviewing all tender documents, and placing emphasis on:
 - 20.4.1. Major sections in the estimation that may affect a Project budget;
 - 20.4.2. Method of payment, and payment milestones;
 - 20.4.3. Tender parts (any specification and/ or drawings and/ or requirements provided as part of the tender documents) that can influence the pricing of the contract with the current content.
 - 20.5. Ensure that the Employer's priority themes are embedded in the tender;
 - 20.6. Review and provide comments regarding the correlation between the payment headings in the BOQ, the heading in the budget and the technical specifications and identify any areas of incompatibility. Identify any missing items or duplication of items either in the BOQ or budget or between the BOQ and budget and the drawings and specifications. In the event of a design-build tender, ensure the pricing method suggested is in line with the tender design and documentation;
 - 20.7. Review Project's and sub-project's risk registers and mitigation plans and their impact on the budget and BOQ/ payment schedule;
 - 20.8. Review and provide comments regarding the payment milestones versus the contract and the BOQ/ method payment/specifications;
 - 20.9. Review the general requirements chapters, with a view towards compliance with good industry practice and whether there is any influence of them on the Project budget;
 - 20.10. Review the suggested schedule of the works as part of the tender documents;
 - 20.11. Analyze the financial implications of the risk survey and its impact on a Project budget;
 - 20.12. Examine the payment milestones against the contract and BOQ while examining the feasibility of payment milestones vis a vis contractor financing and cash flow and the impact of time schedule changes on the cash flow;
 - 20.13. Assign a delivery confidence rating to the item(s) being reviewed;
 - 20.14. Once the audit recommendations are agreed these will be presented to

- the relevant forum(s), facilitating decisions on whether the Project or sub-project can proceed and move to the next phase;
- 20.15. Review that recommendations have been implemented by the PMCs and the team;
- 20.16. Review the documents to make sure the comments of the monitoring company (appointed by the MOT and MOF) were implemented;
- 20.17. Any repetitive review of the documents after implementation of comments shall form part of this audit;
- 20.18. Any other audits needed regarding the tender documents.

21. **Technical auditing of Construction and Testing Phases:**

During the construction and testing phases there will be a series of readiness reviews, hold points, inspections and audits to ensure that the works are:

- Executed safely;
- Implemented in accordance with the validated design;
- Carried out by competent staff;
- Carried out in accordance with Project processes and procedures;
- Progressed in pre-defined sequence and transition from one activities stage to another occurs in a safe manner;
- Meet the intended requirements;
- Interfaces and dependencies are resolved in accordance with the agreed upon interface matrices;
- Executed with associated certification provided in a progressive manner.

The technical auditing team is responsible for assuring the integrity of the technical processes and products throughout the construction and testing phase delivered by the PMCs. They are purely an auditing function and have no delivery responsibility.

For all audits, a technical auditing team and a technical auditing Team Leader with the relevant expertise and experience shall be selected to work with the Technical Auditing Manager and/ or the Deputy Technical Auditing Manager to carry out the audit.

21.1. The construction and testing phase is made up of the following:

- Construction/ civil engineering works connected with engineering
- Fit out and equipment installation
- Manufacturing and/or procurement

21.2. Construction/ civil engineering works shall be all works connected with civil engineering works such as, but not limited to:

21.2.1. Construction of structures, including site set up, enabling

- works;
 - 21.2.2. Logistics management;
 - 21.2.3. Streetscape;
 - 21.2.4. Landscape;
 - 21.2.5. Utility relocation;
 - 21.2.6. Traffic diversions;
 - 21.2.7. Digging and movement of material off site;
 - 21.2.8. Heavy structure;
 - 21.2.9. Tunneling;
 - 21.2.10. Any other such items.
- 21.3. Construction/civil engineering work product and processes to be assured and audited by the TAT include but are not limited to:
- 21.3.1. Technical assurance of materials in accordance with specified design requirements, including laboratory tests;
 - 21.3.2. Assure laboratory tests are conducted in accordance with international standards and requirements;
 - 21.3.3. Assure the compliance of the works with drawings, specifications and technical standards;
 - 21.3.4. Assure the construction is carried out in accordance with the sustainability requirements;
 - 21.3.5. Assure the structure location is in accordance with the geotechnical data and drawings and in accordance with the grid indicated in the design phase;
 - 21.3.6. Assure all interfaces are dealt with and closed in accordance with the plan written by the contractors;
 - 21.3.7. Assure risks are being mitigated and closed in accordance with the agreed upon risk log. Where needed assure that new risks are identified and dealt with (to be led by the PAO);
 - 21.3.8. The TAT will be part of any supreme supervision (supervision carried out by the designers to make sure the works are carried out in accordance with the design) audit on site, and will assure the supreme supervision comments are dealt with as part of the construction;
 - 21.3.9. Review the "as built" drawings, assuring compliance with the design and variations agreed upon;
 - 21.3.10. Assure the sequence of construction is in accordance with the schedule and milestones and in accordance with the sequence agreed upon (PAO to lead this part of the audit);

- 21.3.11. Examine Project expenditure to ensure it is in accordance with the agreed upon cash flow and budget and the payments (PAO to lead this part of the audit);
- 21.3.12. Assign a delivery confidence rating to the item(s) being reviewed, as assigned by the PAO;
- 21.3.13. Once the audit recommendations and none conformance reports (NCRs) are agreed these will be presented to the relevant forum(s), facilitating decisions on whether the Project or sub-project can proceed and move to the next phase;
- 21.3.14. Review whether the recommendations have been implemented and that non-conformance reports (NCRs) have been corrected by the relevant contractor;
- 21.3.15. If an audit is carried out by the monitoring company (appointed by the MOT and MOF), assure that their comments and NCRs were amended as required;
- 21.3.16. Any repetitive review of NCRs and corrective actions required shall form part of this report;
- 21.3.17. Any additional activities needed for implementation of construction works audits;
- 21.4. Fit-out and equipment installation can contain the above mentioned civil works as well as but not limited to:
 - 21.4.1. Finishes works;
 - 21.4.2. Fit-out and/or installation of equipment (such as rail transit systems, M&E, elevators, escalators, etc.);
 - 21.4.3. Procurement of these items (elevators, escalators, HVAC, etc.);
 - 21.4.4. Any other such items.
- 21.5. The Fit-out and equipment installation products and processes to be assured and audited by the TAT include but are not limited to:
 - 21.5.1. The scope as detailed in the civil engineering works;
 - 21.5.2. Assure factory acceptance test (FAT) in plants or site acceptance test (SAT) at site;
 - 21.5.3. Assure material and equipment are in accordance with the specifications and drawings and are undamaged prior to installation;
 - 21.5.4. Assure the positioning and location of the installation;
 - 21.5.5. Assure certified installation;
 - 21.5.6. Assure installation in accordance with specifications and

- drawings;
 - 21.5.7. Assure the user's manual contains all necessary information at the time of Project completion;
 - 21.5.8. Assign a delivery confidence rating to the item(s) being reviewed;
 - 21.5.9. Once the audit recommendations and none conformance reports (NCRs) are agreed these will be presented to the relevant forum(s), facilitating decisions on whether the Project or sub-project can proceed and move to the next phase;
 - 21.5.10. Review whether the recommendations have been implemented and NCRs have been corrected by the relevant contractor;
 - 21.5.11. If an audit was carried out by the monitoring company (appointed by the MOT and MOF), assure that their comments and NCRs were amended as required;
 - 21.5.12. Any repetitive review of NCRs and corrective actions shall form part of this report;
 - 21.5.13. Any additional activities needed for fit-out and installation audits.
- 21.6. Manufacturing and/or procurement shall include all items which are manufactured by the supplier and delivered by it (in Israel or abroad), such as:
- 21.6.1. M&E equipment (if installed by the supplier this will fall under the category described in Sub-Clauses 21.4-21.5 above);
 - 21.6.2. Rail systems equipment (if installed by the supplier will fall under the category described in Sub-Clauses 21.4-21.5 above);
 - 21.6.3. Rolling stock;
 - 21.6.4. Any other such item.
- 21.7. Manufacturing and/ or procurement products and processed to be assured and audited by the TAT include but are not limited to:
- 21.7.1. Be present at the manufacturing plant to ensure:
 - (a) Materials used are in accordance with the specifications, standards and drawings;
 - (b) Manufacturing process is carried out in accordance with the relevant international standards and as specified in the contract;

- (c) FAT is being carried out in accordance with the specifications and standards.
- 21.7.2. Assure shipment to Israel is carried out in a professional manner (insurance, export permits, shipping documents, requirements, etc.) and in accordance with good industry practice to include delivery from port to site;
- 21.7.3. Assure the equipment arrives in Israel and to the site unharmed;
- 21.7.4. Assure on-site installation (either on the equipment or of the equipment) is carried out in accordance with the specifications, drawings, interface log and plan and standards (and in accordance with Sub-Clause 21.5 above);
- 21.7.5. Review the “as built” drawings of the equipment;
- 21.7.6. Assure the sequence of manufacturing and installation is in accordance with the agreed schedule, milestones and sequence (PAO to lead this part of the audit);
- 21.7.7. Examine Project expenditure to ensure it is in accordance with the agreed upon cash flow and budget and the payments made are in accordance with the works carried out (PAO to lead this part of the audit);
- 21.7.8. Assure that the user’s manual contains all necessary information at the time of Project completion;
- 21.7.9. Assign a delivery confidence rating to the item(s) being reviewed;
- 21.7.10. Once the audit recommendations and none conformance reports (NCRs) are agreed these will be presented to the relevant forum(s), facilitating decisions on whether the Project or sub-project can proceed and move to the next phase;
- 21.7.11. Review whether the recommendations have been implemented and NCRs corrected by the relevant contractor;
- 21.7.12. If an audit was carried out by the monitoring company (appointed by the MOT and MOF), assure that their comments and NCRs were amended as required;
- 21.7.13. Any repetitive review of NCRs and corrective actions shall form part of this report;
- 21.7.14. Any additional activities needed for manufacturing and/or

- procurement audits.
- 21.8. The testing and commissioning (T&C) products and processes to be assured and audited include but are not limited to:
- 21.8.1. Examine the testing and commissioning plan for the Projects and sub-projects, making sure it is fit for purpose and includes the required integration tests of the system;
 - 21.8.2. Assure that the testing plan complies with the requirements of the regulator permit to operate (PTO);
 - 21.8.3. Assure that the testing plan is fully functional to the Employer's design requirements;
 - 21.8.4. Assure the plan and tests comply with public relations and community involvement requirements;
 - 21.8.5. Assure the interfaces between the contractors participating in the tests while performing a multidisciplinary quality assurance role;
 - 21.8.6. Assure the schedule and duration of the tests is in accordance with the agreed upon time schedule (The PAO will lead this part of the audit);
 - 21.8.7. Assure the sequence of testing is in accordance with the schedule and milestones and in accordance with the sequence agreed (The PAO will lead this part of the audit);
 - 21.8.8. Assign a delivery confidence rating to the item(s) being reviewed;
 - 21.8.9. Once the audit recommendations and none conformance reports (NCRs) are agreed these will be presented to the relevant forum(s), facilitating decisions on whether the project or sub-project can proceed and move to the next phase;
 - 21.8.10. Review whether the recommendations have been implemented and that NCRs have been corrected by the relevant contractor;
 - 21.8.11. If an audit was carried out by the monitoring company (appointed by the MOT and MOF), assure that their comments and NCRs were amended as required;
 - 21.8.12. Any repetitive review of NCRs and corrective actions shall form part of this report;
 - 21.8.13. Any additional activities needed for testing and commissioning audits.

22. Quality Assurance of Operation and Maintenance (O&M)

- 22.1. For all audits, a technical auditing team and a technical auditing Team Leader with the relevant expertise and experience shall be selected to work with the Technical Auditing Manager and the Deputy Technical Auditing Manager to carry out the audit;
- 22.2. Review the operating plan and assure it is fit for purpose, in accordance with industry good practice and in accordance with the Employer and the regulator's requirements;
- 22.3. Review the maintenance plan and assure it is fit for purpose, in accordance with industry best practice and in accordance with the Employer and the regulator's requirements;
- 22.4. Review the security plan and assure it is in accordance with all regulations and requirements as instructed by the authorities and with the Employer's needs;
- 22.5. Review the operating and maintenance requirements and assure they are implemented in all the design stages (this audit will also be part of the design audits, see Clause 6 above);
- 22.6. Review and assure the development of the operational timetable for operation and examine the operational concept for each and every line;
- 22.7. Audit the training of the operator's staff (to include drivers, security staff, maintenance staff, etc.) and the training scheme. Assure the training scheme is in accordance with the standards and regulations as well as with industry best practice;
- 22.8. Audit the handover processes between the various contractors and the operator;
- 22.9. Assure that the operation of each line is in accordance with the approved plan;
- 22.10. Assure that the maintenance of each line is in accordance with the approved plan;
- 22.11. Assign a delivery confidence rating to the item(s) being reviewed;
- 22.12. Once the audit recommendations and non conformance reports (NCRs) are agreed these will be presented to the relevant forum(s), facilitating decisions on whether a Project or sub-project can proceed and move to the next phase;
- 22.13. Review whether the recommendations have been implemented and NCRs have been corrected by the relevant contractor;
- 22.14. If an audit was carried out by the monitoring company (appointed by the MOT and MOF), assure that their comments and NCRs were

amended as required;

22.15. Any repetitive review of NCRs and corrective actions shall form part of this report;

22.16. Any additional activities needed for O&M audits

23. Method

23.1. Quarterly and yearly work plans shall be agreed in advance. A yearly work plan shall be submitted 2 months before implementation of the works. A quarterly work plan will be confirmed one month before implementation, and will conform to the yearly work plan. The Yearly work plan provides the basis for estimating the total resources required to deliver the project and the mobilization program.

23.2. For each audit, a time frame will be agreed prior to the commencement of the audit, in accordance with the time schedule attached to the this Agreement as Appendix 3. The agreed completion date will be the date for the final report to be handed over to the Employer.

23.3. The final report submitted to the Employer will include only the open items to which the audited party did not agree. All comments are to be reviewed with the audited party prior to the issuance of the final report and either closed (and amended in the documents/design/ on site/ factory, etc.), agreed or disagreed. Where such comments were disagreed, the Consultant will provide the reasons for the disagreement and seek the Employer's decision.

23.4. Corrective actions will be taken by the audited party, and such actions shall be reviewed by the Consultant. Once all actions have been taken and all comments and/or non-compliance and/or NCRs corrected and the Consultant review and provide a report that such actions were carried out, the audit shall be deemed to have been completed.

23.5. Where process audits are carried out, the Consultant will recommend changes to the process when and if needed. If the process affects other processes, then changes to other processes shall be suggested as a consequence.

23.6. Software:

23.6.1. The Employer has chosen to work in the IBM Rational DOORS system to manage requirements.

23.6.2. The Consultant will be required to perform all audits to compliance with the requirements in Projects and sub-projects in DOORS.

23.6.3. Reports are to be created through DOORS

23.6.4. Any other reports provided will be provided to the

Employer using Microsoft office tools.

- 23.6.5. Time schedule audits – the Employer is working with Primavera software and TILOS. The Consultant will be required to use these software tools.

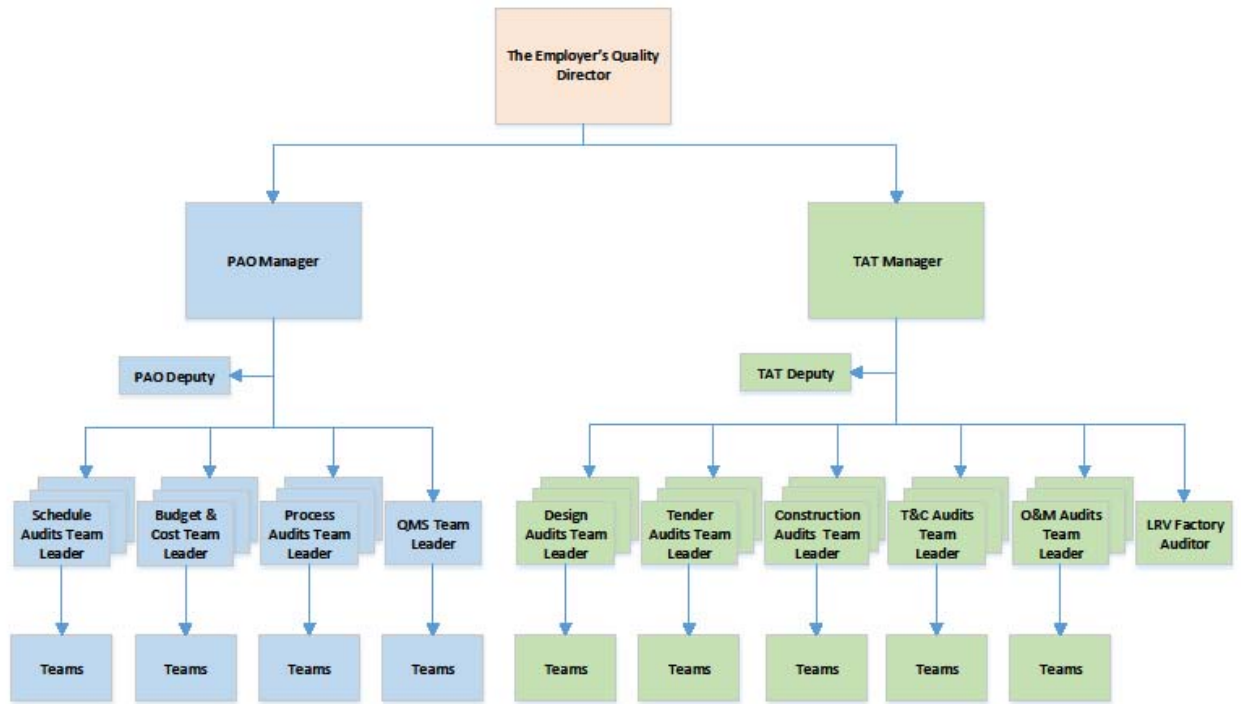
24. Deliverables

- 24.1. Conduct working meetings with the Employer, PMCs, designers and the Employer's consultants as needed.
- 24.2. PAO set up to include assurance teams and assurance team leader recruitment.
- 24.3. QMS Set Up.
- 24.4. Technical audit team and technical audit Team Leader recruitment and set up.
- 24.5. Initial reports:
- 24.5.1. Shall be provided in accordance within the time period agreed upon for each audit, in accordance with the Appendix 3 of this Agreement.
- 24.5.2. The initial report shall include as a minimum:
- (a) Assumptions made during the audit (if applicable);
 - (b) Initial comments regarding the audited subject, including any non-compliance and NCRs found;
 - (c) Level of such findings (“minor” or “major”);
- 24.5.3. Meetings, workshops and discussions will be held with the audited party to review this initial report;
- 24.5.4. The audited party will correct the agreed upon items and/or non-compliance items and/or the NCRs.
- 24.6. Final reports:
- 24.6.1. Will be submitted in accordance with the time period agreed for each audit in accordance with the Appendix 3 of this Agreement;
- 24.6.2. Will be submitted after all meetings with the audited party have been completed and corrective actions taken by that party. The Consultant will review that the agreed upon corrective actions have been taken;
- 24.6.3. The final report will include all items that were not corrected during the period of the report as well as those items which were not agreed upon with the audited party;
- 24.6.4. The final reports shall contain as a minimum:
- (a) Description of the work reviewed and audited;
 - (b) Audit results/outcome;

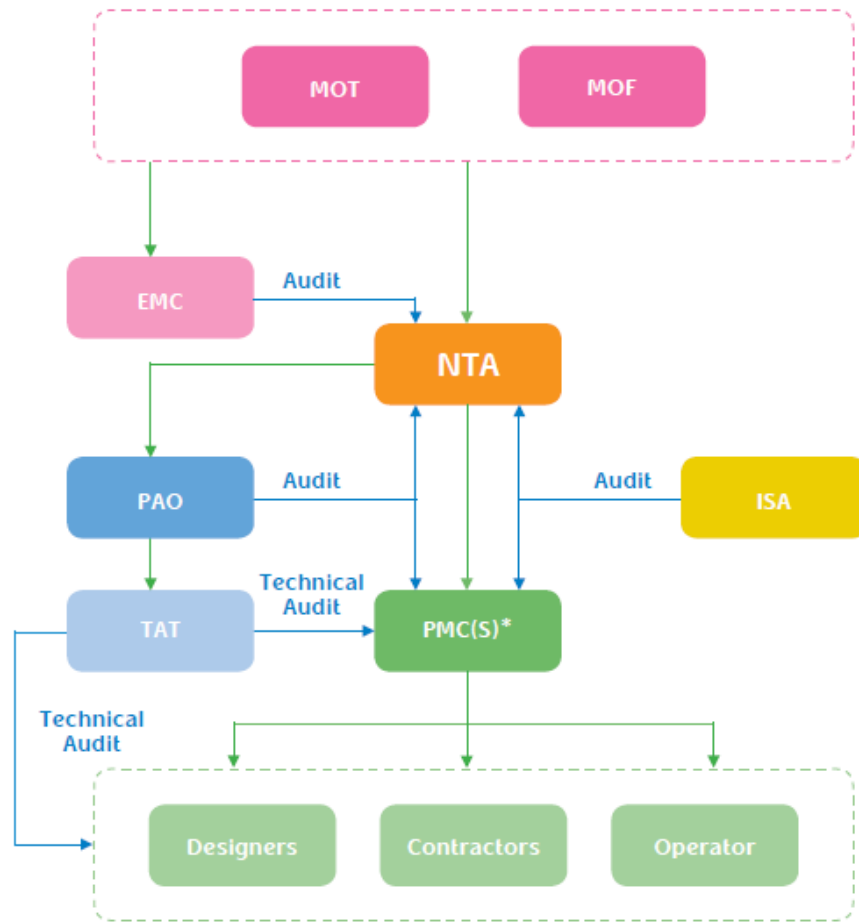
- (c) NCRs or non-compliance items identified in the audit. Where such NCRs or non-compliance items were amended during the report, this shall be mentioned in the report;
 - (d) Where a process audit is carried out, suggest changes to the process and affected processes where needed;
 - (e) Each finding will be described as “no comment” “minor” or “major” as a measure of the need to correct it;
 - (f) Suggested root causes and effective ways to correct nonconforming items;
 - (g) Where needed, decisions will be made on how to proceed and what actions are to be taken by the audited party;
 - (h) Repetition of the audit shall be carried out to verify that the corrective actions taken were effective.
- 24.7. Provide quarterly assessments of each Project and Sub-project in accordance with the reports provided and Non-conformance Report.
- 24.8. Any other report requested by the Employer.

Below are schematic charts presenting the various roles described above.

A. The Consultant Roles:



B. The Consultant, PMC(s) and Suppliers relationships:



*As part of the PMC's responsibilities auditing and assurance is to be carried out.

C. Roles and Responsibility Matrix:

The completion of the Matrix has to be performed by the PAO and approved by the Employer during the phase of preparation of the procedures

Activity	International PMC	Local PMC	PAO	TAT	EMC	ISA
Government's program assurance of NTA						
Monitor performance of the Employer across the whole program on behalf of the MoF and MoT					X	
Assure that all major tenders are carried out in accordance with national					X	

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
procurement standards						
Audit project payments					X	
Audit progress against the delivery timetable					X	
Ensure that the Employer has appropriate assurance, risk and safety processes in place					X	
Contractual roles						
Engineer under the Contract until the international PMC becomes the PMC of the entire project		X				
Engineer under the Contract after the international PMC becomes the PMC of the entire project	X					
Engineer's Assistant, with assigned duties and delegated authority from the Engineer (International PMC)		X				
Tendering process						
Assist Employer with tender preparation, tender approval, tender evaluations, etc.	X					
Assist Employer with tender preparation, tender approval, tender evaluations, etc. for the components that are under the local PMC's responsibility		X				
Provide quality checks on the Employer's tender preparation, tender			X			

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
approval and tender evaluation process						
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Assuring tender and procurement processes and procedures meet the Employer's technical requirements				X		
Engineering and Design Management						
Scope and Definition Management with overall view and consideration of the project	X					
Design Review with overall view and consideration of the project	X					
Engineering and Design Management with overall view and consideration of the project	X					
Engineering and Integration Management with overall view and consideration of the project	X					
Configuration Management with overall view and consideration of the project	X					
Engineering Assurance with overall view and consideration of the project	X			X		
Safety Assurance & Safety Case Management	X			X		

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
with overall view and consideration of the project						
Scope and Definition Management for the components that are under the local PMC's responsibility		X				
Design Review for the components that are under the local PMC's responsibility		X				
Engineering and Design Management for the components that are under the local PMC's responsibility		X				
Engineering and Integration Management for the components that are under the local PMC's responsibility		X				
Configuration Management for the components that are under the local PMC's responsibility		X				
Engineering Assurance for the components that are under the local PMC's responsibility		X		X		
Safety Assurance & Safety Case Management for the components that are under the local PMC's responsibility		X		X		
Run internal design and engineering management process performance audits			X			

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
Assuring design quality and engineering specifications achieve minimum agreed standards at each stage of the program across all projects and engineering deliverables			X	X		
Ensure that measures are in place to coordinate and integrate engineering and design across the different lines and that common standards, systems, processes, products etc are adopted			X	X		
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Overall Project Management						
Project management and the monitoring of the local PMC	X					
Ensure Contractor's compliance with project specifications, schedule, cost, and quality		X				
Arrange and chair start-up meetings	X					
Run internal project management process performance audits			X			
Assure all project management systems are in place and meet client requirements			X			
Assure that overall program management			X			

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
controls are properly implemented						
Assure that there are adequate measures in place to ensure that the different lines are managed in an integrated way and potential areas of conflict are identified and managed by the individual line PMCs and their contractors			X			
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Project Controls						
Review the Contractor's daily, weekly, monthly work plan		X				
Provide comments on the Contractor's baseline schedule		X				
Review baseline schedule for conformity to specific logic, task duration, critical activities, submittal review periods, etc. with overall view and consideration of the project	X		X	X		
Review baseline schedule for conformity to specific logic, task duration, critical activities, submittal review periods, etc. for the components that are under the local PMC's responsibility		X				
Run internal project control process			X			

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
performance audits						
Assure that every PMC and each line has in place effective control systems that meet client requirements			X			
Ensure that there are effective project controls in place to coordinate and manage integration across the different lines			X			
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Commercial Management						
Monitor and manage budget, change and commercial reporting with overall view and consideration of the entire Red Line project	X					
Monitor and manage budget, change and commercial reporting for the components that are under the local PMC's responsibility		X				
Check Contractors' monthly invoices and forward with recommendation to International PMC		X				
Review and process Contractors' monthly invoices with overall view and consideration of the entire Red Line project	X					

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
Manage Variations and Claims with overall view and consideration of the entire Red Line project	X					
Review and process Contractors' monthly invoices for the components that are under the local PMC's responsibility		X				
Manage Variations and Claims for the components that are under the local PMC's responsibility		X				
Keep detailed records of all claim and potential claim events.		X				
Review and make recommendation to International PMC on all claims and Contractor's requests for variations		X				
Run internal commercial management process performance audits			X			
Assure that the commercial management systems that are being operated by each of the PMC's meet client requirements and are fit for purpose			X			
Assure processes are in place to manage any commercial issues that arise between different lines and PMC's			X			
Interface and Integration						

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
Management						
Monitor Contractor's Interface and Integration Management and assist with stakeholder approval's etc.		X				
Monitor overall permit/approval progress		X				
Coordinate PTO and handover to Operator and Maintenance Contractor	X					
Access and possession planning	X					
Assist International PMC with coordinating access and possession planning		X				
Run internal interface and integration management process performance audits			X			
Assure that interface and integration processes are effectively managed and meet client requirements			X			
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Risk Management						
Manage project risk management with overall view and consideration of the entire Red Line project	X					
Manage project risk management for the components that are under the local PMC's responsibility		X				

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
Participate in risk managment meetings		X				
Run internal risk management process performance audits			X			
Assure that appropriate risk management systems are in place and are being implemented effectively to meet client requirements			X			
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Information Management and Document Management						
Provide information management and document management systems	X					
Ensure compliance with information management and document management systems		X				
Run internal information management and document management process performance audits			X			
Assure on behalf of the client that effective document management systems are in place and are being implemented adequately to meet client requirements			x			
Conformity assessment with regards to safety as						X

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
laid down in the Assessment Plan						
Construction Supervision						
Monitor and record Contractor's activity		X				
Perform inspections and construction administration		X				
Review and forward with recommendation to International PMC all Contractor's submittals		X				
Provide comments or Statement of No Objection Review to Contractor's submittals, as appropriate	X					
Undertake constructability reviews		X				
Review and forward with recommendation to International PMC all Contractor's construction methodologies		X				
Provide comments or Statement of No Objection to Contractor's construction methodologies, as appropriate	X					
Run internal construction supervision process performance audits			X			
Assuring construction and testing phases meet agreed technical standards and ensuring integrity of the construction and testing				X		

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
carried out at each stage of the Program across all projects and deliverables						
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Communications Control						
Respond to correspondence, reports to Contractors within the local PMC's delegated authority level		X				
Inform and forward reports to the International PMC on issues not within the Local PMC's delegated authority level		X				
Conduct meetings to highlight and resolve issues and hold weekly meetings to determine construction progress and quality of works.		X				
Organise Contractor's monthly progress meetings/presentations covering all disciplines		X				
Review Contractor's monthly contract progress report, prepare local PMC's contract progress report and submit to International PMC		X				
Incorporate contract progress into International PMC's Monthly Report to the	X					

Activity	International PMC	Local PMC	PAO	TAT	EMC	ISA
Employer.						
Review correspondence, reports, and meeting minutes and offer guidance and comments to the Local PMC, if required or requested.	X					
Run internal communications control process performance audits			X			
Assure that effective communication systems are being operated by all PMCs in line with client requirements			X	X		
Assure that effective communication controls are integrated across all lines			X	X		
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Change Control						
Review any change proposed	X					
Prepare an estimated valuation for any potential change	X					
Assist with International PMC review and assessment of significant potential change which influences the entire project		X				
Provide review and assessment of potential change for the components that are		X				

Activity	International PMC	Local PMC	PAO	TAT	EMC	ISA
under the local PMC's responsibility						
Run internal change control process performance audits			X			
Assure that the control measures being operated by each PMC are adequate and meet client requirements			X	X		
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Procurement Control						
Prepare a Critical Materials List and Employer-furnished materials/equipment list and submit to International PMC		X				
Analyse the procurement schedule to ensure lead times are adequate	X					
Analyse the procurement schedule to ensure lead times are adequate for the components that are under the local PMC's responsibility		X				
Review and forward recommendations to International PMC on material submissions		X				
Provide comments or Statement of No Objection to Contractor's construction methodologies	X					
Run internal procurement			X			

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
control process performance audits						
Assure that PMCs have effective procurement controls in place			X	X		
Request for Information (RFI)						
Respond to the Contractor's RFI		X				
Inform the International PMC if the RFI involves issues outside the Local PMC's delegated authority level		X				
Respond to the Contractor's RFI which concern issues outside the Local PMC's delegated authority level	X					
Monitor the RFI process to ensure that RFIs are resolved	X					
Run internal Request for Information process performance audits			X			
Assure that RFI processes are managed and executed effectively in accordance with client requirements			X			
Handover Requirements						
Review and verify as- built and O&M documentation	X					
Provide comments on as- built and O&M documentation	X					
Run internal handover			X			

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
process performance audits						
Assuring operation and maintenance plans comply with the clients requirements				X		
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
Quality Assurance/Quality Control (QA/QC)						
Provide, manage and maintain the Project Quality Management System (QMS) defining the minimum standards and systems to be followed, outlining roles and responsibilities with regard to the delivery management and enforcement of project quality	X					
Enforce all QA/QC activities concerning implementation of the Contractor's Quality Plan, method statements, and inspection and test plans (ITPs)		X				
Witness critical inspection and testing activities		X				
Conduct audits, including random witnessing of various QC inspections and tests conducted on site, to ensure quality oversight is being	X					

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
administered on the Contractor's work and documented accordingly.						
Conduct audits of the Contractor's QC		X				
Initiate a Non-conformance Report (NCR) on any nonconforming item		X				
Support the Employer in planning and coordinating quality assurance activities			X			
Support the Employer in coordination of quality assurance activities with external parties including the Government of Israel and the Monitoring company on its behalf			X			
Audit and provide assurance on technical processes and products throughout the lifecycle of the Projects and the Program.				X		
Conformity assessment with regards to safety as laid down in the Assessment Plan						X

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
Health, Safety, Security and Environmental (HSSE)						
Provide, manage and maintain a HSSE Management System (as part of the QMS) defining the minimum standards and systems to be followed, outlining roles and responsibilities with regard to the delivery management and enforcement of project safety	X					
Provide advice and guidance on HSSE issues	X					
Enforce HSSE policies on site.		X				
Provide reports to the International PMC on all accidents, incidents and near misses		X				
Run internal healthy, safety, security and environmental management process performance audits			X			
Assuring design quality and engineering specifications achieve minimum agreed HSSE standards at each stage of the program across all projects and engineering deliverables				X		
Training						
Monitor handover training conducted by the Contractor to Employer's operations and		X				

Activity	Intern ational PMC	Local PMC	PAO	TAT	EMC	ISA
maintenance personnel.						
Conformity assessment with regards to safety as laid down in the Assessment Plan						X
