




Yearly Report

January 2015 - December 2015

IDENTIFICATION

Doc ID	Project	Entity	Line	Package	Doc. Type	Chrono Nb	Version
Code :	8162	ERA	COM	CMN	YRP	120265	A

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Monitoring Services for the Tel Aviv Mass transit Network

PURPOSE

EMC Yearly Report - This report incorporates the work have been made by the EMC team in the period between January 2015 and December 2015.

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1. EXECUTIVE SUMMARY

EMC Yearly Report for the year of 2015 as per EMC Contract.

This Yearly Report summarizes actions undertaken by Egis-Rail during January-December 2015, includes short brief of the year activities and detailed summary of December 2015 as part of the monthly report.

The year plan includes subject such as:

- **Tenders** - Continue working with NTA on promoting the various tenders (including tender reports readiness) of the Red Line projects, with emphasize on the System (SDAG) aspects of the Red Line including conducting seminars and several meetings with NTA. In addition, intensive work was carried out in relations with the O&M tender whose publication was postponed for 2016 due to non-preparedness of the tender during 2015.
- **Schedule** – During the year a spotted examination of schedule have been made to the overall Red line. A new version of the schedule, (10.5) was published during October 2015 and a final report intended to be submitted during next period (Q1 2016).
- **Budget** - During the year NTA didn't made major changes in the budget. EMC continued its discussion with NTA, about the challenges in the development budget and cash flow, though no formal submittal from NTA during 2015. Most of the effort of the team was about the financial models of the tenders.
- **Bills/account control** – Continued examination of the various NTA project account, and an emphasis on making the correct accounting procedures. This year the amount of the bills raised due to the progress of the tender and the works of the various Red line sub-project (Depot, Shenkar, TBM, etc...)
- **BRT** - EMC reviewed NTA's activities and work on Blue, Orange, Fast Red line and preference axis (partly embedded in Blue line) during the year. NTA was awaiting revised MoT guidelines for BRTs.

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2. MAIN YEARLY ACTIVITIES

During the last 12 months we undertook actions mainly on the following topics, per package and per dedicated cross project aspects:

2.1 Tunnelling and UG works

- **Turkish Alignment**

During the 1st half EMC was asked to monitor the Turkish Alignment technical options. During the process NTA presented alternatives (TBM Vs. C&C). Later, due to Tel-Aviv municipality's abandonment of its financial commitment to a road tunnel integrated into the cut and cover section NTA has produced a multi-criteria analysis of the possible options it should pursue for this segment of the Red line. NTA has submitted this document to EMC for comments and review. A report about this issue was submitted on the beginning of the 3rd quarter. Up to the end of the year NTA didn't submit any update dossier to EMC.

- **TBM and Boxes West Package & Carlbach BOX**

- During the 2nd half of the year NTA intended to submit an NTP for the package. Part of this process EMC had discussion with NTA on the stipulation/Risk Assessment to award commence works in Tel Aviv during 08/2015.
- EMC began its sites visits to the TBM+boxes sites during the 3rd quarter of the year per the contractual obligation.

- **TBM and Boxes East Package**

NTA Continue its process of selecting a concessionaire during the year. No major Inputs of EMC on this.

2.2 System, Depot at Grade & Shankar Portal

SDAG (SDAG+M) - EMC continued discussion & meeting with NTA regarding the readiness of the tender. During the 1st quarter a global review on the tender (including workshop) done and the correspondences between NTA & EMC was analysed by the experts of EMC

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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- **Depot & Portal Shankar**

EMC continued its visits in the sites according to the contractual obligation during the year to evaluate the progress of the works.

2.3 O&M Tender

EMC starts its evaluation process of the tender during the 1st quarter of the year. A very intensive work has been done and still going on due to the expected strategy set up by NTA in this matter on procurement, financial and technical aspects.

2.4 QA Tender

In the 1st half of the year EMC held several reviews and meeting with NTA on this tender which introduced the concept of work. After few meetings EMC and NTA converged on the scope of services which is particular and not so common in Europe. Nevertheless EMC emphasize NTA's attention on the fact that NTA will play a key role in this matter.

2.5 Local PMC

EMC has supported the promotion of a tender in terms of budget, organizational structure and other administrative issues. During the 1st half the tender was published and selected two management companies.

EMC was not involved in the decision about the identity of the international PMC's. Tender process was not made during the year and is apparently going to be decided upon 2016.

2.6 Schedule

Version 10.3/10.4 were submitted during the year but due to several changes in the tenders and postponement of some of the tenders (Turkish alignment & fit out of underground stations as example), only a spotted examination of schedule have been made to each individual project. A new version of the schedule, (10.5) was published during Oct 2015 and a final report intended to be submitted during next period (Q12016).

2.7

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted]

[Redacted]

2.8 Network

Master plan projects status presentation of the future LRT line were held – Green, Purple, Yellow and Brown, The meeting includes a Presentation of the context of each of the project and its special specific settings.

The work is directed towards a summary report to the GOI that will be submitted in Q1 2016 after a finalizing presentation by NTA on network and operation considerations.

2.9 BRT

During the 1st quarter EMC performed the following:

- Orange Line BRT – Update of project report and follow up of the advancement.
- Blue Line BRT – Update of project & status meeting with NTA

During the year EMC has identified existing accounting activities as part of BRT's projects, however, despite the repeated requests, NTA did not forward any engineering information regarding the progress of these projects. During of the 4th quarter of the year, EMC requested to have formal meetings with NTA to have an update on the progress of the projects due to revision in MoT guidelines.

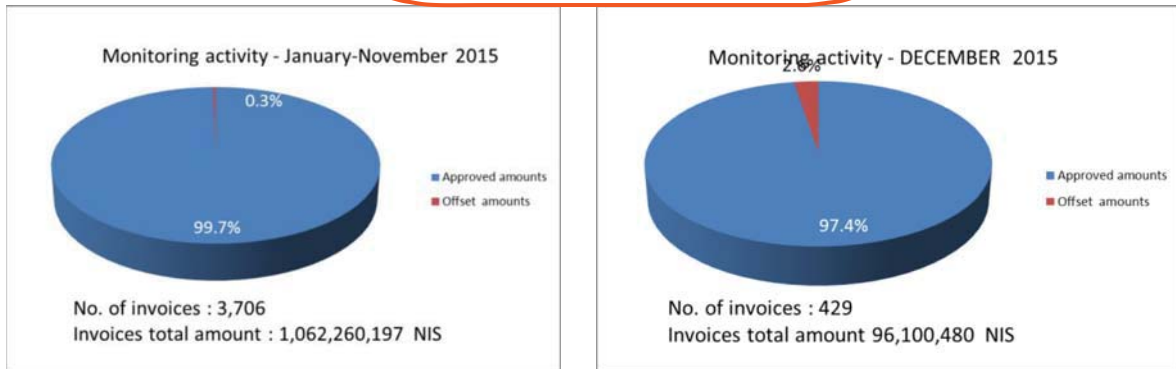
2.10 Bills/account s control

The 2015 period was characterized in extensive examination process of large and complex projects (Shankar, TBM West, Depot, etc...) in which integrative exam was needed by the billing monitoring team. In this year EMC received a large quantity of bills for approving which required a great investment of inputs.

[Redacted]

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Here is some data of the year certificate accounts with several statistics:



	Invoices (No.)	Invoices (NIS)	Average (No. per month)	Average (NIS per month)
2012	2,174	0	217	28,657,784
2013	2,121	379,126,965	177	31,593,914
2014	2,752	435,744,866	229	32,484,467
Jan-Nov 2015	3,706	1,062,260,197	335	96,543,532
December 2015	429	96,100,480	429	109,166,422
Total	11,182	1,973,232,508	227	37,585,606

2.11 Organization

During the year NTA has stabilization of the organizational structure and the recruitment of managers in various ranks of the organization. EMC had several meetings with the new management along the year for having a deep understanding; and coordinating the expectations towards the mutual work during the upcoming years.

2.12 General issues

EMC had discussion and work meeting with NTA & GOI regarding 2 important issues:

- Representing NTA agenda for the security concept of the Red line. This issue discussed during the 2nd half.

- [Redacted text]

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3. MEETINGS HELD

Date	subject
01.01.2015	Bills / Accounts monitoring
08.01.2015	RED LINE OPERATION
08.01.2015	NTA QA current practice
19.01.2015	SDAG Tender Readiness
20.01.2015	QA Tender - Meeting with Egis
20.01.2015	Status meeting - EMC+ NTA
29.01.2015	PB Consultant Tasks
05.02.2015	O&M Tender - PQ dossiers review
11.02.2015	SDAG Tender - Final Review
19.02.2015	Presentation for State reps last December 2014
02.03.2015	Bills / Accounts monitoring
08.03.2015	Weekly Status meeting
11.03.2015	Loacl PMC Tender
16.03.2015	Loacl PMC Tender
18.03.2015	site visit- galei gil
18.03.2015	site visit-portal shenkar
18.03.2015	site visit-Depot
18.03.2015	site visit- Em Hamoshavot
18.03.2015	Red Line - local PMC tender
01.04.2015	Weekly Status meeting
16.04.2015	QA Tender
20.04.2015	Lessons learned with the monitoring company
27.04.2015	Em'Hamoshavot Box - clarifying on the development agreement
27.04.2015	Kiryat Arye Terminus meeting
29.04.2015	site visit-E'm Hamoshavot
29.04.2015	Turkish Alignment - NTA / Egis
29.04.2015	Weekly Status meeting
30.04.2015	NTA Annual Work Plan
02.05.2015	Turkish Alignment
12.05.2015	NTA organizational structure Review+ Egis rail CEO
13.05.2015	Weekly Status meeting
18.05.2015	LOCAL PMC Tender RFT
21.05.2015	LOCAL PMC Tender RFT
27.05.2015	Weekly Status meeting

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Date	subject
15.06.2015	Carlebach RFT / with Egis
18.06.2015	Mekorot Pipe line report review with NTA
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
08.07.2015	Presentation of 9 UG stations design-Fit-Out tender's main charac
09.07.2015	TBM & UG stations WEST contract
03.08.2015	Weekly Status meeting
17.08.2015	Weekly Status meeting
20.08.2015	Red line electrification presentation
24.08.2015	SDAG RFT
27.08.2015	FW: SDAG Tender
31.08.2015	Weekly Status meeting
03.09.2015	NTA safety case procedure meeting
07.09.2015	(VC) O&M Tender RFI doc
10.09.2015	Weekly Status meeting
24.09.2015	Financial issues- SDAG
[REDACTED]	[REDACTED]
28.09.2015	Weekly Status meeting
12.10.2015	Weekly Status meeting- Illy Toiber
14.10.2015	work site visit by egis - Gali gil
14.10.2015	work site visit by egis - Bialik
14.10.2015	work site visit by egis - Abba Hillel
14.10.2015	work site visit by egis - Arlozorov
14.10.2015	work site visit by egis - King Saul
14.10.2015	work site visit by egis - yehudit
14.10.2015	work site visit by egis - Carlisah
14.10.2015	work site visit by egis - Allenby
[REDACTED]	[REDACTED]
02.11.2015	SDAG Tender RFT
05.11.2015	Preservation of transport routes at Carlisah station during works
05.11.2015	BRT Status
09.11.2015	PB/EGIS Meeting
11.11.2015	Weekly Status meeting
18.11.2015	Introductory meeting-Yair Shamir - Egis rail

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Date	subject
02.12.2015	Weekly Status meeting
02.12.2015	Red line tunneling update meeting
08.12.2015	O&M Financial issues
09.12.2015	NTA O&M - local team meeting with EMC
10.12.2015	Weekly Status meeting
10.12.2015	O&M - rediness for tender report
14.12.2015	PB's monthly report / with Egis
14.12.2015	Design status of future LRT lines - brown line
14.12.2015	Design status of future LRT lines - Perple line
15.12.2015	Design status of future LRT lines -yellow line
16.12.2015	Design status of future LRT lines - green line
17.12.2015	O&M Tender
23.12.2015	Weekly Status meeting

3.2 Weekly Status Meetings/Limited forum/GOI-NTA meetings

Date	subject
01.01.2015	Weekly Meeting - GOI +EMC representatives
05.01.2015	NTA Tenders Review
08.01.2015	Weekly Meeting - GOI +EMC representatives
11.01.2015	Open issues related to accounts monitoring
22.01.2015	Weekly Meeting - GOI +EMC representatives
12.02.2015	Weekly Meeting - GOI +EMC representatives
05.03.2015	Weekly Meeting - GOI +EMC representatives
19.03.2015	Weekly Meeting - GOI +EMC representatives
16.04.2015	Weekly Meeting - GOI +EMC representatives
22.04.2015	SDAG tender readiness cont.
30.04.2015	Weekly Meeting - GOI +EMC representatives
05.05.2015	Weekly Meeting - GOI +EMC representatives
17.05.2015	Weekly Meeting - GOI +EMC representatives
21.05.2015	SDAG - meeting with Moshe Amsalem from MOT
18.06.2015	Weekly Meeting - GOI +EMC representatives
18.06.2015	Maintenance of systems In the O&M Tender
02.07.2015	Weekly Meeting - GOI +EMC representatives
16.07.2015	Weekly Meeting - GOI +EMC representatives
22.07.2015	NTA Security Consultants meeting
29.07.2015	Workshop O&M
30.07.2015	Workshop SDAG
08.09.2015	Estimates mass transit network in Tel Aviv
21.12.2015	Implementing quality procedures in infrastructure company - MOT

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3.3 EMC GOI MEETINGS

Date	subject
07.01.2015	The Pink Line Project
21.01.2015	PMC models
21.01.2015	Gush Dan Mass Transit Forum
25.01.2015	light rail steering committee
05.02.2015	Monitoring NTA - GOI+EMC
18.02.2015	Gush Dan Mass Transit Forum
22.02.2015	light rail steering committee
11.03.2015	L&L - Account/Bills monitoring
18.03.2015	monitoring NTA
20.03.2015	monitoring NTA
30.04.2015	SDAG Tender RFT
10.05.2015	SDAG Tender - open issues
12.05.2015	GOI representative+CEO Egis Rail meeting
14.05.2015	SDAG Tender RFT
17.05.2015	light rail steering committee
21.05.2015	Red line cash flow
31.05.2015	Information System feeds of monitoring companies
01.06.2015	Red Line Tenders -Work meeting with MOT
07.06.2015	light rail steering committee
08.06.2015	Red Line Tenders -Work meeting with NTA financial Advisors
17.06.2015	Gush Dan Mass Transit Forum
21.06.2015	light rail steering committee
29.06.2015	Mekorot Pipe line report review with Yariv Nehama
19.07.2015	Gush Dan Mass Transit Forum
09.08.2015	MOT Report's Formats
19.08.2015	Status of the red line - schedule and Budget meeting
23.08.2015	Monitoring NTA - GOI+EMC
03.09.2015	NTA safety case Prior meeting
08.09.2015	SDAG Tender RFT
09.09.2015	Gush Dan Mass Transit Forum
14.10.2015	Introducing meeting - Alon Messer- MOF
08.11.2015	light rail steering committee - SDAG Tender
08.11.2015	MOT Report's Formats
19.11.2015	Introductory meeting / NTA monitoring
19.11.2015	monitoring NTA - shani radman + denis colrat
25.11.2015	Gush Dan Mass Transit Forum
06.12.2015	light rail steering committee
14.12.2015	State Comptroller's office, about Ministry of Transp et

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4. REPORTS PUBLISHED IN THE YEAR

At the completion of the year the following reports have been produced within the period:

- **General Reports:**

Date	File Name	Issue
01.06.2015	8162_ERA_RED_CMN_MER_120236_05.05.2015	Weekly Meeting Summary
02.04.2015	8162_ERA_COM_CMN_TRA_120232	Review of the Tel Aviv Transport Master Plan update
03.08.2015	EMC July 2015 Monthly status report for NTA monitoring	EMC's Monthly report
04.11.2015	8162_ERA_RED_CMN_MOM_120244 - 15 11 2 סיכום דיון	Weekly Meeting Summary
06.07.2015	8162_ERA_RED_CMN_MER_120244_18.06.2015	Weekly Meeting Summary
06.07.2015	8162_ERA_RED_CMN_MOM_120240	Weekly Meeting Summary
10.06.2015	8162_ERA_RED_CMN_MRP_120246_A - May 2015.pdf	EMC's Monthly report
15.07.2015	8162_ERA_RED_CMN_QRP_120243_A	EMC Quarterly Report N°1- Jan-Mar 2015
15.07.2015	8162_ERA_RED_CMN_MRP_120245_A	EMC's Monthly report
15.07.2015	8162_ERA_RED_CMN_MRP_120246_A	EMC's Monthly report
15.07.2015	8162_ERA_RED_CMN_QRP_120247_A	EMC Quarterly Report N°2 Apr-Jun 2015
17.11.2015	8162_ERA_COM_CMN_AUD_120257_Tel Aviv Mass Transit Project Master Plan Review	Tel Aviv Master Plan review update report
18.01.2015	8162_ERA_RED_CMN_MOM_120215 - 27.11.14	Weekly Meeting Summary
18.01.2015	8162_ERA_RED_CMN_MOM_120218 - 04.12.14	Weekly Meeting Summary
18.01.2015	8162_ERA_RED_CMN_MOM_120219 - 18.12.14	Weekly Meeting Summary
21.04.2015	8162_ERA_RED_CMN_MRP_120234_A - Feb 2015	EMC's Monthly report
23.02.2015	8162_ERA_RED_CMN_MRP_120225_A - Jan 2015.pdf	EMC Monthly reports Jan 2015
26.03.2015	8162_ERA_RED_CMN_MOM_120230 - 26.03.15.	Weekly Meeting Summary
28.01.2015	8162_ERA_RED_CMN_MRP_120222_A QA Tender Readiness	QA Tender Readiness Ver A
28.04.2015	8162_ERA_COM_CMN_YRP_120226_A.	EMC's Yearly report for 2014

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- **Red line Reports**

Date	File Name	Issue
20.05.2015	8162_ERA_RED_TOP_TRR_120229_C_Local PMC	Local PMC Tender Report Ver C
01.07.2015	8162_ERA_RED_CMN_TRP_120239_C	Review on the Mekorot Pipe Line aloocationg Ver C
03.05.2015	8162_ERA_RED_TOP_TRR_120229_B_Local PMC	Local PMC Tender Report Ver B
03.06.2015	8162_ERA_RED_CWS_TRP_120241	Risk Assessment for TBM West NTP with Partial Permitting
06.05.2015	8162_ERA_RED_CMN_MRP_120222_C QA Tender Readiness	QA Tender Readiness Ver C
06.09.2015	8162_ERA_RED_SYS_TRR_120149_G_SDAG Tender Readiness	SDAG tender readiness report Ver G
10.06.2015	8162_ERA_RED_CMN_MRP_120222_D_QA Tender Readiness	QA Tender Readiness Ver D - Update
11.06.2015	8162_ERA_RED_CWT_TRP_120242_A_Turkish alignment report	Turkish alignment report
14.10.2015	8162_ERA_RED_SYS_TRR_120149_G_SDAG Tender Readiness_Final	Tel Aviv LRT –Red Line SDAG+M Tender Readiness
16.12.2015	8162_ERA_RED_OPE_TRP_120266_A	Tel Aviv LRT- Key Principles of Red Line O&M Framework
18.06.2015	8162_ERA_RED_CMN_TRP_120239_B	Review on the Mekorot Pipe Line aloocationg Ver B
19.08.2015	8162_ERA_RED_CWT_TRR_120183_D_Carlebach Tender Readiness report_NTP version	Carlebach Tender ReadinessTel Aviv LRT Red Line –
19.08.2015	8162_ERA_RED_CWT_TRR_120183_D_Carlebach Tender Readiness report_NTP version	Carlebach Tender ReadinessTel Aviv LRT Red Line –
20.05.2015	Operation and Maintenance Tender for the Red Line - PQ RFT	EMC report of the O&M PQ stage tender readiness
21.07.2015	8162_ERA_RED_TPO_AUD_120248	EMC reference to apartment shielding manager Agreement
22.07.2015	8162_ERA_RED_CMN_MEM_120102_A	Red Line Logistic management report
25.03.2015	8162_ERA_RED_TOP_TRR_120229_A_Local PMC	Local PMC Tender Report Ver A
26.05.2015	8162_ERA_RED_CMN_TRP_120239_A	Review on the Mekorot Pipe Line aloocationg Ver A
26.11.2015	8162_ERA_COM_CMN_LTR_120258	EMC Letter regarding monitoring of bills in progress projects
28.05.2015	8162_ERA_RED_CMN_MRP_120222_D_QA Tender Readiness	QA Tender Readiness Ver D
31.08.2015	8162_ERA_RED_SYS_MOM_120251_A_SDAG Tender readiness financial aspects	Minutes of meeting SDAG Tender readiness-financial aspects
31.08.2015	8162_ERA_RED_SYS_MOM_120251_A_SDAG Tender readiness financial aspects	Minutes of meeting SDAG Tender readiness-financial aspects 30/08/2015

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- **Green line**

Several meeting with NTA have been done during the period but without any major progress.

- **BRT lines**

Non



- **Budget**

Generally speaking, a strong effort has to be undertaken by NTA in order to have a clear idea of the budget

EMC had asked to NTA to provide each 6 months a note explaining what the changes with a brief historical are. In this way the traceability can be easy to find. Nothing like this is performed. EMC is worry about this lack.

5. EMC CONTRACT UPDATE AND EXTENSION

During the year EMC has made change in some positions:

1. UG consultant Eng. Henning Schwarz was replaced by Andrew Bourget
2. Economic consultant Ruth Lowental was replaced by Peleg Zehevi
3. Françoise Guillerault is in charge of the O& M Tender review

And the contract has been amended by reducing BRT perimeter and increasing perimeter of tender review to the O&M contract.

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6. EMC YEARLY MOBILIZATION

During the past year EMC has mobilized not less than 13 experts (including PM) in all disciplines in the respect of the contract clauses. On average, about 5.5 expert days, and 11.5 PM days per month in Israel were performed in the last year.

Below, the summary of the yearly mobilization in Israel only is presented. Of course in addition to this mobilization, experts are also involved in back office mobilization to prepare their intervention during the meeting and after for writing their report. For many other subjects experts are regularly mobilized at the office for answering to the question of NTA or GOI.

name of expert	Discipline	Total number of days in Israel
JM ISSARTIER	PM Acting	136
Olivier Bouvert	Expert	3
philipe amat	Expert	7
Andrew Bourget	Expert	6
Denis Colrat	Expert	15
Paul Bergoin	Expert	4
Michael Leymarie	Expert	5
Molina Maria-Teresa	Expert	4
Dominique Hurbin	Expert	4
Yves Amsellem	Expert	3
Francois Brousseau	Expert	2
Guillerault Françoise	Expert	7
N.MOSSER	Expert	3
Total	13 Experts	199

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7. EMC ON GOING PLAN FOR THE NEXT QUARTER

The next quarter will be used for:

- Finalizing O&M tender.
- Finalizing Turkish Alignment alternative & tender readiness.
- Following the construction of Em Hemashavot
- Following the construction of Carlibach
- Following the construction of the depot.
- Following the construction of Shankar Portal.
- Following the construction of the West TBM areas focus on the UG stations.
- Following on the beginning of the East TBM area.
- Reviewing the progress of the BRT projects.
- Reviewing the progress of the additional LRT's projects.
- Participating at any meeting held by GOI and NTA.
- Finalizing review of Schedule 10.5
- Following the set-up of the QA contract