

**Agenda Notes
for
54th Meeting
of the
PROJECT SANCTIONING & MONITORING
GROUP-I
(PSMG – I)**

Venue:

**Conference Hall (Room No. 123-C)
Ministry of Urban Development
Nirman Bhawan
New Delhi**

**At
11:00 AM
on 27th January 2017**



**National Capital Region Planning Board
Ministry of Urban Development, New Delhi.**



**Agenda Items for the 54th Meeting of the
Project Sanctioning & Monitoring Group-I (PSMG-I)**

Agenda No.	Agenda	Page No.
1.	Confirmation of the Minutes of the 53 rd Meeting of the PSMG-I held on 19.1.2016	3
2.	ATR of 53 rd PSMG-I Meeting decisions	4
3.	Status Note on assistance by Asian Development Bank (ADB) and KfW (German Development Bank) to NCRPB	11
4.	New Project Proposals submitted to NCRPB with Loan Requests	
4.1	Rejuvenation of Amanishah Nallah (Dravyavati River) including Area Development in Jaipur City, Jaipur Development Authority (JDA)	19
4.2	ROB / RUB projects from JDA, Rajasthan	26
A	Construction of 6 lane ROB with LHS including Electrification work at L/C-211, Goner road, Dantli on JP-DLI Railway line in Jaipur	
B	Construction of 3 lane ROB parallel to existing Jhotwara ROB from Panchayat Bhawan/ SBBJ Bank to Ambabari T-junction, Jaipur	
C	Construction of Six lane ROB in lieu of LC-70, Sitapura on JP-SWM Railway line	
D	Construction of four lane road over bridge with limited height subway (LHS) in lieu of L.C.-200, Bassi Town, Jaipur	
E	Construction of Four Lane ROB in lieu of LC-102/2E, Jahota on Jaipur to Sikar Railway Line, Jaipur	
F	Construction of RUB on Jaipur-Sikar Railway Line near Bridge No. 107 to connect Anand Lok and Swapan Lok JDA Schemes, Jaipur	
4.3	Construction of Elevated Road from Sodala Tri-junction to LIC Office near Ambedkar Circle, Jaipur by JDA, Rajasthan	44
4.4	Extension of Metro Link from Mundka to Bahadurgarh, HMRTC, Haryana	49
4.5	Four Sewerage projects from PHED, Haryana	57
A	Providing renovation of existing 7 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Ganaur town in Sonipat district	
B	Providing renovation of existing 4.5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Kharkhoda town in Sonipat district	
C	Upgradation and renovation of existing 5 MLD STP based on MBBR technology followed by tertiary treatment in Samalkha town in Panipat district	
D	Upgradation of existing 5.5 MLD STP & 5 MLD STP (MBBR technology) followed by tertiary treatment & chlorination at Kosli Road & Sampla road respectively alongwith some balance pipeline laying, Jhajjar town	



Agenda No.	Agenda	Page No.
4.6	Strengthening of Sub-transmission & distribution network including metering in Jhajjar, Rohtak, Panipat & Sonipat Circles of Haryana (under IPDS) by UHBVN	69
5.	Review of projects financed by NCRPB	76
5.1	Request for extensions of completion dates of projects	84
6.	Noida Metro Rail Corporation(NMRC) request for waiving off condition of submitting Tripartite Escrow Agreement and to accept the bank guarantee issued by Noida & Greater Noida Industrial Development Authorities on behalf of NMRC for drawal of loan amount from NCRPB.	85
7.	Extension of time period on the Study for “Creation and Updation of Landuse for Review of Regional Plan 2021 for National Capital Region (NCR)” through National Remote Sensing Centre (NRSC), Department of Space, Govt. of India	86
8.	Creation and Updation of Regional Land use for the six additional districts of NCR	90
9.	Consultancy Study on Economic Profile of NCR, undertaken by the Board	110
10.	Any other item with permission of the Chair	



Agenda Item No. 1: Confirmation of the Minutes of the 53rd Meeting of the PSMG-I held on 19.1.2016

The Minutes of 53rd PSMG-I Meeting, held on 19.01.2016 were circulated to all members vide NCR Planning Board letter No. K-14011/22/2015/PMC/NCRPB dated 01.02.2016. No comments have been received. A copy of the same is placed at **Annexure-I**.

The Minutes may be confirmed.



Agenda Item No. 2: ATR of 53rd PSMG-I meeting decisions

The following actions have been taken on the decisions of the 53rd Meeting of the PSMG-I held on 19.1.2016:-

Agenda proposed & decisions taken	Action Taken / Status
Agenda Item No. 1: Confirmation of the Minutes of the 52nd Meeting of the PSMG-I held on 21.5.2015	No action to be taken.
<p>Agenda Item No. 2: Action Taken Report (ATR) of 52nd PSMG-I meeting decisions</p> <p>Item 2(a): Representative from GNCT of Delhi informed that the necessary process regarding reimbursements of commitment charges was underway and the payments shall be made soon.</p> <p>Item 2(b): Revised sanctions issued for projects pertaining to PWD (B&R) & PHED Haryana</p> <p>Item 2(c): The Group directed that necessary action related to loan documentation and applicable releases pertaining to Water Supply Project at IMT Manesar should now be taken up as all issues appear to have been resolved as stated.</p> <p>Item 2(d): Regarding the Non Starter project of UIT Alwar, i.e “Solar Bus Shelters with Solar Lantern Recharging Stations in Alwar District”, for which loans sanctioned in December 2012 & released in July 2013, the Group decided that the project shall be treated as withdrawn after the necessary funds are returned and directed UIT Alwar to expedite the necessary formal submissions and payments.</p> <p>Item 2(e): Regarding delay in progress of project “Construction of Multi-storied office building at Karkardooma Institutional area at Shahdara South Zone by EDMC” sanctioned in 51st PSMG meeting held in Dec 2013, EDMC was directed to specify a timeline with respect to its re-tendering and thereafter the likely project completion dates.</p>	<p>Payment of Commitment Charges from GNCTD is still awaited</p> <p>No action to be taken.</p> <p>The first installment of Rs. 31.13 Cr. released in March 2016, but HSIIDC is yet to submit any physical or financial progress report for the project as the works are yet to started.</p> <p>The project is being treated as withdrawn and entire loan amount of Rs.2.00 crore alongwith interest has been repaid / refunded by UIT Alwar on 24.2.2016.</p> <p>Timeline received indicating tenders were to be recalled in April 2016 & works expected to be awarded by July 2016. Later informed that as nobody qualified, tenders proposed to be recalled in Nov 2016 & works expected to be awarded by Feb 2017.</p> <p>Hence, no progress made in actual & Works are yet to be tendered.</p>



Agenda proposed & decisions taken	Action Taken / Status
<p>Item 2(f): Status of the proposal regarding Creation and Updation of Regional Land use for the five additional districts of NCR</p> <p>The matter & status was discussed & deliberated in the meeting and following decisions were taken:</p> <ul style="list-style-type: none"> ○ NRSC may include the districts, namely, Jind & Karnal of Haryana Sub-region and Muzaffarnagar of UP Sub-region, notified on 24.11.2015, as a part of the earlier study "Creation of Regional Land use for the three additional districts of NCR" & update the Regional Landuse Map-database, notified in 2005, inclusive of all the six newly added districts. ○ Revised estimate for the earlier proposal including these three new districts may be submitted in the next meeting for financial sanction after obtaining the same from NRSC. Revised MoU for the purpose may be signed after obtaining the financial sanction. ○ NCR participating States shall provide district, tehsil & other required administrative boundaries of the newly added districts of their respective sub-regions to NRSC through NCRPB within 30 days. ○ NCR participating State Governments shall carryout the planning for newly added districts by means of analysing the existing situation, identifying the issues & challenges at the ground/district level and then integrate the same with their respective Sub-Regional Plans in time bound manner. 	<p><i>Detailed status presented at Agenda Item No. 8.</i></p>
<p>Agenda Item No 3: Status Note on Assistance by Asian Development Bank (ADB) and KfW (German Development Bank) to NCRPB</p>	<p><i>Detailed status note presented at Agenda Item No. 3</i></p>

Agenda proposed & decisions taken	Action Taken / Status
Agenda No.4: New Projects submitted to NCRPB with Loan Requests	
Agenda Item No. 4.1: Development of access controlled Kundli-Manesar-Palwal Expressway section (Manesar RD 83.320 to Palwal RD. 135.650 km) by HSIIDC, Haryana (balance works)	Sanction letter for loan of Rs.343.35 cr. issued on 9.2.2016 and 1st installment of Rs.274.68 cr. released on 3.10.2016. Further, 2 nd instalment of Rs. 50 Cr. released on 10.11.2016.
Agenda Item No. 4.2: ROB projects	
4.2.A: Construction of 4 lane ROB at Lakhanmajra Mehram road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District	Sanction letter for loan of Rs.23.15 cr. issued on 9.2.2016 and 1st installment of Rs.9.26 cr. released on 27.5.2016.
4.2.B: Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district	Sanction letter for loan of Rs.11.18 cr. issued on 9.2.2016 and 1st installment of Rs.4.47 cr. released on 27.5.2016.
4.2.C: Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district	Sanction letter for loan of Rs.11.29 cr. issued on 9.2.2016 and 1st installment of Rs.4.52 cr. released on 27.5.2016.
4.2.D: Construction of additional 2 lane ROB at LC no. 3 on Hissar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hissar	Sanction letter for loan of Rs.56.00 cr. issued on 9.2.2016 and 1st installment of Rs.22.40 cr. released on 27.5.2016.
Agenda Item No. 4.3: Construction of Elevated Road on National Highway No 10 from Chottu ram Chowk to Old bus stand (KM 74.00 to 75.86) in Rohtak city Portion"	Sanction letter for loan of Rs.114.62 cr. issued on 9.2.2016 and 1st installment of Rs.45.85 cr. released on 27.5.2016.
Agenda Item No. 4.4: Improvement of Gurgaon Pataudi Rewari road (SH-26) from km 12.00 to 50.541 in Gurgaon & Rewari districts in the State of Haryana	HSRDC vide letter No. 1631/HSRDC dated 16.3.2016 has informed that Government of Haryana has accorded approval to drop the project from the NCRPB loan assistance in light of declaration of the road as National Highway by MORTH. The project is, accordingly, being considered as withdrawn.
Agenda No. 4.5: Development of Six lane Elevated Road (Hindon) in Ghaziabad, Uttar Pradesh by GDA	Sanction letter for loan of Rs.700.00 cr. issued on 9.2.2016 and 1st installment of Rs.210.00 cr. released on 5.8.2016.
Supplementary Agenda Item No. 4.6: Project of Metro connection between Noida and Greater Noida (29.707 km)	Sanction letter for loan of Rs.1587.00 cr. issued on 9.2.2016. Part loan instalment of Rs.406 crore released on 26.12.2016 to NMRC against 1st instalment of Rs.580.00 crore.



Agenda proposed & decisions taken	Action Taken / Status	
Supplementary Agenda Item No. 4.7: Four Lanning of Jhajjar - Farukhnagar Road in Jhajjar / Gurgaon Districts (Phase-I)	Sanction letter for revised loan of Rs.86.33 cr. issued on 9.2.2016 and loan installments of Rs.34.53 crore and Rs.25.00 cr. (total Rs.59.53 cr.) released on 27.5.2016 and 29.8.2016.	
Agenda Item No. 5: Review of Projects financed by the NCR Planning Board	Details presented as a separate agenda.	
Agenda Item No.6: Monitoring of developments at site in the National Capital Region (NCR) through use of Remote Sensing and GIS technology After detailed discussions & deliberations, following decisions were taken: i) The proposal was deferred. ii) Govt. of Haryana shall submit a copy of the proposal which they have sent to NRSC for conducting the study for monitoring of development at site. iii) A pilot study shall be carried out by the Govt. of Haryana for one of its district in the Central National Capital Region for monitoring of development at site.	The matter was also deliberated in the Sixth meeting of the State Level Steering Committee, Haryana held under the chairmanship of Chief Secretary, Haryana on 05.10.2016 at Chandigarh, wherein it was informed by Govt. of Haryana that an MoU has already been signed with National Remote Sensing Centre (NRSC), Hyderabad, Gol in this regard. Subsequently, Govt. of Haryana vide Memo dated 30.11.2016 (Annexure-I) has provided brief details of the MoU that has been executed on 11.02.2016 between Govt. of Haryana and NRSC, Hyderabad. The status of 'Development of Land Use Monitoring Application' has also been communicated vide the aforesaid Memo dated 30.11.2016. It has been conveyed by the Govt. of Haryana, that the present MoU with NRSC is for technical collaboration only and defines the responsibilities of Town & Country Planning Department (TCPD), Haryana and NRSC. It is further conveyed that the NRSC Hyderabad has already started development of the geo-portal which is likely to be completed by 15 th March, 2017 and that the development of Geo-portal will enable the launch of various GIS based applications, including "Land Use Monitoring". As informed by Govt. of Haryana, the status of 'Development of Land Use Monitoring Application' is as under:	
	Action Items	Current Status
	i. Regular procurement, processing and interpretation of high resolution satellite imageries.	Satellite Images procurement under process.
	ii. Development and publishing of GIS data over web i.e., Geo-portal development.	Development already initiated by NRSC, Hyderabad.



Agenda proposed & decisions taken	Action Taken / Status	
	iii. Development of a customised Web-based application on BHUVAN with necessary GIS tools for monitoring of development at site and change analysis.	To be initiated after the completion of the above activity at Sr. No. ii.
	iv. Development of a Mobile Application to assess field verification/ modification on BHUVAN TCPD Haryana GIS portal.	To be initiated after the completion of the above activity at Sr. No. iii.
	<i>Govt. of Haryana may provide the latest status of the aforesaid pilot project.</i>	



Annexure-I to Agenda No. 2, Item 6

Sharma
1.12.2016

Office of Chief Co-ordinator Planner (NCR)
DIRECTORATE OF TOWN & COUNTRY PLANNING, HARYANA
HUDA COMPLEX, SECTOR-6, PANCHKULA
Tel+Fax: 0172-2578086, Tel: 0172-2581737
E-mail: ccpncr3.haryana@gmail.com

Memo No.CCP (NCR)/726/2016/ 3263
Dated: 30-11-2016

To: ✓ The Member Secretary,
National Capital Region Planning Board,
1st Floor, Core-IV-B, India Habitat Centre,
Lodhi Road, New Delhi-110003.

Subject: - **Monitoring of developments at site in the National Capital Region (NCR) through use of Remote Sensing and GIS technology.**

Reference: Your office memo no. K-14011/88/2008/NCRPB dated 02.11.2016.

Regarding the subject cited above, the Action Taken Report (ATR) on "Monitoring of developments at site in the National Capital Region (NCR) through use of Remote Sensing and GIS technology" are enclosed for your kind information and further necessary action please

DA/As above

[Signature]
District Town Planner
For: Chief Coordinator Planner, NCR
Haryana, Panchkula

Ednst No.CCP(NCR)/726/2016/ Dated:

A copy is forwarded to the Chief Town Planner, IT & Monitoring (HQ), Town and Country Planning Department Haryana, SCO- 71-75, Sec-17C, Chandigarh for information please.

District Town Planner
For: Chief Coordinator Planner, NCR
Haryana, Panchkula

[Signature]

[Signature] AD (RD)
Copy to AD (MC) - for informⁿ
Panchi
05/12/16

रा. रा. क्षे. यो. बोर्ड
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SUBJECT: ATR ON MONITORING OF DEVELOPMENTS AT SITE IN THE NCR THROUGH USE OF REMOTE SENSING AND GIS TECHNOLOGY.

PROGRESS ON MOU WITH NRSC: In this regard, it is informed that the MoU stands executed with NRSC, Hyderabad on 11.02.2016. It may also be noticed that the present MoU with NRSC is for technical collaboration only since the entire data creation (spatial and non-spatial geo-referenced GIS layers required for Geo-Spatial data model and application) as well as its updation alongwith complete hardware and networking support to all field/circle/HQ offices is being undertaken in-house by Town & Country Planning Department, Haryana. On the other hand, the technical support as well as IT services for BHUVAN-TCPD Haryana server maintenance, database management as well as development of open source Geo-Spatial application on BHUVAN with all functions, tools/facilities and user interface as per requirements of the Department alongwith training and capacity building for TCPD Haryana officials is provided by NRSC, Hyderabad.

A team of TCPD Haryana visited NRSC, Hyderabad on 6-7 September 2016 and had detailed discussions with NRSC, Hyderabad team and finalized the scope. NRSC, Hyderabad has already started development on the Geoportal which is likely to be completed by 15th March 2017.

2. After the development of Geo-portal is completed, it will enable the launch of various GIS based applications, including "Land Use Monitoring". It is further informed that the entire GIS data creation part forming the responsibility of TCPD Haryana has been substantially completed by the IT Cell and the same has already been hosted on a Intergraph WebGIS application at the State Data Centre (SDC) for access by all field/circle/HQ offices of the Department.

3. **DEVELOPMENT OF LAND USE MONITORING APPLICATION:** The major requirements for development and usage of Land Use Monitoring application would be as follows:

S.No.	Action Items	Current Status
1	regular procurement, processing and interpretation of high resolution satellite imageries	Satellite Images under procurement process.
2	Development and publishing of GIS data over web i.e. Geo-portal development	Development already initiated by NRSC, Hyderabad
3	development of a customised Web-based application on BHUVAN with necessary GIS tools for monitoring of development at site and change analysis;	To be initiated after the completion of the above activity at Sr. No. 2
4	development of a Mobile Application to assess field verification/ modification on BHUVAN-TCPD Haryana GIS portal	To be initiated after the completion of the above activity at Sr. No. 3



Agenda Item No. 3: Status Note on Assistance by Asian Development Bank (ADB) and KfW (German Development Bank) to NCRPB.

A. Asian Development Bank

ADB has approved a loan of US \$ 150 million to NCRPB as a Multi-Tranche Financing Facility for financing infrastructure projects in the National Capital Region (NCR) and its Counter Magnet Areas (CMAs). The loan agreement for the 1st tranche of US \$ 78 million was signed between ADB and NCRPB on 17.3.2011. Out of Tranche-1 loan amount of USD 78 million, USD 18 million has been cancelled. Board has utilized the entire loan amount of USD 60 million (INR 352.06 crore) by the loan closing date of 31.12.2014 for tranche1. **The repayment period is 25 years with 5 years moratorium for repayment of the principal amount.** The loan was disbursed to participating States subject to compliance with ADB procurement guidelines and environmental and social safeguards requirements.

a. **Status of Projects under ADB line of credit:** The status of projects being funded under the ADB loan facility is as follows:-

S. No.	Project/Agency	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
1	Improvement of Roads in Jhajjar districts, Haryana -PWD (B&R)/HSRDC	169.98	127.48	Completed
2	Improvement of Roads in Sonapat district, Haryana -PWD (B&R)/HSRDC	125.40	94.05	Implementing Agency is claiming it as completed (date of completion- 24.06.2013) However, Social Safeguard issue is still pending for compliance in full with the Social Safeguard policy of the ADB.*
3	Construction of Badli-bypass, Haryana - PWD (B&R)/HSRDC	62.92	39.45	Completed
4	Widening & Strengthening of Gohana Lakhanmajra Bhiwani road upto district Rohtak boundary road from km. 0.000 to 37.700 - PWD (B&R)/HSRDC	99.77	74.83	Implementing Agency is claiming it as completed (date of completion- 24.11.2014), However, Social Safeguard issue is still pending for compliance in full with the Social Safeguard policy of the ADB.*
5	Widening & Strengthening of U.P. border Sonapat Gohana road upto District Sonapat boundary from km. 11.600 to 74.000 - PWD (B&R)/HSRDC	176.26	132.20	Completed IA has reported the final project completion cost as Rs.188.98 crore.



S. No.	Project/Agency	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
6	Widening & up-gradation of Gurgaon-Chandu-Badli Bahadurgarh Road - PWD (B&R)/HSRDC	244.10	183.08	Project is non-compliant with the Social Safeguard policy of the ADB.*
7	Sonepat Drainage Scheme - PHED, Haryana	21.72	16.29	Work reported completed. CC received.
8	Augmentation of Water Supply in Pataudi - PHED, Haryana	41.15	30.86	Works are in progress. Expected to be completed by Jun 2017.
9	Water Supply Scheme for Nulhar Medical College & Nuh town - PHED, Haryana	150	112.50	-do-
		1091.3	810.74	

* The projects are non-compliant to the Social Safeguard policy of the ADB. Though IA has started looking into the issues but the compliance in full is still awaited. Project wise status note having Social Safeguard issues are as follows:

1. Sonepat Roads (Sonepat-Farmana Sisana Road):

The sub-project is having dispute in land ownership in two sections. In the first section (2.5 km from chainage 21.500 to 24.000) road exists at a stretch where land is not owned by PWD(B&R), Haryana as per the revenue record; 14 civil suits filed by private persons claiming ownership; matter is sub-judice.

In the second section, (2.8 km, from chainage 24.974 to 27.780), when villagers claimed their ownership, Haryana State Road & Bridges Development Corporation (HSRDC) issued Land Acquisition Notification, which was, however, discontinued after civil suits were filed in the above mentioned first section.

The matter has been highlighted at various level including at the level of the Hon'ble Minister of Urban Development and the Hon'ble Chief Minister, Govt. of Haryana.

Latest Development: NCRPB issued letters dated 30.8.2016 followed by reminder dated 27.10.2016 to Engineer-in-Chief, PWD (B&R) Haryana requesting them to share the latest status of the Court cases filed either by Govt. or private owners/Court verdicts or compensation paid hitherto pertaining to land in adverse possession of PWD (B&R) be submitted to NCRPB at the earliest. Subsequently, DO letters dated 9.11.2016 and 7.12.2016 were also issued to ACS, PWD (B&R), Haryana and Chief Secretary, Govt. of Haryana respectively.

2. Gurgaon-Chandu Badli Road:

Under this sub-project, in village Dhankot, some villagers approached court alleging that the road is being built on their land. Road exists in 24 m. However in land records, road land is limited to 5 m. HSRDC / PWD represented in the court that road exists for last 50-60 years and is under their adverse possession. The matter is presently *sub-judice*. There



are a large number of owners who have not moved to the court. It has been suggested to PWD (B&R)/HSRDC that in all stretches having land ownership/title dispute, PWD (B&R)/HSRDC may proactively bring all such cases to the court, claiming its land ownership and requesting for mutation in favor of Govt. of Haryana.

Latest Development: NCRPB issued letters dated 30.8.2016 followed by reminder dated 27.10.2016 to Engineer-in-Chief, PWD (B&R) Haryana requesting them to share the latest status of the Court cases filed either by Govt. or private owners/Court verdicts or compensation paid hitherto pertaining to land in adverse possession of PWD (B&R) be submitted to NCRPB at the earliest. Subsequently, DO letters dated 9.11.2016 and 7.12.2016 were also issued to ACS, PWD (B&R), Haryana and Chief Secretary, Govt. of Haryana respectively

3. Gohana-Lakhan-Majra-Bhiwani Road (GLMB):

Issue of payment of compensation (compensation to be paid for lost assets (but not for land)) to the affected persons in the sub-project 'Widening & Strengthening of Gohana-Lakhan-Majra-Bhiwani Road from Km 0.000 to 37.700 is partially resolved for compliance with the Social Safeguard policy of the ADB.

Latest Development: PWD (B&R)/HSRDC has approved & declared an amount of Rs.20,53,538/- to be paid as compensation towards the encroached structure. However, Executive Engineer, PWD B&R has submitted report on "Corrective action plan" vide letter dated 07.09.2016 stating that compensation have been paid to 54 beneficiaries out of the total 69 affected person as on date. Twelve (12) beneficiaries have approached the court and 03 beneficiaries structures are falling in between the structures for which matter is *sub-judice* and therefore PWD (B&R) /HSRDC is awaiting the judgment on the 12 court cases and will apply the same on the remaining 03 beneficiaries. ***Confirmation on compliance in full is awaited.***

Matter is placed before the PSMG for giving suitable directions to PWD (B&R), Govt. of Haryana to fix a timeline to resolve the issue as ADB is pressing hard.

b. Reimbursement of Commitment Charges:

Two MMTC projects at Anand Vihar and Sarai Kale Khan have been dropped.

Commitment Charges pertaining to Govt. of Delhi: A reminder Letter dated 03.11.2016 was issued by the Member Secretary, NCRPB to the Chief Secretary, Govt. of NCT of Delhi requesting for reimbursement of commitment charges to the tune of Rs.69,95,613.81 up to 31.01.2013 being borne & paid by NCRPB to ADB on account of the two non-starter projects of the Transport Department, Govt. of NCT of Delhi. The Latest D.O letter also highlighted the details of the earlier several letters issued by NCRPB to the Govt. of Delhi in this regard.

In the 35th Board Meeting of the NCR planning Board held on 09.06.2015, it was decided that the amount which has been paid by the Board to ADB towards commitment charges may be recovered from GNCTD, Delhi. In the last meeting of PSMG held on 19.1.2016, it was informed by representative of GNCT of Delhi that payment is underway and shall be made soon.

However till date the Govt. of Delhi has not paid the commitment charges to NCRPB.



Matter is placed before the PSMG for giving suitable directions to Transport Department, GNCT of Delhi to fix a timeline to resolve the issue

c. Debt Service:

Board has been making regular payments of its dues to ADB. So far, Board has made payment of Rs.7.40 cr. (\$ 1.19 million) to ADB on account of interest and commitment charges. Alongside, as on date, Board has also repaid the principal amount to the tune of US\$ 1.01 million to ADB in two installments.

Matter is placed before the PSMG for information.



B. KfW - (German Development Bank)

Loan agreements of Euro 100 million + Euro 1 million Grant for environment friendly schemes in the water supply, sewerage, drainage, solid waste management and urban transport Sectors to National Capital Region Planning Board were signed between NCRPB & KfW on 09.02.2012 & 30.03.2012. The repayment period will be 15 years with 5 years moratorium for repayment of the principal amount. The loan is at a fixed rate of Interest @ 1.83% p.a. A total amount of Rs. 418.48 Crores (Euro: 58.75 million) has been claimed & disbursed by KfW to the Board.

a. The status of projects to be funded under KfW line of credit are as follows:-

Sl. No.	Name of the Project	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
1	Augmentation of Water Supply in Kota, Rajasthan - UIT, Kota	151.66	113.74	Completed.
2	Water supply scheme at Farrukh Nagar Distt., Gurgaon - PHED, Haryana	13.90	10.43	Contract awarded and work is under progress. Completion date has been extended to 30.06.2017
3	Sewerage scheme at Farrukh Nagar Distt., Gurgaon - PHED, Haryana	11.48	8.61	Project was withdrawn by IA, citing difficulties with tendering under KfW procedures. Entire loan amount of Rs. 2.45 Cr. (including interest and commitment charges) has been repaid by PHED, Haryana on 4 th & 5 th May, 2016.
4	Sewerage scheme and treatment plant for SADA, Gwalior - SADA, Gwalior	28.38	21.28	Due to lack of progress the project has been declared a "non-starter" by NCRPB and is proposed to be dropped. Agency may resubmit the revised proposal to NCRPB, if required.
5	15 Mld Sewage Treatment Plant and Pumping Station At Ecotech-II, Greater Noida - Greater Noida Industrial Development Authority (GNIDA)	21.17	15.87	The contract was awarded on 30.12.2016. It was signed on 10.1.2017 and will become effective on the date when the implementing agency issues the advance payment to the contractor.
6	20 Mld Sewage Treatment Plant and Pumping Station At Ecotech-III, Greater Noida – GNIDA	28.15	21.10	-do- (Both STPs being tendered together as one contract)
7	Raw Water Conveyance Main from Intake at Dehra (Ghaziabad) to WTP Site at Palla (Greater	183.19	137.39	Re-tendering was proposed due to poor response to the initial tender floated on 09.05.2014. The revised tenders floated on 08.05.2015; and two contracts were awarded on



Sl. No.	Name of the Project	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
	Noida) and Clear Water Main from WTP Site to Master Reservoir (Greater Noida) Under 85 Cusec Ganga Jal Project for Greater Noida – GNIDA**			18.02.2016. The contracts were signed on 16.03.2016 and the Commencement Dates were 30.05.2016 and 14.06.2016 for Package 2 and Package 1 respectively.
8	Primary Treatment Works at Dehra (Ghaziabad) & 210 Mld Water Treatment Plant At Palla (Greater Noida) & Allied Works Under 85 Cusec Ganga Jal Project For Greater Noida - GNIDA	121.48	87.16	The contract was awarded on 16.12.2016, it was signed on 27.12.2016 and became effective on 2.1.2017.
9	Alwar Water Supply Upgradation Scheme - PHED, Rajasthan**	174.86	131.14	The tender was floated on 21.09.2015 and the last date for submission of bids was 11.12.2015. The contract was awarded on 10.03.2016 and the Start Date was 11.04.2016. Work is in progress.
10	Rajgarh Water Supply Upgradation Scheme - PHED, Rajasthan	20.24	15.18	Re-tendering was proposed due to poor response to the tenders floated on 11.11.2014. The tender was floated on 08.10.2015 and the last date for submission of bids was 17.12.2015. The contract was awarded on 10.03.2016 and the Start Date was 13.04.2016. Work is in progress.
11	Behror Water Supply Upgradation Scheme - PHED, Rajasthan	26.02	19.51	- do -
12	Tijara Water Supply Upgradation Scheme - PHED, Rajasthan	16.46	12.35	- do -
13	Bhiwadi Water Supply Scheme-PHED, Rajasthan	40.69	30.52	Re-tendering was proposed due to poor response to the tenders floated on 11.11.2014. The tender was floated on 08.10.2015 and the last date for submission of bids was 17.12.2015. The contract was awarded on 18.03.2016 and the Start Date was 18.04.2016. Work is in progress.
		837.68	624.28	



Further, NCRPB has been receiving requests from Agencies to consider the “date of start of project” as “date of award” for the purpose of ascertaining the eligibility for grant as the projects under KfW line of credit underwent detailed scrutiny of its bids as per its norms.

Accordingly, PSMG may consider the “date of start of project” as “date of award” for the purpose of ascertaining the eligibility for grant with regard to the projects under implementation by PHED Rajasthan and GNIDA, which underwent bids scrutiny as per the KfW norms & procedures.

Meanwhile, the Group is informed that KfW has extended the loan disbursement period upto December 2018 with an increase in the commitment fee from 0.25% to 0.40% after due approval from DEA.

Matter is placed before the PSMG for information & approval.

b. Debt Service:

Board has also been making regular payments of its dues to KfW. Board has made payment of Rs.12.49 cr. (€ 1.63 million) to KfW on account of interest and commitment charges up to 30.06.2016.

Matter is placed before the PSMG for information.

c. Extension of Accompanying Measure:

KfW has approved and appointed consultancy firm M/s. Lahmeyer GkW Consult, Germany towards Technical Assistance (TA) for appraisal of Detailed Project Reports (DPRs), capacity development of NCRPB and its stakeholders on 20.12.2013 under the contract signed between National Capital Region Planning Board, represented by KfW and GKW Consult GmbH (previously M/s.Lahmeyer GKW Consult GmbH). The Total value of the contract is Euro: 999,712/- only. The initial contract was supposed to end on 20.01.2016 but as some amount was available under the original contract, the validity of the contract has been extended by 02 months i.e., 19.03.2016. Till 19.03.2016, funding towards consultancy was done out of Euro 1 million Grant.

Considering the pace of implementation of the projects under KfW line of credit, it was envisaged that the support is still required from M/s. GKW Consult GmbH even covering the requested loan extension period i.e., up to December 2018 beyond the existing loan closure date i.e. December 2016 to get the projects implemented smoothly. KfW has agreed to continue funding the consultancy contract but requested and clarified that NCRPB needs to fund the service tax, Public charges and Withholding tax liability arising on account of consultancy services to the Indian Tax Department (Article 2.4; taxes (Addendum 2)). KfW has signed a fresh financing agreement dated 17.06.2016 for Euro:800,000/- to fund exclusively the services of the experts to support NCRPB in the implementation of the programme “Environment-related Urban Infrastructure Development through NCRPB” (“Programme”)(“Expert Services”). The expected financial implication on account of tax payment is around Euro: 0.21 Million

Matter is placed before the PSMG for information & Approval.



d. Pass on the commitment fee liability to the stakeholders:

NCRPB has noticed that certain Implementing Agencies (IA) withdraw their projects from the NCRPB funding even after the completion of the due appraisal process of the DPR and inclusion of the projects in the foreign funding list, which costs NCRPB very dearly as the Board pays commitment charges on the undrawn amount against the projects to the lenders. Therefore, it is proposed to let the Board pass on the commitment fee to its stakeholders in case the projects are withdrawn by the IA once the appraisal process of the project is completed.

Matter is placed before the PSMG for information & Approval.

e. Noida Metro Rail Corporation (NMRC):

In accordance with the power conferred by section 8(e) and 22-(2) (c) of the NCR Planning Board Act 1985, NCRPB has sanctioned loan assistance of Rs.1587.00 crores (with 1st installment of loan of Rs.580.00 crores) to Noida Metro Rail Corporation (NMRC) for the project of metro connection between the Noida & Greater Noida (29.707 km). Board had requested KfW to examine the project and convey their approval if the said project can be undertaken under their funding list to cover the funding Gap available under the KfW line of credit of Euro: 100 million.

KfW has conveyed their “in principal approval” vide their letter dated 05.12.2016 agreeing to partially fund the project subject to the following condition:

- Only the contracts listed in annex 1 are eligible to be financed out of FC funding. The total value of the contracts mentioned in annex 1 is Euro 60.6 million approx. although KfW has restricted the maximum amount for disbursement against the said project to the tune of Euro 20.27 million only. As on date, NCRPB has claimed and received Euro 20.18 million from KfW for the Noida-Greater Noida metro project.

With the inclusion of NMRC project in the funding list of KfW, Board expects to fully allocate the KfW credit line to the different sub-projects.

Matter is placed before the PSMG for information



Agenda Item No. 4: New Projects submitted to NCRPB with Loan Requests

The Board has received requests for sanction of financial assistance for a River Rejuvenation project and Road/RoB projects from JDA, Jaipur and a metro link project, some sewerage projects and a power sector project from Haryana. Detailed agendas are as presented from Agenda Item No. 4.1 to 4.6 below.

Agenda Item No. 4.1: Rejuvenation of Amanishah Nallah (Dravyavati River) including Area Development in Jaipur City, JDA**Introduction**

Government of Rajasthan in its conference on Urban Transformation held in September 2014, provided opportunities, for those interested, to identify potentially transforming urban infrastructure projects for its cities. Tata Group identified Jaipur City for carrying out its urban transformation and submitted formal EOI to Jaipur Development Authority wherein Rejuvenation of Amanishah Nallah was found critical for development of Jaipur City. The same was examined by Government of Rajasthan and Tata Group was mandated to submit the DPR.

The project for development of Amanishah Nallah was submitted under Swiss Challenge method i.e. *a method of procurement which involves an unsolicited proposal for a Government project and allows the third party to challenge the original proposal through open bidding and then lets the original proponent counter match the most advantageous or the most competitive offer (Government of Rajasthan Gazette Notification dated 5.6.2015)*. As per this, the agency shall incur the expenditure on DPR preparation at its own risk as it shall not be reimbursed for DPR cost in case project is not taken up by administrative department.

State Level Empowered Committee (SLEC) of Government of Rajasthan considered the proposal of its UDH Department for Rejuvenation of Amanishah Nallah (Dravyavati River) including area development submitted by M/s Tata Projects and indicated its satisfaction on the proposal and accorded its approval in the second meeting held in October 2015 (refer Appendix-I).

The project was also discussed in Hon'ble High Court of Rajasthan under a PIL wherein citizens of Jaipur have shown a concern for protection of environment of Jaipur city, in restoration of Dravyavati River which flows for 47 km length from foothills of Nahargarh to the city to Goner road crossing. It was noticed that the river in the last few decades had reduced to a Nallah emanating foul smell in which untreated sewer water and industrial waste of textile from Sanganer was discharged, unabated. Concern was raised about massive encroachments in the catchment areas leading to reduction in river width as well as pollution. The Hon'ble Court noted that number of proposal had been made in past for restoration of the river (CES report in 1984-85, SPAN Consultant report of 2007, MNIT report in 2010). However, as Court did not find that a scientific approach had been made in past, it directed an expert intervention of National Environmental Engineering Research Institute (NEERI) to be obtained. NEERI was accordingly, given the task by JDA at a cost of around Rs. 1.2 Cr.

JDA vide its letter dated 21.7.2016 had submitted to the Hon'ble High Court regarding recommendation of NEERI and the action taken regarding incorporation of the same in



the works awarded to M/s Tata Project Limited – SUCG Consortium at a cost of Rs. 1676.93 Cr. (including O&M) with date of commencement and completion as 11.4.2016 and 10.10.2018 respectively.

Hence, as the project was amongst the top priorities of Government of Rajasthan for Jaipur city, Jaipur Development Authority has now approached NCRPB for sanction of financial assistance for the project and help Jaipur which is also notified as Counter Magnet Area of NCR.

The Project Details

The Dravyavati River also known as the Amanishah Nallah of Jaipur City originates from the western slopes of Amer hills. It flows through the west side of Jaipur city from North to south. It collects storm water from Nahri ka Nallah, Ambabari, major portion of walled city and newly developed areas of Jaipur through Ganda Nallah, Sanganer Town and Pratap Nagar area. The Ganda Nallah and Jawahar Nallah are major tributaries of Amanishah Nallah. The Nallah on its way collects municipal wastewater, sewage, storm water and industrial waste from surrounding areas. The bed slope of Nallah is very steep which results in soil erosion. Total difference in elevation from 0 to 47.5 km is 134 m. There were lot of encroachments on Nallah banks from chainage 11 KM to 21 KM and these encroachments have reduced the cross section of Nallah and also obstructed the flow of water.

Treated sewage from two sewage treatment plants at Delawas and Swarna Jayanthi Park (Mazar dam) is released in to Amanishah Nallah. Some of the populous habitats located along and near the Nallah directly discharge sewage into the Nallah. At certain locations, the sewage gets injected into the soil and therefore does not reach the Nallah.

The river ultimately discharges into Dhund River.

The Pink city of Jaipur like most other in India lacks solid waste management system and significant portion of such waste is dumped into the Nallah. Untreated waste from industries especially textile mills, printing units near Sanganer and other industries causing pollution and contamination of Ground water also find their way into the Nallah.

Amanishah Nallah is one of the major open drains in Jaipur and occupies major land and is causing environmental issues. Major problems faced by the City Administration owing to Amanishah Nallah are:

- Complex effluents and sewerage causing health hazard to nearby habitations
- Loss of valuable land
- Threat of flooding due to encroachments
- Farmers use the wastewater in Nallah for Vegetation leading to toxic vegetation
- Unappealing aesthetics where Nallah passes
- Diminishing value of the properties along Nallah

The project of rejuvenating the river has accordingly been conceived as an attempt to address the listed problems. Salient features and major scope being covered under the project include:-

- Course correction / strengthening of 47.5 km long stretch (design for 100 year flood discharge) covering provision of perennial flow of water (0.25 meters to 0.3 meters by



construction of check dams, reservoirs, etc.), arrangement for crossing of utilities, improve rain water inflow, etc.

- Sewerage interception & treatment
 - Intercept all raw municipal waste water in the catchment area
 - Provision of intercepting pipe running along the Nallah length on both sides
 - Treat the waste water to relevant discharge norms
 - Ensure no foul odor emission, etc.
 - Construction of 8 STPs of total capacity of 170 MLD treatment
 - Reuse of treated water
- Ground Water Recharging
- Landscaping and land development works along the river / nallah (plantation of around 12,000 trees, shrubs and ornamental plants with adequate lighting, 5.5 meter wide pathway along the river with total length of 16 km., grass turfing / stone steps
- Exhibition center, office, museum facilities etc. (built up area – 14279 sq km) for awareness of public to know about the status of Amanishah pre & post project implementation
- Catchment area of 213.15 sq km.

Development of Amnishah Nallah is thus expected to provide with cleaner, clearer, odorless flowing water, improving the aesthetic surroundings, reclamation of government land of around 8 lakh sq. meters

Project Approval Status

- The project has the necessary administrative approvals from the State Government as well as permission to take loan for the project from NCRPB (letter No. P.18(39)/UDD/SwissChallenge/2014.Part dated 10.10.2016).
- Necessary NOCs already received by JDA from North Western Railway.
- Military Station, Jaipur has also given its permission to carry out the surveys along the Nallah and intimated that in order to execute the project the sanction of Ministry of Defence, GOI is being processed.
- The State level Environmental Impact Assessment Authority has also given the environmental clearance for the stretch from 12.65 km to 47.5 km having a length of 34.85 km project.
- With respect to Wild Life issue as the project area is inside Nahargarh Wildlife Sanctuary and within 10 km. of its boundary, the Standing Committee of the State Board of Wildlife has already approved the project and it has sent the requested approvals of National Board of Wildlife in October 2016.
- The Rajasthan State Pollution Control Board has given the Consent to Establish (CTE) for the project.



The land required for the project has been informed to have been in the possession of JDA and policies of State Govt. for Resettlement has been followed by the authority regarding the social issues. PDCOR has been appointed as the transaction advisor for the project.

The project is proposed to be completed by December 2018.

The Project Cost & Financing

The component-wise break up of cost estimate of the project is as under:

S.No.	Description	Estimated Cost as per DPR (Rs. In Cr.)
A	Site Clearance (Trees, Debris Removal, etc.)	18.10
B	Landscaping (Plantations of Trees, Herbs, Shrubs, etc.)	25.13
C	Earthwork in Embankment (including excavation, rehandling of works, compaction, dewatering, dressing, stone pitching, nallah diversion, outfall structures, sump well, etc.)	351.26
D	Canal lining works at Bed & Slopes	183.17
E	Fall Structures Checkdam (excavation, masonry, fencing, gates & reinforcement)	63.08
F	Pedestrian Pathways	36.51
G	Road works	8.22
H	Masonry Works & Pitching	114.68
I	Misc. (including piping, benches, toilets, drinking water, security cabins, parking, storage, dust bins, etc.)	71.69
J	Other Items including Manhole chambers, existing structure demolition, collection sumps	26.66
K	Piping (700 mm - 7.94 km, 250 mm - 7.15 km, NP3 RCC Humepipe, 800 mm - 14 km, corrugated HDPE pipe)	90.82
L	Sewerage Treatment Plants (STP) - 170 MLD Total Capacity	358.70
M	Electrical works (including pumps, solar street led lighting, poles, feeders, CCTV cameras, etc.)	114.93
N	Additional Items (including gated spillway structure at Mazar dam and restoration of existing structures)	16.00
	TOTAL (Project Capital Cost)	1478.95
O	Service tax, labour cess and other statutory taxes	73.53
P	Provision for unforeseen items (@ 2 % of project cost)	29.58
	Total project capital cost	1582.06

The total estimated cost of the project amounting to Rs. 1582.06 Cr. is proposed to be met as under:

Loan amount from NCRPB	1098.00
JDA, Govt. of Rajasthan, Share	484.06

Drawal Schedule and Sharing Pattern

JDA, Rajasthan is the implementing agency for the Project. The project is proposed to be executed by **December 2018** as per the following financing details:



(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.*	Tenure for Loan (years)	Moratorium period (years)	Phasing of expenditure on works
2016-17	240.00	105.81	15	3	345.81
2017-18	600.00	264.51	14	2	864.51
2018-19	258.00	113.74	13	1	371.74
Total	1098.00	484.06			1582.06

* Balance project cost distributed as per %age of loan requested in each year

Appraisal of DPR

The complete development project appears to have been planned on fundamental sustainability principles with a consideration to develop a robust ecosystem which can withstand general public use. While planning, the theme of sustainability has been integrated with the current National focus of “Swacch Bharat”, “Swasthya Bharat” and “Surakshit Bharat” which is a directive of Honorable Prime Minister.

This rejuvenation project is based on the concept of watershed rehabilitation, flood prevention, pollution treatment and ecology landscape. This will help in restoring Jaipur’s historic river as the resting corridor for the public facilitating a “harmonious relationship between the citizens of Jaipur and nature”.

As stated, the project for development of Amanishah Nallah was submitted under Swiss Challenge method and State Level Empowered Committee (SLEC) of Government of Rajasthan considered this proposal of its UDH Department submitted by M/s Tata Projects and indicated its satisfaction on the proposal and accorded its approval in the second meeting held in October 2015.

The project was also discussed in Hon’ble High Court of Rajasthan under a PIL wherein citizens of Jaipur have shown a concern for protection of environment of Jaipur city, in restoration of Dravyavati River. As the Hon’ble High Court directed an expert intervention of National Environmental Engineering Research Institute (NEERI) to be obtained, NEERI was given the task by JDA at a cost of around Rs. 1.2 Cr. JDA later submitted to the Hon’ble High Court regarding recommendation of NEERI and the action taken regarding incorporation of the same in the works awarded to M/s Tata Project Limited – SUCG Consortium at a cost of Rs. 1676.93 Cr. (including O&M). The observations made by NEERI against which compliance has been submitted to Hon’ble High Court, were also broadly looked into by NCRPB and were found acceptable.

NCRPB through its plans always propagates that due attention needs to be given to Sewerage & Sanitation aspects in towns of NCR and its CMAs. Through this project JDA, is attempting to not only address the Sewerage issues along the Dravyavati River but also trying to improve the environment along the river and attempting to rejuvenate it, and NCRPB proposes to support it in its attempt.

Project Benefits & Justification

There are several intangible benefits of this project such as – cleaner water, air, and land mass. This would result in, appreciation in land value, improvement in health of the citizens, higher ground water availability, better ground water quality, employment



generation, creation of business opportunities etc. As per DPR, the economic value/gain corresponding to the above benefits has been calculated. Per sq. m rate of reclaimed land is uniformly considered @ Rs. 20000/-. For other adjoining lands (Government land) which are not directly connected with channelization of Nallah, average appreciation in land price @ Rs. 4000 per sq. m has been considered. Most of the land parcels that would be reclaimed as well as those parcels that would be appreciated due to rejuvenation belong to JDA and other beneficiary departments such as RIICO, RHB, PHED and Irrigation. The total land to be reclaimed could be about 8.56 Lakh sqm. valuing about Rs. 1712 Cr. Similarly, the total land that would benefit from value appreciation would be 5.3 Lakh sqm with appreciated value may be around Rs. 212 Cr.

Further, the proposal is expected to go a long way in JDA's attempts to solve the problems of encroachments, flooding and environmental hazard and enhance the opportunities to develop social and commercial infrastructure.

Point for Decision

It is proposed that loan assistance of **Rs 1098 Cr.** for the project 'Rejuvenation of Amanishah Nallah (Dravyavati River) including Area Development in Jaipur City, JDA' may be approved as per project details at Appendix-I. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly. JDA will take all necessary steps to follow the social, environmental and wildlife issue requirements as per applicable laws of state and central government.

The total estimated cost of the project is **Rs. 1582.06 Cr.** The loan will be released in 3 installments and will carry an interest rate as applicable for basic infrastructure project on the date of release of installment. The principal along with interest is to be repaid in 15 years with a moratorium period of 3 years for principal. The project is expected to be completed by December 2018. The loan will be subject to JDA/ Govt of Rajasthan making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per its DPR.



APPENDIX – I to Agenda 4.1

I. General Particulars

1	Project	Rejuvenation of Amanishah Nallah (Dravyavati River) including Area Development in Jaipur City, JDA
2	Type of project	Sewerage & Drainage
3	Location	Jaipur City
4	Borrowing agency	Jaipur Development Authority (JDA)
5	Implementing agency	JDA
6	Length	47.5 km
7	Land availability	Informed to be in possession

II. Financial features

8	Estimated total cost of project	Rs. 1582.06 Cr
9	Loan from NCRPB	Rs. 1098.00 Cr.
10	Interest rate	As applicable at the time of loan disbursement.
11	Provision in State Budget for Principal & interest payment	To be provided by Govt. of Rajasthan / JDA in the budget of corresponding financial year.
12	Other sources of funds	JDA / State Govt.
13	Tenure of loan	15 years
14	Provision of State Govt. Guarantee	Adequate security shall be provided by JDA
15	Other Security proposed	Letter of comfort from Govt. of Rajasthan along with Loan Agreement in case of loan to State Govt.
16	Stipulated date of completion	December 2018

(Rs. In Cr.)

I	II	III	IV	V	VI
Year	Loan from NCRPB	Contribution from State Govt.*	Tenure for Loan (years)	Moratorium period (years)	Phasing of expenditure on works
2016-17	240.00	105.81	15	3	345.81
2017-18	600.00	264.51	14	2	864.51
2018-19	258.00	113.74	13	1	371.74
Total	1098.00	484.06			1582.06



Agenda Item No. 4.2 : ROB / RUB projects from Jaipur Development Authority, Rajasthan**Introduction**

Jaipur town which has been identified as one of the Counter Magnet Areas of NCR as recently as in year 2013, and is an urban area located sufficiently away from NCR and, also has its known established roots with inherent potentials to function as viable independent growth foci. It has the attributes of physical, social and economic viability, nodality with respect to transportation network and the quality of physical linkages in the form of transportation and communications facilities.

In order to further strengthen the road network in the city, Jaipur Development Authority (JDA) which is the main agency in Jaipur concerning development of the city has initiated attempts of constructing various Road over Bridges (ROB), Road under Bridge (RUB) and Elevated Road in line with the budget announcements of Hon'ble CM for the year 2016-17.

JDA has further approached NCRPB for financial assistance for these projects which include 5 ROB's, one RUB and an elevated road together having an estimated cost of Rs. 794.50 Cr. Agendas for the 5 ROB's and one RUB are as follows:-

Agenda Item No. 4.2A: Construction of 6 lane ROB with Limited Height Subway (LHS) including Electrification work at L/C-211, Goner road, Dantli on JP-DLI Railway line in Jaipur

Agenda Item No. 4.2B: Construction of 3 lane ROB parallel to existing Jhotwara ROB from Panchayat Bhawan/ SBBJ Bank to Ambabari T-junction, Jaipur

Agenda Item No. 4.2C: Construction of Six lane ROB in lieu of LC-70, Sitapura on JP-SWM Railway line

Agenda Item No. 4.2D: Construction of four lane road over bridge with Limited Height Subway (LHS) in lieu of L.C.-200, Bassi Town, Jaipur

Agenda Item No. 4.2E: Construction of Four Lane ROB in lieu of LC-102/2E, Jahota on Jaipur to Sikar Railway Line, Jaipur

Agenda Item No. 4.2F: Construction of RUB on Jaipur-Sikar Railway Line near Bridge No. 107 to connect Anand Lok and Swapan Lok JDA Schemes, Jaipur

The continuous monitoring of the road and rail line intersections in terms of delays caused to traffic is an important aspect for improving the level of service of road network. As per Indian Railways, the level crossings with more than one lakh TVUs (Tram Vehicle units) need to have ROB's/RUB's. Out of proposed ROB works, three ROB's are included in the railway programme and one ROB is an extension of existing ROB. The necessary Railway permissions for the RUB has also been taken by JDA. All these projects have been announced by the Hon'ble Chief Minister of Rajasthan in the State Budget Announcement for the years 2015-16 & 2016-17.



The projects are as under:-

- a) Construction of 6 lane ROB with LHS including Electrification work at L/C-211, Goner road, Dantli on JP-DLI Railway line in Jaipur.
- b) Construction of 3 lane ROB parallel to existing Jhotwara ROB from Panchayat Bhawan/SBBJ Bank to Ambabari T-junction, Jaipur
- c) Construction of Six lane ROB in lieu of LC-70, Sitapura on JP-SWM Railway line.
- d) Construction of four lane road over bridge with limited height subway (LHS) in lieu of L.C.-200, Bassi Town, Jaipur
- e) Construction of Four Lane ROB in lieu of LC-102/2E, Jahota on Jaipur to Sikar Railway Line, Jaipur
- f) Construction of RUB on Jaipur-Sikar Railway Line near Bridge No. 107 to connect Anand Lok and Swapn Lok JDA Schemes, Jaipur

All the ROB's have been proposed at the location of Level Crossings where traffic volume as well as TVU's are heavy. All these projects are situated within densely populated area on the important city roads. The train traffic data on the five intersections as per the Railway Census and the necessary Railway approvals are as indicated below:-

Level Crossing	Tram Vehicle Units (TVUs)	Railway Correspondence	Approval Reference	Administrative Approval
L/C-211, Goner road, Dantli on JP-DLI Railway line in Jaipur.	3,97,200 as per November 2012 Railway Census.	GAD approved by No. HQ/W/420/2/66 dated 29.12.2016 bearing HQ.Drg.No. CBE-807/ JP/ ROB/2016		Rs. 99.92 Cr. (vide JDA/EE ROB RUB-III/A&F/2016-17/AUG/NR-091)
Construction of 3 lane ROB parallel to existing Jhotwara ROB from Panchayat Bhawan/SBBJ Bank to Ambabari T-junction, Jaipur	N.A. (Proposed work is Widening of Existing ROB)	As per Railway document, HQ Drg No. CBE-784/JP/ROB/2016 dated 19.10.2016		Rs. 166.73 Cr. vide JDA/EE ROB RUB-I/A&F/2016-17/ Sep/173 dated 27.09.2016
Construction of Six lane ROB in lieu of LC-70, Sitapura on JP-SWM Railway line.	109439 as per August 2015 Railway Census	Railway Letter No. HQ/W/420/2/1/56 dated 12.07.2016		Rs. 116.17 Cr. vide A&F sanction No. JDA/ EE ROB RUB-II/A&F/ 2015-2016/ Sept/ 267 Dated 16.9.2015
L/C-200, Bassi on JP-DLI Railway line in Jaipur.	329112 as per November 2012 Railway Census.	GAD approved by No. HQ/W/420/2/2/1/JDA/2010/8 dated 24.10.2016 bearing HQ. Drg. No. CBE-789/JP/ ROB/2016		Administrative approval for Rs. 57.54 Cr. accorded on 13.06.2016

Level Crossing	Tram Vehicle Units (TVUs)	Railway Correspondence Reference	Approval Approval
LC-102/2E, Jahota on Jaipur to Sikar Railway Line	ATVU 58775 as in Sep-15. JDA initiative to construct ROB as the line currently meter gauge single track soon proposed to be converted to broad gauge	GAD approved by No. HQ/W/420/2/2/1/57 dated 26.5.2016 bearing HQ. Drg. No. CBE-758/JP/ROB/2016	Administrative approval for Rs. 76.57 Cr. accorded on 2.12.2016.
RUB on Jaipur-Sikar Railway Line near Bridge No. 107 at chainage	JDA initiative to construct RUB as the line currently meter gauge single track soon proposed to be converted to broad gauge	GAD approved by No. HQ/W/420/2/3/67 dated 12.10.2016 bearing HQ. Drg. No. CBE-87/JP/RUB/2016	Administrative approval for Rs. 29.56 Cr. accorded on 11.2.2016.

Keeping in view the mixed traffic and severe difficulties encountered by people in these locations and assessing the TVUs which are much more than the mandatory minimum 1 lakh TVUs necessary to have an ROB/RUB, it has been decided by the JDA as well as Railways authorities to construct the 3 Road Over Bridges (ROBs) on cost sharing basis at the respective level crossings (i.e. L.C.-70, L.C.-200 & L.C.-211).

The additional lanes at Jhotawara (LC 87 old) in Jaipur city are being added by JDA as single entity based on traffic scenario and JDA's development plans for the area. The RoB at L/C 102/2E is also being taken up by JDA on its own initiative near Bhatton ki Gali Railway station on road connecting Sikar road to JDA's Swapnlok scheme and industrial areas at Renewal and Kaldera near Chomu. The RUB project at Jaipur Sikar railway line which would connect Anand Lok I & II area to Reengus is a deposit work without any cost sharing with Railways and is again being taken up by JDA as single entity.

Projects Details

The broad technical details of the proposed ROBs are as summarized below:-

Details	a) LC-211, Goner Road, Dantli	b) (LC-87 old) 3 lane ROB parallel to Jhotwara ROB	c) LC 70 on JP-SWM Railway Line, Sitapura, Jaipur	d) L/C-200, Bassi on JP-DLI Railway line in Jaipur	e) LC-102/2E, Jahota on Jaipur to Sikar Railway Line	f) RUB on Jaipur-Sikar Railway Line near Bridge No. 107
RD of railway track	223 / 4 – 5 Of DLI-JP railway track near Khatipura	134/ 4 – 5 Of JP-SIKAR railway track at Jhotwara	110 / 0 – 1 Of JP – SWM railway track	207/8-9 Of DLI-JP railway track near Bassi	153/5-6 on Jaipur-Sikar Railway Line	151/5-6 on Jaipur-Sikar Railway Line



Details	a) LC-211, Goner Road, Dantli	b) (LC-87 old) 3 lane ROB parallel to Jhotwara ROB	c) LC 70 on JP-SWM Railway Line, Sitapura, Jaipur	d) L/C-200, Bassi on JP-DLI Railway line in Jaipur	e) LC-102/2E, Jahota on Jaipur to Sikar Railway Line	f) RUB on Jaipur-Sikar Railway Line near Bridge No. 107
	Railway Station			Railway Station		
Nearby town	in Jaipur City Limit	in Jaipur City Limit	Sitapura, Jaipur	in Jaipur City Limit	in Jaipur City Limit	in Jaipur City Limit
Railway span or length	31.28m(for composite girder) and 24.0m (for PSC Girder)	50 m	80 m	31.28m(for composite girder) and 24.0m (for PSC Girder)	31.28m(for composite girder) and 25.0m (for PSC Girder)	Two Boxes of size 9.0m X 4.0m RCC Cast-in-Situ
Road						
Ramp on stilts	456.0 m	1180m(3 Lane) 1080m (2 Lane)	545m	205 m	406.28m	30.0m in Railway Portion
Ramp on Solids	258.00 m	625 m	370m	260.00 m	378.90m	approaches 790.0 m
Total length	770 m	2885 m	995 m	700 m	785.18 m	820.00 m
Service roads with drains	9.0 m service road with drains	10.5 m service road with drains	10.50 m service road both sides with drains	7.50 m service road with drain	7.50 m service road with drain	Drain under Railway Portion with sump
Typical Cross section	Divided Six lane with foot path (0.75m on both side) and median (1.2m)	3 lane/ 2 Lane	Six lane split into 3-3 lanes with crash barrier on both sides	Divided Four lane with median (1.2m)	Divided Four lane with median (0.9m)	Divided Four lane with median
Gradient	1 in 30	1 in 40 (Towards Kalwar) 1 in 30 (Towards Jaipur)	1 in 40 @ Hospital side & 1 in 30 @ Tonk road side	1 in 30	1 in 30	1 in 20
Structural arrangement/ Foundation Substructure/ Super structure	6 nos of 1.2m dia Piles for each group with Pile Cap and twin pier with 4 no of PSC girders (each pier) with deck slab.	Piles Pier and pier caps with RCC Girders and deck slab	8 piles in railway portion & 6 piles in remaining portion Pile cap, Pier with Pier cap 4 PSC Girders with 250mm deck slab & 65mm wearing coat.	9nos of 1.2m dia Piles for each group with Pile Cap and single pier with 6 no of PSC girders (each pier) with deck slab.	6nos of 1.2m dia Piles for each group with Pile Cap and single pier with 6 no of PSC girders on viaduct and composite girders on railway span with deck slab.	Two Boxes of size 9.0m X 4.0m RCC Cast-in-Situ Length 30.00m in Railway Portion.
Pavement Composition GSB WMM	300 mm 300 mm	250 mm 250 mm	230mm 250mm	300 mm 300 mm	300 mm 300 mm	GSB-200mm & PQC-



Details	a) LC-211, Goner Road, Dantli	b) (LC-87 old) 3 lane ROB parallel to Jhotwara ROB	c) LC 70 on JP-SWM Railway Line, Sitapura, Jaipur	d) L/C-200, Bassi on JP-DLI Railway line in Jaipur	e) LC-102/2E, Jahota on Jaipur to Sikar Railway Line	f) RUB on Jaipur-Sikar Railway Line near Bridge No. 107
DBM BC	75mm GR-I 50mm GR-I 40mm GR-II	75 mm GR-I 50mm GR-I 50mm GR-II	60mm GR-I 50mm GR-I 50mm GR-II	75mm GR-I 50mm GR-I 40mm GR-II	75mm 50mm	300mm thick over 150 mm PCC
PCU	7016	7759	11539	11451		N.A (RUB)
Land Acquisition (in Hect.)						
Available	2.60	2.98	4.14	1.73	0.80	1.54
To be acquired	0.60	2.26	0.35	0.53	1.44	0.08
Total	3.20	5.23	4.49	2.26	2.24	1.62
ESMS Categorization						
Environment	E-2	E-2	E-2	E-2	E-2	E-2
Social	S-2	S-2	S-2	S-2	S-2	S-3

Project Cost & Financing

Jaipur Development Authority, Jaipur is the implementing agency for all the projects. The works of three ROB's (i.e. L.C.-70, L.C.-200 & L.C.- 211) are already in progress and the work of ROB at Jhotwara (LC-87 old), Jahota and Anandlok RUB are proposed to be carried out after calling competitive tenders from contractual agencies. The total estimated cost breakup of all the projects along with tentative railway share for three ROB's is indicated as follows:-

(Rs. In Cr.)		
S.No.	Description	Total Cost
a)	<i>Construction of 6 lane ROB with LHS including Electrification work at L/C-211, Goner road, Dantli on JP-DLI Railway line in Jaipur.</i>	
1	Main ROB Construction cost	70.50
2	LHS	4.00
3	Add LS Electrical Utility Shifting	3.50
4	Signage Board	1.50
5	Service Road	6.50
6	Drain work	4.00
7	Diversion	1.50
	Subtotal	91.50
8	Add 4% for contingency	3.66
	Subtotal	95.16
9	Add 5% Price Escalation for SOR 2014-15	4.76
	Total	99.92
	Railway share*	20.00
	JDA share	79.92



S.No.	Description	Total Cost
b)	Construction of 3 lane ROB parallel to existing Jhotwara ROB from Panchayat Bhawan/ SBBJ Bank to Ambabari T-junction, Jaipur	
1	Main ROB with elevated road	95.41
2	Service Road	7.83
3	Electrification	10.00
4	Utility shifting	8.00
5	Drainage	5.00
6	Railway fee	2.00
7	Signage & Horticulture	4.00
8	Dismantling of existing structure	5.00
9	Non-BSR item	12.00
10	Rehabilitation	2.00
	Subtotal	151.24
11	Escalation 6%	9.07
	Sub total	160.31
12	Add 4% for contingency	6.41
	Total	166.73
	Railway share	NA
	JDA share	166.73
c)	Construction of Six lane ROB in lieu of LC-70, Sitapura on JP-SWM railway line, Jaipur	
1	Main Bridge	
	Bridge & approach	86.82
	LHS	5.12
	Electrical works	2.44
	Signage & Misc.	1.02
	Non BSR item	2.50
	Sub total	97.90
2	Add 4% for contingency	3.92
	Sub total	101.82
3	Service Road	6.52
4	Drain work	5.25
5	Diversion	0.56
	Sub total	12.33
6	Add 4% for contingency	0.49
7	Utility shifting & Railway supervision charges	1.53
	Subtotal	14.35
	Total	116.17
	Railway share*	10.00
	JDA share	106.17

S.No.	Description	Total Cost
d)	Construction of four lane road over bridge with limited height subway (LHS) in lieu of L.C.-200, Bassi Town, Jaipur	
	Main Bridge	
1	BSR Item	36.91
2	Non-BSR item	0.98
3	Limited Height Subway (LHS)	2.23
4	Road work	3.68
5	Signage	0.23
6	Drainage	3.77
7	Electrical Work	4.02
	Subtotal	51.82
8	Escalation	3.50
	Sub total	55.32
9	Add 4% for contingency	2.22
	Total	57.54
	Railway share*	10.00
	JDA share	47.54
e)	Construction of Four Lane ROB in lieu of LC-102/2E, Jahota on Jaipur to Sikar Railway Line, Jaipur	
1	Construction cost	60.51
2	Provisional Charges for Railways	5.00
3	LS Electrical Utility Shifting	3.00
	Subtotal	68.51
4	Add 4% for contingency	2.74
	Subtotal	71.25
	Add Price Escalation for SOR 2014-15	5.32
	Total	76.57
	Railway share	Nil
	JDA share	76.57
f)	Construction of RUB on Jaipur-Sikar Railway Line near Bridge No. 107 to connect Anand Lok and Swapan Lok JDA Schemes, Jaipur	
1	Construction cost	14.00
2	Provisional Charges for Railways	3.00
3	Electrical Works	2.11
4	Utility Shifting	3.00
	Subtotal	22.11
5	Add T.P. (approx) 20%	4.42
	Subtotal	26.53
6	Add 4% for contingency	1.06
	Subtotal	27.59
	Add 7% Price Escalation for SOR 2014-15	1.97
	Total	29.56
	Railway share	Nil
	JDA share	29.56

* Current Railway share as intimated by JDA

Note: As requisite ESMS reports (IEE & SRP, as applicable) are still to be finalized, the related costs, if over & above, the provisions taken beforehand, shall have to be borne by JDA, from its own resources.



The cost of main bridge, solid approach, electrification, service roads, shifting of level crossing, diversion road etc. shall be borne by railways and JDA as per the provision mutually agreed upon.

Drawal Schedule and Sharing Pattern

The rates taken in the estimate are based on the RUIDP BSR-2013, JDA BSR-2016 etc. The estimated project cost includes provision for shifting of utilities etc. The financing structure proposed for respective ROB and RUB is as under:-

a) Construction of 6 lane ROB with LHS including Electrification work at L/C-211, Goner road, Dantli on JP-DLI Railway line in Jaipur.

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	6.00	4.00	10	2	10.00
2017-18	30.00	20.00	9	1	50.00
2018-19	23.92	16.00	8	1	39.92
Total	59.92	40.00			99.92

The proposed date of completion for the project is **February 2019**.

b) Construction of 3 lane ROB parallel to existing Jhotwara ROB from Panchayat Bhawan/ SBBJ Bank to Ambabari T-junction, Jaipur

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2017-18	5.00	1.66	10	2	6.66
2018-19	44.00	14.67	9	1	58.67
2019-20	44.00	14.52	8	1	58.52
2020-21	32.00	10.88	7	1	42.88
Total	125.00	41.73			166.73

The proposed date of completion for the project is **March 2021**.

c) Construction of Six lane ROB in lieu of LC-70, Sitapura on JP-SWM railway line, Jaipur

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	10.00	4.71	10	2	14.71
2017-18	54.00	25.41	9	1	79.41
2018-19	15.00	7.05	8	1	22.05
Total	79.00	37.17			116.17

The proposed date of completion for the project is **December 2018**.



d) **Construction of four lane road over bridge with limited height subway (LHS) in lieu of L.C.-200, Bassi Town, Jaipur**

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	1.50	0.93	10	2	2.43
2017-18	16.00	9.93	9	1	25.93
2018-19	18.00	11.18	8	1	29.18
Total	35.50	22.04			57.54

The proposed date of completion for the project is **March 2019**.

e) **Construction of four lane ROB in lieu of L.C 102/2E on Jahota on Jaipur-Sikar Railway Line, Jaipur**

(Rs. in Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	6.00	2.00	10	2	8.00
2017-18	40.00	13.33	9	1	53.33
2018-19	11.00	4.24	8	1	15.24
Total	57.00	19.57			76.57

The proposed date of completion for the project is **June 2018**.

f) **Construction of RUB on Jaipur-Sikar Railway line Near Bridge no. 107 to connect Anand Lok and Swapan Lok JDA schemes**

(Rs. in Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	1.00	0.33	10	2	1.33
2017-18	18.00	6.00	9	1	24.00
2018-19	3.00	1.23	8	1	4.23
Total	22.00	7.56			29.56

The proposed date of completion for the project is **December 2018**.

Abstract of the 5 ROB and 1 RUB projects are as enclosed at **Appendix 1A, 1B, 1C, 1D, 1E & 1F**.

Project Report Appraisal

The project report submitted by JDA have been prepared by their technical departments as per the applicable norms. The reports appear to be as per the Plans applicable to the area. The need for financial assistance has been indicated as urgent and hence NCRPB



has been approached. Some land needs to be acquired for all the six projects and agency should ensure that the projects do not get delayed due to the same and applicable norms are followed in balance land acquisition and required ESMS reports are prepared and adhered to.

The Implementing Agency also needs to explore the possibilities regarding incorporation of Rain Water Harvesting mechanisms and other environment improvement measures along the road as a ground water recharging measures which should be made part of all current & future road development schemes.

As per the details available, the projects have been categorized as E-2 regarding environment aspects and S-2 regarding social aspects. The Initial Environmental Examination (IEE) Report is under finalization and the agency shall bear the related costs if not already covered in the current estimates.

Project Benefits & Justification

The five RoB and one RUB projects from JDA are going to help minimize the traffic situation at the respective crossings to a great extent. Jaipur is one of the key CMA in Rajasthan state and a fast developing city experiencing fast increase in vehicle population of vehicles. Keeping this in view, there is a huge requirement of construction developments in all spheres. The roads, however, are in need of improvement not only for current usage but also to cater to the future needs. Therefore, this road which is a significant section of road networks in the Jaipur city appear to be of vital importance for achieving the objective of improving connectivity, accessibility and mobility apart from other social and economic benefits in the urban area.

Point for Decision

- In case of RoBs wherein the project is approved by Railway authorities and the project cost shared, NCRPB considers the Railway approved estimated cost and cost sharing and provides for loan on the agency share. Accordingly, the loan for the RoBs at LC 70, LC 200& LC 211 have been arrived at, based on the information provided by JDA regarding its share and Railway share. The loans shall be limited to 75% of the JDA share in case Railway agrees to increase its share of the project cost which is currently being vetted by them.
- For the case of ROB at Jhotwara (LC 87 old) in Jaipur city additional lanes are being added by JDA as single entity based on traffic scenario.
- The RoB at L/C 102/2E is being taken up by JDA on its own initiative near Bhatton ki Gali Railway station on road connecting Sikar road to JDA's Swapnlok scheme and industrial areas at Renewal and Kaldera near Chomu as the mandatory minimum 1 lakh TVUs necessary to have an ROB are still to be achieved.
- The RUB project at Jaipur Sikar railway line which would connect Anand Lok I & II area to Reengus is a deposit work without any cost sharing with railways.

The summary of Railway's GAD approvals and share, JDA share and the loan part is as presented below:-



The details are as under:-

(Rs. In Cr.)

Level Crossing	Railway Approval Correspondence Reference	Railway Sanctioned Cost and Share		Estimated Cost	Loan from NCRPB
		Railway	JDA		
LC-211, Jaipur	GAD approved by No. HQ/W/420/2/66 dated 29.12.2016 bearing HQ.Drg.No. CBE-807/ JP/ ROB/2016	20.00	79.92	99.92	59.92
(LC-87 old) Jaipur	As per Railway document, HQ Drg No. CBE-784/JP/ROB/2016 dated 19.10.2016	0.00	166.73	166.73 (No cost sharing with Railways)	125.00
LC- 70 Sitapura	Railway Letter No. HQ/W/420/2/1/56 dated 12.07.2016	10.00	106.17	116.17	79.00
LC 200 Bassi	GAD approved by No. HQ/W/420/2/2/1/JDA/2010 /8 dated 24.10.2016 bearing HQ.Drg.No. CBE-89/JP/ ROB/2016	10.00	47.54	57.54	35.50
LC- 102/2E Jahota	GAD approved by No. HQ/W/420/2/1/57 dated 26.05.2016 bearing HQ.Drg.No. CBE-758/JP/ROB/2016	0.00	76.57	76.57 (No cost sharing with Railways)	57.00
RUB Anand Lok	GAD approved by No. HQ/W/420/2/3/67 dated 12.10.2016 bearing No. CBE-1087/JP/RUB/2016	0.00	29.56	29.52 (No cost sharing with Railways)	22.00

Note:- Loans have been calculated based on JDA share in the available Railway approved project estimates where applicable.

JDA is in process of carrying out the necessary ESMS studies and shall comply with the requirements. As requisite ESMS reports for the projects (IEE & SRP, as applicable) are still to be finalized, the related costs, if over & above, the provisions taken beforehand, shall have to be borne by JDA from its own resources, and JDA shall ensure that the requisite reports are prepared and required action taken as applicable to the respective project. The Implementing Agency also needs to explore the possibilities regarding incorporation of Rain Water Harvesting mechanisms and other environment improvement measures along the road as a ground water recharging measures which should be made part of all current & future road development schemes.

The Jaipur Development Authority, Jaipur (JDA) is seeking loan of 75% of its share from the NCRPB. The loan amounts for the projects scheduled to be released in subsequent financial year as per project eligibility, will carry interest rate as applicable on the date of release of loan installment. The principal amount along with interest is to be repaid in 10



years with a moratorium period of 2 years. Accordingly, PSMG-I may sanction respective loan amounts as indicated below:

- Loan amount of **Rs. 59.92 Cr.** for the project of **Construction of Six lane ROB with LHS including Electrification work at L/C-211, Goner road, Dantli on JP-DLI Railway line in Jaipur.**
- Loan amount of **Rs. 125.00 Cr.** for the project of **“Construction of 3 lane ROB parallel to existing Jhotwara ROB from Panchayat Bhawan/ SBBJ Bank to Ambabari T-junction, Jaipur**
- Loan amount of **Rs. 79.00 Cr.** for the project **“Construction of Six lane ROB in lieu of LC-70, Sitapura on JP-SWM railway line, Jaipur**
- Loan amount of **Rs. 35.50 Cr.** for the project **“Construction of four lane road over bridge with limited height subway (LHS) in lieu of L.C.-200, Bassi Town, Jaipur**
- Loan amount of **Rs. 57.00 Cr.** for the project **“Construction of four lane ROB at in lieu of L.C 102/2E on Jahota on Jaipur-Sikar Railway Line, Jaipur”.**
- Loan amount of **Rs. 22.00 Cr.** for the project **“Construction for RUB on Jaipur-Sikar Railway line Near Bridge no. 107 to connect Anand Lok and Swapan Lok JDA schemes”.**

The target date of completion of respective projects shall be as follows:

L/C-211, Goner road, Dantli	February 2019
Jhotwara ROB	March 2021
LC-70, Sitapura	December 2018
L.C.-200, Bassi	March 2019
L.C 102/2E on Jahota	June 2018
RUB on Jaipur-Sikar Railway line Near Bridge no. 107	December 2018

The loan will be subject to JDA/ Govt of Rajasthan making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as proposal been posed to the Group. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly. JDA will take all necessary steps to follow the social, environmental and wildlife issue requirements as per applicable laws of state and central government and ensure the required land to be in its possession



APPENDIX-1A to Agenda 4.2A

I. General Particulars

1	Project	Construction of 6 lane ROB with LHS including Electrification work at L/C-211, Goner road, Dantli on JP-DLI Railway line in Jaipur.
2	Type of project	Road Over Bridge (ROB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	As per Indian Railways, the level crossings with more than one lakh TVUs (Tram Vehicle units) need to have ROB/RUBs. As the average TVU at level crossing no. 211 at Goner road on Delhi- Jaipur railway line road - comes to 3,97,200 units, a 6 lane Road over Bridge (ROB) has been proposed here to facilitate free movement of traffic. There is very heavy traffic volume on the stretch of road because the level crossing is located on the 300 ft wide Proposed master plan Goner sector Road which is a link Road between NH-11 (Jaipur-Agra highway) and NH-12 (Jaipur-Jabalpur Highway).
5	Location	Jaipur City, Rajasthan
6	Borrowing agency	Jaipur Development Authority
7	Implementing agency	Jaipur Development Authority
8	Land availability	Total 3.20 ha. (Available – 2.60 ha and to be acquired 0.60 ha.)

II. Financial features

9	Estimated cost of projects	Rs. 99.92 Cr.
10	Loan from NCRPB	Rs. 59.92 Cr
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Jaipur Development Authority.
13	Other sources of funds	Railways / JDA / Govt. of Rajasthan
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Required.
16	Other Security proposed	Adequate security to be provided by JDA
17	Stipulated date of completion	February 2019

III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	6.00	4.00	10	2	10.00
2017-18	30.00	20.00	9	1	50.00
2018-19	23.92	16.00	8	1	39.92
Total	59.92	40.00			99.92



APPENDIX-1B to Agenda 4.2B

I. General Particulars

1	Project	Construction of 3 lane ROB parallel to existing Jhotwara ROB from Panchayat Bhawan/ SBBJ Bank to Ambabari T-junction, Jaipur
2	Type of project	Road Over Bridge (ROB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	The existing ROB capacity is only 2070 PCU's per hour in both directions. The through traffic (Kalwar to Jaipur and Jaipur to Kalwar) is 7759 PCU's per hour in both direction. After making the existing ROB in one way direction (from Jaipur to Kalwar) it serves for 3600 PCU's per hour. Still there is a requirement to cater 4159 PCU's in the base year itself. Considering above scenario there is an urgent need of another 3 lane ROB to reduce the traffic load from existing ROB.
5	Location	Jaipur City, Rajasthan
6	Borrowing agency	Jaipur Development Authority
7	Implementing agency	Jaipur Development Authority
8	Land availability	Total 5.23 ha. (Available – 2.98 ha and to be acquired 2.26 ha.)

II. Financial features

9	Estimated cost of projects	Rs. 166.73 Cr.
10	Loan from NCRPB	Rs. 125.00 Cr
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Jaipur Development Authority.
13	Other sources of funds	JDA / Govt. of Rajasthan
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Required.
16	Other Security proposed	Adequate security to be provided by JDA
17	Stipulated date of completion	March 2021

III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2017-18	5.00	1.66	10	2	6.66
2018-19	44.00	14.67	9	1	58.67
2019-20	44.00	14.52	8	1	58.52
2020-21	32.00	10.88	7	1	42.88
Total	125.00	41.73			166.73



APPENDIX-1C to Agenda 4.2C**I. General Particulars**

1	Project	Construction of Six lane ROB in lieu of LC-70, Sitapura on JP-SWM railway line, Jaipur
2	Type of project	Road Over Bridge (ROB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	As per Indian Railways, the level crossings with more than one lakh TVUs (Tram Vehicle units) need to have ROB/RUBs. As the average TVU at level crossing no. 70 at Sitapura on Goner road on JP – SWM Railway line road - comes to 143512 units, a six lane Road over Bridge (ROB) has been proposed here to facilitate free movement of traffic. There is very heavy traffic volume on the stretch of road because the level crossing is located within the Sitapura Industrial area which is one of the most populated industrial area, as well as in this area 5 – 6 Engineering and Medical Institute with one of the largest hospital of Jaipur District
5	Location	Sitapura, Jaipur
6	Borrowing agency	Jaipur Development Authority
7	Implementing agency	Jaipur Development Authority
8	Land availability	Total 4.49 ha. (Available – 4.14 ha and to be acquired 0.35 ha.)

II. Financial features

9	Estimated total cost of projects	Rs. 116.17 Cr.
10	Loan from NCRPB	Rs. 79.00 Cr
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Jaipur Development Authority.
13	Other sources of funds	Railway / JDA / Govt. of Rajasthan
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Required.
16	Other Security proposed	Adequate security to be provided by JDA
17	Stipulated date of completion	December 2018

III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	10.00	4.71	10	2	14.71
2017-18	54.00	25.41	9	1	79.41
2018-19	15.00	7.05	8	1	22.05
Total	79.00	37.17			116.17



APPENDIX-1D to Agenda 4.2D

I. General Particulars

1	Project	Construction of four lane road over bridge with limited height subway (LHS) in lieu of L.C.-200, Bassi Town, Jaipur
2	Type of project	Road Over Bridge (ROB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	As per Indian Railways, the level crossings with more than one lakh TVUs (Tram Vehicle units) need to have ROB/RUBs. As the average TVU at level crossing no. 200 at Bassi, Tuga Road on Delhi- Jaipur railway line road - comes to 3,29,112.00 units, a 4 lane Road over Bridge (ROB) has been proposed here to facilitate free movement of traffic. There is very heavy traffic volume on the stretch of road because the level crossing is located on the Bassi- Tunga Road (SH-24) which is a link Road between NH-11 (Jaipur-Agra highway) and NH-11 B (Dausa – Kothun road Highway).
5	Location	Jaipur City, Rajasthan
6	Borrowing agency	Jaipur Development Authority
7	Implementing agency	Jaipur Development Authority
8	Land availability	Total 2.29 ha. (Available – 1.73 ha and to be acquired 0.53 ha.)

II. Financial features

9	Estimated total cost of projects	Rs. 57.54 Cr.
10	Loan from NCRPB	Rs. 35.50 Cr
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Jaipur Development Authority.
13	Other sources of funds	Railways / JDA / Govt. of Rajasthan
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Required.
16	Other Security proposed	Adequate security to be provided by JDA
17	Stipulated date of completion	March 2019

III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	1.50	0.93	10	2	2.43
2017-18	16.00	9.93	9	1	25.93
2018-19	18.00	11.18	8	1	29.18
Total	35.50	22.04			57.54



APPENDIX-1E to Agenda 4.2E

I. General Particulars

1	Project	Construction of four lane ROB at in lieu of L.C 102/2E on Jahota on Jaipur-Sikar Railway Line, Jaipur
2	Type of project	Road Over Bridge (ROB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	As per Master Development Plan 2025 Jahota Town will be Developed as Satellite Town. This ROB is situated near bhatton ki gali railway station on important road connecting to sikar road railway line, Near swapan lok and industrial areas at Renewal and Kaladera. Presently ATVU is 58775 as the track was on meter gauge with single track. However the railway is converting this track to broad gauge with the provision of double track. So, the ATVU will also increase accordingly.
5	Location	Jaipur City, Rajasthan
6	Borrowing agency	Jaipur Development Authority
7	Implementing agency	Jaipur Development Authority
8	Land availability	Total 2.24 ha. (Available – 0.80 ha and to be acquired 1.44 ha.)

II. Financial features

9	Estimated total cost of projects	Rs. 76.57 Cr.
10	Loan from NCRPB	Rs. 57.00 Cr
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Jaipur Development Authority.
13	Other sources of funds	JDA / Govt. of Rajasthan
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Required.
16	Other Security proposed	Adequate security to be provided by JDA
17	Stipulated date of completion	June 2018

III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	6.00	2.00	10	2	8.00
2017-18	40.00	13.33	9	1	53.33
2018-19	11.00	4.24	8	1	15.24
Total	57.00	19.57			76.57



APPENDIX-1F to Agenda 4.2F

I. General Particulars

1	Project	Construction for RUB on Jaipur-Sikar Railway line Near Bridge no. 107 to connect Anand Lok and Swapan Lok JDA schemes
2	Type of project	Road Under Bridge (RUB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	This RUB will connect the residential schemes Anand lok I, II and Swapan lok and assist for smooth traffic movement. This will save time and inconvenience caused to the nearby residents.
5	Location	Jaipur City, Rajasthan
6	Borrowing agency	Jaipur Development Authority
7	Implementing agency	Jaipur Development Authority
8	Land availability	Total 1.62 ha. (Available – 1.54 ha and to be acquired 0.08 ha.)

II. Financial features

9	Estimated total cost of projects	Rs. 29.56 Cr.
10	Loan from NCRPB	Rs. 22.00 Cr
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Jaipur Development Authority.
13	Other sources of funds	JDA / Govt. of Rajasthan
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Required.
16	Other Security proposed	Adequate security to be provided by JDA
17	Stipulated date of completion	December 2018

III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2016-17	1.00	0.33	10	2	1.33
2017-18	18.00	6.00	9	1	24.00
2018-19	3.00	1.23	8	1	4.23
Total	22.00	7.56			29.56



Agenda Item No. 4.3 : Construction of Elevated Road from Sodala Tri-junction to LIC Office near Ambedkar Circle, Jaipur from JDA, Rajasthan

Introduction

An efficient transport system is a pre requisite for sustained economic development. It is not only the key infrastructural input for the growth process but also plays a significant role in promoting regional integration. The transport systems also plays an important role for promoting the development of the backward regions and integrating them with the mainstream economy by opening them to trade and investment.

The Transport Plan policies and strategies of the Regional Plan-2021 recommend that accessibility should be provided to all parts of the NCR and its Counter Magnet Areas to promote and support economic development.

Due to increase in the economic activity and consequent load on road transport, the road network in Jaipur City needs improvement in terms of carriageway width, crust thickness, and removal of inherent deficiencies such as acute curves, new construction of roads such as ring roads, bypass elevated corridor etc,

Accordingly, with a focus on improving an important 3 km road stretch by way of constructing an elevated road, in Jaipur CMA, Jaipur Development Authority (JDA) has taken up the project of “Construction of Elevated Road from Sodala Tri-junction to LIC Office near Ambedkar Circle” and approached NCRPB to approve loan assistance for the project having an estimated cost of Rs 250 Cr.

Project Details

The Elevated road project is a part of NH 11 and starts near Ambedkar Junction further merging to the existing elevated section of the Ajmer road at Sodala junction. The elevated road is proposed to be staggered with the length being about 2.8 km in the up direction and 1.8 km in the down direction.

The project involves no land acquisition and is proposed to be constructed in single pier in the median of existing road. The project will facilitate vehicular movement in the east west direction of the city and provide a high capacity corridor connecting central city with south eastern part of the city thus, helping in decongestion of the central areas. The road will fly over at least 3 major signalized junctions, 2 rotaries and 2 railway crossing. The famous governor residence, CM residence and the Rajasthan Assembly as well as the Secretariat also fall on this stretch adding to the significance of the project road.

The project road will have elevated four lane divided carriageway road.

Technical Details

ROW in built up area	17 m. (4 lane stretch) & 8.5 m. each in the staggered 2 lanes stretches
Carriage way for two lane	7.50 m
Foundation	1200 mm dia piles with pile cap in 4 lane stretch and 1000 mm dia piles with pile cap in staggered stretches



Piers	2m x 3m RCC piers with integrated cap
Superstructure	Fish belly segmental box construction with transversely pre-stressed cantilever arms
Vertical clearance	5.50 m minimum above finished road level of lower road Spans 105 nos of varying spans from 27 to 32 m and above according to site condition, lay out plan approved etc.
Approaches	RE wall with soil fill
Other fixtures	All other conventional provisions provided
Traffic intensity	82,678 to 117,116 PCUs as per 2011 (2021 projected figure as 134,200 to 189,110 PCUs)
Design life	10 years for rigid pavement
Speed	40 kmph
Terrain	Plain

The Improvements are only in the existing alignment and the impacts during the construction will be properly mitigated by the JDA who have assured to follow the ESMS policies of NCRPB. The JDA shall adhere mandatory; and statutory laws during implementation as well as keeping the clearances alive. The tentative costs for ESMS has been included under contingency in the estimate. The project has been categorized as E-2 regarding environment aspect and S-3 regarding social aspect.

Time period for construction of the project has been considered as **33 months**. As informed, the works have been awarded in Jul-16 and are under progress.

The Project Cost & Financing

The cost estimates have been prepared based on BSR RUIDP 2013 of Rajasthan. The component-wise break up of cost estimate of the project (after appraisal) is as under:

S. No.	Description	Amount (in Cr)
A	Land Acquisition including R&R	Nil
B	Construction Cost	
1	Bridge on stilts and approaches with RE wall and soil fill	
	BSR Items	165.58
	Non BSR Items	38.11
	Electrical Items	1.43
	Sub total	205.12
2	Shifting of Services	2
3	Railway Supervision charge (2% of cost of Railway portion works)	0.72
4	Consultancy, design proof check etc.	2.38
5	Miscellaneous including tender premium and price escalation	29.67
	Sub total	239.89
6	Contingency @ 4%	9.60
	Total	249.49

Say Rs. 250 Cr



The total estimated cost of the project amounting to Rs. 250.00 Cr. is proposed to be met as under:

Loan amount from NCRPB	Rs. 187.00 Cr.
JDA Share	Rs. 63.00 Cr.

Drawal Schedule and Sharing Pattern

JDA is the implementing agency for the project. The project is proposed to be executed by **December 2019** from the issue of sanction letter as per the following financing details: (Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (in yrs.)	Moratorium period	Phasing of expenditure on works
2016-17	10.00	3.33	10	2	13.33
2017-18	80.00	26.67	9	1	106.67
2018-19	60.00	20.00	8	1	80.00
2019-20	37.00	13.00	7	1	50.00
Total	187.00	63.00			250.00

Project Appraisal

The project report submitted by JDA has been vetted at the State Govt. level by its Technical as well as Planning Wing. JDA took up the initiative as far as back in 2011 in preparing feasibility reports for the project which have now been updated giving the current project report proposing the elevated road. The traffic data indicated in the report mandates the proposed width of the elevated road under the constraints of available ROW.

The cost estimates are as per the BSR 2013 and the project has already been awarded currently at a cost of Rs. 213.85 Cr. excluding the cost to be incurred under utility shifting and departmental charges to Railways etc.

The Implementing Agency also needs to explore the possibilities regarding incorporation of Rain Water Harvesting mechanisms and other environment improvement measures along the road as ground water recharging measures which should be made part of all current & future road development schemes.

As per the details available, the project has been categorized as E-2 regarding environment aspect and S-3 regarding social aspect. The Initial Environmental Examination (IEE) Report is under preparation and the agency shall bear the related costs if not already covered in the current estimates.

Project Benefits & Justification

This project will augment transportation infrastructure in the East-West direction of city for which there are limited corridors available at present. This project will provide a high capacity corridor connecting central city with south eastern part of the city in addition to decongesting the areas of central part of the city by diverting through traffic from it. It will pave way for a faster mobility and will prove to be a major step in coherence with planned growth of this historical city.



Keeping this in view, there is a huge requirement of construction developments in all spheres. The roads, however, are in need of improvement not only for current usage but also to cater to the future needs. Therefore, this road is of vital importance for achieving the objective of improving connectivity, accessibility and mobility apart from other social and economic benefits.

Point for Decision

It is proposed that loan assistance of **Rs. 187.00 Cr.** for the project of **Construction of Elevated Road from Sodala Tri-junction to LIC Office near Ambedkar Circle, Jaipur** against estimated cost of **Rs. 250.00 Cr.** may be approved as per project details at Appendix-I subject to compliances listed below. The loan will be released in 4 installments and will carry an interest rate as applicable for basic infrastructure project on the date of release of installment. The principal along with interest is to be repaid in 10 years with a moratorium period of 2 years for principal. The project is to be completed by December 2019. The loan will be subject to JDA making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per proposed project report. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly.

As requisite ESMS reports for the projects (IEE) are still to be finalized, the related costs, if over & above, the provisions taken beforehand, shall have to be borne by JDA from its own resources, and JDA shall ensure that the requisite reports are prepared and required action taken as per EMP applicable to the project.



APPENDIX – I to Agenda 4.3**I. General Particulars**

1	Project	Construction of Elevated Road from Sodala Tri-junction to LIC Office near Ambedkar Circle, Jaipur
2	Type of project	Infrastructure – Transportation (construction of elevated road)
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Location	The Elevated project road is a part of NH 11 and starts near Ambedkar Junction further merging to the existing elevated section of the Ajmer road at Sodala junction.
5	Borrowing agency	Jaipur Development Authority
6	Implementing agency	Jaipur Development Authority
7	Length	2.8 km
8	Land availability	Available

II. Financial features

9	Estimated total cost of project	Rs. 250.00 Cr
10	Loan from NCRPB	Rs. 187.00 Cr
11	Interest rate	As applicable at the time of loan disbursement.
12	Provision in State Budget of Principal & interest	To be provided by JDA/Govt. of Rajasthan in the budget of corresponding financial year.
13	Other sources of funds	JDA/State Govt.
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Required
16	Other Security proposed	Adequate security to be provided by JDA
17	Stipulated date of completion	<u>December 2019</u>

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (in yrs.)	Moratorium period (in yrs.)	Phasing of expenditure on works
2016-17	10.00	3.33	10	2	13.33
2017-18	80.00	26.67	9	1	106.67
2018-19	60.00	20.00	8	1	80.00
2019-20	37.00	13.00	7	1	50.00
Total	187.00	63.00			250.00



Agenda Item No. 4.4: Extension of Delhi Metro from Mundka to Bahadurgarh**Introduction**

The Transport Plan policies and strategies of the Regional Plan-2021 recommend that accessibility should be provided to all parts of the NCR to promote and support economic development. It further calls for linkages amongst regional centers and also sub-regional centers with efficient transport network for facilitating faster movement of traffic amongst such centers. Delhi Metro is playing a key part in integrating Delhi with its surrounding towns both in Haryana and Uttar Pradesh. Bahadurgarh is one of the towns in Haryana which has a common border with Delhi and which experiences heavy to & fro traffic with Delhi.

Govt. of Haryana expects that provision of a Metro connection alternative shall assure the commuting public about their mobility and shall encourage more & more people to opt for satellite towns of Delhi in Haryana. Metro system shall further help in improving safety situation, protection of environment, conservation of energy, and saving land to support the increasing population. Metro system is emerging as the most economical form of mass transit for intra city and inter city services. When used in conjunction with feeder buses providing collection and distribution services it is possible to establish an attractive and a very economical operation. The Regional Plan 2021 has also advised to provide rapid transit systems in the NCR and hence the metro project is as per the recommendations of the Plan.

In the 30th meeting of NCRPB held on 21.8.2007, Hon'ble Chief Minister, Haryana made a request to Hon'ble Chief Minister, Delhi to extend the Inderlok-Mundka Corridor of Delhi upto Tikri. Earlier the decision was taken by the Government of Haryana that the metro line may be terminated at City Park instead of bus stand Bahadurgarh and the same was conveyed to DMRCL on 31.10.2009. DMRCL then suggested that the only way to push forward the project was that GOH may execute the entire project (including Delhi portion) as deposit work and the total cost of the project of Rs. 1633 Cr. may be shared by GOH and GOI in the ratio of 80:20. GOH decided that the Bahadurgarh Metro project may be funded on the same pattern on which Gurgaon Metro Project was funded.

This project was discussed in the Empowered Group of Ministers (EGoM), Government of India in its meeting held on 9.8.2011 and it was decided that extension of metro line to Bahadurgarh be considered for inclusion in Delhi Metro Phase-III and a separate proposal be brought for consideration of EGoM. DMRCL updated the DPR in October 2011.

The matter was followed up with the Ministry of Urban Development and finally it was decided that DMRCL may revise the DPR taking into account the present ridership, Transit Oriented Development and funding pattern to be shared by GNCTD and GOH. DMRCL further revised the DPR in April 2012 as per which 11.182 km route length of metro with 4.875 km of Haryana segment and 6.307 km of Delhi segment was proposed.

Govt. of Haryana approved the Haryana portion of the Metro extension in its Council of Ministers meeting vide its cabinet UO Note No. 9/10/107/2012-2Cabinet dated 20.7.2012.

Haryana Mass Rapid Transport Corporation Limited (HMRTCL), was thereafter incorporated on 24.3.2012 with the approval accorded by Council of Ministers vide its orders dated 14.12.2011. HMRTC is a joint venture of State Government, HUDA and



HSIIDC with the objective to carry on the business of planning, designing, development, maintenance, operation of mass transit and other Urban Transport. HMRTC is the nodal agency which looks after the mass transport projects including metros. The Mundka to Bahadurgarh metro line project was accordingly taken up and is under implementation with foundation stone laid in Feb 2013. Further, more than Rs. 400 Cr have already spent by GoHaryana on the project till 2015-16. However, citing liquidity crunch, HMRTC has now approached NCRPB for financial assistance of **Rs. 270.22 Cr.** for its section.

The Project Details

Bahadurgarh is rapidly developing town in the National Capital Region. With high growth in transport demand, congestion on roads has been increasing due to phenomenal rise in private transport. Absence of an efficient public transport system coupled with rapid growth in the use of personalized vehicles has led to high consumption of fossil fuel and increase in environmental pollution. The transport system, at present, relies heavily on roads while relegating the Railways to a secondary role.

The proposed metro alignment has all the necessary approvals of MoUD, G o Haryana and GNCT of Delhi and covers 7 stations namely Mundka Industrial Area, Ghevra, Tikri Kalan, Tikri Border in Delhi portion and Modern Industrial Estate, Bahadurgarh Bus Stand, City Park in Haryana portion. Summary of project details is as presented below:

DMRCL revised the DPR in April 2012, the details of which are given as follows:-

a) Total route length	11.182 kms.
b) Haryana Segment	4.875 kms.
c) Delhi Segment	6.307 kms.
d) No. of stations (all elevated)	7 (Mundka Industrial Area, Ghevra, Tikri Kalan, Tikri Border, Modern Industrial Estate, Bahadurgarh Bus Stand, City Park)
e) Average intersection distance	1.58 kms.
f) Land requirement	
i. At stations and other locations	3.576 hec.
ii. Property development	4.00 hec. (Delhi area)
iii. Depot near Transport Nagar in Bahadurgarh	10.00 hec. (Haryana Area)
iv. Private land	2.034 hec.
Total land requirement	19.6104 hec.
g) Project cost at January 2011 price level	Rs. 1531.00 Cr.
i. Completion cost with taxes	Rs. 1991.00 Cr.
ii. Cost of Delhi segment	Rs. 1079.00 Cr.
iii. Cost of Haryana segment	Rs. 912 Cr.
h) i. Start of work	April 2012
ii. Date of completion	March 2016
i) FIRR	
i. Delhi portion	6.04%
ii. Haryana portion	2.29%
j) EIRR	19.62 after 25 years of operation



Traffic Demand

Ridership forecast of Bahadurgarh Metro Corridor – 2011			
	Pass./Day	Pass.Km/Day (Lakhs)	Pass.Km/Km/Day (Lakhs)
Ridership	74914	116456	160131
Passenger induced Ridership	17934	30220	46259
Total Ridership	92848	146676	206390
Passenger Km	1069614	1720513	2665920

Planning & Design Parameters

DMRC has already commissioned the Inderlok-Mundka corridor in Phase-II of Delhi Metro. Since this is further extension of existing Metro line, the planning norms and design parameters will be the same as adopted for Inderlok-Mundka line of Delhi metro.

Route Alignment

The route of Bahadurgarh corridor takes off from terminal Mundka station of Delhi metro planned in Phase-II. Centre line of Mundka Metro station is at the chainage of 15.796 km and its dead end is at km 16.396 length of this line from Centre line of Mundka station to the dead end of City Park Station will be 11.181 km.

Train Operation & System Design

Traction system for the Bahadurgarh corridor will be 25-kV ac 50-Hz Single phase. Designs and layouts of traction system and Electrical & Mechanical (E&M) system shall be similar to those provided on the Barakhamba-Dwarka line of Delhi Metro. Additional power required for this extension will be availed from M/s Haryana Vidyut Prasaran Nigam Limited. The Rolling Stock shall be of the same design as being procured by DMRC for Inderlok / Kirtinagar – Mundka line.

Detailed train operation plan has been prepared for a rake of 4 units at a frequency of 9 minutes catering to a capacity of 6920-phpd for the year 2016 at a scheduled speed of 40-kmph. The Maintenance Depot and Workshop is planned at Mundka for providing facilities for overhauling, inspection, maintenance and repair of the rolling stock.

The Rolling Stock shall be Stainless Steel body, Air-conditioned, 3-phase traction motors powered with IGBT converter and VVVF control system with regenerative braking similar to that of Delhi Metro.

S&T and Fare Collection System

Design consideration for the present corridor shall be commensurate with Phase-1&2 system of Delhi Metro and shall adopt the following features:-

- Design Headway (sec) - 120
- Operating Headway (sec) - 540
- Maximum Train Length (m) - 120
- Maximum Attainable Speed (kmph) - 80
- Average Speed (kmph) - 40
- Station Dwell Time (sec) - 30



Land

Abstract of land requirement for different components of this corridor is mentioned below:-

a) Government Land	3.576 ha.
o Government Land to be acquired at Stations & Other locations (Delhi area – 1.4549 ha. Haryana area – 2.1211 ha.)	
o Land exclusively for property development (Haryana area)	4 ha.
o Land for Depot (Haryana area)	10 ha.
b) Private Land	
o Private Land to be acquired at Stations & Other locations (Delhi area – 1.201 ha. Haryana area – 0.8334 ha.)	2.0344 ha.
c) Total Land to be acquired	19.6104 ha.

The project involved relocation of few shops, commercial-cum-residential buildings and hutments along the alignment.

Environment

Detailed Environmental Impact Assessment Study has been carried out along the proposed alignment. As a part of this study, comprehensive environmental baseline data such as water quality, vegetation, air and noise quality was collected. Both positive and negative impacts of the project were assessed in detail. The project involved cutting of upto 700 nos. of trees on Rohtak road. No historical / cultural monuments will be affected as a result of the proposed development. As the alignment is running almost on the road, acquisition of private land is kept to the barest minimum although few commercial properties are affected. To minimize the negative environmental impacts, a comprehensive Environment Management & Monitoring Plan has also been drawn up, both for construction and operational phases, outlining necessary remedial measures.

The Project Cost & Financing

The corridor under consideration falls partly in Delhi (6.307 km) and partly in Haryana (4.875 km). The data assumed for the 2 portions is as under:-

Item	Delhi Area	Haryana Area	Total
Length (km)	6.307	4.875	11.182
Estimated Cost without taxes (Rs./ Crore)	825.04	705.60	1530.64
Estimated Cost with Central taxes (Rs./Crore)	924.00	785.44	1709.44
Completion Cost with taxes (Rs./Crore)	1079.00	912.00	1991.00

Funding Pattern

	Delhi portion	Haryana portion
	Rs. in Cr. (%)	Rs. in Cr. (%)
Equity by GOI & GNCTD	257.00 (24%)	
Grant by GOI (20% on 612/- Cr.)		124.00 (14%)
Grant by DDA	46.00 (4%)	
Grant by HUDA (80% on 612/- Cr.)		496.00 (54%)



	Delhi portion	Haryana portion
	Rs. in Cr. (%)	Rs. in Cr. (%)
Interest free SD for land & CT by GOI & GNCTD	179.00 (17%)	
RS by DMRC		110.00 (12%)
Grant by Haryana to Delhi	152.00 (14%)	
SD for CT by GOI (80%)		80.00 (9%)
Loan	355.00 (33%)	
SD for CT by HUDA (20%)		20.00 (2%)
Property Development	90.00 (8%)	
Land free by HUDA		82.00 (9%)
Total	1079.00 (100%)	912.00 (100%)

The state taxes amounting to Rs. 47.56 Cr. at January 2011 price level for Delhi & Rs. 37.96 Cr. at January 2011 price level for Haryana, has to be exempted or reimbursed to DMRC

Although works are already ongoing, due to liquidity crunch in HUDA and HSIIDC, both are not in position of contributing their share towards the project. In order to complete the project in time, HMRTC has opted to take a loan from NCRPB.

Cost Estimates:

Abstract Capital Cost Estimates (cost at Jan 2011 price level)

Sl. No.	Description	Estimated Cost (Rs. in Cr.)
1.	Land	132.58
2.	Alignment and Formation	339.26
3.	Station Buildings (elevated) including E & M works	197.75
4.	Depot augmentation	100.00
5.	Permanent way	72.43
6.	Traction & power supply incl. VAC, lifts, escalators, etc.	95.67
7.	Signaling and Telecommunications and AFC works	160.03
8.	Rehabilitation & Resettlement	15.00
9.	Utilities (civil works) including Road Restoration Environmental protection	46.96
10.	Rolling Stock (in 2011)	236.96
11.	Staff Quarters	50.00
12.	Total of all items except Land	1314.06
13.	General charges @ 3% on all items except land	39.42
14.	Total of all items including General charges	1353.48
15.	Total cost including cost of land	1486.05
16.	Contingencies @ 3%	44.58
	Grand Total without land	1398.06
	Grand Total with land	1530.64
	Haryana share (Rs. 706 Cr.) + Delhi share (Rs. 825 Cr.) at Jan 2011 cost	Say Rs. 1531 Cr.
	Completion Cost with taxes (Rs./Crore) i.e. Rs. 1079 Cr. w.r.t. Delhi and Rs. 912 Cr. w.r.t. Haryana considering cashflow spills upto 2017-18	1991.00



The total contribution of GOH would work out to **Rs. 787.96 Cr.** to be contributed from 2012-13 to 2017-18 as per details given below:-

i.	80% cost towards Haryana portion	Rs. 496.00 Cr.
ii.	Central taxes @ 20%	Rs. 20.00 Cr.
iii.	Land free of cost	Rs. 82.00 Cr.
iv.	1/3 rd grant towards equity portion of Delhi portion	Rs. 152.00 Cr.
Total		Rs. 750.00 Cr.

State taxes amounting to Rs. 37.96 Cr. at January 2012 price level shall be extra. The contribution of State Government may be **Rs. 787.96 Cr.** Considering land as free, the amount required reduces to Rs. 705.96 Cr.

The current status of expenditure pertaining to Haryana is as presented below:-

GOH has submitted 1/3rd of the equity as grant of Rs. 152 Cr. towards the cost of Delhi segment for the early commissioning of the project.

Financial Year	Amount Due	Amount Released
2012-13	133.49	-
2013-14	176.49	124.00
2014-15	176.49	127.78
2015-16	176.49	148.50
2016-17	43.00	35.46
Total	705.96*	435.74

* excluding cost of land of Rs. 82.00 Cr.

The balance amount to be released i.e. Rs. 270.22 Cr. (less than 40% of the Haryana share) has now been sought as loan from NCRPB.

Although the construction is proposed to be **completed by March 2017**, the cash flow spillover is expected for completion only up to 2017-18 on account of payment normally required to be made to the various contractors up to that period necessitated by contractual clauses.

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from HMRTC (via grants & other contributions)	Tenure for Loan (in yrs.)	Moratorium period (in yrs.)	Phasing of expenditure on works
2015-16	-	400.28			400.28
2016-17	162.13	35.46	20	5	197.59
2017-18	108.09	-	19	4	108.09
Total	270.22	435.74			705.96

Appraisal of DPR

Although the project report has been prepared by the DMRC, a mandatory review of the report was done in NCRPB through its available experts. The project has the sanction of



Government of Haryana. The alignment has been fixed in consultation with DMRC who were also the DPR Consultants for the project. As DMRC is implementing the project, it is expected that necessary permissions for tree cutting must have been obtained although related documents are to be submitted for record. As per DPR, HVPN is supplying electricity for the alignment have provided the necessary consent and the required sub-stations for the proposed corridor are being constructed.

In principal approval has been granted by State Govt. to be the guarantor of the said loan and repayment of loan through State Plan Budget. Accordingly, necessary approval of Finance Department, Haryana is awaited.

The project FIRR on completion cost with central taxes comes to **2.29%** for Haryana portion and **6.04%** for Delhi portion. EIRR is **19.62%** after 25 years of operation.

Project Benefits & Justification

Proposed metro lines in Bahadurgarh will produce benefits mainly due to reduction of travel time and fuel cost of shifted road traffic and reduction in emission of gases from the road based motor vehicles. Travel time saving benefit shall be enjoyed not only by the metro passengers but also by the road based passengers. The speed on the roads adjacent to the metro line shall be reduced and the road passengers shall get the benefit of higher speed. There will be likely reduction of road accidents and thereby savings in the accident cost. Other benefits are not easily quantifiable but certainly exist. The benefits which can be quantified may be grouped into two namely (a) Benefits of the passengers shifted to metro and (b) Benefits of the road based passengers. Other benefits are follow up benefits due to savings from transport infrastructure due to the passengers, reduction of vehicle capital and operation cost due to metro and the benefits due to reduction of gases emitted by the vehicles on the road.

Point for Decision

It is proposed that loan assistance of **Rs 270.22 Cr.** for the project '**Extension of Delhi Metro from Mundka to Bahadurgarh**' (around 11.18 Km.) may be approved as per project details at Appendix-I.

The total estimated cost of the project is Rs. 1530.64 Cr. at January 2011 rates and Rs. 1991 Cr. as expected completion cost. Haryana cost of share comes to Rs. 787.96 Cr. against which Rs. 270.22 Cr. has been sought as loan. The loan will be released in 2 installments from year 2016-17 onwards and will carry an interest rate as applicable for other infrastructure project on the date of release of installment. The principal along with interest is to be repaid in 20 years with a moratorium period of 5 years for principal. The project is proposed to be executed by April, 2018 in physical terms. The loan will be subject to HMRTC/ Govt. of Haryana making suitable budgetary provisions in the Annual Budgets and furnishing of adequate security against loan. As project is being implemented by DMRC, it is expected that requisite Environment and Social aspects have been taken care of.



Appendix-I to Agenda Item No. 4.4

I. General Particulars

1	Project	Extension of Delhi Metro from Mundka to Bahadurgarh
2	Type of project	Mass Transportation
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Location	Delhi -Haryana
5	Borrowing agency	Haryana Metro Rail Transport Corporation (HMRTC Ltd.)
6	Implementing agency	HMRTC Ltd.
7	Length	11.18 km.
8	Land availability & land acquisition	Total land required is 19.6104 hec.

II. Financial Particulars

9	Estimated total cost of project	Rs. 1530.64 Cr. at January 2011 rates and Rs. 1991 Cr. as expected completion cost. Haryana cost of share comes to Rs. 787.96 Cr.
10	Loan from NCRPB	Rs. 270.22 Cr.
11	Interest rate	As applicable at the time of loan disbursement.
12	Provision in State Budget for Principal & interest payment	To be provided by Govt. of Haryana / HMRTC in the budget of corresponding financial year.
13	Other sources of funds	Grants from Central Govt., State Govt., HMRTC (HUDA / HSIIDC)
14	Tenure of loan	20 years with 5 year Moratorium period for payment of principal
15	Provision of State Govt. Guarantee	Adequate security shall be provided by HMRTC
16	Other Security proposed	Letter of comfort from Govt. along with Loan Agreement in case of loan to State Govt.
17	Stipulated date of completion	April, 2018

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from HMRTC (via grants & other contributions)	Tenure for Loan (in yrs.)	Moratorium period (in yrs.)	Phasing of expenditure on works
Upto 2015-16	-	400.28			400.28
2016-17	162.13	35.46	20	5	197.59
2017-18	108.09	-	19	4	108.09
Total	270.22	435.74			705.96



Agenda Item No. 4.5: Four Sewerage projects from PHED, Haryana

Agenda Item No. 4.5A: Providing renovation of existing 7 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Ganaur in Sonipat district

Agenda Item No. 4.5B: Providing renovation of existing 4.5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Kharkhoda in Sonipat district

Agenda Item No. 4.5C: Upgradation and renovation of existing 5 MLD STP based on MBBR technology followed by tertiary treatment in Samalkha town in Panipat district

Agenda Item No. 4.5D: Upgradation of existing 5.5 MLD STP & 5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination at Kosli Road and Sampla road respectively alongwith some balance pipeline laying, Jhajjar

Background

Hon'ble National Green Tribunal, New Delhi, in its decision dated 13.1.2015 regarding an application titled "Manoj Mishra vs. Union of India" has given following directions to Govt. of Haryana:-

"Wherever necessary, the technology of the existing STPs should be upgraded to ensure proper performance and adherence to the prescribed standards of effluent discharge.

To make every possible effort to ensure that the storm water drains do not carry sewage, sewage may be carried through those drains upon which the STPs have already been installed, till the completion of the project. After the completion of the project, steps shall be taken so that only minimal quantity of treated water from the STPs reaches Yamuna".

Further, Central Pollution Control Board, New Delhi vide its letter dated 21.4.2015 has asked the Chairman, Haryana State Pollution Control Board, to issue directions to the concerned departments/authorities to treat the effluent with BOD up to 10 mg/l.

So, in order to comply with the orders passed by Hon'ble NGT and to comply with the revised discharge standards fixed by CPCB, there is urgent necessity to upgrade these STPs. The upgradation is proposed by construction of additional structures such as Anoxic Tank, deep bed rapid gravity filters, installation of internal recirculation pumps, return activated sludge pumps and allied works which are necessary for bringing the BOD down upto 10 mg/l at existing. Accordingly, PHED Haryana has planned this upgradation and renovation of its existing Sewage Treatment Plants (STPs) in the various towns of Haryana.

The agency (PHED) has further requested NCRPB to provide necessary financial assistance for these upgradation works. Accordingly, the current agenda covers 4 projects pertaining to upgradation of STPs in Ganaur, Kharkhoda, Samalkha and Jhajjar towns as listed below:-



- A. Providing renovation of existing 7 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Ganaur in Sonipat district
- B. Providing renovation of existing 4.5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Kharkhoda in Sonipat district
- C. Upgradation and renovation of existing 5 MLD STP based on MBBR technology followed by tertiary treatment in Samalkha town in Panipat district
- D. Upgradation of existing 5.5 MLD STP & 5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination at Kosli Road and Sampla road respectively alongwith some balance pipeline laying, Jhajjar

Projects Details

Present Status & Proposal

The towns of Ganaur and Kharkhoda in Sonipat district already have **7 MLD STP** and **4.5 MLD STP** respectively, based on MBBR technology. Similarly, while Jhajjar town has two functioning STPs of **5.5 MLD and 5 MLD** capacity, Samalkha town in Panipat has a commissioned STP of **5 MLD**, all based on MBBR technology. All these STPs are proposed to be upgraded by PHED as per the new norms.

Table below broadly presents the main norms for discharge of treated waste water considered earlier and required now as per Hon'ble NGT orders.

S.No.	Parameter	Considered earlier	Now proposed
1	pH	7-7.5	6.5-9
2	SS	100mg/L	<20mg/L
3	BOD5	30mg/L	<10mg/L
4	COD	250mg/L	<60mg/L
5	TKN	-	<10mg/L
6	NH4-N	-	<5mg/L
7	Phosphorous	-	<1mg/L

PHED Haryana proposes to upgrade and renovate the existing STPs by adding the nitrification, de- nitrification mechanisms, process upgradation followed by tertiary treatment which will require a tertiary treatment plant including inlet chamber, Chemical house, flash mixer, rapid sand gravity filters, chlorine Contact tank. However, upgradation in form of additional civil works. The entire STP & tertiary treatment is proposed to be automatized with online PLC & SCADA.

The project in Jhajjar town shall also include sewer pipeline laying of around 10.3 km of 200 mm and 250 mm dia pipes.

The Project Cost & Financing

The component-wise break up of cost estimate of the projects are as under:



- A. Providing renovation of existing 7 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Ganaur in Sonipat district

S.No.	Particulars	Estimated Cost (Rs. In lakhs)
1	Civil works	85.71
2	Buildings	
	Annexe Building	25.95
3	Mechanical & Electrical Equipment	420.24
	Sub Total	531.90
4	Operation & Maintenance	18.87
	Total	550.77
5	Add 0.50% Contingency Charges	2.75
6	Add 1% Quality Control Charges	5.51
7	Add 0.85% 3rd Party inspection charges	4.68
	Grand Total	563.71
	Grand Total excluding O&M charges but including 5,6,7 above	544.40
	Loan part on Cost excluding O&M	408.30

- B. Providing renovation of existing 4.5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Kharkhoda in Sonipat district

S.No.	Particulars	Estimated Cost (Rs. In lakhs)
1	Civil works	85.85
2	Buildings	
	Annexe Building	25.20
	Platforms	4.20
3	Mechanical & Electrical Equipment	308.36
	Sub Total	423.61
4	Operation & Maintenance	18.87
	Total	442.48
5	Add 0.75% Contingency Charges	3.32
6	Add 1% Quality Control Charges	4.42
7	Add 0.85% 3rd Party inspection charges	3.76
	Grand Total	453.98
	Grand Total excluding O&M charges but including 5,6,7 above	434.62
	Loan part on Cost excluding O&M	325.97

- C. Upgradation and renovation of existing 5 MLD STP based on MBBR technology followed by tertiary treatment in Samalkha town in Panipat district

S.No.	Particulars	Estimated Cost (Rs. In lakhs)
1	Civil works	106.08
2	Annexe Building	17.78

S.No.	Particulars	Estimated Cost (Rs. In lakhs)
3	Platforms for DG Sets, Transformer Yard & Dry Sludge, Tonner Shed, Sludge Pump Room	7.30
4	Mechanical & Electrical Equipments	505.95
5	Provision for Repair of Existing structures and Development of Site	24.50
6	10% of civil works	10.61
	Sub Total	672.22
7	Operation & Maintenance	21.84
	Total	694.06
	Add 0.5% Contingency Charges+0.5% consultancy charges	6.94
	Add 1% Quality Control Charges	6.94
	Add 0.85% 3rd Party inspection charges	5.90
	Grand Total	713.84
	Grand Total excluding O&M charges but including 7,8,9 above	691.38
	Loan part on Cost excluding O&M	518.53

D. Upgradation of existing 5.5 MLD STP & 5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination at Kosli Road and Sampla road respectively alongwith some balance pipeline laying, Jhajjar (*the rates adopted in project report for quality control, third party inspection & contingency charges with regards to the pipeline laying part have also been considered for the STPs*)

S.No.	Particulars	Estimated Cost (Rs. In lakhs)
	Part-I	
A	Pipeline Laying	
1	Trunk Sewer	37.49
2	Lateral Sewer	125.2
	Total (Part-I)	162.69
	Part-II	
B	5.5 MLD STP	
3	Civil works	116.30
4	Buildings	
5	Annexe Building	26.04
6	Centrifuge Building	11.16
7	Platforms	6.60
8	Mechanical & Electrical Equipment	303.05
	Sub Total	463.15
9	Operation & Maintenance	22.19
	Total (Part-II)	485.34
	Part-III	
C	5 MLD STP	
10	Civil works	116.14
11	Chemical cum Annexe Buildings	36.00
12	Centrifuge Building	12.00



S.No.	Particulars	Estimated Cost (Rs. In lakhs)
13	Platforms	6.60
14	Mechanical & Electrical Equipment	230.96
	Sub Total	401.70
15	Operation & Maintenance	22.19
	Total (Part-III)	423.89
	Total (Part I + II +III)	1071.92
16	Add 0.75% Contingency Charges	8.04
17	Add 1% Quality Control Charges	10.72
18	Add 0.85% 3rd Party inspection charges	9.11
	Grand Total	1099.79
	Grand Total excluding O&M charges but including 16,17,18 above	1054.26
	Loan part on Cost excluding O&M	790.692

Drawl Schedule and Sharing Pattern

The target date of completion of all the four projects although proposed as 36-39 months in report is recommended to be kept as 24 months from the date of sanction and PHED Haryana shall be implementing the projects through financial assistance from NCRPB as per the following phasing and schedule. The loans components has been restricted at 75% of the project cost excluding O&M charges.

- A. Providing renovation of existing 7 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Ganaur in Sonipat district

(Rs. In lakhs)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (yr)	Moratorium period (yr)	Phasing of expenditure on works
2016-17	122.50	46.62	15	3	169.12
2017-18	142.90	54.39	14	2	197.29
2018-19	142.90	54.40	13	1	197.30
Total	408.30	155.41			563.71

- B. Providing renovation of existing 4.5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Kharkhoda in Sonipat district

(Rs. In lakhs)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (yr)	Moratorium period (yr)	Phasing of expenditure on works
2016-17	97.79	38.41	15	3	136.20
2017-18	114.09	44.80	14	2	158.89
2018-19	114.09	44.80	13	1	158.89
Total	325.97	128.01			453.98



- C. Upgradation and renovation of existing 5 MLD STP based on MBBR technology followed by tertiary treatment in Samalkha town in Panipat district

(Rs. In lakhs)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (yr)	Moratorium period (yr)	Phasing of expenditure on works
2016-17	155.57	58.59	15	3	214.16
2017-18	181.48	68.36	14	2	249.84
2018-19	181.48	68.36	13	1	249.84
Total	518.53	195.31			713.84

- D. Upgradation of existing 5.5 MLD STP & 5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination at Kosli Road and Sampla road respectively alongwith some balance pipeline laying, Jhajjar

(Rs. In lakhs)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (yr)	Moratorium period (yr)	Phasing of expenditure on works
2016-17	237.21	92.73	15	3	329.94
2017-18	276.74	108.18	14	2	384.93
2018-19	276.74	108.18	13	1	384.93
Total	790.69	309.10			1099.79

Abstract of the four projects are as enclosed at **Appendix 1A, 1B, 1C & 1D.**

Appraisal of DPRs

DPRs were technically looked into by available sewerage & waste water experts and the necessary suggestions were conveyed to agency for onward action, in the interest of the projects. The projects are simple upgradations as per Hon'ble NGT's directions and the standard norms & procedures applicable in the state government are proposed to be adopted. The necessary administrative approvals have been taken by PHED for the projects from the Standing Financing Committee (SFC) "B" of Haryana Government in its meeting held on 29.7.2016.

It was found that submitted reports had varying %age charged regarding contingency, quality control and third party inspection etc. probably due to different circles. It is recommended that in future, before forwarding the projects for financial assistance, PHED should cross check that uniform rates of contingency, quality control and third party inspection etc. are being adopted for the projects.

The O& M cost although considered in project cost is not applicable for loan. The projects were also examined as per the ESMS adopted by NCRPB. Both the projects fall in 'E-3' category. The proposed projects neither have impact of involuntary resettlement nor impact on indigenous people. Hence these projects were categorized as S-3 and required no social resettlement plan etc.



Project Benefits & Justification

By virtue of upgrading and renovating the STPs PHED shall attempt to meet the fresh /revised discharge standards for effluents as set by the Hon'ble NGT as well as CPCB. Haryana Pollution Control Board who is monitoring the efficiency and efficacy of the STPs shall thereafter be able to give its consent (as treated effluent parameters are currently exceeding the prescribed limits).

The four projects shall therefore make its contribution towards the river cleaning efforts of government and the Hon'ble Tribunal. With the upgradation of the STPs, the pollution of water is expected to be minimized significantly. The projects thus shall have positive impact on the environment as it will reduce the pollution of surface and ground water. The flow of untreated sewage from these sectors into drains further leading to River Yamuna is expected to be considerably reduced with the implementation of the proposed project. The economic gains of improvement in health, less illnesses and more work days due to less number of illnesses are significant

Grant in aid up to 15%

According to the decision of the 32nd Board meeting of the NCR Planning Board held on 22.3.2012, the sewerage projects are eligible to apply for grant-in aid up to 15% of the sanctioned project cost, on completion, subject to fulfillment of terms and conditions laid down by the Board.

Point for Decision

It is suggested that PHED may doubly check the basis for consideration of raw sewerage characteristics as they vary for different towns as does the required treatment for the different raw sewerage characteristics. The agency should take note as to how the raw sewage will be dealt during the period renovation / upgradation of the existing STPs. Further, the agency needs to be clear and ready with a plan as to how the treated effluent is planned to be discharged / utilized. In case of Jhajjar where small pipeline laying component is also involved, the agency should ensure that the design maintains the required self-cleansing velocity of the flow.

The State Govt. of Haryana is seeking loan of 75% of its share from the NCRPB. The loan amounts for the projects scheduled to be released subsequent financial year as per project eligibility, will carry interest rate as applicable on the date of release of loan installment. The principal amount along with interest is to be repaid in 15 years with a moratorium period of 3 years. Accordingly, PSMG-I may sanction respective loan amounts as indicated below:

- Loan amount of **Rs. 408.30 lakhs** for the project of "Providing renovation of existing 7 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Ganaur in Sonipat district";
- Loan amount of **Rs. 325.97 lakhs** for the project of "Providing renovation of existing 4.5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Kharkhoda in Sonipat district";



- Loan amount of **Rs. 518.53 lakhs** for the project “Upgradation and renovation of existing 5 MLD STP based on MBBR technology followed by tertiary treatment in Samalkha town in Panipat district”;
- Loan amount of **Rs. 790.69 lakhs** for the project “Upgradation of existing 5.5 MLD STP & 5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination at Kosli Road and Sampla road respectively alongwith some balance pipeline laying, Jhajjar”

The loan will be subject to Govt of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly.

The loan will be disbursed in three instalments. The second instalment will be released by the NCRPB on receipt of utilization report and on-site verification of expenditure and progress made. The loan will carry an interest rate as applicable on the date of disbursement. The present rate is 7% p.a. A rebate of 0.25 % will be available in the form of reduction of interest rate for the timely repayment of loan instalment (principal +interest) strictly as per repayment schedule. The principal along with interest is to be repaid in 15 years with a moratorium period of 3 years for principal. The project completion time is 24 months from date of loan sanction. Grant-in aid up to 15% of the sanctioned project cost, on completion, will be given to the implementing agency subjected to fulfilment of terms and conditions stipulated by NCRPB.



APPENDIX–1A to Agenda No. 4.5A**I. General Particulars**

1	Project	Providing renovation of existing 7 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Ganaur in Sonipat district
2	Type of project	Sewage Treatment Plant
3	Borrowing agency	PHED Haryana
4	Implementing agency	PHED Haryana
5	Land Availability	Land for STP is available with PHED Haryana

II. Financial Particulars

6	Estimated total cost of projects	Rs. 563.71 lakhs
7	Loan from NCRPB	Rs. 408.30 lakhs
8	Other sources of funds	Rs. 155.41 lakhs is to be provided by PHED Haryana
9	Tenure of loan	15 years (with 3 years moratorium)
10	Rate of Interest	7% p.a. A rebate of 0.25 % on conditions
11	Security for loan	Appropriate security will be provided by PHED Haryana
12	Stipulated date of completion	24 months from the date of sanction.

III. Phasing of Expenditure & Loan Schedule

(Rs. In lakhs)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (yr)	Moratorium period (yr)	Phasing of expenditure on works
2016-17	122.50	46.62	15	3	169.12
2017-18	142.90	54.39	14	2	197.29
2018-19	142.90	54.40	13	1	197.30
Total	408.30	155.41			563.71



APPENDIX–1B to Agenda No. 4.5B**I. General Particulars**

1	Project	Providing renovation of existing 4.5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination, Kharkhoda in Sonipat district
2	Type of project	Sewage Treatment Plant
3	Borrowing agency	PHED Haryana
4	Implementing agency	PHED Haryana
5	Land Availability	Land for STP is available with PHED Haryana

II. Financial Particulars

6	Estimated total cost of projects	Rs. 453.98 lakhs
7	Loan from NCRPB	Rs. 325.97 lakhs
8	Other sources of funds	Rs. 128.02 lakhs is to be provided by PHED Haryana
9	Tenure of loan	15 years (with 3 years moratorium)
10	Rate of Interest	7% p.a. A rebate of 0.25 % on conditions
11	Security for loan	Appropriate security will be provided by PHED Haryana
12	Stipulated date of completion	24 months from the date of sanction.

III. Phasing of Expenditure & Loan Schedule*(Rs. In lakhs)*

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (yr)	Moratorium period (yr)	Phasing of expenditure on works
2016-17	97.79	38.41	15	3	136.20
2017-18	114.09	44.80	14	2	158.89
2018-19	114.09	44.80	13	1	158.89
Total	325.97	128.01			453.98



APPENDIX–1C to Agenda No. 4.5C**I. General Particulars**

1	Project	Upgradation and renovation of existing 5 MLD STP based on MBBR technology followed by tertiary treatment in Samalkha town in Panipat district
2	Type of project	Sewage Treatment Plant
3	Borrowing agency	PHED Haryana
4	Implementing agency	PHED Haryana
5	Land Availability	Land for STP is available with PHED Haryana

II. Financial Particulars

6	Estimated total cost of projects	Rs. 713.84 lakhs
7	Loan from NCRPB	Rs. 518.53 lakhs
8	Other sources of funds	Rs. 195.31 lakhs is to be provided by PHED Haryana
9	Tenure of loan	15 years (with 3 years moratorium)
10	Rate of Interest	7% p.a. A rebate of 0.25 % on conditions
11	Security for loan	Appropriate security will be provided by PHED Haryana
12	Stipulated date of completion	24 months from the date of sanction.

III. Phasing of Expenditure & Loan Schedule*(Rs. In lakhs)*

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (yr)	Moratorium period (yr)	Phasing of expenditure on works
2016-17	155.57	58.59	15	3	214.16
2017-18	181.48	68.36	14	2	249.84
2018-19	181.48	68.36	13	1	249.84
Total	518.53	195.31			713.84



APPENDIX–1D to Agenda No. 4.5D**I. General Particulars**

1	Project	Upgradation of existing 5.5 MLD STP & 5 MLD STP based on MBBR technology followed by tertiary treatment and chlorination at Kosli Road and Sampla road respectively alongwith some balance pipeline laying, Jhajjar
2	Type of project	Sewage Treatment Plant
3	Borrowing agency	PHED Haryana
4	Implementing agency	PHED Haryana
5	Land Availability	Land for STP is available with PHED Haryana

II. Financial Particulars

6	Estimated total cost of projects	Rs. 1099.79 lakhs
7	Loan from NCRPB	Rs. 790.69 lakhs
8	Other sources of funds	Rs. 309.10 lakhs is to be provided by PHED Haryana
9	Tenure of loan	15 years (with 3 years moratorium)
10	Rate of Interest	7% p.a. A rebate of 0.25 % on conditions
11	Security for loan	Appropriate security will be provided by PHED Haryana
12	Stipulated date of completion	24 months from the date of sanction.

III. Phasing of Expenditure & Loan Schedule

(Rs. In lakhs)					
Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (yr)	Moratorium period (yr)	Phasing of expenditure on works
2016-17	237.21	92.73	15	3	329.94
2017-18	276.74	108.18	14	2	384.93
2018-19	276.74	108.18	13	1	384.93
Total	790.69	309.10			1099.79



Agenda Item No. 4.6 : Strengthening of Sub-transmission and distribution network including metering in Jhajjar, Rohtak, Panipat & Sonipat Circles of Haryana (under IPDS) by UHBVN

Introduction

Sub transmission & Distribution is the most critical segment of the electricity business chain. The real challenge in the power sector today lies in efficient management of the distribution sector. Availability of a robust sub-transmission and distribution network along with adequate metering arrangements is the need of the day for efficient management of the distribution system.

There is a consistent increase in electricity demand, particularly in urban areas, due to increase in customer base, changes in lifestyle and consumption pattern, which requires continual up-gradation and creation of infrastructure for electricity distribution. However, the poor financial health of the distribution utilities has resulted in inadequate investment in the distribution network. The Government of India has been providing support to State owned Discoms/Power Departments by extending financial assistance through various programmes. However, the State owned Discoms/Power Departments have not been able to keep pace with the growth in demand of electricity, resulting in critical gaps/missing links in the sub transmission and distribution network. The sub-transmission and distribution network has, therefore, become a bottleneck in ensuring reliable and quality power supply to the consumers. Apart from bridging the gaps in the requisite distribution infrastructure, there is also a need to focus on metering of consumers.

Keeping in view the present financial condition of Discoms/Power Department, GoI has launched the Integrated Power Development Scheme (IPDS) to extend financial assistance against capital expenditure to address the gaps in sub transmission & distribution network and metering in urban areas to supplement the resources of DISCOMs / Power Department.

As per the funding mechanism of IPDS launched by Ministry of Power, GOI, 60% of the sanctioned cost is to be provided by GOI as grant, 10% as the DISCOMs contribution and balance 30% are to be raised by DISCOMs as loan. Accordingly, UHBVN has approached NCRPB to provide with the 30% share of the cost of projects already approved under IPDS for the four circles i.e. Jhajjar, Rohtak, Panipat & Sonipat in Haryana Subregion.

Project Details

The existing scenario & proposed activities under the project, for each of the circles along with the towns being covered is as presented below circle-wise:-

A. Jhajjar Circle – Beri Town

a. Existing Scenario

No. of consumers in all towns covered in the project area		3325
	Unit	Data for Previous FY
Energy Input	M Units	112.50
Energy Sales	M Units	46.30
Total Revenue Billed (FY 14-15)	Rs. Lac	1807.65
Total Revenue Collected (excluding arrears)	Rs. Lac	1297.24



No. of consumers in all towns covered in the project area		3325
	Unit	Data for Previous FY
Billing Efficiency	%	41.16%
Collection Efficiency	%	71.76%
AT&C Losses	%	70.47%

b. Proposed activities

The sub project activities focus on addition of 13 distribution transformers, enhancing the capacity of 2 LT sub stations along with providing a 2 km long LT line. With regards to metering, the sub project shall involve addition of 10 smart meters in Govt. establishment, 2 11 KV Feeder meters, 64 DT metering etc. A provision of 50 KWE (Kilowatt Electrical) solar panel is also included in the scheme.

B. Rohtak Circle – Kalanaur, Meham & Sampla Towns

a. Existing Scenario

No. of consumers in all towns covered in the project area		18582
	Unit	Data for Previous FY
Energy Input	M Units	626.47
Energy Sales	M Units	357.34
Total Revenue Billed (FY 14-15)	Rs. Lac	2402.63
Total Revenue Collected (excluding arrears)	Rs. Lac	2391.83
Billing Efficiency	%	57.04%
Collection Efficiency	%	99.55%
AT&C Losses	%	43.22%

b. Proposed activities

The sub project activities focus on addition of eight 11 KV feeders, 17 km 11 KV feeder line (overhead), 25 km LT line, 52 no. of distribution transformers, enhancing the capacity of 49 LT sub stations along with providing a 25 km long LT line. With regards to metering, the sub project shall involve addition of 30 smart meters in Govt. establishment, 4 11 KV Feeder meters, etc. A provision of 30 KWE solar panel is also included in the scheme.

C. Panipat Circle – Samalkha Town

a. Existing Scenario

No. of consumers in all towns covered in the project area		10218
	Unit	Data for Previous FY
Energy Input	M Units	237.67
Energy Sales	M Units	167.22
Total Revenue Billed (FY 14-15)	Rs. Lac	6771.96
Total Revenue Collected (excluding arrears)	Rs. Lac	6094.76
Billing Efficiency	%	70.36%
Collection Efficiency	%	90.00%
AT&C Losses	%	36.68%



b. Proposed activities

The sub project activities focus on addition of one 11 KV feeders, 4.9 km 11 KV feeder line (overhead), 8 km LT line, 14 no. of distribution transformers, enhancing the capacity of 13 LT sub stations along with providing 8 km long LT line. With regards to metering, the sub project shall involve addition of 55 smart meters in Govt. establishment, 2 11 KV Feeder meters, etc. A provision of 20 KWE solar panel is also included in the scheme.

D. Sonipat Circle – Ganaur & KharkhodaTownaa. Existing Scenario

No. of consumers in all towns covered in the project area		53742
	Unit	Data for Previous FY
Energy Input	M Units	371.00
Energy Sales	M Units	204.20
Total Revenue Billed (FY 14-15)	Rs. Lac	12244.24
Total Revenue Collected (excluding arrears)	Rs. Lac	11858.49
Billing Efficiency	%	55.04%
Collection Efficiency	%	96.85%
AT&C Losses	%	46.69%

b. Proposed activities

The sub project activities focus on 12 km 11 KV feeder line (overhead), 17 km LT line, 21 no. of distribution transformers, enhancing capacity of 25 LT sub stations along with providing 17 km long LT line. With regards to metering, the sub project shall involve addition of 10 smart meters in Govt. establishment, 5 11 KV Feeder meters, etc.



The Project Cost & Financing

(Rs. in lakhs)

S. No	Particulars/ Units	Jhajjar Circle (Berī Town)		Rohtak Circle (Kalanaur, Meham & Sampla Towns)		Panipat Circle (Samalkha Town)		Sonipat Circle (Ganaur & Kharkhoda Towns)		Total	
		Qty	Project Cost	Qty	Project Cost	Qty	Project Cost	Qty	Project Cost	Qty	Project Cost
A	11KV Line: New Feeder/Feeder Bifurcation(Km)			17	103.45	4.9	30.87	12	75.6	33.9	209.92
B	11KVLine:Augmentation/Reconductoring (km)	2	6.52	10	46.6	23.7	77.26	17	57.52	52.7	187.90
C	11 KV Aerial bunched cable (Kms.)										
D	11 KV UG cable (Kms.)			0.5	11.84	2.6	52.43	0.6	18.98	3.7	83.25
E	11 KV VCB (Nos.)			4	12.4	2	6.2			6	18.60
F	Installation of Distribution Transformer (Nos.)	13	36	52	128.7	14	34.8	21	49.36	100	248.86
G	Capacity Enhancement of LT S/S (Nos.)	2	3	49	111.31	13	37.41	25	61.38	89	213.10
H	LT Line: New Feeder/Feeder Bifurcation (Kms.)	2	9.01	25	106.93	8	36.33	17	72.8	52	225.07
I	LT Line: Augmentation/ Reconductoring (km)	1.7	4.83	28	87.71	6.8	22.44	12.5	35.9	49	150.88
J	Capacitor Bank (Set)	2	2.04	17	17.34	2	2.04	3	3.06	24	24.48
K	Maintenance free earthing (Nos.)	30	1.8	202	12.12	54	3.24	92	5.52	378	22.68
L	Trolley mounted s/s (Nos.)	2	8.4	3	12.6	1	4.2	2	8.4	8	33.60
M	Metering (Nos.)										
	Prepaid/smart meters Govt Establishment (No)	10	1.2	30	3.6	55	6.6	10	1.2	105	12.60
	Boundary Meter (Nos.)										
	11 KV feeder meter (Nos.)	2	0.06	4	0.12	2	0.06	5	0.15	13	0.39
	Modem for 11 KV feeder meter (Nos.)	13	0.78	13	0.78	20	1.2	8	0.48	54	3.24
	DT Metering & Modem (Nos.)	64	14.72							64	14.72
	1 Phase Downloadable / AMI (Nos.)	125	1.25	8000	80			7065	70.65	15190	151.90
	3 Phase Downloadable / AMI (Nos.)	25	0.5	220	4.4			495	9.9	740	14.80
	1:1 (Single Phase) (Nos.)			5100	51			6453	64.53	11553	115.53
	1:1 (Three Phase) (Nos.)			230	4.6			549	10.78	779	15.38
	4 in 1 (Nos.)			1600	80			245	12.45	1845	92.45
N	Provision of Solar Panel (Kwe)	50	50	30	30	20	20			100	100.00
O	Others (11 KV GO Switch) (Nos.)	43	3.87	166	14.94	110	9.9	66	5.94	385	34.65
	Grand Total		143.98		920.44		344.98		564.6		1974.00



The total estimated cost of the four Subprojects being considered under this IPDS project comes to about **Rs.19.74 Cr.** The breakup of the cost sharing is as follows:-

	Rs. in Cr.
GoI Grant (60%)	11.84
UHBVN share (10%)	1.97
Loan amount from NCRPB (30%)	5.93
Total	19.74

The project is proposed to be executed **by September 2018**, as per the following details:-
(Rs. in Cr.)

Year	GOI Grant (60%)	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (in yr.)	Moratorium period (in yr.)	Phasing of expenditure on works
2016-17	1.19	0.59	0.20	10	2	1.98
2017-18	7.10	3.56	1.18	9	1	11.84
2018-19	3.55	1.78	0.59	8	1	5.92
Total	11.84	5.93	1.97			19.74

Abstract of the project is enclosed at **Appendix I.**

Appraisal of DPR

The project reports had been proposed by UHBVN to Government of India under its **Integrated Power Development Scheme (IPDS)** launched by Ministry of Power, Government of India. As per the funding mechanism of IPDS, 60% of the sanctioned cost is to be provided by GOI as grant, 10% as the DISCOMs contribution and balance 30% are to be raised by DISCOMs as loan.

The Sub projects have been informed to have been duly appraised by Power Finance Corporation Limited and sanctioned by Monitoring Committee, GOI. Thereafter financial assistance (grant portion) amounting to Rs. 11.84 Cr. (60% of the cost) has also been approved for the four sub schemes in March 2016.

The project has also been looked into from ESMS aspect and appears to fall in E3 and S3 category.

Project Benefits & Justification

- a. The project primarily focusses to reduce AT&C loss in the towns wherein the project is being implemented as indicated below:-
 - Beri town in Jhajjar Circle - The AT&C losses are proposed to gradually reduce from 70.47% in 2014-15 to 46% in 2018-19 to finally 28% by the year 2021-22.
 - Rohtak Circle (Kalanaur, Meham & Sampla Towns) - The AT&C losses are proposed to gradually reduce from 43.22% in 2014-15 to 31% in 2018-19 to finally 22% by the year 2021-22.



- Panipat Circle (Samalkha Town) - The AT&C losses are proposed to gradually reduce from 36.68% in 2014-15 to 26% in 2018-19 to finally 17% by the year 2021-22.
- Sonipat Circle (Ganaur & Kharkhoda Towns) - The AT&C losses are proposed to gradually reduce from 46.69% in 2014-15 to 36% in 2018-19 to finally 26% by the year 2021-22.

b. Other expected intangible benefits are as follows:-

- Accurate & reliable energy accounting on sustainable basis.
- Better accountability at all level.
- Improve the reliability of the power supply.
- 24x7 power supply for consumer in urban area.
- Reduction of losses to meet AT&C loss reduction trajectory.
- Providing electricity access to all urban household.
- Improvement in network planning.
- Improvement in quality of supply like voltage level, PF, etc.
- Prompt and effective solution to the consumer queries / grievances.
- Line loss reduction: With strengthening of network, conductor resistance will be reduced, resulting reduction in cu loss.
- Ensuring better accounting: With metering of all nodal points, the energy accounting & auditing will be improved, resulting better administrative action.
- Better voltage profile: With strengthening of network & improvement in PF, tail end voltage will be improved & reactive current will be reduced resulting improvement of quality of power & better consumer satisfaction.
- Decrease in the DT failure: With addition of DT & enhancement of DT capacity the load on DT will be reduced, resulting decrease in DT failure & improvement in reliability.
- Curbing the theft / pilferage / and unaccounted usage: With ABS, HVDS, multi meter boxes & proper consumer metering, theft / pilferage & unaccounted usages will be minimized.

Point for Decision

It is proposed that loan assistance of **Rs. 5.93 Cr.** for the project for “**Scheme for Strengthening of Power Infrastructure in NCR area of Haryana – Augmentation of Transmission works involving four sub schemes** ” may be approved as per project details at Appendix-I. The total estimated cost of the project is **Rs.19.74Cr.** Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly. UHBVN will take all necessary steps to follow the social, environmental and wildlife issue requirements as per applicable laws of state and central government. The loan will carry interest rate as applicable on the date of release of loan installment. The present rate is 7.50% p.a. with eligible incentives. The principal along with interest is to be repaid in 9 years with a moratorium period of 2 years for principal. The project is to be completed in 1 year. The loan will be subject to furnishing of adequate security by UHBVN.



APPENDIX – I for Agenda 4.6**I. General Particulars**

1	Project	Strengthening of Sub-transmission and distribution network including metering in Jhajjar, Rohtak, Panipat&Sonipat Circles of Haryana (under IPDS) by UHBVN
2	Type of project	Infrastructure (Power)
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	The present scheme has been prepared to enhance distribution capacity and achieve reduction in AT&C losses which are necessary to strengthen the power supply system to cope with the increased load demand in the towns of Beri, Kalanaur, Meham, Sampla, Samalkha, Ganaur & Kharkohda.
5	Location	Jhajjar, Rohtak, Panipat&Sonipat Circles of Haryana
6	Borrowing agency	Uttar Haryana Bijli Vitran Nigam (UHBVN)
7	Implementing agency	Uttar Haryana Bijli Vitran Nigam (UHBVN)
8	Area covered	Parts of Beri, Kalanaur, Meham, Sampla, Samalkha, Ganaur & Kharkohda towns
9	Land availability	Available with UHBVN

II. Financial features

10	Estimated total cost of projects	Rs. 19.74 Cr.
11	Loan from NCRPB	Rs. 5.93 Cr.
12	Interest rate	As applicable on the date of release of loan installment. The present rate is 7.50% p.a.
13	Provision in the Budget	UHBVN has to provide its counterpart share in their Annual Budget provision
14	Other sources of funds	Rs. 1.97 Cr. is to be provided by UHBVN Rs. 11.84 Cr. to be provided by GOI as grant.
15	Tenure of loan	10 years
16	Provision of State Govt. Guarantee	--
17	Other Security proposed	Tripartite escrow agreement & State Government guarantee / Bank guarantee
18	Stipulated date of completion	September 2018

(Rs. in Cr.)

Year	GOI Grant (60%)	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan (in yr.)	Moratorium period (in yr.)	Phasing of expenditure on works
2016-17	1.19	0.59	0.20	10	2	1.98
2017-18	7.10	3.56	1.18	9	1	11.84
2018-19	3.55	1.78	0.59	8	1	5.92
Total	11.84	5.93	1.97			19.74



Agenda Item No. 5: Review of Projects financed by the NCR Planning Board

As on date, the Board has provided financial assistance to **295** infrastructure development projects with an estimated cost of Rs. **27,309** Crore, out of which an amount of Rs. **12,157** Crore has been sanctioned as loan. The Board has released a loan amount of about Rs. **8,480** Crore till December 2016. The sector wise break up of estimated cost of projects and the loans sanctioned by the NCRPB are shown in Figure 1 and Figure 2 below, respectively.

Figure 1

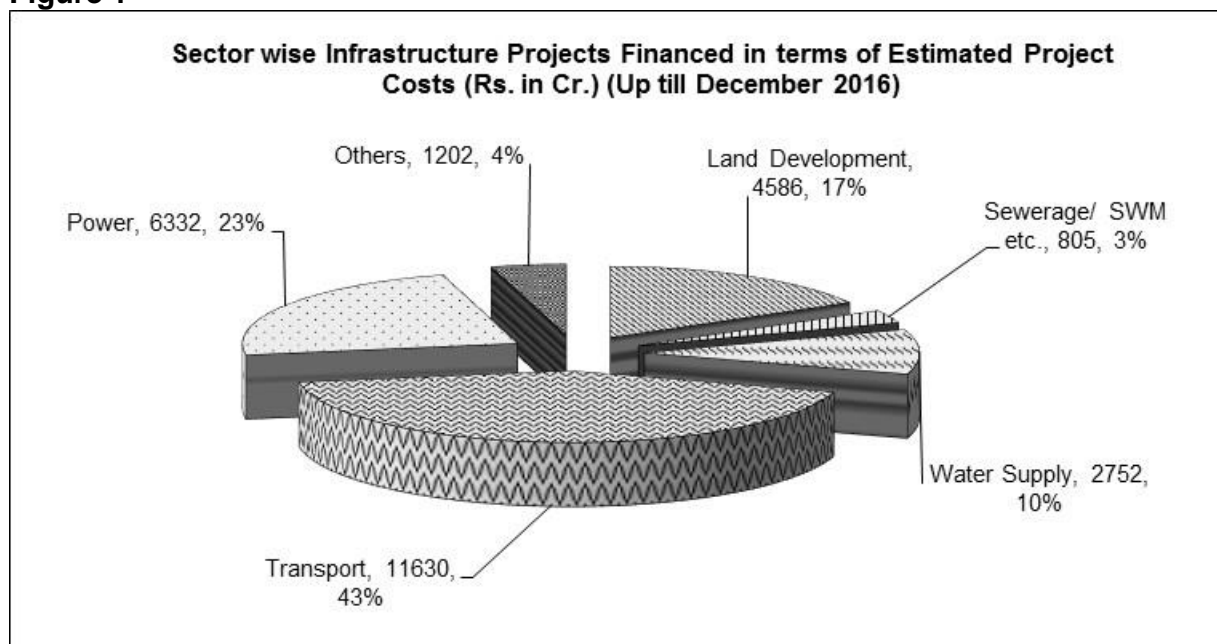
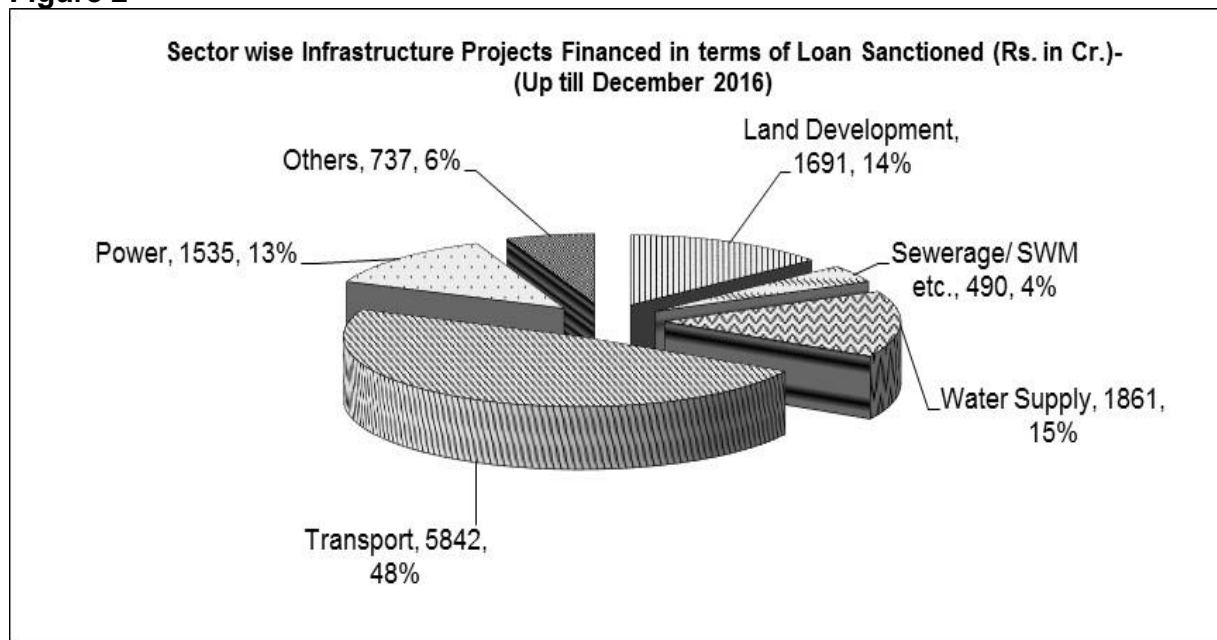


Figure 2



Out of **295** projects for which loans have been sanctioned by the Board, **247** projects have been completed and balance **48** are at various stages of implementation. State-wise analysis of **48** ongoing projects is as under:-

Project Description	Haryana	Uttar Pradesh	Rajasthan	Delhi	Madhya Pradesh	Total
Delayed						
Delayed > 1 Year	8	-	-	-	-	8
Delayed from 6-12 Months	1	-	-	-	-	1
Delayed < 6 Months	-	-	-	-	-	-
Ongoing Within Sanctioned Time	11	7	5	1	-	24
Reported Completed						
Completion Certificate Received	3		-	-	-	3
Completion Certificate/ Clarification Awaited	6	2	-	-	1	9
Withdrawn	1	-	1	-	-	2
Nonstarter	-	-	-	-	1	1
Total	30	9	6	1	2	48

- **8** projects from the ongoing list of projects have been delayed by more than one year from the original date of completion (refer **Appendix-I**). Out of these, **4** projects have sought fresh extensions for another 6-9 months.
- **3** of the ongoing projects have been reported as completed and Completion Certificates received (List at **Appendix-II**). Another **9** have though reported completed / foreclosed but are yet to submit the necessary Completion Certificates or related clarifications (List at **Appendix-III**).
- One **(1)** bus shelter project from UIT Alwar and one **(1)** sewerage sector project from SADA Gwalior have been a Non-Starter despite loans sanctions in December 2012 & November 2011.

Point for Decision

- Agencies need to adhere the project completion schedules. The Board should be kept apprised with regard to the delays and the reasons thereof and necessary action that is being taken to avoid further delays.
- Agencies who foresee delays in project completion need to make the necessary extension request with appropriate justification in a timely manner.
- **3** projects that have been reported completed and completion certificates received since last PSMG may be shifted to List of Completed projects.



- The Solar bus shelter project of UIT Alwar proposed to be treated as withdrawn in the last PSMG after return of funds from agency may now be considered withdrawn/dropped.
- The SADA Gwalior Sewerage project may also be considered withdrawn as agency has not been able to take up necessary action despite sanction of loans in November 2011. They may however approach NCRPB afresh when their issues regarding the project are resolved and fresh updated DPR prepared.
- EDMC need to ascertain regarding intent to take up the project as no action is being seen on ground even after even after 2 years of loan approvals.
- The respective agencies need to expedite submission of the completion certificates and related clarifications for the projects that have been reported completed pending submission of completion certificates. They may ensure that the assets proposed under the project have been actually created and are functional on ground as envisaged.



Appendix-I

Ongoing Projects - ongoing but delayed by more than a year from original/revised date of completion

Project Description	Haryana	Total
Delayed more than 1 Year	8	8

(Rs. in Cr)

S.No.	Name of the Projects	Type of Project	Implementing Agency	Date of sanction	Original completion Date / revised date	Estimated cost	Loan Sanctioned	Loan released	Reported Expenditure
	Haryana Sub region								
1.	Water Supply at Sohna Town & Rojka Meo Industrial Area, Sohna*	Water supply	PHED	Nov-08	Dec-11/ Dec-12 / Dec-14 / Sep-15 / Mar-16	65.34	24.50	24.50	65.84
2.	Water Supply scheme for Nalhar Medical College and Nuh Town*	Water supply	PHED	Aug-11/May-15	Jul-14/ Mar 2015, Aug 2016	150.00	112.50	90.13	92.19
3.	Augmentation of Water Supply for Pataudi and adjoining town of Haily Mandi along with surrounding seven villages*	WATER SUPPLY	PHED	Nov-11/May-15	Jul-16	41.15	30.86	16.90	24.51
4.	Providing sewerage scheme and treatment plant for Pataudi, Gurgaon District*	SEWERA GE/swm/drg.	PHED	Aug-11	Jul-14/ Sep-15 / Jun-16	14.50	10.87	8.27	14.88
5.	Providing sewerage facilities in village kosli, Bhakli and Railway station area of Kosli, Dist. Rewari	SEWERA GE/swm/drg.	PHED	Oct-07	Oct-10/Mar-12/ Aug-13 / Sep-14 / Dec-15 / Jun-16	8.70	6.53	5.22	9.15
6.	Construction of 2 lane ROB at Hodal Hassanpur road on Delhi Palwal Mathura Railway line at L/C No. 553	TPT	PWD (B&R)	Dec-12	Dec-14/ Dec-15	24.10	13.76	10.88	27.68



S.No.	Name of the Projects	Type of Project	Implementing Agency	Date of sanction	Original completion Date / revised date	Estimated cost	Loan Sanctioned	Loan released	Reported Expenditure
7.	Two lane ROB at Sonapat Purkhas road near sugar mill on Delhi Ambala Railway line L/C No. 29	TPT	PWD (B&R)	Dec-12	Dec-14/ Dec-15	40.37	16.42	13.210	27.61
8.	Widening & upgradation of Gurgaon-Chandu-Badli-Bahadurgarh Road	TPT	PWD (B&R)	Dec-12	Aug-15	244.10	183.08	109.85	187.32

* Fresh extensions requested and taken up separately.



Appendix-II

Projects Reported Completed & Completion Certificate Received

Following projects have been reported completed through completion certificates by respective agencies:-

Project Description	Haryana	Total
Completion Certificate Received	3	3

(Rs. in Cr.)

S.No.	Name of the Projects	Implementing Agency	Date of sanction	Final Completion Cost
1.	Widening & Strengthening of Gohana Lakhanmajra Bhiwani road upto district Rohtak boundary road from km. 0.000 to 37.700	PWD (B&R)	Dec-12	110.43
2.	Widening & Strengthening of UP border Sonapat Gohana upto district Sonapat boundary road from km. 11.600 to 74.000	PWD (B&R)	Dec-12	188.98
3.	Construction of Storm Water Drain in Sonapat Town, Haryana (ADB line of credit)	PHED	Dec-12	21.72



Appendix-III

Projects Reported Completed but Completion Certificate Awaited

Following projects have been reported as completed by the agencies but the completion certificates are still awaited. The details are as follows:-

Project Description	Haryana	Uttar Pradesh	SADA Gwalior	Total
Completion Certificate/Clarification Awaited	6	2	1	9

(Rs. in Cr)

S. No.	Name of the Projects	Type of Project	Implementing Agency	Date of sanction	Original / Revised Date of completion	Estimated cost	Loan Sanctioned/ released	Completion cost
	Haryana							
1.	Providing sewerage scheme for Punhana Town in Mewat Distt.	SEWERAGE/swm/drng.	PHED	Aug-11	Jul-14/ Sep-15 / Jun-16	12.50	9.37 / 7.73	11.91
2.	Providing sewerage scheme and treatment plant for Hathin Town, Palwal District	SEWERAGE/swm/drng.	PHED	Aug-11	Jul-14/ Sep-15 / Jun-16	12.30	9.23/ 8.00	11.04
3.	Development of Sewerage System and Construction of two STPs at Rohtak town.	SEWERAGE/swm/drng.	PHED	Feb-06	Feb-09/Feb-10/Mar-11/ Dec-14 / Sep-15 / Mar-16	44.25	33.20/ 33.20	62.00
4.	Improvement by way of four laning of Rewari Kot Kasim Road upto NH-8, Shahjahanpur Rewari road upto 6 km., Rewari Narnaul Road (SH26), Rewari Mohindergarh Road, Rewari Dadri road upto proposed bypass- 25.61km	TPT	PWD (B&R)	Nov-08	Dec-10/ Mar -12/ Sep-13 / Dec-15	106.07	79.55/ 71.77	95.69



S. No.	Name of the Projects	Type of Project	Implementing Agency	Date of sanction	Original / Revised Date of completion	Estimated cost	Loan Sanctioned/ released	Completion cost
5.	Establishment of Technical Institutions at Rohtak	Social	DTE, GoH	May-10	Mar-12/ Mar-14	197.00	67.50/ 67.50	215.14
6.	Scheme for strengthening power infrastructure in NCR area of Haryana – Augmentation of Transmission Works,	Power	HVPN	Nov-08	Nov-09/ Sep-12 / Mar-14	79.43	59.58/ 59.58	52.97
	Uttar Pradesh							
7.	Ganga Nagar residential scheme, Bulandshahr*	LD	BKDA	Nov 04/ May 10	May-08/ Mar-09/ Mar-13	69.14	48.09/ 35.09	81.16
8.	Transport Nagar Scheme, Bulandshahr**	Transport	BKDA	Nov-04	Mar-08/ Mar-09	33.71	20.65/ 17.79	65.43
	SADA Gwalior							
9.	Infrastructure Development of Residential Schemes	LD	SADA, Gwalior	NOV 09	Dec-11/ Jun-14/ Sep-15	76.07	42.05/ 31.54	92.71

* Reported foreclosed indicating no more loan required. Balance works to be taken up from own sources on availability of land

** Persistent land issues have led to little action on ground apart from land acquisition. Agency request for foreclosure indicating no more loan required and assuring works to be taken up from own sources



Agenda Item No. 5.1: Request for extensions of completion dates of projects

Request for extension of completion dates for 5 ongoing projects were made by PHED, Haryana. These include 4 water supply & 1 sewerage sector projects as per details below:-

S. No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons for delay
1.	Water Supply at Sohna Town & Rojka Meo Industrial Area, Sohna	65.34	Nov-08	Dec-11/ Dec-12 / Dec-14/ Sep-15/ Mar-16	Dec-16	Delay in obtaining permission from Forest Department & land acquisition. Work now completed & under testing.
2.	Water Supply scheme for Nalhar Medical College and Nuh Town	150.00	Aug-11/May-15	Jul-14 Mar 2015, Aug 2016	Mar-17	Delayed permissions from other department such as NHAI, Railway, Forest, Irrigation, Mining etc.
3.	Augmentation of Water Supply for Farrukh Nagar Town & Five Villages, Gurgaon District.	13.90	Nov-11/ May-15	Feb-16/ Jul-16	Jun-17	Delay in source development covered under project at S. No. 2 above. So this work can only be completed once the water is available. Moreover, the work also got delayed as permission from Forest Department was delayed.
4.	Augmentation of Water Supply for Pataudi and adjoining town of Haily Mandi along with surrounding seven villages.	41.15	Nov-11/ May-15	Jul-16	Jun-17	
5.	Providing sewerage scheme and treatment plant for Pataudi, Gurgaon District	14.50	Aug-11	Jul-14/ Sep-15 / Jun-16	Mar-17	Delay in shifting of 2 No. Electric feeders by DHBVN. They were coming in the alignment of sewer. Now the work of laying of trunk sewer has been started.

Point for Decision: The Group may approve the requested extensions directing the respective Implementing Agency to complete the pending works within the sought extensions and take necessary steps to avoid such delays in the projects.



Agenda Item No. 6: Noida Metro Rail Corporation(NMRC) request for waiving off condition of submitting Tripartite Escrow Agreement and to accept the bank guarantee issued by Noida & Greater Noida Industrial Development Authorities on behalf of NMRC for drawal of loan amount from NCRPB.

In accordance with the powers conferred by section 8(e) and 22-(2) (c) of the NCR planning Board Act 1985, the NCRPB has sanctioned loan assistance of Rs.1587.00 crores (with 1st instalment of loan of Rs.580.00 crores) to Noida Metro Rail Corporation(NMRC) for the project of Metro connection between the Noida & Greater Noida (29.707 Km). As per para-8 of Terms & Condition annexed with loan Sanction Order dated 9.2.16 the borrowing agency is required to submit Tripartite Escrow Agreement 'AND' State Government Guarantee 'OR' Bank Guarantee 'OR' Charge on Assets by way of by way of mortgage and hypothecation as Security against loan.

Further, the borrowing agency i.e (NMRC) vide its letter No. NMRC/2016/809 dated 28.9.2016 has intimated that at present NMRC has not started any commercial operation and hence there is no commercial receipt. Further as regard to submission of bank guarantee they have intimated that presently NMRC does not have any capital Assets against which the bank can issue bank guarantee, however, bank guarantee can be obtained by Noida & GNIDA who at present are the majority stake holder in the company. In view of this the NMRC has requested to waive off condition of submitting tripartite escrow agreement and to accept the bank guarantee issued by Noida & Greater Noida Industrial Development Authorities on behalf of NMRC for drawal of loan amount from NCRPB.

Rule-42 of NCRPB Rules 1985, specifically mention about security which stipulates that *"Loans to the local authorities, urban development authorities and such other authorities other than State governments and UT administration shall be sanctioned only against adequate security. The security to be taken shall ordinarily be at least 33 1/3 percent more than amount of loan; provided that the Board may accept a State guarantee in lieu of security".* As the borrowing agencies were facing difficulties in obtaining State Govt. Guarantees due to applicability of FRBM Act, from 2007 onwards, the Board has started accepting Bank Guarantee (upto 100% of loan amount) in lieu of state guarantee, in addition to collateral security of Tripartite Escrow Account upto 133.33% of amount of loan, which is in accordance with Rule-225 of GFR.

Since NMRC is not in a position to provide Tripartite Escrow Agreement, the Board may consider providing loan to NMRC on furnishing the Bank Guarantee to the tune of 133.33% of loan amount, issued in favour of NCR Planning Board, obtained by Noida and Greater Noida on behalf of NMRC. Accordingly, NCRPB has released part 1st instalment of Rs.406.00 cr. to NMRC against bank guarantee of Rs.541.32 cr obtained by NOIDA on behalf of NMRC. Similar type of practice may also be followed by Board in case of other metro projects to be received for funding by the Board.

The matter is placed before the Group for approval please.



Agenda Item No. 7: Extension of time period on the Study for “Creation and Updation of Landuse for Review of Regional Plan 2021 for National Capital Region (NCR)” through National Remote Sensing Centre (NRSC), Department of Space, Govt. of India.

Study for the “Creation and Updation of Landuse for Review of Regional Plan 2021 for National Capital Region (NCR)” through National Remote Sensing Centre (NRSC), Department of Space, Govt. of India was approved in the 48th meeting of the PSMG-I held on 31.05.2012. The relevant extract of the Minutes of the said meeting is placed as **Annexure-I**. Thereafter, MoU for the aforesaid study was signed between NCRPB & NRSC on 12.06.2012. The project was to be executed within 16 months from the date of commencement.

Based on the aforesaid study the Existing & Proposed Land Use maps prepared by the NRSC were utilized to carry out the exercise of Review and Revision of Regional Plan-2021. Draft Revised Regional Plan-2021 was published on 29.07.2013 for inviting objections/ suggestions from the public, Central and State Governments and the local bodies. Subsequently, after thorough scrutiny and consideration of the objections & suggestions, the Planning Committee in its 62nd meeting held on 03.10.2013, 15.10.2013 and 20.12.2013, put forward its recommendations to the Board. The Board in its 34th meeting held on 20.01.2014, discussed the recommendations of the Planning Committee and approved their incorporation in the Plan. The revised Regional Plan-2021 for NCR was approved by the Board in its 34th meeting held on 20.01.2014 for notification under Section 13 of the NCRPB Act, 1985. Subsequently, Board re-visited some of the policies and proposals of the revised Regional Plan-2021 in its Special Meeting held on **25.04.2014**. This was in view of the direction received from the Prime Minister’s Office (PMO) wherein it was conveyed that **“no final decision on the proposed Regional Plan-2021 and Sub-Regional Plan (SRP)-2021 of Haryana should be taken until the issues raised by MoEF&CC are fully resolved and a compliance report is sent to PMO.”**

Subsequent to the aforesaid Special Meeting of the Board, several rounds of communications/ consultations between NCRPB/MoUD and MoEF&CC have taken place from time to time in order to resolve the issues and there remained only three observations of the MoEF&CC on which consensus between MoEF&CC and the Board is yet to be reached. The matter was discussed in the 65th meeting of the Planning Committee held on 28.04.2016 and subsequently in the 36th meeting of the Board held on 15.06.2016, wherein it was decided that *a meeting under the chairmanship of Secretary (UD), Govt. of India be held to resolve the issues.*

Pursuant to the above decision of the Board, a meeting was held under the chairmanship of Secretary (UD), Govt. of India on 07.09.2016, wherein the observations of MoEF&CC were deliberated in detail and the decisions taken are reproduced as under:

- “ a) MoEF&CC is agreeable to the provisions as proposed by NCRPB with respect to target of 20% as forest & tree cover and red category industries, as given at Annexure-II of the Minutes;
- b) The Regional Plan prepared by NCRPB gives broad policy guidelines. Accordingly, the RP-2021 for NCR notified in 2005, contains policies relating to landuse, including the NCZ, which is broadly shown at 1:50k scale Map prepared by NRSC. NCR participating States are required to further elaborate these broad landuses on lower scale Maps under their respective Sub-Regional Plans and under the



Master/Development Plans. Therefore, the observation of MoEF&CC regarding detailed mapping & delineation of ecologically sensitive areas will be addressed by the NCR Participating States under their respective Sub-Regional Plans and Master/Development Plans, and not by NCRPB in the Regional Plan;

- c) With respect to MoEF&CC's suggestion regarding stipulating definition of individual components of NCZ and putting forward a methodology for identification and delineation of environmentally sensitive areas in the Regional Plan, it was noted that the matter has already been addressed in a separate meeting held under the chairmanship of Secretary, MoUD, Govt. of India on 16.08.2016, wherein the issues related to finalization of definition of 'forest', 'Aravalli' and 'ground water recharging areas', have been resolved; and*
- d) MoEF&CC may communicate their consent/acceptance on the above within a reasonable time from the date of issue of the Minutes of the meeting, so that further necessary action with respect to notification/publication of the draft revised RP-2021 can be initiated."*

Consent/ confirmation from MoEF&CC is awaited. The matter is being pursued with MoEF&CC by the Board's Secretariat letter dated 15.09.2016 & 22.11.2016. The process is expected to be completed in a year.

Point for decision:

Request for extension of time period (till December, 2017) for the ongoing Study is placed before the PSMG-I for consideration and approval.



Annexure-I to Agenda 7

Extracts from the Minutes of the 48th Meeting of the Project Sanctioning & Monitoring Group – I of the NCR Planning Board.

Agenda Item No. 3: Study proposal for “Creation and Updation of Landuse for Review of Regional Plan 2021 for National Capital Region (NCR)” through National Remote Sensing Centre (NRSC), Department of Space, Govt. of India.

4. Member Secretary, NCR Planning Board stated that as per the requirement of NCR Planning Board Act, 1985, Board's Secretariat has undertaken the exercise of review and revision of RP-2021 for NCR. In order to carry out the review and revision exercise of Regional Plan 2021, latest landuse and land cover data based on remote sensing technology is necessary and Board has approached the NRSC, Department of Space, Govt. of India to carry out this Study as they had done similar Study while preparing the RP-2021. The NRSC has prepared the Study proposal and after series of discussions with NRSC, the Study proposal and draft MoU has been finalized and placed before the PSMG-I. She further stated that keeping in view future use of the data created through the Study, a Capacity Building & Training Programme for the senior level officers and working level officers of the NCRPB, NCR Cells, State Town Planning Departments and Development Authorities has been added in the proposal. She requested Dr. Raghavswamy, Group Director, NRSC to present the proposal before the PSMG-I.
5. Dr. Raghavswamy, Group Director, NRSC while presenting the proposal explained the need, objectives of the Study remote sensing data inputs to be used for the Study; image coverage and landuse classifications to be used for analysis, deliverables and time schedule for the project.
6. Secretary (UD) stated that the review exercise is a statutory requirement and various Study Groups have been constituted to carryout the review and revision exercise for the RP-2021 and suggested that the bench marking aspects need to be looked into by one of the Study Groups. Additional Secretary (UD), Ministry of Urban Development suggested that one of the sub-objective of the review exercise should be building of alternate scenario for development perspective of the NCR. Commissioner, UP Sub-Region suggested that the Social Infrastructure aspects such as Education and Health should be taking into account in the review of RP-2021. She has also stated that in the NCR Cells there is no post of GIS expert and post should be created in the Cell. Principal Secretary, PHED, Haryana suggested that the Remote Sensing GIS should be used as a tool for planning and various gaps should be identified after detailed examination.
7. Advisor, Planning Commission stated that the present proposal of creation of landuse, land cover for NCR would involve duplication and whether this project is part of the NUIS plan/scheme. He observed that the Study is proposed to be entrusted to NRSC without the open bidding process. Dr. Raghavswamy, Group Director, NRSC clarified that NUIS Scheme is for creation of database for the 156 metro towns and urban areas at much larger scale of 1: 10000 while the present



proposal is for creation of data base for smaller scale i.e. 1:50000. He further clarified that there is no duplication in data base creation between this and NUIS. Chief Regional Planner, NCRPB explained that there are number of defence installations/sensitive areas in NCR and NRSC is the Govt. of India Organization and, therefore, it would be more appropriate to get the work done by the government agency. NRSC had done similar work of database creation for NCR in pertaining to 1999 and formulated the proposed Landuse Plan for Regional Plan-2021 for which the review exercise is now proposed to be undertaken. Looking into the sensitivity of the area, historically this work is being done by NRSC (earlier NRSA) which is under Department of Space.

8. After detailed discussions, Secretary (UD) suggested the following:

- i) NRSC should be associated with appropriate Study Groups constituted for review and revision of the RP-2021.
- ii) A note should be prepared and circulated to all the NCR participating States with a request for their active association and cooperation in carrying out the review exercise.
- iii) The duration of Training Programme for senior level officers may be kept for three days and site visit may also be organized.
- iv) Synopsis of various court orders should also be circulated to States to apprise them about various legal implications.
- v) States should facilitate NRSC with maps and drawings including various administrative boundaries (districts, tehsils, village etc.) to have the correct boundaries on the base map. They might have changed over a period of time during reorganization of districts/tehsils.
- vi) Query based system should be developed.
- vii) There could be variation between the records and actual existence on the ground especially for water bodies, forest etc. and should be on the basis of actual on the ground.
- viii) The time schedule for completion of the Study proposed is 16 months whereas the Study Groups Reports are expected to complete within 6 months time. This needs to be suitably aligned.
- ix) All data generated should be made available to the NCR participating States/NCR Cells so that they can also use the same. The data could also be placed on the website.
- x) NCR participating States should invite NRSC for interaction and guidance either jointly or separately.

After the detailed discussions, the proposal for getting the study for "Creation and Updation of Landuse for Review of Regional Plan 2021 for National Capital Region (NCR)" through National Remote Sensing Centre (NRSC), Department of Space, Govt. of India was approved by the PSMG.



Agenda Item No. 8: Creation and Updation of Regional Land use for the six additional districts of NCR

NCR Planning Board in its 33rd meeting held on 01.07.2013 approved inclusion of three additional districts, namely Mahendragarh and Bhiwani of State of Haryana and Bharatpur of State of Rajasthan in NCR. Notification regarding the same was issued by MoUD, Govt. of India on 01.10.2013.

Project Sanctioning & Monitoring Group-I (PSMG-I) of NCRPB in its 52nd meeting held on 21.05.2015 approved the proposal to carry out study on **“Creation and Updation of Regional Landuse for the three additional Districts of National Capital Region”** at a total cost of Rs. 22.6 lakh. Total area of these three districts is 11,744 sq. km. Accordingly, an MoU was signed between NCRPB & NRSC on 11.09.2015 and the work was initiated by NRSC.

Subsequently, NCR Planning Board in its 34th meeting held on 20.01.2014 also approved inclusion of three more districts, namely Jind and Karnal of State of Haryana and Muzaffarnagar of State of Uttar Pradesh, in NCR. Notification regarding the same was issued by MoUD, Govt. of India on 24.11.2015.

PSMG-I in its 53rd meeting held on 19.01.2016 requested NRSC to extend the study area to cover the above newly three added districts notified on 24.11.2015, retaining the scope of work as per MoU signed on 11.09.2015. PSMG-I in the said meeting has decided that:

*“NRSC may include the districts, namely, Jind & Karnal of Haryana Sub-region and Muzaffarnagar of UP Sub-region, notified on 24.11.2015, as a part of the earlier study “Creation of Regional Land use for the three additional districts of NCR”, (MoU signed on 11.09.2015) and update the Regional Landuse Map-database, notified in 2005, inclusive of all the six newly added districts. **Revised estimate for the earlier proposal including these three new districts may be submitted in the next meeting for financial sanction after obtaining the same from NRSC. Revised MoU for the purpose may be signed after obtaining the financial sanction.**”*

In pursuance of the above, NRSC has submitted a proposal along with the revised estimates for “Creation and Updation of Regional Land use for six additional districts of NCR” for the six newly added districts of NCR. The details of the revised proposal are at Annexure-I.

The total project cost of Rs.42.54 lakhs (plus applicable taxes) is proposed to be paid as per schedule given in the following Table.

S. No.	Stage	Payment Schedule
1.	Stage 1 Mobilization of Advance after signing of Memorandum of Understanding between NCRPB and NRSC	40% of the cost of Rs.42.54 lakhs i.e. Rs.17.016 lakhs.



S. No.	Stage	Payment Schedule
2.	Stage 2 Submission of Draft Report and Maps	40% of the cost of Rs.42.54 lakhs i.e. Rs.17.016 lakhs.
3.	Stage 3 Submission of Draft Report and Maps, incorporating suggestions / modifications of proposals and closeout meeting / feedback.	20% of the cost of Rs.42.54 lakhs i.e. Rs.8.508 lakhs.

Action Point:

The Proposal submitted by NRSC for Creation and Updation of Regional Land use for six additional districts of NCR with cost estimate of Rs. 42.54 lakhs (plus applicable taxes) is placed before the PSMG-I for consideration and approval.



Annexure-I to Agenda 8

Creation of Regional Landuse for Six Additional Districts of National Capital Region



Prepared By
National Remote Sensing Centre (NRSC/ISRO)
(Dept. of Space, Govt. of India)
Hyderabad

Prepared For
National Capital Region Planning Board (NCRPB)
(Ministry of Urban Development, Govt. of India)
New Delhi

Project Proposal (Six Additional Districts)

December, 2016



**National Remote Sensing Centre
(Report / Document Control Sheet)**

1.	Security Classification	Controlled Document			
2.	Distribution	Within NRSC / ISRO and NCRPB			
3.	Report / Document version	(a) Issue no.01	(b) Revision & Date	09 th December 2016	
4.	Report / Document Type	Project Proposal			
5.	Document Control Number				
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7.	Particulars of collation	Pages 17	Figures 3	Tables 2	Annexures 2
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9.	Affiliation of authors	US & GIG / RSAA			
10.	Scrutiny mechanism	Compiled by GH (US & GIG)	Reviewed by DD (RSAA)	Approved /Controlled by DD (RSAA)	
11.	Originating unit	US & GIG / RSAA, NRSC			
12.	Sponsor(s) / Name and Address	NCRPB (Ministry of Urban Development, Government of India), New Delhi			
13.	Date of Initiation	October, 2016			
14.	Date of Publication	December, 2016			
15.	Abstract (With Keywords)	Land use database generated earlier by erstwhile NRSA in 1999 was one of major input for preparing the Regional Plan – 2021 by NCRPB, New Delhi. The Land use database was updated in 2012 for review of Regional Plan-2021. The current proposal is for Creation of Regional Land use for Six Additional Districts of National Capital Region.			



Creation of Regional Land use for Six Additional Districts of National Capital Region

Contents

Background and Scope	95
NCRPB Request / Communication	97
Relevance to NCR Planning Board	97
Objectives	97
Study Area	97
Satellite Data / Ancillary Data	97
Approach and Methodology	98
Quality Assurance Mechanism	102
Magnitude of Work	102
Project Execution Plan	103
Time Schedule	103
Project Review and Reporting	103
Budget.....	104
Responsibilities of NRSC and NCRPB.....	105
Intellectual Property Rights (IPR)	105
Confidentiality.....	106
Amendment Handling.....	106
Indemnity.....	106
Handling of NCR Property Details	106
NCRPB (User) Feedback	106
Post Project Services, if any.....	106
Arbitration.....	106
Force Majeure	106
Need for MOU between NRSC/ISRO and NCRPB	107



Creation of Regional Land use for Six Additional Districts of National Capital Region

Background and Scope

The NCR Planning Board is constituted under the National Capital Region Planning Board (NCRPB) Act 1985 has the mandate for preparing Plan for the development of the National Capital Region and for coordinating and monitoring the implementation of the plan and for evolving harmonized policies for the control of land uses and development of infrastructure in the region so as to avoid any haphazard development.

Subsequently, in order to prepare the Regional Plan 2021 (RP 2021), NCRPB had entrusted a study titled “*Updating Land use from latest Remote Sensing Imageries and prepare GIS database for the entire NCR*” to erstwhile National Remote Sensing Agency (NRSA), Department of Space, Government of India, Hyderabad. Based on the urban sprawl / land use analysis made by the NRSA using the satellite images of 1999, the proposed land use and other development proposals for the RP-2021 were evolved and formulated. The RP-2021 for NCR was approved by the Board and notified on 17.09.2005 for implementation.

Draft Revised Regional Plan 2021: As per the Section 15 (1) provision of the NCRPB Act 1985, the Regional Plan – 2021 is required to be reviewed after every five years from the date of operationalization. Accordingly, National Remote Sensing Centre (NRSC) was requested vide Board’s D.O. letter dated 03.01.2012 to undertake the study as it had previously carried out similar work while preparing the landuse plan for RP-2021.

Following this, NRSC, Hyderabad has carried out the study “*Creation and Updation of Land use for Review of Regional Plan 2021*” for National Capital Region (NCR) in 2012-13. The project comprised of mapping for 34,144 sq.km area of NCR falling in 16 districts, viz. nine districts from Haryana sub-region, six districts from UP sub-region and one district of Rajasthan sub-region and NCT, Delhi. Under the study, existing land use and proposed land use maps were prepared for “*Draft Revised Regional Plan -2021*” which is under the process of finalization & notification.

Mapping of three additional districts (Mahendragarh, Bhiwani & Bharatpur):

NCR Planning Board in its 33rd meeting held on 01-07-2013 has included three additional districts, namely Mahendragarh (area -1899 sq.km.) and Bhiwani (area – 4778 sq.km.) of Haryana State and Bharatpur (area – 5067 sq.km.) of Rajasthan state in NCR. Notification regarding the same was issued by MoUD, Govt. of India on 01-10-2013.



Project Sanctioning & Monitoring Group-I (PSMG-I) of NCRPB in its 52nd meeting dt. 21-05-2015 approved the proposal to carry out the study on “*Creation of Regional Land use for the three additional Districts of National Capital Region*”.

Total area of these three districts is 11,744 sq.km. Accordingly the work was initiated by NRSC.

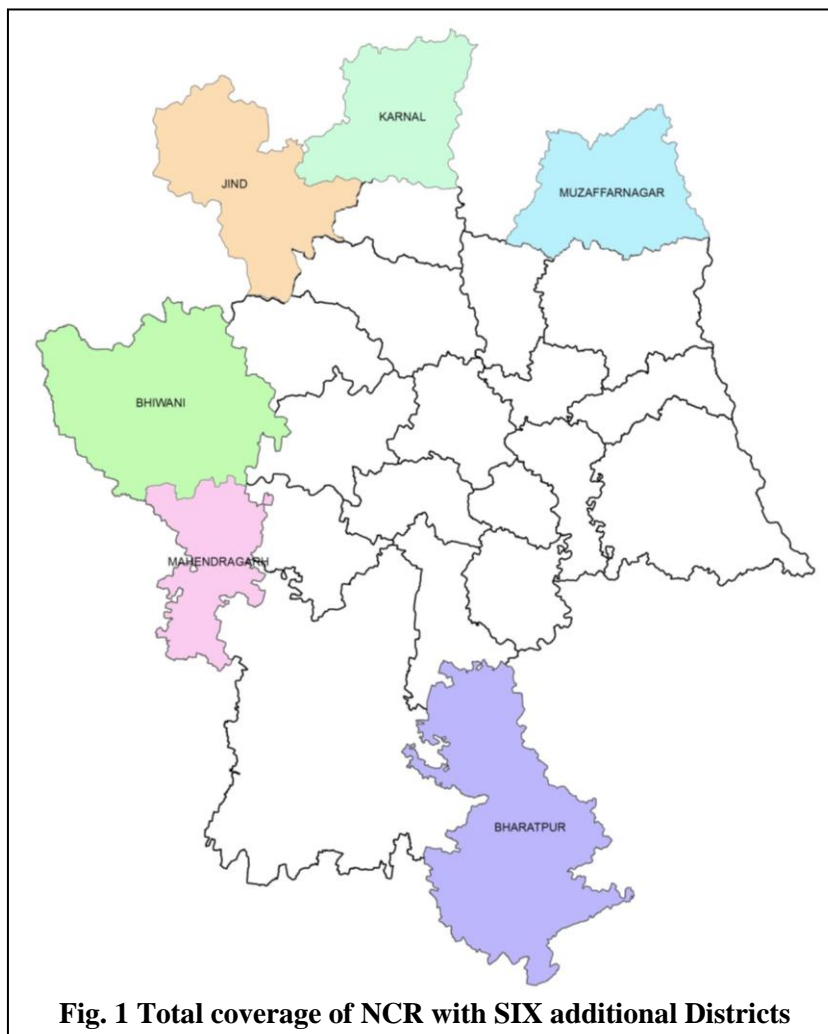
Mapping of another three additional districts (Jind, Karnal & Muzaffarnagar):

NCR Planning Board in its 34th meeting held on 20-01-2014 further included another three additional districts, namely Jind and Karnal of Haryana State and Muzaffarnagar of Uttar Pradesh State in NCR. Notification regarding the same was issued by MoUD, Govt. of India on 24-11-2015.

PSMG-I in its 53rd meeting held on 19-01-2016

requested NRSC to extend the study area to cover THREE more districts viz. Jind (2702 sqkm.) & Karnal (2520 sqkm.) of Haryana State and Muzaffarnagar (2723 sqkm.) of Uttar Pradesh State retaining the scope of work as per MoU signed on 11-09-2015. In the said meeting of PSMG-I, it was decided that NRSC will submit a fresh proposal including all six new districts with revised estimates and a revised MoU may be signed after obtaining the financial sanction. The revised extent of the study area for the six newly added districts of NCR is likely to be 19,673 sq.km. The maps of these six newly added districts will be integrated with the earlier notified map of NCR prepared for the area of 34,144 sqkm. The total area of NCR is likely to be 53,817 sqkm.

Subsequent to financial sanction of the revised estimates by PSMG-I, the revised MoU will be signed.



NCRPB Request / Communication

In continuation to the above request, the present proposal is submitted by NRSC / ISRO, Hyderabad to NCRPB, New Delhi for consideration and approval.

Relevance to NCR Planning Board

The present study would enable the NCRPB to examine the existing urban and regional land use (2015-16) for the six new districts of NCR.

Objectives

The objectives of the proposed study would be as given below:

1. Mapping and GIS Database Creation of Land Use / Land Cover at 1:50,000 scale for the six additional districts in NCR (Mahendragarh, Bhiwani, Jind, Karnal, Bharatpur and Muzaffarnagar)
2. Provide thematic maps of Geology, Geomorphology, Groundwater Prospects and Slope of NCR on 1:500,000 or smaller scale, each theme in one single map.
3. Seamless integration of GIS database with previous NCR GIS database.
4. Report Generation.

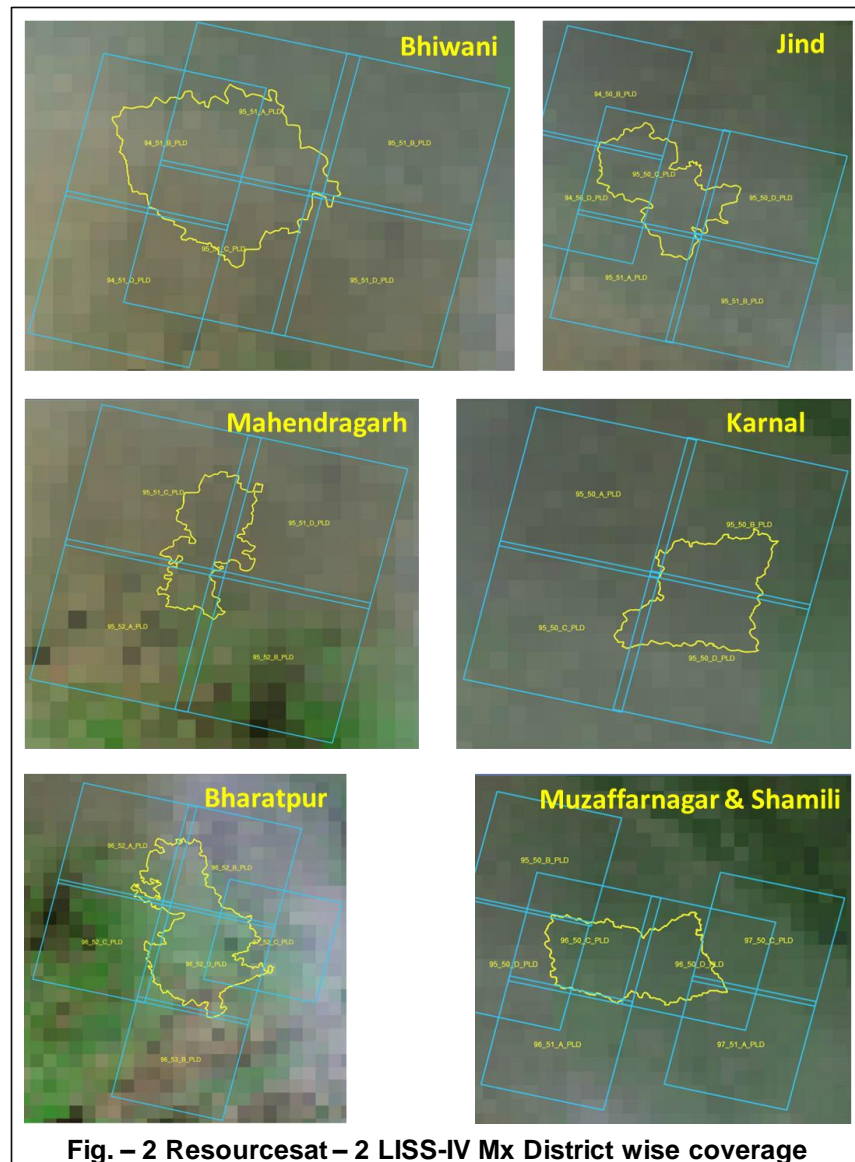
Study Area

The study area constitutes six districts namely Mahendragarh, Bhiwani, Jind & Karnal in Haryana sub-region, Bharatpur in Rajasthan sub-region and Muzaffarnagar in UP Sub-region with a total area of 19673 sqkm.

Satellite Data / Ancillary Data

- Single Season orthorectified data from IRS satellite (Resourcesat 2 MX LISS-IV having a spatial resolution of 5.8m). Figure 2 shows the district wise satellite data coverage



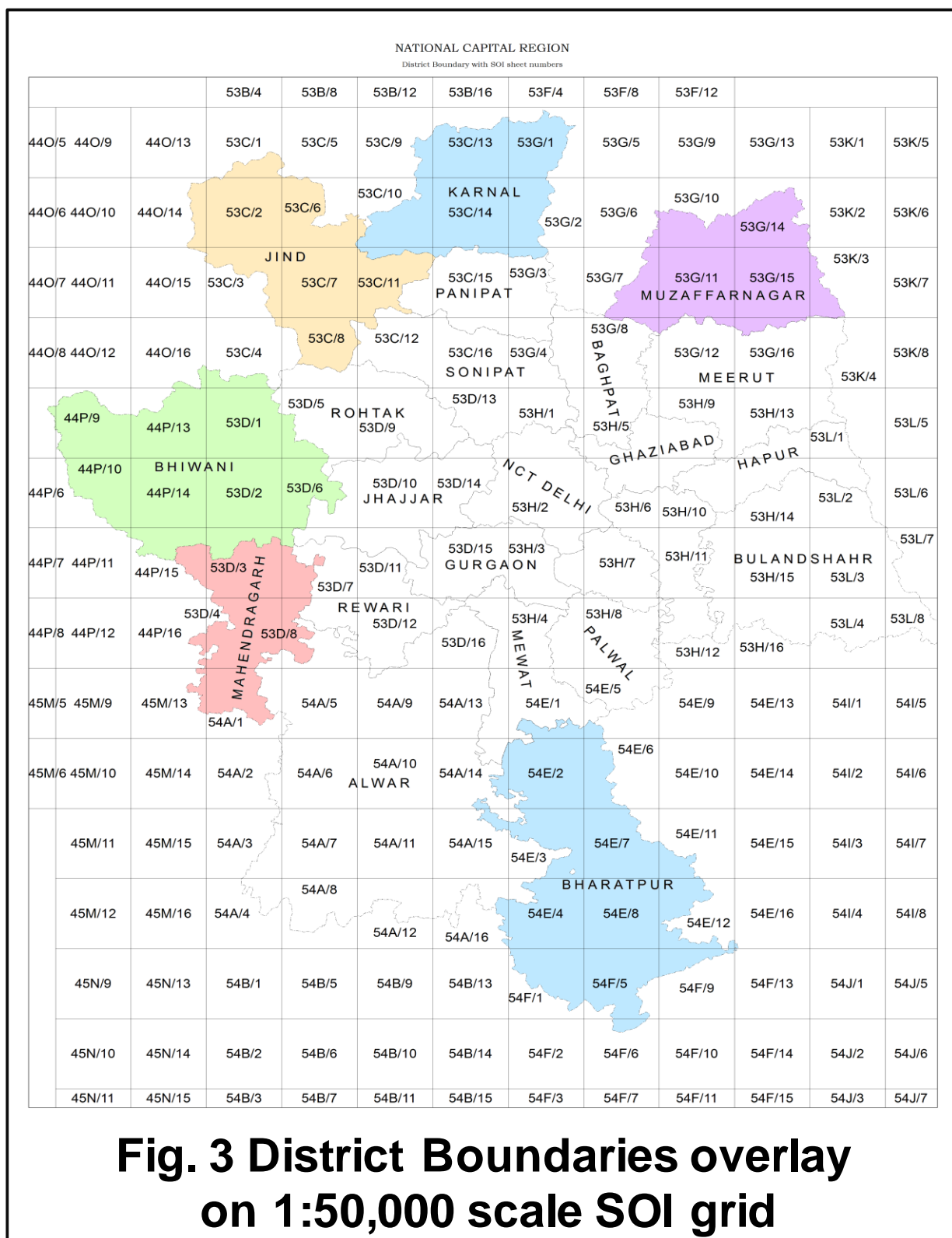


- Existing Notified Controlled/ Development/Regulated Areas of Towns in 6 districts.
- Digital Data of Map sheets as per Survey of India and Other Spatial data on 1:50,000 scale..
- Legacy thematic databases on Geology, Geomorphology, Groundwater Prospects and Slope
- Master / Development Plan of NCR Towns and Regional Plan Proposed Land use of 2021.
- Ground Truth data collected during Current Mapping season of 2016-17.

Approach and Methodology

Scale: Scale of satellite data / ancillary data input and output would be on 1:50,000. The spatial reference grid map of 15' x 15' with district boundaries overlaid is given in figure 3. As per this, the number of map sheet products / output on 1:50,000 scale would be around 73.





Land use Classification: To make the data / interpretation comparable with the land use classification followed in the earlier study conducted for preparation of RP-2021, during 1999, the various levels of land use classification to be mapped are shown in the Table-1. The satellite data of 2015-16 & 2016-17 will be used for generating consistent and comparable vector data on land use.

Table-1: Levels of Land Use Classification for Interpretation and Analysis

Sl. No.	Level – I	Level – II	Level – III
Scales	1:500,000	1:250,000	1:50,000
01.	Builtup	Dense Builtup	Dense Builtup
		Medium Builtup	Medium Builtup
		Sparse / Low Builtup	Sparse / Low Builtup
			Non-Residential
			Open / Vacant Land
			Recreational
			Railway Yard
			Airport
02.	Agriculture	Cultivated	Cultivated
		Fallow	Fallow
		Plantation	Horticultural Plantation
03.	Green Area	Dense	Dense
		Plantation	Plantation
		Open Scrub	Open Scrub
04.	Wasteland	Gullied Land	Gullied Land
		Saline Land	Saline Land
		Waterlogged	Waterlogged
		Barren	Barren
		Rocky	Rocky
		River Sand	River Sand
		Land with or without scrub	Land with or without scrub
05.	Waterbodies	River / Stream	River / Stream
		Canal	Canal
		Drain	Drain
		Lake / Tank / Pond	Lake / Tank / Pond
		Valley Fill	Valley Fill
		Palaeo Channel	Palaeo Channel
06.	Others	Quarry	Stone Quarry
			Brick Kilns
		Land Fill Site	Land Fill Site
07.	Transportation	Roads	National Highway
			State Highway
			Express way
			Ring Road / By-pass
			Other Roads



Sl. No.	Level – I	Level – II	Level – III
Scales	1:500,000	1:250,000	1:50,000
		Rail	Rail
		Airport	Airport
08.	Admin Boundaries	NCR Boundary	NCR Boundary
		Sub-Region Boundary	Sub-Region Boundary
		State Boundary	State Boundary
		District Boundary	District Boundary
		Taluk Boundary	Taluk Boundary
		Forest Boundary	Forest Boundary
		Controlled / Development Area Boundary	Controlled / Development Area Boundary

(Source: NCRPB Communication – vide letter dated 29.4.2016)

Methodology

Land use / Land Cover: The methodology would involve interpretation & onscreen data capture using Resourcesat-2 orthorectified imagery which would be supported by limited ground truthing, discussions with the officials of the respective sub-region, use of collateral maps, study reports etc. SOI map data available on 1:50,000 scale would also be referred and used whenever the base details/information and annotation details are deemed necessary. The Controlled / Development / Regulated Area boundaries of the towns in these six districts as provided by NCRPB or respective state NCR Planning & Monitoring Cells would be georeferenced and digitized for transfer onto the land use map.

Ground truth of land use theme would be conducted on sample basis for each of the district for verification, checking and collection of near real time ground realities. Post-field corrections / modifications would be carried out and quality check shall be done, before the final GIS database is generated. The suggestions/ modifications received during the review of proposed landuse plan would be incorporated in the landuse database. The statistical tables would be generated at Regional / Sub-Regional and District level.

The seamless spatial data output integration for the entire NCR would be generated for data browsing, retrieval and attribute linking and to perform sample query operations using the database in GIS environment.

Other Layers/maps: Other maps (such as Lithology, Geomorphology, Ground water prospects, Ground water rechargeable areas, Flood prone Areas slope maps etc. of total NCR will be generated from legacy data and supplied as one mosaic for each theme.

The different types of deliverables / outputs resulting from the study are listed in Table – 2.



Table – 2: Deliverables with Specifications

Sl. No.	Particulars	Scale	Quantity	Requirements
01.	Existing Landuse Maps of 2015 – 2016 and proposed Land use Maps of 6 districts	1:50,000	73 prints (one set)	Five print copies each of 73 nos. and Softcopy (.pdf) in DVD
02.	Thematic Mosaic of Landuse (75 maps of initial NCR area + 73 maps of additional 6 districts) covering NCR of 53,817 sq. kms.	1:500,000 or smaller (total NCR in one A0 map)	5 prints	One print copy each and one Softcopy (.pdf/.jpg) in DVD
03.	Satellite Data (Resourcesat – 2) LISS-IV orthorectified (15' x 15') Prints and Digital Data (tiff image) of 6 districts	1:50,000	73 prints	One print copy each and Softcopy in CD / DVD
04.	Study Report (Hard Copy) in Colour & Soft Copy with Statistical Tables, Maps / Figures	---	50 copies	Ready to Print Softcopy in CD
(05.	Seamless Landuse GIS database of 2015/2016	---	---	DVD
06	Other thematic maps	Mosaic	Approx. 20 nos.(List of Maps at Annexure-II)	In pdf/jpg format

Quality Assurance Mechanism

The Quality and Accuracy Standards (QAS) required for project realization will be adopted according to the procedures mentioned in the Methodology and NNRMS Design Standards (The applicable document would be NNRMS (2005) ISRO:NNRMS:TR:112:2005 standards). The Internal Quality and External Quality Assurance (QAS) team would carry the quality checking and certify the data / maps for dissemination to NCRPB, New Delhi.

Magnitude of Work

- Project Documentation
- Preparation of Project Proposal and Budget Estimates
- Signing of MoU
- Browsing and Procurement of IRS Resourcesat-2 Satellite Data
- Satellite Data preparation (26 scenes) – Figure 2.



- Interpretation of satellite data, spatial database creation of land use of 2015/2016, ground truth verification, post-field corrections and quality checking (QAS)
- Seamless GIS database creation.
- Statistics (category-wise) generation, compilation, change matrix preparation and analysis of land use 2015/2016
- Generation of other thematic maps as per the list of maps given at Annexure II for 6 districts and adding to total NCR area.
- Project training
- Deliverables / output generation
- Report generation (draft and final)
- Project closeout meeting and feedback

Project Execution Plan

The project would be executed by internal manpower / team identified and deployed for execution of tasks / responsibilities listed.

Time Schedule

Duration of the proposed study would be around 12 (6 months for first 3 districts and 6 months for latest 3 districts) months from the date of signing of MOU. The project activity wise time schedules are shown in Annexure – I.

Project Review and Reporting

It is envisaged to Review and Report during the Project Period as deemed necessary by NRSC/ISRO, Hyderabad and NCRPB, New Delhi. The Project Review and Reporting Committee would consist of DD (RSAA), GH (US & GIG) and Project Team Members from NRSC/ISRO, Hyderabad. The NCRPB, New Delhi team would consist of CRP and JD (Tech) as Members. The Committee would meet either at NRSC/ISRO, Hyderabad or at NCRPB, New Delhi on mutually agreed dates. The committee would examine the progress of work on mapping, GIS database, quality, deliverables, report, timelines, payment and unforeseen delays if any and report to Director, NRSC and Member-Secretary, NCRPB.



Budget

Terms of Payment: Out of the total cost of the project, 100% of the cost of the satellite data products (prints and digital) will be paid directly to NRSC Data Centre (NDC), NRSC, Hyderabad. The 90% of the cost of the Mapping and GIS database and analysis, map deliverables, study report etc., will be paid as advance payment and balance 10% will be paid after the completion of the work. Service Tax as applicable will be paid by NCRPB to NRSC. No Tax Deduction at Source (TDS) would be admissible. The payment will be made through Demand Draft drawn in the name of Pay & Accounts Officer, NRSC payable at Hyderabad.

i. Map Sheet Cost:

Cost for each Mapsheet of 1:50,000

Manpower	Interpretation/Data Capture/Analysis 7days + GT 2 days + post field correction 1Day + GIS data base finalization 1.25 Day + Output Generation 0.25 day + project Management 0.5 day =12 days for a mapsheet	Discounted rate for Govt.
	Cost of Interpretation/data capture/Analysis	70% of Manpower Cost
	TOTAL (RS)	
A	Analysis Cost for 12 days (Salary for S/E- SE @Rs.1,29,970/-per month for 12 days)	54587
B	G T collection (2 days per mapsheet)	
	1. Travel Cost (@ Rs.1500/- one way x 2)	3000
	2. Field cost for GT transportation (@ Rs.2500 per day X 2 days)	5000
	3. DA (Lodging+ Boarding) @ Rs.4950 per day X 2 days	9900
C	System Cost (Rs.90 X8 X9.25 Days)	6660
D	QAS by S/E- SE (@ Rs.1,29,970 pm for .5 Days)	3249
E	QAS System Cost (@Rs.90 X 8 Hrs X 0.5 Day)	360
F	QAS Check Plots	1500
G	TOTAL	107651.25
H	Round Off	107650
		83280

ii. Costing of Additional 6 Districts (Bharatpur, Bhiwani, Jind, Karnal, Mahendragarh and Muzaffarnagar)



a. Number of sheets for mapping

Sl. No.	Description	
1	Total additional area of 6 districts (sq. km.)	19689
2	Area covered by one full map sheet of 1:50,000 scale in NCR region (sq. km)	~650
3	No. of 1:50,000 scale map sheets = 19689 sq. km / 650 sq. km.	30.29 ~ 31 sheets

b. Cost estimation

COST ESTIMATION		
Proj : Creation of Regional Landuse for Six Additional Districts of National Capital Region		
Sl.No.	Component	Amount (₹)
1	Cost of Satellite data- Resourcesat LISS IV orthorectified data of 2015-16 @ Rs.10470/- per scene for 26 scenes	272220
2	Cost of Printing Resourcesat-2 LISS IV data of 2015-16 (73 map sheet prints as per SOI map sheets) @ Rs.2000 per map sheet	146000
3	Cost of Mapping @ Rs.83280/- for 31 sheets (As per Area)	2581680
4	Cost of printing Landuse maps of 2015-16 (73 maps X 5 Sets) @ Rs.2000/- map	730000
5	Cost of Training as per NRSC: RSA-T&ED/2014 dated 06 March 2014	128750
6	SUB TOTAL (Sl. No.1 to Sl. No.5)	3858650
7	Project Management -5% on Sl. No.6	192933
8	Organizational overheads -(5% on Sl. No.6 and 7)	202579
	TOTAL	4254162
	R/O	4254000
	Service Tax Extra, as applicable at the time of payment	

Responsibilities of NRSC and NCRPB

Responsibilities of NRSC and NCRPB will be in accordance with the contents mentioned in the MOU.

Intellectual Property Rights (IPR)

The Intellectual Property Rights (IPR) for the satellite data inputs and outputs (deliverables) out of the project will jointly vest with NRSC / ISRO and NCRPB.



Confidentiality

The output (deliverables) of the project is for Official Use of NCRPB, New Delhi. The data / information can be shared with various government user departments with letter to Deputy Director, RSAA, NRSC.

Amendment Handling

Any change in number and type of project schedule, deliverables etc., would be handled by the Project Review and Reporting Joint Committee constituted therein with mutual consensus / approval.

Indemnity

NCRPB, New Delhi shall exercise care and diligence while using the database, reports and will indemnify NRSC / ISRO, Hyderabad in respect of any loss or claim arising out of using project database.

Handling of NCR Property Details

The Regional Plan (RP – 2021) maps / report along with associated maps / data and other inputs would be required at NRSC for reference during project execution.

NCRPB (User) Feedback

The outputs of the project will be examined by the NCRPB (user) and feedback would be given within two months, after submission of deliverables / report in the format, as provided by NRSC.

Post Project Services, if any

(Not envisaged)

Arbitration

(Not Acceptable)

Force Majeure

Neither party shall be held responsible for non-fulfilment of their respective obligation under the MoU due to the exigency of one or more of the unforeseen events such as but not limited to Acts



of God, war, flood, earthquake, strike, lockouts, epidemics, riots, civil commotion etc. provided on the occurrence and cessation of any such events.

Need for MOU between NRSC/ISRO and NCRPB

It is a mandatory requirement to have a MoU with the NCRPB (user) before the commencement of the Project. Format of MoU will be provided by NRSC to NCRPB, after the approval of the project for mutual consent and approval / signatures of the concerned.



Annexure – I

Project Activity wise Time Schedules

(A) Three additional Districts (Jind, Karnal & Muzaffarnagar)

Sl. No.	Milestones / Activities	Jan 2017	Feb	Mar	Apr	May	Jun	Jul 2017
1.	Submission of Proposal	↔						
2.	Acceptance, MoU with NCRPB		↔					
3.	Execution Plan Document		↔					
4.	IRS (R2) Satellite Data Procurement		↔	→				
5.	Collection and Preparation of Spatial / Non-Spatial Data from NCRPB			↔	→			
6.	Project Review (Mid Term) and data collection				↔			
7.	Satellite data integration / database creation of 2015-2016 and Training			↔	→			
8.	Ground Truth (GT) data collection / Verification and Database Updation			↔	→			
9.	Quality Evaluation (QAS) Exercise					↔	→	
10.	GIS Data Analysis and Statistical Tables / Compilation etc.					↔	→	
11.	Draft Report and Maps & GIS Database						↔	→
12.	Project Review (Final) / Project Closeout Meeting and Feedback							↔
13.	Final Report & Maps Delivery							↔

(B) Three additional Districts of Bhiwani, Mahendragarh & Bharatpur

Sl. No.	Milestones / Activities	Oct-2015	Nov	Dec	Jan 2016	Feb	Mar	Apr 2016
1.	Submission of Proposal	↔						
2.	Acceptance, MoU with NCRPB		↔					
3.	Execution Plan Document		↔					
4.	IRS (R2) Satellite Data Procurement		↔	→				
5.	Collection and Preparation of Spatial / Non-Spatial Data from NCRPB			↔	→			
6.	Project Review (Mid Term) and data collection				↔			
7.	Satellite data integration / database creation of 2015-2016 and Training			↔	→			
8.	Ground Truth (GT) data collection / Verification and Database Updation			↔	→			
9.	Quality Evaluation (QAS) Exercise					↔	→	
10.	GIS Data Analysis and Statistical Tables / Compilation etc.					↔	→	
11.	Draft Report and Maps & GIS Database						↔	→
12.	Project Review (Final) / Project Closeout Meeting and Feedback							↔
13.	Final Report / & Maps Delivery							↔



Annexure –II

List of Maps

Map No.	List of Maps
2.1	National Capital Region : Regional Plan 2021: Constituent Areas
2.2	National Capital Region : Physiography and Slope
2.3	National Capital Region : Lithology
2.4	National Capital Region : Geomorphic Units
3.1	National Capital Region : Policy Zones
4.1	Level of Urbanisation in NCR (2011)
4.2	Population Density of NCR (2011)
4.3A	National Capital Region : Existing Settlement Pattern-2011
4.4	National Capital Region : Proposed Settlement Pattern 2021
6.1	Existing Road Network
6.2	Existing Rail Network
6.6	New Rail Lines and Logistic Hubs
8.1	Status of Ground Water Availability in NCR
8.2	Flood-Prone Areas in NCR
8.3	Ground Water Rechargeable Areas in NCR
15.1	National Capital Region – Seismo-Tectonic Features
17.1	National Capital Region : Existing Land Use 2012
17.2	National Capital Region : Proposed Land Use 2021
18.1	National Capital Region – Counter-Magnet Areas 2001
18.2	National Capital Region – Counter-Magnet Areas 2021



Agenda Item No. 9: Consultancy Study on Economic Profile of NCR, undertaken by the Board

Section 11 of the NCRPB Act, 1985 mandates NCR Planning Board to undertake any survey and studies, as it may consider necessary for the preparation of the Regional Plan, to be made by such person / group of persons / consultants for carrying out studies as may be determined by the Board.

The Empowered Committee of NCR Planning Board, after detailed discussions & deliberations, in its 3rd meeting held on 25.02.2009 decided that NCR Planning Board (NCRPB) would undertake the Studies on Economic Profile of NCR, Household Industries and Social infrastructure in NCR through Consultants (**Annexure-I**). Pursuant to the said decision, Consultancy Evaluation Committee (CEC) for the Study was constituted with the mandate to finalize the Terms of Reference of the Study and undertake identification/finalization of the Consultant for the Study.

The Study on Economic Profile of NCR was initiated by the NCRPB through Consultant after obtaining the approval of PSMG-I in its 45th meeting held on 31.05.2010 (**Annexure-II**). Details of the Study are as follows:

Sl. No.	Study	Consultant	Month & Year of signing Agreement	Total Cost
1.	Economic Profile of NCR	M/s Apex Cluster Development Services Pvt. Ltd.	15 th June 2010	Rs. 30,10,250/- + service tax extra.

Pursuant to the above, the study on Economic Profile of NCR has been completed in the year 2015 and upon approval accorded by the respective Consultancy Review Committee (CRC), constituted for monitoring and reviewing the work of Consultant with reference to the Contract Agreement, payments were made to the Consultants as per the schedule of payment provided in the Contract Agreement. Based on the output of the Study, Functional Plan on Economic Profile of NCR has been prepared by the Board and circulated to NCR participating States for guidance in June, 2016.

Point for decision:

The matter is placed before PSMG-I for information.



Annexure-I to Agenda 9

Extract from Minutes of the 3rd Meeting of the Empowered Committee of NCR Planning Board held on 25.02.09

Development Strategy and Action Plan for a New Town "Global City at Shahjahanpur-Neemrana-Behror" in Rajasthan Sub-region had been completed and the Committee directed that the Master Plan be prepared for the said Complex by the Government of Rajasthan expeditiously. Similarly, the Empowered Committee directed the Government of UP to expedite action on New Townships along EPE and the preparation of Master Plan for Greater NOIDA Phase - II as new township.

(e) Bottlenecks in the on-going Projects

After discussions, the Chief Secretaries of Government of Haryana and UP were requested to resolve the issues and bottlenecks to expedite the implementation of the schemes of Western and Eastern Peripheral Expressways.

8. Agenda Item No. 8: Development of Metro and Regional Centres in the National Capital Region- City Development Plans

The Empowered Committee observed that the City Developments Plans (CDP) had been used as a tool under JNNURM in all the 63 mission cities to prioritize investments in critical urban infrastructure. In Tamil Nadu, Tamil Nadu Urban Development Fund (TNUDF) has supported 108 City Development Plans which were finalized through a Consultative process between the ULB, the Directorate of Municipal Administration and TNUDF. The Empowered Committee further observed that in NCR out of the 18 Metro/Regional Centres, 2 Metro Centres namely Fardiabab and Meerut had been covered under the JNNURM and CDPs had already been prepared and felt that CDPs which would provide the road map for planned development with appropriate investments need to be prepared for the remaining Metro and Regional Centres in a time bound manner.

After detailed discussions and deliberations the following decisions were taken by the Empowered Committee:

- i) City Development Plans for few Metro and Regional Centres would be prepared through ADB Technical Assistance Project.
- ii) CDPs for the remaining Metro and Regional Centres would be prepared by the respective State Governments/Local Bodies in consultation with NCRPB.
- iii) Based on priorities identified in the City Development Plans, projects would be taken up for development and financing in consultation with the local body and the State Government.

9. Agenda Item No. 9: Consultancy Studies on Economy of NCR

Member Secretary, NCRPB stated that the changes in economic policy, the process of privatization of PSUs and downsizing of government, elimination of subsidies and tax incentives for industry are going to transform the economic structure of the NCR in a significant manner. Further, new developments, such as introduction of Delhi Metro and its proposed extensions in Central NCR, construction of Western Peripheral (KMP) and Eastern Peripheral Expressways, and other expressways, construction of Delhi-Mumbai Industrial Corridor and Dedicated Freight Corridor, development of SEZs and new towns, etc. would also have a significant impact on economy of NCR. He added that heavy and large manufacturing in the NCR would be determined to a great extent by policies and initiatives of Government of India, such as



development of the Delhi-Mumbai Industrial Corridor, Dedicated Freight Corridor, SEZ policy etc. He further stated that there is tremendous potential in the handicraft and household industries sector in NCR, which provides eco-friendly way of employment generation and includes agro-processing, handicraft, textile etc.

There is need to respond to the changes, carry out accurate analysis and assessment of present economic base of NCR and study future directions of growth, along with fiscal policies, legislations, etc. In view of this, it is proposed to undertake following two studies:

- a) Study of Economic Profile of NCR
- b) Study on Household Industries

After discussions and deliberation, it was decided that NCR Planning Board would undertake the studies on Economic Profile of NCR and Household Industries in NCR through Consultants.

Agenda Item No. 10: Consultancy on Social Infrastructure in NCR

Member Secretary, NCRPB stated that social infrastructure is of great significance in promoting the objectives of Regional Plan 2021 by contributing to the population absorbing capacity of settlements. It was informed during discussions that while NCT-Delhi had comparatively good social infrastructure in the form of educational institutions and medical facilities, Government of Haryana and UP have been developing institutions of higher education which are attracting students from Delhi also. Issues related to facilities for higher education in NCT-Delhi and rest of NCR was discussed.

He further stated that there is a need to assess the quantity and quality of social infrastructure facilities, including education, medical facilities, law and order, etc. available in the region and future requirement. In view of this, it is proposed to undertake the study on Social Infrastructure in NCR through outsourcing.

After discussions and deliberation, it was decided that NCR Planning Board would undertake the study on Social Infrastructure in NCR through Consultants.

11. Agenda Item No. 11: Compliance of the Directions of the Standing Committee on Urban Development on the subject "National Capital Region Planning Board" given in the 35th Report (14th Lok Sabha)

This item was taken up with the permission of the Chair as additional agenda item. Member Secretary, NCRPB informed that copy of the 35th Report (14th Lok Sabha) of the Standing Committee on Urban Development on the subject "National Capital Region Planning Board" was received in the Board with the direction to submit the Action Taken Report. He added that the points on which the action is required to be taken by the Constituent State Governments were circulated to the Chief Secretaries of all the constituent States vide D.O. No. H-11018/1/2007-Vol.II dated 20.02.2009 along with the copy of the Report. He further added that copy of the same has also been circulated in the meeting and requested all the constituent States to submit their Action Taken Report at the earliest.



Annexure II to Agenda 9

National Capital Region Planning BoardMinutes of the 45th Meeting of the Project Sanctioning & Monitoring Group – I of the NCR Planning Board.

The 45th Meeting of the PSMG-I was held on 31.05.2010 under the Chairmanship of Dr. M. Ramachandran, Secretary, Ministry of Urban Development, Govt. of India. The list of the participants is enclosed as Annexure I.

Agenda Item No. 1: Confirmation of Minutes of the 44th Meeting of PSMG-I held on 25.11.2009.

1.1 The Minutes were confirmed.

Agenda Item No. 2: Action taken on decisions taken during the 44th Meeting of the PSMG-I

The Member Secretary highlighted the action taken on the decisions taken in the 44th meeting of PSMG-I held on 25.11.2009. He informed that out of five projects for which extensions were granted in the last meeting, one has been completed, two are nearing completion and in case of other two, request for further extension has been received. He further informed in detail about the action taken in respect of all new projects approved during the last meeting and mentioned that first loan instalment has been released in respect of 2 projects so far and in case of other 2 projects of Alwar and Gwalior, loan sanction letters have been issued but agencies are yet to draw the loan instalment.

As regards, progress in respect of projects sanctioned for ADB line of credit, he informed that further action, as required in respect of roads project of Sonapat and Jhajjar and MMTC at Anand Vihar has since been completed and bid documents have been forwarded to ADB for review and clearance. But there has been some delays in taking further action in respect of MMTC at Sarai Kale Khan, which needs to be expedited by DIMTS, the project implementing agency. The Engineer-in-Chief, DIMTS explained the position and assured that they would be submitting the requisite documents soon.



Ministry of Urban Development and GNCT-Delhi with 50% share holding each. Member Secretary, NCR Planning Board stated that in order to take the benefit of their experience, DMRC and Mumbai Rail Vikas Nigam (MRVC) have been nominated as expert special invitee to the Consultancy Review Committee (CRC). He further added that DMRC can participate as one of the operator of RRTS with NCRTC.

After the discussion, the group granted ex-post facto approval for conducting the Feasibility Study of three Corridors of Regional Rapid Transit System (RRTS) followed by Preparation of Detailed Project Report as proposed in the agenda.

✓ Agenda Item No. 6: Consultancy Study on Economic Profile of NCR

The Member Secretary brought to the notice of the Group that in order to have an accurate analysis and assessment of the economic base of NCR, NCRPB proposed to get a study conducted on important aspects of the NCR economy and the proposal was approved by the Empowered Committee in its third Meeting. Accordingly, a detailed TOR was prepared and finalized by a committee headed by the Member Secretary which included an outside expert from NIUA. After finalizing the TOR, Requests for the Proposal (RFP) were called from the interested firms through advertised tender enquiry and in order to save processing time, pre-qualification criteria were specified in the RFP document itself, MS explained. He informed that NCRPB received a total of three quotations with in the extended date of submission and the proposals received were first screened through pre-qualification criteria and all the three firms were short listed. Thereafter, technical proposals of the firms were opened and evaluated on basis of 100 marks criteria, as specified in RFP. The details of technical evaluation were then presented before the PSMG. MS further informed that based on technical evaluation, two firms were found to be qualified and financial bids of only these two firms were opened and L1 bidder, out of two technically qualified firms, was selected. Accordingly, PSMG is requested to approve the proposal to award the study to M/s Apex Cluster Development Services Pvt Ltd, who is the L1 bidder, for a sum of Rs. 30,10,250/- + service tax extra (Rs.



thirty lakhs, ten thousand, two hundred and fifty only + service tax extra). The study will be completed in six months.

The Group after brief discussion approved the proposal.

Agenda Item No.7: Proposal for the Consideration and approval of Full Consultancy charges for the preparation of Sub-Regional Plan-2021 by Constituent States of Rajasthan, UP & Haryana.

MS, NCRPB mentioned that PSMG-I, in its 39th Meeting held on 25-7-2007, had approved a budget upto Rs. 54 lakhs for each state to prepare their Sub-regional Plans. He informed that subsequent to the PSMG approval, three participating states of Haryana, UP and Rajasthan had awarded the work after following the prescribed bidding procedure and the matter was placed in PSMG-I meeting held on 9-6-2009 for approval. PSMG approved the proposal with the condition that any expenditure above the limit of Rs. 54 lakhs was to be borne by the respective state government. MS said that the work is now progressing well and inception reports have been received and approved in respect of all three states and in case of Haryana, interim report has also been submitted and approved. In the meantime, NCRPB has received requests from the Govt. of Rajasthan to consider bearing the entire cost of preparing SRP, as per the cost of work awarded after following tendering process without putting a ceiling of Rs. 54 lakhs, he stated. Supporting this, Principal Secretary, Town & Country Planning, Haryana also requested that NCRPB should consider funding the entire cost of study, as awarded.

The matter was discussed in detail and PSMG approved the proposal of NCRPB funding entire cost of study as awarded by the states after following due tender process, given the importance of SRP preparation and also the additional amount involved was not very significant.



Annexure-I to Agenda 1**National Capital Region Planning Board****Minutes of the 53rd Meeting of the Project Sanctioning & Monitoring Group – I of the NCR Planning Board**

The 53rd Meeting of the Project Sanctioning & Monitoring Group – I (PSMG-I) was held at 3.00 PM on 19.01.2016 under the Chairmanship of Secretary, Ministry of Urban Development, Govt. of India at Nirman Bhawan, New Delhi. The list of the participants is enclosed as Annexure-I.

Welcoming the participants, Member Secretary initiated the discussion with the permission of the chair.

Agenda Item No. 1: Confirmation of the Minutes of the 52nd PSMG-I Meeting

The Minutes were confirmed.

Agenda Item No. 2: Action Taken Report (ATR) of 52nd PSMG-I meeting decisions

Action Taken Report on the decisions of the 52nd PSMG-I meeting held on 21.05.2015 was discussed at length.

- a) The Group was updated that with regards to the pending reimbursements of commitment charges, Govt. of Haryana had made the necessary reimbursements in December 2015 but commitment charges from GNCT Delhi were yet to be received despite requests from NCRPB as well through Secretary (UD).

Representative from GNCT of Delhi informed that the necessary process was underway and the payments will be made soon, possibly within a month.

Appreciating the efforts of Govt. of Haryana, the Group noted the status.

- b) Regarding the two road projects pertaining to PWD(B&R), Haryana, re-submitted to NCRPB with Loan Requests with revised scope of work post PSMG approval, it was informed that necessary loan sanction letters had been issued and applicable loan installments had also been released.

Similarly, with regard to revision of project costs & corresponding loan amounts for the ongoing water supply projects at Nuh, Pataudi and Farukhnagar from PHED Haryana, the Group was informed that necessary revised sanctions were issued and the projects were progressing well.

The status was noted by the Group.

- c) Member Secretary further informed the Group that loans sanctioned for their Water Supply Project at IMT Manesar could not be released as HSIIDC was still to take care of the



conditions subject to which the loans were sanctioned. They had however made some submissions which are being reviewed and appear to be prima facie acceptable.

CE, HSIIDC informed that the main issue of furnishing of a certificate from T&CP Deptt. / HSIIDC confirming that the project site as well as area for which the project is envisaged do not fall under Natural Conservation Zone (NCZ), had been complied.

The Group directed that necessary action related to loan documentation and applicable releases should now be taken up.

- d) Regarding the Non Starter project if UIT Alwar, i.e “Solar Bus Shelters with Solar Lantern Recharging Stations in Alwar District”, for which loans sanctioned in December 2012 & released in July 2013, the representative from UIT Alwar was requested to present the status. He submitted that as the works related to Solar Lantern Recharging Stations were not feasible as per TERI report and the Bus Shelters were to be built on PWD land who wanted repeated shifting of the shelters as and when roads are widened, UIT Alwar has decided to withdraw the project and return the requisite funds.

The Group accordingly decided that the project shall be treated as withdrawn after the necessary funds are returned and directed UIT Alwar to expedite the necessary formal submissions and payments.

- e) Regarding the delay in progress of the project “Construction of Multi-storied office building at Karkardooma Institutional area at Shahdara South Zone by EDMC” sanctioned in 51st PSMG meeting, Additional Secretary, UD suggested that the East Delhi Municipal Corporation needs to specify a timeline with respect to its re-tendering and thereafter the likely project completion dates. Representative from EDMC informed that they expected to award the works by March 2016 and then expected date of project completion shall be around March 2018. He assured of formal submission with regard to the same to NCRPB within a week
- f) Explaining the status of the proposal regarding Creation and Updation of Regional Land use for the five additional districts of NCR the Group noted that the study has been awarded to NRSC and work is in progress.
- i. Advisor, NCRPB informed that subsequent to awarding the study for additional three districts of NCR and signing of MoU on 11.09.2015, Govt. of India notified addition of two more districts of Haryana in Haryana Sub-region (Jind and Karnal) and one district of UP in UP Sub-region (Muzaffarnagar) in NCR on 24.11.2015 which was published in Extraordinary Gazette of India No.2508, Part II Section 3 Sub-section (ii), dated 26.11.2015. Similar study is also required to be undertaken through NRSC for the three newly added districts in NCR. Scope of work for undertaking the study will remain the same as per the earlier MoU. He added that an addendum to Agenda item No. 2 in this regard has been circulated in the meeting.
- ii. The matter was discussed & deliberated in the meeting and following decisions were taken:



- NRSC may include the districts, namely, Jind & Karnal of Haryana Sub-region and Muzaffarnagar of UP Sub-region, notified on 24.11.2015, as a part of the earlier study “Creation of Regional Land use for the three additional districts of NCR”, (MoU signed on 11.09.2015) and update the Regional Landuse Map-database, notified in 2005, inclusive of all the six newly added districts. Revised estimate for the earlier proposal including these three new districts may be submitted in the next meeting for financial sanction after obtaining the same from NRSC. Revised MoU for the purpose may be signed after obtaining the financial sanction.
- NCR participating States shall provide district, tehsil and other required administrative boundaries of the newly added districts of their respective sub-regions to NRSC through NCRPB within 30 days.
- NCR participating State Governments shall carryout the planning for newly added districts by means of analysing the existing situation, identifying the issues & challenges at the ground/district level and then integrate the same with their respective Sub-Regional Plans in time bound manner.

Agenda Item No 3: Status Note on Assistance by Asian Development Bank (ADB) and KfW (German Development Bank) to NCRPB

ADB loan status

Member Secretary, NCRPB while presenting the status of financial assistance from ADB informed that the entire Tranche 1 loan amount of USD 60 million (INR 352.06 Cr.)has been drawn from ADB. It was also informed that there has been no default in the payment of interest and commitment charges by NCRPB to ADB.

The Social Safeguard issues pertaining to the following sub-projects have been discussed in detail:-

- 1) Sonapat Roads (Sonapat-Farmana Sisana Road).
- 2) Gurgaon-Chandu Badli Road.
- 3) GLMB Road.

Sonapat Roads (Sonapat-Farmana Sisana Road):

Advisor, NCRPB highlighted the issue pertaining to non-compliance to the ADB safeguard policy in this sub-project. MD, HSRDC stated that the case has already been referred to the office of the DRO Sonapat, Govt.of Haryana to make entries of mutations in favour of State Govt from individual owners.

Gurgaon-Chandu Badli Road.

Advisor, NCRPB also raised the Social Safeguard issue pertaining to this sub-project and informed that HSRDC has been requested to proactively bring all such cases where there is dispute in the land title to the court, claiming its land ownership of the sections/roads where their ownership is not established and thus carrying out mutation in favor of Govt. of Haryana.



MD, HSRDC informed that the case has already been referred to the office of the DRO Gurgaon, Govt. of Haryana to make entries of mutations in the name of State Govt. from individual owners. Further, MD, HSRDC has stated that the issues pertaining to the Social Safeguard issues under the projects mentioned at Sr.no.1 & 2 will get resolved by April 2016 by making the necessary entries of mutations in the name of State Govt. from individual owners.

Wdg. & Stg. Of Gohana-Lakhan-Majra-Meham-Bhiwani road from Km 0.000 to 37.700.

It was brought out that the sub-project was having social safeguard issue pending for compliance with the Social Safeguard policy of the ADB. However as on date the project has complied with the Social Safeguard Policy to some extent only. The Status on the non-compliance is as follows:

- PWD (B&R)/HSRDC has approved & declared an amount of Rs.20,53,538/- to be paid as compensation towards the 69 encroached structures. 50 encroached structures had been compensated as on 29 December 2015.

KfW (German Development Bank) loan status

The Group has been informed that out of Euro 100 million loan, NCRPB has already utilized an amount of Euro 19.31 million till date. As most of the Implementing Agencies (IA's) were not conversant with the International Bidding Procedures & Practices, out of the 13 projects under KfW line of credit 11 projects could not be awarded on time. NCRPB is making all possible efforts to expedite the Bidding process and Award of Contracts to improve the disbursement status. The matter is being taken up with all the implementing agencies and is being monitored by NCRPB on regular basis.

1. Sewerage Scheme at Farrukh Nagar Distt., Gurgaon-PHED Haryana:

Advisor, NCRPB briefed the Group, that PHED, Haryana has requested NCRPB to drop the project 'Sewerage Scheme at Farrukh Nagar Distt., Gurgaon being implemented under KfW line of credit' from its list of funding as now they want to get it implemented through State funds.

The Chair advised PHED officer that implementing the project through State funds will put financial burden on the same and since loan is available for the project, the State funds can be used elsewhere on other priority infrastructure. The Chair discussed the advantages of availing the funds from NCRPB. He further stated that issues if any, may later be discussed & resolved in NCRPB.

Member Secretary (MS), NCRPB informed that a meeting has been called on 29.01.2016 to discuss the issues.

Extension of KfW Loan:

The Group was informed that as the KfW loan is on reimbursement basis, NCRPB would not be in a position to utilize the entire loan of Euro 100 million by the loan closing date i.e., December 2016. Therefore, in order to utilize the balance loan amount, it is essential to



extend the loan period beyond December, 2016 for a further period of 2 years i.e. up to December 2018. In context of this, Member Secretary, NCRPB has issued a letter dated 09.11.2015 requesting Ministry of Urban Development to forward the request of NCRPB to Department of Economic Affairs (DEA) for extending the loan period up to December 2018 on the same terms and conditions as specified in the loan agreement signed on 09.02.2012 & 30.03.2012.

Additional Secretary (UD) directed Director, Delhi Division to look into the matter and coordinate with the IFD, MoUD to get the request processed at the earliest.

The Group accordingly noted the status.

Agenda No.4: New Projects submitted to NCRPB with Loan Requests

Member Convenor informed that NCRPB was in receipt of requests for financial assistance for 9 new and one old revised project. The fresh projects included one (1) road development project from HSIIDC, four (4) RoBs & two (2) new road development projects from PWD(B&R) Haryana), one (1) road development project from GDA, and one (1) Metro link project from NMRC Ltd. together involving loans of about Rs. 3112 Cr. The projects have been appraised from technical, financial, environmental and social angles by experts available in NCRPB. These projects are being proposed for the consideration and sanction of loan by the Group.

Agenda Item No. 4.1: Development of access controlled Kundli-Manesar-Palwal Expressway section (Manesar RD 83.320 to Palwal RD. 135.650 km) by HSIIDC, Haryana (balance works)

Advisor, NCRPB initiated the discussions by informing that the proposal was part of the Western Peripheral expressway propagated by NCRPB in its Regional Plan. Presenting the case, Chief Engineer, HSIIDC informed the Group that the project was being monitored by the Hon'ble Supreme Court and was important to become an alternative for the non-destined heavy traffic currently passing through Delhi. NCRPB had been approached for financial assistance with regards to the 52.33 km road section running from Manesar to Palwal, which was being implemented through the item rate mode. He explained that as per Supreme Court orders, the project is to be completed at the earliest and HSIIDC was making all efforts in this regard.

Addl. Secretary (UD) lauded the project but insisted that the projects should have the necessary environmental clearances and further suggested that as any cost increase shall have to be borne by HSIIDC, the agency may take necessary steps for timely completion within the estimates.

Accordingly, after deliberations, the Group approved the loan assistance of **Rs 343.35 Cr.** for the project for balance works of development of access controlled Kundli Manesar Palwal expressway section Manesar to Palwal RD 83/320 to 135/650 km. as per project details at Annexure-II A subject to compliances of aspects indicated below:-

- i. Renewal of Environmental clearance for the project which was obtained in February 2007.



- ii. Incorporating a safety clause in the loan agreement stating that NCRPB shall not be responsible in any manner for any claim / liability which may arise due to ongoing / future court proceedings or arbitration. In case the Board is made a party to the litigations, the cost of the litigation shall be borne by HSIIDC / Govt. of Haryana.
- iii. HSIIDC to collect all land records of ownership in respect of land acquired to avoid any future problems.
- iv. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly.

The loan will be subject to HSIIDC / Govt of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR.

The project detail regarding loan component sanctioned from NCRPB is as under:-

(Rs. In Cr.)

Agenda	Name of the Project	Estimated Cost	Total Loan Component
4.1	Development of access controlled Kundli Manesar Palwal Expressway section Manesar to Palwal RD 83/320 to 135/650 Balance works	457.81	343.35

Agenda Item No. 4.2: ROB projects

- 4.2.A : Construction of 4 lane ROB at Lakhanmajra Meham road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District**
- 4.2.B : Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district**
- 4.2.C : Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district**
- 4.2.D : Construction of additional 2 lane ROB at LC no. 3 on Hissar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hissar**

Managing Director, HSRDC initiated the discussions and informed that the four ROB's including one in Lakhanmajra, two in Panipat and one in Hissar were important Railway Crossings experiencing heavy Train Vehicle Units (TVU) and are in immediate need of ROB's. Addl. Secretary (UD) enquired whether the ROB's were approved in the Railway programme and Railway was sharing the costs. While confirming that the 4 ROB's were in the Railway programme and had approved the estimates as indicated in the agenda, MD, HSRDC clarified that in case of ROB at Hissar, they were going in for additional two lanes on the existing 2 lane ROB and Railways were not sharing the cost for additional two lanes. He assured the



Group that the 4 ROB's shall be completed within 2 years from the date of issue of sanction letter of NCRPB.

After detailed deliberations, the Group approved loan assistance of **Rs. 101.62 Cr.** for the 4 ROB's as per details at Annexure-II A, subject to compliances of aspects indicated below:-

The target date of completion of project shall be two years from issue of sanction letter. The loan will be subject to Govt of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly.

In addition, the loan release for each of the project shall be subject to following, as applicable:-

- i. Land should be in possession of PWD B&R, Govt of Haryana/HSRDC as per the land records, as applicable
- ii. Revised administrative approvals from Govt. of Haryana on the proposed administrative cost against which loans have been sanctioned.
- iii. Forest clearances, if any.
- iv. The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the ESMS reports will be part of the bid document for implementation during the construction period.
- v. A Social Impact Assessment identifying all the number of project affected person (PAP) and assessing the impact for all the projects and based on the impacts R&R plan has to be duly abided and taken care of. If there is any increase in fund requirement of R&R then PWD will provide additional funds to implement R&R.

The project-wise details regarding loan component from NCRPB is as under:-

(Rs. In Cr.)

Agenda	Name of the Project	Estimated Cost of Project	Total Loan Component
4.2.A	Construction of 4 lane ROB at Lakhanmajra Meham road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District	56.04	23.15
4.2.B	Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district	32.58	11.18
4.2.C	Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district	29.46	11.29
4.2.D	Construction of additional 2 lane ROB at LC no. 3 on Hissar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hissar	74.67	56.00



Agenda Item No. 4.3 : Construction of Elevated Road on National Highway No 10 from Chottu ram Chowk to Old bus stand (KM 74.00 to 75.86) in Rohtak city Portion”

Continuing with the road projects from PWD (B&R) Haryana / HSRDC, MD, HSRDC emphasized the need for the Elevated Road in Rohtak City portion to meet the challenge of limited road space and increasing traffic. He informed the Group that the agency proposed to have a 1.6 km long elevated section with 2 lanes. On project completion, the project road shall have four lanes on ground and two lanes elevated together providing road space of six lanes in the 1.6 km section.

Advisor, NCRPB highlighted the importance of the structural design and emphasized that that the design should be such as it uses minimum space on ground. MD, HSRDC confirmed that all these aspects had been considered while preparing the project.

After detailed deliberations, the Group approved loan assistance of **Rs. 114.62 Cr.** for the project of Construction of Elevated Road on National Highway No 10 from Chottu ram Chowk to Old bus stand (KM 74.00 to 75.86) in Rohtak city Portion, as per details at Annexure-II A, subject to compliances of aspects indicated below:-

The project is to be completed in 2 years from date of issue of sanction letter. The loan will be subject to Govt of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly. In addition the loan release shall be subject to:-

- i. Administrative approvals from State Govt. on the project and its estimated cost
- ii. Land should be in possession of PWD B&R, Govt of Haryana/HSRDC as per the land records, as applicable
- iii. MoEF clearances, if any to be obtained
- iv. The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the ESMS reports will be part of the bid document for implementation during the construction period.

The project details regarding loan component from NCRPB is as under:-

(Rs. In Cr.)			
Agenda	Name of the Project	Estimated Cost of Project	Total Loan Component
4.3	Development of construction of Elevated road on National Highways No 10 form Chottu Ram Chowk to Old bus stand (km 74.00 to 75.86) in Rohtak city portion	152.83	114.62



Agenda Item No. 4.4: Improvement of Gurgaon Pataudi Rewari road (SH-26) from km 12.00 to 50.541 in Gurgaon & Rewari districts in the State of Haryana

Discussing another road improvement project received from PWD (B&R) Haryana / HSRDC, MD, HSRDC informed that the proposed road development project was in 38.71 km long road widening project from Wazirpur Chowk on SH-26 till Durga Colony in Rewari. The project corridor is part of SH-56 which connects Gurgaon Pataudi Narnaul and Singhana. It was explained that the project involved 4 laning of the current 2 lane stretch and has 59 junctions enroute of mostly T-type. Further, 74 cross drainage structures including the slab culverts, box culverts, pipe culverts and minor bridges were proposed for improvement / construction. The project involved land acquisition of around 39 hectares and necessary action in this regard has been initiated.

After detailed deliberations, the Group approved loan assistance of **Rs. 265.50 Cr.** for the project – Improvement of Gurgaon Pataudi Rewari road (SH-26) from km 12.00 to 50.41 in Gurgaon & Rewari districts in the State of Haryana, as per details at Annexure-II A, subject to compliances of aspects indicated below:-

The project is to be completed in 2 years from date of issue of sanction letter. The loan will be subject to Govt of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly. In addition the loan release shall be subject to:-

- i. Administrative approvals from Government of Haryana on the project and its estimated cost
- ii. Land should be in possession of PWD B&R, Govt of Haryana/HSRDC as per land records
- iii. MoEF clearances, if any to be obtained
- iv. The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the ESMS reports will be part of the bid document for implementation during the construction period.
- v. A Social Impact Assessment identifying all the number of project affected person (PAP) and assessing the impact for all the projects and based on the impacts R&R plan has to be duly abided and taken care of. If there is any increase in fund requirement of R&R then PWD will provide additional funds to implement R&R.

The project details regarding loan component from NCRPB is as under:-

(Rs. In Cr.)			
Agenda	Name of the Project	Estimated Cost of Project	Total Loan Component
4.4	Improvement of Gurgaon Pataudi Rewari road (SH-26) from km 12.00 to 50.541 in Gurgaon & Rewari districts in the State of Haryana	354.00	265.50



Agenda No. 4.5 : Development of Six lane Elevated Road (Hindon) in Ghaziabad, Uttar Pradesh by GDA

Initiating the discussions, Additional Secretary (UD) appreciated the fact that agencies from Uttar Pradesh has come forward with some infrastructure projects for the development of its region. Presenting the project details, VC, GDA explained that as an attempt to enhance the traffic capacity and safety for efficient movement of goods as well as passenger traffic in the area, it proposed to have the six lane elevated road. Chief Engineer, GDA informed that while the Hindon Elevated Road is proposed to start from NH-24 (bye-pass) and terminate after crossing proposed Northern Peripheral Road (10.3 km), the part of the road in Rajnagar extension area shall be surface road (7 km) and was to be taken up in the next phase after which the overall length shall be 17.3 km. The total land area to be acquired was about 3.25 hectare. There is no structure in the alignment of the elevated road. About 95% of the land is falling under Irrigation Department and was available. The balance land (for 1 km. road stretch) was proposed to be purchased by GDA through direct negotiations.

Regarding ROW, the project shall involve an elevated road having 24.5m formation width including six lanes of 3.5m width, 0.5m kerbstone and crash barrier on either side and a median of 1.5m. In addition, the ramp at NH-24 shall have a 12m formation width including 3 lanes of 3.5m width and 0.5m kerbstone and crash barrier on either side. The ramp proposed at Mohan Nagar link road crossing at Kanavani shall have 8.5m formation width including 2 lanes of 3.5m width and 0.5m kerbstone and crash barrier on either side.

VC, GDA further added that the project will lead to considerable reduction in travel time from UP gate to Hindon bridge, the stretch which was currently a major congestion stretch for traffic towards Meerut etc. and hence, was the major requirements in the area. CE, GDA also added that although the project is proposed to be completed by April 2017, all efforts shall be made to complete it with the financial year 2016-17. He requested that accordingly, the loan scheduling may also be such that all loans is received by March 2017.

Additional Secretary (UD) appreciated the effort of GDA but advised that in case the agency wants to avail the 0.25% rebate on interest, they should focus in completing the project in time. The necessary loans can always be worked out as per GDA requirements after discussions with NCRPB during the course of project progress. He, however, emphasized that the necessary permissions and requirements indicated against the project in the agenda were important and were required to be taken care of, by GDA. These include need to work out solutions to provide connectivity with the Eastern part of the city. Further, the proper round about needed to be designed and taken up at the North end of the elevated section and the authority needs to look into the possibility of having an interchange at this point. Further, GDA needs to ensure integration of the existing road network with the proposed road to facilitate efficient use of the created capital intensive infrastructure. GDA needs to have a clear design & construction programme of the Master Plan proposal for North Peripheral Road (which has been part of programme since more than a decade but no action taken) along with the Elevated Road associated at grade section.

After detailed deliberations, the Group approved loan assistance of **Rs. 700 Cr.** for the project - Development of Six lane Elevated Road (Hindon) in Ghaziabad, Uttar Pradesh by GDA, as per details at Annexure-II A, subject to compliances of aspects indicated below:-



- i. Appropriate updation be done in the GDA Master Plan so that the elevated road does not appear to be a project not being part of the approved developing plans. The current Master Plan specifies a 45m wide at grade road with access to adjacent parts of the city and the provision of 25m wide access controlled elevated road does not fulfil this requirement.
- ii. Clear implementation schedule, programme and timeline for Part-A & Part-B scheduled to be taken at different stages along with the initiation of necessary process of land acquisition for the 7 km. at grade portion scheduled to be taken up Part-B with advance action as the success of the elevated road rests on having a complete road stretch development.
- iii. Have proper institutional operation and maintenance set up for the project road (both stages).

The loan will be subject to GDA making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly.

In addition the loan release shall be subject to:-

- Land should be in possession of GDA as per land records
- MoEF clearances, if any to be obtained
- Submission and approval of the IEE and SRP reports for the project and assurances from GDA that necessary action as mandated in the resulting Environment Management Plan (EMP) along with the relevant mitigation measures provided in the ESMS reports will be undertaken and implemented under intimation to NCRPB.
- An SRP report with necessary Social Impact Assessment identifying all the number of project affected person (PAP) and assessing the impact for all the projects and based on the impacts R&R plan has to be duly abided and taken care of. If there is any increase in fund requirement of R&R then GDA will provide additional funds to implement R&R.

The project details regarding loan component from NCRPB is as under:-

(Rs. In Cr.)			
Agenda	Name of the Project	Estimated Cost of Project	Total Loan Component
4.5	Development of Six lane Elevated Road (Hindon) in Ghaziabad, Uttar Pradesh by GDA	1147.60	700.00

Advisor, NCRPB informed the Group that another 2 loan sanction related agendas were placed as part of Supplementary Agenda and suggested that they may be discussed in continuity. The discussion related to two projects under Supplementary Agenda were accordingly taken up as follows:-



Supplementary Agenda: Project of Metro connection between Noida and Greater Noida (29.707 km)
Item No. 4.6

MD, NMRC informed the Group that Govt. of UP had constituted the Noida Metro Rail Corporation Limited which was currently in process of taking up the ambitious metro link project from Noida to Greater Noida against which they were pursuing financial assistance from NCRPB. Explaining the project, representative from DMRC who were also the Project Management Consultants to NMRC, informed the Group that the proposed metro link was an all elevated 29.7 km stretch having 22 stations. The land required for the project was mostly Government land and in possession of NMRC.

While the Group appreciated the efforts, Addl. Secretary (UD) enquired if this was the best use of the capital for the area especially when Greater Noida was not having enough population to justify the ridership. He suggested that the concerned agencies should explore possibilities of having BRTs in the open areas where the design and management can be done more efficiently than in areas already facing traffic congestions.

MD, NMRC indicated that the project was important for the area and the agencies were also looking into the matter of bus services complementing the Metro Rail network. The Group was also informed that around 70% of the alignment was in Noida which had ample population to provide the required ridership to justify the project. Project Director, DMRC added that the alignment feasibility had been done through DMRC and the viabilities had been checked. The project FIRR on completion cost with central taxes comes to 3.98% whereas the minimum acceptable is 8 %. To make the project viable, it is proposed to develop 50 Ha. by the concessionaire to get the benefits after which the FIRR shall be more than 8% (8.64%). This 50 Ha. land is to be made available by NOIDA and GNIDA (in 70:30 ratio). These land parcels shall not, however, be part of equity contribution.

Addl. Secretary (UD), however, added that even though the project were being discussed here for NCRPB assistance it is yet to get necessary approvals from GOI. It was also brought out that as Noida and Greater Noida do not have adequate Intermediate Public Transport (IPT) and public transport mode facilities, the respective authorities should also look into necessary alternatives of bus and IPT systems to complement the LRT proposal over and above the feeder buses plan already under consideration.

After detailed deliberations, the Group approved loan assistance of **Rs 1587.00 Cr.** for the project of Metro connection between Noida and Greater Noida (around 30Km.), as per details at Annexure-II A, subject to compliances of aspects indicated below:-

- Clearance and approval of Public Investment Board (PIB) and thereafter, MoUD, GOI.
- NMRC Ltd. to collect all land records of ownership in respect of land being provided for the project, to avoid any future problems.
- Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly.



- Revenue sharing plan / formula between NMRC and DMRC for the purpose of inter-operability and seamless travel needs to be finalized as it shall effect the FIRR of the project and hence, the expected returns for NMRC.
- It needs to be ensured by NMRC that in case FIRR decreases from 8%, necessary steps to bring it above the desired rate shall be taken by NOIDA and GNIDA, as and when required.
- NMRC shall be undertaking the necessary Initial Environmental Examination (IEE) and Social Impact Assessment report preparation through NABET accredited consultants. This may include the exploring of possibilities regarding incorporation of Rain Water Harvesting mechanisms and other environment improvement measures along the alignment.

The project is proposed to be executed by April, 2018 in physical terms. The loan will be subject to NMRC Ltd. making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR and the releases shall be subject to the following:-

- Clearance and approval of Public Investment Board (PIB) and thereafter, MoUD, GOI.
- The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the ESMS reports will be part of the bid document for implementation during the construction period.
- A Social Impact Assessment identifying all the number of project affected person (PAP) and assessing the impact for all the projects and based on the impacts R&R plan has to be duly abided and taken care of. If there is any increase in fund requirement of R&R then PWD will provide additional funds to implement R&R.

The project details regarding loan component from NCRPB is as under:-

(Rs. In Cr.)			
Agenda	Name of the Project	Estimated Cost of Project	Total Loan Component
4.6	Metro connection between Noida and Greater Noida (29.707 km)	5533.00	1587.00

Supplementary Agenda: Four Lanning of Jhajjar - Farukhnagar Road in Jhajjar / Item No. 4.7 Gurgaon Districts (Phase-I)

Advisor, NCRPB informed that although loans were sanctioned for the project - Four Lanning of Jhajjar - Farukhnagar Road in Jhajjar / Gurgaon Districts (having length of 34.8 km) in the 51st PSMG-I, the releases were subject to necessary environmental / wildlife authority clearances, as portion of the project stretch fell under the eco-sensitive zone due to the Sultanpur National Bird Sanctuary and Wildlife area.



MD, HSRDC appraised the Group that as the requisite clearances were taking considerable time, PWD(B&R), Haryana has now decided to take up the project stretch in phased manner. While Phase-I shall include the section from km. 0.000 to 21.300 (from Jhajjar to Farrukhnagar), the balance section from km. 21.300 to 34.800 (from Farrukhnagar to Gurgaon) is proposed to be taken as Phase –II.

Accordingly, a revised proposal for the Phase I covering section from 0-21.3 km now having an estimated cost of Rs. 115.11 Cr. (against earlier consolidated estimated cost of Rs. 290.84 Cr.), had been prepared for revised loan approvals. The Phase- I has the required sanctions and approvals of Govt. of Haryana. PWD (B&R) shall be approaching for the financial assistance for the Phase-2 separately as and when necessary clearances are received. The current project i.e. Phase-I now covers a length of 21.3 km with 20.12 meter right of way including one by-pass and involving land acquisition of 27.85 acres which was in possession of the agency. The proposal is to have a divided four lane carriage way with paved shoulders and one by-pass at Farukhnagar. It shall also include about 19 box culverts, 7 minor bridges and 14 slab culverts for cross drainage works.

After detailed deliberations, the Group approved loan assistance of **Rs 86.33 Cr.** for the project of “Four lanning of Jhajjar Farukhnagar-Gurgaon road in Jhajjar/Gurgaon district-Phase-I”, as per details at Annexure-II B, subject to compliances of aspects indicated below:-

The project is to be completed in 18 months from date of issue of sanction letter. The loan will be subject to Govt. of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR.

In addition the loan release shall be subject to following;

- i. Land should be in possession of PWD (B&R), Haryana before physical commencement of work.
- ii. Approvals & clearances from Forest Department, Wildlife Authority & MOEF, where applicable, shall be obtained before award of work.
- iii. The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the IEE/EIA reports will be part of the bid document for implementation during the construction period.
- iv. A Social Impact Assessment identifying all project affected person (PAP) and assessing the impacts & mitigation measures shall be prepared & implemented as per NCRPB ESMS. If there is any increase in fund requirement of R&R then PWD (B&R), Haryana will provide additional funds to implement R&R.

The project details regarding loan component from NCRPB is as under:-

(Rs. In Cr.)			
Agenda	Name of the Project	Estimated Cost of Project	Total Loan Component
4.7	Four Lanning of Jhajjar - Farukhnagar Road in Jhajjar / Gurgaon Districts (Phase-I)	115.11	86.33



Agenda Item No. 5: Review of Projects financed by the NCR Planning Board

Member Secretary, NCRPB presented a summary of the projects financed by the NCR Planning Board. It was informed that since its inception, the Board has approved loan assistance for 286 infrastructure projects with estimated cost of Rs. 19,647 crores, out of which an amount of Rs. 9,176 crores has been sanctioned as a loan. It was further, indicated that the Board has released a loan amount of Rs. 7,161 crores till December 2015 for these projects. It was further informed that out of 286 projects, 232 projects have been completed.

Delayed Projects

It was pointed out that out of 54 ongoing projects, 6 projects all pertaining to PHED, Haryana have been considerably delayed. The Chair directed the concerned officials to look into the matter and expedite completion of these projects.

Non-Starter Project

With regards UIT Alwar's Non Starter project "Solar Bus Shelters with Solar Lantern Recharging Stations in Alwar District", ACE, UIT Alwar reaffirmed that they were in process of withdrawing the project and returning the requisite loans. The other Non-Starter project was the East Delhi Municipal Corporation's project 'Construction of Multi-storied office building at Karkardooma Institutional area at Shahdara South Zone. EDMC official conveyed that the project was of importance to them and they expected to award the works by March 2016 and completion by March 2018.

Non-submission of UC/CC

The Group was informed that five of the ongoing projects had since been reported completed but the necessary Utilization Certificates & Completion Certificates are still awaited from the agencies – DTE, Haryana, HVPN, BKDA and SADA Gwalior. The Chair advised that the necessary action be taken by the concerned departments in this regard and the requisite submissions be expedited. It was also directed that ***no project will be considered complete unless that starts delivering the planned outcome i.e. merely utilization of NCRPB loan should not be used as criteria for project completion.***

Completed Projects

On the subject of project completion since 52nd PSMG-I, Member Secretary, NCRPB informed that 15 projects had been reported completed and completion certificates have been received since last PSMG.

After deliberations, the Group decided that the 15 projects reported completed with completion certificates may be transferred to the list of completed projects (as per Annexure-III).

Time Extension for Ongoing Projects

Advisor, informed that requests for extension of completion dates was received for 7 projects from PHED, Haryana. The Chair instructed the official from the agency to carefully examine



the required extensions and indicate achievable timelines to ensure due completion of the projects by the dates of extension being granted.

After discussions, the PSMG approved the extensions sought (as per Annexure-IV), directing the department to take necessary steps to avoid any further delays on these projects.

Agenda Item No.6: Monitoring of developments at site in the National Capital Region (NCR) through use of Remote Sensing and GIS technology

Initiating the discussion on the agenda item, Advisor, NCRPB apprised all the participants about the directions given by the Hon'ble High Court of Delhi in the matter of CWP No. 5559 of 2013-“Raghuraj Singh V/S Union Of India And Others”, disposed of by the Hon'ble Court vide its Order dated 30.09.2014. He also apprised the participants about the suggestions of the Hon'ble Committee on Petitions of Rajya Sabha in its 146th Report to utilize the latest technology viz. GIS mapping with the help of satellite imaging, in collaboration with the Department of Space to monitor the development in the region.

Advisor, NCRPB mentioned that NCRPB already has mechanism for monitoring of implementation of Policies & Proposals of Regional Plan through various Committees, Groups and the Board. He added that NCR Planning & Monitoring Cells have been created in each of the NCR Participating State to monitor the implementation of the Regional Plan. Specific work program has been drawn for them wherein one of the work allocated is ***to monitor the implementation of the Regional Plan-2021 and in case of any violation, bring the same to the notice of NCRPB.*** He further added that the monitoring of development in the region including developments at site, which is a micro level issue, is also required to be carried out by the NCR participating States through NCR Planning & Monitoring Cells.

This proposal of monitoring developments at site in NCR through use of Remote Sensing and GIS technology is proposed to comply with the orders of the Hon'ble court. In this specific proposal, it is proposed that NRSC will acquire satellite data for districts of CNCR and Alwar in Rajasthan Sub-region and process the same. They will further go into the details of one district i.e. Gurgaon at micro level in association with the State Govt. officials in order to monitor development at site. It will be a pilot project which could be replicated by the NCR Participating States in the remaining districts of their respective Sub-Region. Capacity building program is one of the major components in this proposal, wherein all the concerned officers of Town Planning department and enforcement departments will be trained to carry out the monitoring of developments at site using Remote Sensing & GIS Technology. He further added that NRSC is facilitating Hyderabad Development Authority in a similar monitoring system. NRSC and NCRPB will only facilitate the NCR participating States in monitoring of development at site in NCR.

Group Head, Urban Studies & Geoinformatics, National Remote Sensing Centre (NRSC), Hyderabad gave a presentation on the proposal of the study to Monitoring of developments at site in the National Capital Region (NCR) through use of Remote Sensing and GIS technology. Group Head in his presentation explained the complete process and the roles & responsibilities of NCR Participating States and NCRPB at various stages. He also mentioned that this system will work as a tool for monitoring of development at site.



Additional Chief Secretary (ACS), T&CP, Haryana stated that their Govt. has also initiated a similar study at state level for all the districts of Haryana through NRSC. Govt. of Haryana is likely to sign a Memorandum of Understanding (MoU) with NRSC in this regard soon. It will be appropriate that such monitoring be carried out by the State Govt. as land is a state subject. He requested that funding for the study be provided by NCRPB.

Chief Coordinator Planner, NCR Cell, UP stated that their State Govt. doesn't have resources for execution of such a project. Chairman stated that it will be very much premature at this stage to fund such project. Let the State Govt. of Haryana take up one of its districts as a pilot project with NRSC. Current proposal may be deferred. Member Secretary, NCRPB stated that Govt. of Haryana may submit a copy of the proposal which they have sent to NRSC for conducting the pilot study for monitoring of development at site. He added that the pilot project cost may be shared between Government of Haryana and NCRPB.

After detailed discussion & deliberations, following decisions were taken:

- i) The proposal was deferred.
- ii) Govt. of Haryana shall submit a copy of the proposal which they have sent to NRSC for conducting the study for monitoring of development at site.
- iii) A pilot study may be carried out by the Govt. of Haryana for one of its districts in the Central National Capital Region for monitoring of development at site.

Concluding the meeting, the Chair pointed out that agencies and State Departments should consider a project as complete only when the actual asset proposed under the project at the time of loan sanctions, are created. A project cannot be treated as complete if the estimated cost or the sanctioned loan has been spent, even though the required assets are yet to be completed and commissioned. Expressing concern on project delays, the Chair advised States to achieve timely completion of projects within estimated costs and avail the loan interest rate rebate facility available at NCRPB.

The meeting ended with the vote of thanks to the Chair.



Annexure - I
to Minutes of the 53rd PSMG-I Meeting

List of Participants

- | | | |
|----|---|--|
| 1. | Shri Madhusudan Prasad, Secretary (Urban Development), Ministry of Urban Development, Government of India, New Delhi. | Chairman |
| 2. | Shri D. S. Mishra, Additional Secretary (UD), Ministry of Urban Development | Member |
| 3. | Shri P. Raghavendra Rao, Additional Chief Secretary to Govt. Haryana, Town & Country Planning Deptt., Haryana. | Member |
| 4. | Shri K.K. Joadder, Chief Planner, Town & Country Planning Organization, Delhi. | Member |
| 5. | Shri Jeetender Singh, Director, NITI Aayog, Government of India, New Delhi. | Representing Advisor (UD),
NITI Aayog |
| 6. | Shri Deepak Gupta, Principal Chief Engineer, PWD, Govt. of NCT Delhi, New Delhi. | Representing Principal
Secretary (PWD), Govt. of
NCT Delhi |
| 7. | Shri B K Tripathi, Member Secretary, NCR Planning Board, New Delhi | Member-Convener |
| 8. | Shri A.A. Rao, Addl. DG (Media), Ministry of Urban Development, New Delhi. | |

NCR Planning & Monitoring Cells

9. Shri J.S. Redhu, Chief Coordinator Planner, NCR Planning & Monitoring Cell, Haryana.
10. Shri A.K. Tyagi, Chief Coordinator Planner, NCR Planning & Monitoring Cell, Uttar Pradesh.
11. Shri Manoj Kumar Yadav, Asstt. Architect Planner, NCR Planning & Monitoring Cell, Uttar Pradesh.
12. Shri Shashi Kant, DTP, NCR Planning & Monitoring Cell, Rajasthan.

Uttar Pradesh

NMRC

13. Shri Rama Raman, Managing Director
14. Shri G.P. Singh, Executive Director



15. Shri P.D. Upadhyay, General Manager (Finance)
16. Shri V.K. Jain, DGM (Finance)
17. Shri H.N. Singh, DGM (Technical)

GDA

18. Shri Vijay Kumar Yadav, Vice Chairman
19. Shri Sushil Dwivedi, Chief Engineer
20. Shri Chakresh Jain, Executive Engineer
21. Shri M.M. Pandey, JE

Haryana

PWD (B&R)/HSRDC

22. Shri Mahesh Kumar, Managing Director
23. Shri Abhishek, DGM-I, Gurgaon

HSIIDC

24. Shri A.K. Jain, Chief Engineer
25. Shri Mukesh Gupta, AGM
26. Shri Surender Deswal, Sr. Manager

PHED

27. Shri R.K. Singla, Chief Engineer

Rajasthan

28. Shri Arun Mehta, ACE, UIT, Alwar.

Delhi

DMRC

29. Shri Promit Garg, Project Director

Transport Department, GNCT Delhi

30. Shri Vijender Kumar, Dy. Commissioner

East Delhi Municipal Corporation (EDMC)

31. Shri Pradeep Khandelwal, Chief Engineer

NCRPB

32. Shri Rajeev Malhotra, Advisor



PMC

33. Shri Abhijeet Samanta, Dy. Director (Tech)

PMU

34. Shri Sanjay D. Patil, Jt. Director
35. Shri Syed Husain Asghar, AD (FM)
36. Ms. Tanushri Ghosh, AD (Procurement)
37. Dr. Radhey Shyam Gangwar, AD (Safeguards)

Planning

38. Ms. Ruchi Gupta, JD (Technical)
39. Shri Nabil Jafri, DD (GIS)
40. Shri Naresh Kumar, AD (Technical)

Finance & Accounts

41. Shri P.K. Jain, FAO
42. Shri Shireesh Sharma, AD (F)

Administration

43. Shri Harsh Kalia, AD(A)
44. Shri Sushil Kataria, AD(E)

Others

45. Shri V. Subramanian, Road Consultant
46. Dr. K. Venugopala Rao, NRSC, Hyderabad.



Annexure-II to Minutes of the 53rd PSMG-I Meeting

												Annexure - II A		
Details of loans sanctioned (installment-wise) for various projects considered in the 53nd PSMG Meeting held on 19.01.2016													(Rs. In lakhs)	
Sl. No.	Agenda Item No.	Name of the Project	Borrowing Agency	Sector	Estimated Cost of Project	Total Loan Component Sanctioned	Phasing of loan instalment				*Present Rate of Interest (% P.A.)	Moratorium for repayment of principal for the 1st instalment of loan (in years)	Tenure of loan for 1st instalment of loan (in years)	stipulated date of completion
							(2015-16)	(2016-17)	(2017-18)	(2018-19)				
1	4.1	Development of access controlled Kundli-Manesar Palwal Expressway section (Manesar RD 83.320 to Palwal RD. 135.650 km) by HSIIDC,Haryana (balance works)	HSIIDC	Transport (Road)	45781.00	34335.00	27468.00	6867.00	0.00	0.00	7.50	2	10	12 months from the issue of sanction letter
2	4.2.A	Construction of 4 lane ROB at Lakhanmajra Meham road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District	PWD (B&R) Govt. of Haryana	Transport (ROB)	5604.00	2315.00	926.00	1389.00	0.00	0.00	7.50	2	10	24 months from the issue of sanction letter
3	4.2.B	Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district	PWD (B&R) Govt. of Haryana	Transport (ROB)	3258.00	1118.00	447.00	671.00	0.00	0.00	7.50	2	10	24 months from the issue of sanction letter
4	4.2.C	Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district	PWD (B&R) Govt. of Haryana	Transport (ROB)	2946.00	1129.00	452.00	677.00	0.00	0.00	7.50	2	10	24 months from the issue of sanction letter
5	4.2.D	Construction of additional 2 lane ROB at LC no. 3 on Hisar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk. Hisar	PWD (B&R) Govt. of Haryana	Transport (ROB)	7467.00	5600.00	2240.00	3360.00	0.00	0.00	7.50	2	10	24 months from the issue of sanction letter



												Annexure - II A (Contd...)		
Details of loans sanctioned (installment-wise) for various projects considered in the 53rd PSMG Meeting held on 19.01.2016												(Rs. In lakhs)		
Sl. No.	Agenda Item No.	Name of the Project	Borrowing Agency	Sector	Estimated Cost of Project	Total Loan Component Sanctioned	Phasing of loan instalment				*Present Rate of Interest (% P.A.)	Moratorium for repayment of principal for the 1st instalment of loan (in years)	Tenure of loan for 1st instalment of loan (in years)	stipulated date of completion
							(2015-16)	(2016-17)	(2017-18)	(2018-19)				
6	4.3	Construction of Elevated Road on National Highway No 10 from Chottu ram Chowk to Old bus stand (KM 74.00 to 75.86) in Rohtak city Portion"	PWD (B&R) Govt. of Haryana	Transport (Road)	15283.00	11462.00	4585.00	6877.00	0.00	0.00	7.50	2	10	24 months from the issue of sanction letter
7	4.4	Improvement of Gurgaon Pataudi Rewari road (SH-26) from km 12.00 to 50.41 in Gurgaon & Rewari districts in the State of Haryana	PWD (B&R) Govt. of Haryana	Transport (Road)	35400.00	26550.00	10620.00	15930.00	0.00	0.00	7.50	2	10	24 months from the issue of sanction letter
8	4.5	Development of Six lane Elevated Road (Hindon) in Ghaziabad, Uttar Pradesh by GDA	Ghaziabad Development Authority	Transport (Road)	114760.00	70000.00	21000.00	**21000.00	**28000.00	0.00	7.50	2	10	April-2017
9	4.6	Project of Metro connection between Noida and Greater Noida (29.707 km)	Noida Metro Rail Corporation Ltd.	Mass Transportati on (Other)	553300.00	158700.00	0.00	58000.00	55000.00	45700.00	7.50	2	10	April-2018
		Total Rs.			783799.00	311209.00	67738.00	114771.00	83000.00	45700.00				
		<i>* Rate of interest subject to prevailing i.e. rate available at the time of loan disbursement</i>												
		<i>** Board can consider release of early instalment based on utilisation of loan</i>												



Annexure - II B

Details of loans sanctioned (installment-wise) for various projects considered in the 53rd PSMG Meeting held on 19.01.2016 (with revised scope of work post PSMG approval)

(Amount Rupees in Lakhs)

Sl. No.	Agenda Item No.	Name of the Project	Borrowing Agency	Sector	Estimated Cost of Project approved as per 51st PSMG	Revised Estimated Cost	Total Loan Component approved as per 51st PSMG	Revised loan amount of NCRPB	Revised Phasing of loan instalment			Present Rate of Interest (% P.A.)	Moratorium for repayment of principal for the 1st instalment of loan (in years)	Tenure of loan for 1st instalment of loan (in years)	stipulated date of completion
									(2015-16)	(2016-17)	(2017-18)				
I	Project approved with revised scope of work post PSMG approval.														
1	4.7	Four Lanning of Jhajjar - Farukhnagar Road in Jhajjar /Gurgaon Districts (Phase-I)	PWD, B&R., Haryana	Transport (Road)	29084.00	11511.00	21813.00	8633.00	3453.00	5180.00	0.00	7.50	2	10	18 months from the issue of sanction letter
		Sub total			29084.00	11511.00	21813.00	8633.00	3453.00	5180.00	0.00				



Annexure-III to Minutes of the 53rd PSMG-I Meeting**Projects Reported Completed and to be shifted to list of Completed projects**

S.No.	Name of the Projects	Implementing Agency	Date of sanction	Final Completion Cost
	Uttar Pradesh			
1.	Anand Vihar Housing Scheme at Hapur*	HPDA	Dec-07	214.78
	Haryana			
2.	Providing sewerage scheme and treatment plant for Nuh Town, Mewat District	PHED	Aug-11	10.27
3.	Augmentation of rural drinking water supply for Mewat region, Haryana	PHED	Nov 04 and Nov 09	300.49
4.	Providing Water Supply Scheme for Samalkha town Distt. Panipat	PHED	Aug-11	11.52
5.	Providing sewerage scheme and Treatment Plant for Gohana Town District Sonapat	PHED	Jun-09	19.32
6.	Improvement & Upgradation of Sub transmission of distribution network in Hissar*	DHBVN	Nov-08	37.88
7.	Scheme for HVDS/LVDS & Reallocation of meters under DHBVN in NCR area*	DHBVN	Nov-08	131.03
8.	Project for creating power infrastructure in Haryana subregion of NCR	HVPN	Aug-07	112.98
9.	New construction of roads from Kaluka to NH-8, Sheoraj Majra to Sangwari, Barriawas to NH-8, Rojka to Asadpur, Bikaner to Gurukawas, Rewari Jhajjar road to Rewari Narnaul road via Rewari Dadri road	PWD (B&R)	Nov-08	26.48
10.	Construction of By-pass at Chhara, in Jhajjar District of Haryana	PWD (B&R)	Dec-12	34.16
11.	Construction of By-Pass at Kosli in Rewari district, Haryana	PWD (B&R)	Dec-12	22.14
12.	Improvement of 5 Roads in Gurgaon Distt.(31.65km)	PWD (B&R)	Nov-09	65.08



S.No.	Name of the Projects	Implementing Agency	Date of sanction	Final Completion Cost
13.	Construction of 2 lane ROB at Panipat Jatal road on Delhi Ambala railway line at L/C No. 52-C in Panipat District	PWD (B&R)	Dec-12	32.08
	CMA Patiala			
14.	Extension & Augmentation of Water Supply, Sewerage & Solid Waste Mgmt, Patiala	Patiala Urban Planning & Development Authority (PDA)	Sep-02	59.93
	Rajasthan (CMA Kota)			
15.	Augmentation of Water Supply in Kota	UIT Kota	Aug-11	144.74

* Fore-closed. Balance works to be completed by agency from own funds



Annexure-IV to Minutes of the 53rd PSMG-I Meeting**List of Projects where extension of project completion dates approved**

S. No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion
1.	Water Supply at Sohna Town & Rojka Meo Industrial Area, Sohna	65.34	Nov-08	Dec-11/ Dec-12 / Dec-14/ Sep-15	Mar-16
2.	Augmentation of Water Supply for Farrukh Nagar Town & Five Villages, Gurgaon District.	13.90	Nov-11/ May-15	Feb-16	Jul-16
3.	Development of Sewerage System and Construction of two STPs at Rohtak town.	44.25	Feb-06	Feb-09/ Feb-10/ Mar-11/ Dec-14/ Sep-15	Mar-16
4.	Providing sewerage facilities in village kosli, Bhakli and Railway station area of Kosli, Dist. Rewari	8.70	Oct-07	Oct-10/ Mar-12/ Aug-13/ Sep-14/ Dec-15	Jun-16
5.	Providing sewerage scheme and treatment plant for Pataudi , Gurgaon District	14.50	Aug-11	Jul-14/ Sep-15	Jun-16
6.	Providing sewerage scheme and treatment plant for Hathin Town, Palwal District	12.30	Aug-11	Jul-14/ Sep-15	Jun-16
7.	Providing sewerage scheme for Punhana Town in Mewat Distt.	12.50	Aug-11	Jul-14/ Sep-15	Jun-16

