

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग
केंद्रीय जल आयोग
नदी प्रबन्धसमन्वयनिदेशालय



Government of India
Ministry of Jal Shakti
Dept. of Water Resources, RD&GR
Central Water Commission
River Management Co-ordination Dte.

Date : 20.10.2021,

सेवा मे

Shri Nikhil M Babu,
C 34, Second Floor,
B K Dutt Colony, Jor Bagh,
New Delhi, PIN-110003.

Subject: RTI application under Right to information Act, 2005.

Sir,

Please refer to your online RTI application Registration No: CWCND/R/E/21/00204, dated 21.09.2021 which has been received in this office on **22.09.2021** vide letter no. A-49012/8/2021/RTI/383, dated 22.09.2021 of the Under Secretary & Nodal Officer, RTI Cell, CWC, to provide the information sought under RTI Act, 2005 to the applicant.

In this regard, it is to state that the available information in respect of your RTI application in River Management Wing (RM Wing), Central Water Commission (HQ), New Delhi is enclosed as **"Annexure-A"** along with other attachments (total of 41 pages).

In case, you are not satisfied with the provided information, you may file 1st Appeal to the First Appellate Authority within 30 days of receipt of this letter under RTI Act 2005, whose particulars are as below:

The Chief Engineer (FMO) & First Appellate Authority, River Management Wing, Central Water Commission, 2nd floor, 1st wing, West Block-II, R.K.Puram, New Delhi 110066, Phone No.011-26102112.

Encl : As above (41 pages)

भवदीय

(दीपक कुमार)
निदेशक & CPIO

प्रतिलिपि सूचनार्थ :

Under Secretary & Nodal Officer, RTI Cell, 4th Floor(S), CWC, Sewa Bhawan, New Delhi.

द्वितीय तल(दक्षिण), सेवा भवन
राम कृष्ण पुरम, नई दिल्ली -110066
दूरभाष: 011-29583211,
ई मेल: rmdte@nic.in

♣ जल संरक्षण-सुरक्षित भविष्य ♣



2nd Floor(South), Sewa Bhawan,
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Conserve Water- Save Life

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग
केंद्रीय जल आयोग
बाढ़ प्रबन्ध-I निदेशालय



Government of India
Ministry of Jal Shakti
Dept. of Water Resources, RD&GR
Central Water Commission
Flood Management-I Directorate

दिनांक: 30.09.2021

विषय: RTI application under RTI Act 2005 (Regd. No. CWCND/R/E/21/00204 dated 21/09/2021) of Shri. Nikhil M Babu, C 34, Second Floor, B. K. Dutt Colony, Jor Bagh, New Delhi, Pin-110 003.

सन्दर्भ: E-mail from FMP Directorate dated 24/09/2021

महोदय,

The above mentioned RTI application was received in this office via e-mail on 24.09.2021. In this regard, this directorate has following views:

Information required	Reply
	<ol style="list-style-type: none"> All minutes of meetings held by a technical expert committee or expert committee headed by Central water Commission (CWC) member (RM), which has been examining or looking into a Drainage Master Plan for Delhi prepared by a team of IIT Delhi headed by AK Gosain. Has the technical expert committee or expert committee headed by Central water Commission (CWC) member (RM), which has been examining or looking into a Drainage Master Plan for Delhi prepared by a team of IIT Delhi headed by AK Gosain, approved the Drainage Master Plan? If not why? What is the status of the Drainage Master Plan for Delhi prepared by a team of IIT Delhi headed by AK Gosain, approved the Drainage Master Plan, which has been examined or looked into by a technical expert committee or expert committee headed by Central water Commission (CWC) member (RM)? What are the problems found by the expert committee or technical expert committee or suggestions given by he said committee on the matter? All reports/documents submitted/sent by technical expert committee or expert committee headed by Central water Commission (CWC) member (RM), which has been examining or looking into a Drainage Master Plan for Delhi prepared by a team of IIT Delhi headed by AK Gosain, to the central/Delhi government on the Drainage Master Plan.
	<p>The Technical Expert Committee (TEC) under chairmanship of Member (RM), CWC December, 2011 and Chief Engineer(IFCD), Govt of NCT Delhi as member-secretary was constituted by Govt of NCT Delhi in Dec, 2011 with following terms of reference:</p> <ol style="list-style-type: none"> To decide design parameters/technical inputs like rainfall intensity, return period, runoff coefficient, retention period etc. which is to be used by consultant for preparation of Master Plan for NCT of Delhi.

2. To consider interim report for approval and thereafter consider and recommend final report or its submission by the consultant for acceptance by the Govt.
3. The committee shall meet and function to coordinate with the consultant on regular basis.

However, the matter of “Delhi Drainage Development Master Plan-2020”, prepared by IIT Delhi was brought into notice of TEC in Feb, 2019, though final report by IIT Delhi was already submitted in July, 2018.

1st meeting of Technical Expert Committee (TEC) under chairmanship of Member (RM), CWC was held on 21.05.2019. In this meeting Chairman expressed his displeasure for not holding the meeting after submission of interim report and that data provided by various stakeholders has not been verified by them. He mentioned that a report couldn't be accepted without verifying the authenticity of drainage network adopted in modelling by the respective stakeholders. He desired that 10-20% of the drainage network data should be verified by the concerned stakeholders within a fortnight. **(Minutes of meeting enclosed)**

2nd meeting of Technical Expert Committee (TEC) under chairmanship of Member (RM), CWC was held on 08.08.2019. In this meeting, it was decided that IIT, Delhi should modify the report as per observations, issues discussed in the meeting viz, updation/verification of data, incorporation of views of various stakeholders etc within 1 month so that the same can be deliberated in detail in next meeting of TEC. **(Minutes of meeting enclosed)**

3rd meeting of Technical Expert Committee (TEC) under chairmanship of Member (RM), CWC was held on 20.08.2020. In the meeting, it was observed that the report submitted by IIT Delhi appears to be generic in nature. The recommendations / deliverables of the report should be tangible so that they can be implemented by NCT of Delhi as short/medium/long term measures like identification of priority areas for de-siltation, capacity enhancement of drainage network, revamping of junctions etc. to address drainage congestion problem in an engineering manner. Deliverables should be tangible and implementable. Further the framework is not acceptable so IIT has to provide workable, practical solution and for that at least, IIT should provide on field practical solution for minimum 50 hotspots like Airport, Hospital, Minto Bridge, Prahladpur Under Pass, Bheron Marg & other Sub ways etc out of more than 330 hotspots- water logging points identified by the Delhi Traffic Police so that the impact and on field practical solution of the water logging problem in consonance with IIT Report could be worked out. Further, IIT Delhi was asked to submit its replies on the observations in the right earnest as well as incorporation of those replies in its Report with practical solutions in a time bound manner. **(Minutes of meeting enclosed).**

4th meeting of Technical Expert Committee (TEC) under chairmanship of Member (RM), CWC was held on 05.08.2021. In the meeting it was concluded

that:

1. The contract between IFCD, Delhi and IIT Delhi was made in September, 2011. Inception report on 11.02.2013, draft final report on 21.03.2017 and final report on 13.07.2018 was submitted to IFCD, Delhi by IIT Delhi but the matter was brought to TEC in 2019 after submission of final report. Member (RM), CWC, the current Chairman of TEC, took charge in second half of February, 2019. After that various measures were taken in this matter and the 1st meeting of TEC was held on 21.05.2019. Therefore, the decision of TEC is broadly based on the various TEC meetings and communications among various department including IIT Delhi after 1st TEC meeting.
2. During the last 3 TEC meetings as well as the 4 meetings chaired by ACS/SS, UD, Delhi (which consultant didn't attend) observations of various stakeholders on final report along with running of models/software on 50 hotspots was requested to IIT Delhi but there was not any significant reply from IIT Delhi towards incorporation of views in report, capacity building of State officers for running the model etc.
3. As per 10-20% data verification exercise by stakeholders, there is still large discrepancies between field data and data used in the model to prepare final report.
4. IIT Delhi stated that it has trained 150 officers of different departments but every department in the meeting has expressed that they are not able to run the model. GSDL also stated that it has not received the whole model package.
5. Considering the above discrepancies in data, incapability of stakeholders to run the model and non-satisfactory response from IIT Delhi to modify the report & capacity building of stakeholders, TEC feels that the final report submitted by the consultant is not worth considerable for recommendation and the mentioned report may not be accepted. The State Govt or Nodal Department may take a call in this matter accordingly.

(Minutes of meeting enclosed).

जेपे पेनमे पूजी जीम चचतवअंस वऱिऱुडुडुए ँ

भवदीय

(पीयूष कुमार)
निदेशक

To

The Director, RMCD, & CPIO, CWC

पश्चिमी खंड-2 विंग-1(द्वितीय तल)

आर के पुरम नई दिल्ली-110066

दूरभाष: 011-29583380

ईमेल: fm1dte-cwc@nic.in

♦ जल संरक्षण – सुरक्षित जीवन ♦



West Block-2, Wing-1 (2nd floor),

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♦Conserve Water- Save Life♦

IRRIGATION & FLOOD CONTROL DEPARTMENT

GOVT. OF N.C.T. OF DELHI, L.M. BUND OFFICE COMPLEX;

SHASTRI NAGAR DELHI-110031.

Ph: 011-21210867-68, E-mail: ifccdxiv@gmail.com

No. E.E.CD-XIV/I&FC/ MPD/Vol-IV(N)/2017-18/

Dated:

Minutes of Meeting

Please find enclosed herewith copy of minutes of meeting of Technical Expert Committee (TEC) held on 21.05.2019 (Tuesday) at 11:00 AM in Conference Hall No. 1, Ground Floor, Varunalaya, Jhandewalan, New Delhi for further necessary action. The copy of term of reference (TOR) of the TEC is also attached herewith for ready reference.

To,

1. Member (River Management) Central Water Commission, Govt. of India, 2nd Floor (South) Sewa Bhawan, R.K. Puram, New Delhi-110066.
2. (i) Engineer-in-Chief, East Delhi Municipal Corporation, Udyog Sadan, Patparganj Industrial Area, Delhi-110092.
- ii. Engineer-in-Chief, South Delhi Municipal Corporation, Civic Centre, J.L. Nehru Marg Minto Road, New Delhi-02.
- iii. Engineer-in-Chief, North Delhi Municipal Corporation, Civic Centre, J.L. Nehru Marg Minto Road, New Delhi-02.
3. Engineer-in-Chief, Public Works Department, Govt. of Delhi, 12th Floor, MSO Building, I. P. Estate, New Delhi - 110002.
4. Engineer Member DDA, Vikas Sadan, INA, New Delhi-01.
5. Chief Engineer, NDMC, 15th Floor, Room No. 1512, Palika Kendra, New Delhi-02.
6. Director General, CPWD, Govt. of India, Nirman Bhawan, New Delhi-02.
7. Chief Town Planner, Ministry of Urban Development, Govt. of India, E-Block, Vikas Bhawan, I.P. State, New Delhi 110002.
8. Chief Engineer, Northern Railways H/Q, Baroda House New Delhi.
9. Chief Engineer Delhi Cantonment Board, Delhi Cantt., New Delhi-10.
10. Director (Union Territories) Central Water Commission, North Wing, Sewa Bhawan, R.K. Puram, New Delhi.
11. Director (Land Management) DDA, Vikas Sadan, INA, New Delhi.
12. Managing Director DIMTS Ltd., Govt. of Delhi, ISBT, Kashmiri Gate, Delhi.
13. Chief Engineer, Delhi Metro Rail Corporation, Metro Bhawan, Barakhamba Road, New Delhi.
14. Chief Town Planner, Municipal Corporation of Delhi, 13th Floor Dr. S.P. Mukherjee, Civic Center, J.L. Nehru Marg, Minto Road, New Delhi-110002.

15. Town Planner, DDA, Vikas Sadan, 13th Floor, INA, New Delhi.
16. Chief Engineers, Zone-I & II, I&FC Department, L.M. Bund Office Complex, Shastri Nagar, Delhi 31.
17. Chairman, Central Ground Water Board Authority, NH-4, Bhujal Bhawan, Faridabad-121001.
18. Project Director, Delhi State Spatial Data Infrastructure Project, Govt. of Delhi, A-Block, IInd Floor, Pushpa Bhawan, Madangir Road, New Delhi-110062
19. Chairman, National Highway Authority of India, G-5 & 6, Sector-10, Dwarka, New Delhi.
20. (i) General Manager, Strategic Planning, Delhi International Airport (P) Limited,
New Udaan Bhawan, Opp. Terminal 3, IGI New Delhi-37.
ii. Chairman, Airports Authority of India, Rajiv Gandhi Bhawan, B-Block, Room No. 371, Safdarjung Airport, New Delhi-03.
21. Joint Commissioner (Traffic), Delhi Police, MSO Building, IP Estate, New Delhi.
22. Chief Engineer (Yamuna) U.P. Irrigation and Water Resource Department, Okhla, New Delhi-110025.
23. Engineer-in-Chief, Haryana Irrigation Department, Sinchai Bhawan, Sector-5, Panchkula, Chandigarh.
24. Vice Chairman, National Disaster Management Authority, A-1, Safdarjung Enclave, New Delhi.
25. P.S to Secretary (UD), Central Public Health & Environment Engineering Organization, MOUD, Govt. of India, Nirman Bhawan, New Delhi.
26. Joint Director, NCR Planning Board, Govt. of India, India Habitat Centre, Ist Floor, 4/4 B, Lodhi Road, New Delhi.
27. Pr. Secretary, Department of Environment, Govt. of NCT of Delhi, C-Wing 6th Level, Delhi Secretariat, I.P. Estate Delhi.
28. Superintending Surveyor of Works, I&FC Department, Govt. of Delhi, L.M. Bund Office Complex, Shastri Nagar, Delhi.
29. Dr. Ashok Khosla, Chairman, Development Alternatives, B-32, TARA Crescent, Qutub Institutional Area New Delhi - 110 016, India (Near Rock Land Hospital)
30. Sh. Akash Hingorani, 3172, Sector A, Pocket B, Gate no. 5, Vasant Kunj New Delhi – 110070.
31. Ms. Sujata Hingorani 3172, Sector A, Pocket B, Gate no. 5, Vasant Kunj New Delhi – 110070
32. Sh. Akshya Kaul, Landscape Ecologist. 199, Pocket-B, Sukhdev Vihar, New Delhi-11001.
33. Ms. Promita (Romi) Roy, 407, Technology Apartment, 24, I.P. Extension, Patpar Ganj, New Delhi-110092
34. Mr. Manu Bhatnagar, INTACH (India National Trust for Art & Cultural Heritage), 71, Lodi Estate, New Delhi-110003.
35. Sh. Bhisma Kumar Chugh, Special Advisor, Innovative Technologies & Systems, Govt. of NCT of Delhi, Delhi Sectt. I.P. Estate, New Delhi.

36.Sh. H.S. Dogra, Former D.G.(W), CPWD.A-7/1, Multi Storey Flat, Sector-13, R.K. Puram, New Delhi-110066.Mobile No.9818695335

37.Sh. A.K. Gupta, Retd. Chief Engineer, Irrigation & Flood Control Deptt. Govt. NCT of Delhi, 901, Tower No. 1, The Close South, Nirmana Country, Sector-50, Gurgaon (Haryana).

Yours faithfully

**CE Zone-II/SSW/ Member Secretary (TEC)
Irrigation & Flood Control Department**

No. E.E.CD-XIV/I&FC/ MPD/Vol-IV(N)/2017-18/

Dated:

Copy for kind information to:-

1. Pr. Secretary Urban Development, 9th Floor, Delhi Secretariat, New Delhi-02.
2. Chief Executive Officer, Delhi Jal Board, Varunalaya, Jhandewalan, New Delhi.
3. Secretary to Hon'ble Minister (I&FC), Delhi Secretariat, New Delhi-02.
4. CEO, Delhi Parks garden Society, Deptt. of Environment GNCTD, 6th Level, C-Wing, Delhi Secretariat, I.P. Estate, New Delhi-02.
5. CEO, DUSIB, I.P. Estate, ITO, New Delhi.
6. Director General Meteorology, Govt. of India, Ministry of Earth Sciences, MET Office, Lodhi Road, New Delhi-03.
7. Managing Director, DSIIDC, Bombay Life Building, Connaught Place, New Delhi.
8. Managing Director, GSDL, 3rd Level, C-Wing, Vikas Bhawan-II, Civil Lines, Delhi-54
9. Additional Secretary to Hon'ble Chief Minister, Delhi, Delhi Secretariat, New Delhi-02.
- 10.Prof. A.K. Gosain, Deptt. Of Civil Engineering, IIT Delhi-16.
- 11.Staff Officer to Chief Secretary, Delhi Secretariat, New Delhi-02.
- 12.Member Drainage, Delhi Jal Board, Varunalaya, Jhandewalan, New Delhi.
- 13.Chief Conservator of Forest (H.Q.), Deptt. of Forest of Wild Life, Ist Floor, Talkatora Stadium, Annice Building, New Delhi.
- 14.Chief Engineer-VI, DSIIDC, DSIIDC Bldg., 74, Ring Road, Lajpat Nagar, New Delhi-24.
- 15.Shri Jitendra Singh, Jt. G.M. (EC) AAI Rajiv Gandhi Bhawan, B-Block, Room No. 371, Safdarjung Airport, New Delhi-03.
- 16.All Superintending Engineer, I&FC Department Govt. of Delhi.

CE Zone-II/SSW/ Member Secretary (TEC)
Irrigation & Flood Control Department

**IRRIGATION AND FLOOD CONTROL DEPARTMENT
GOVT. OF NCT OF DELHI, L. M. BUND OFFICE COMPLEX,
SHASTRI NAGAR, DELHI-110031.**

No. E.E.CD-XIV/I&FC/ MPD/Vol-IV(N)/2017-18/

Dated:

Sub: Minutes of meeting of Technical Expert Committee (TEC) held on 21.05.2019 at 11:00 AM, under the chairmanship of Member (RM) CWC in the Conference Hall No. 1, Ground Floor, Varunalaya, Jhandewalan, New Delhi.

The meeting of Technical Expert Committee (TEC) was held in the Conference Hall No. 1, Ground Floor, Varunalaya, Jhandewalan, New Delhi. 21.05.2019 at 11:00 AM, under the chairmanship of Member (RM) CWC. The list of participants is given at Annex-I. After a brief introduction Chairman, Technical Expert Committee (TEC) welcomed all the members present in meeting.

In his opening remarks, he stressed that the progress for preparation of Drainage Master Plan of NCT of Delhi is not satisfactory and meeting of the Technical Expert Committee (TEC) was held first time, though the work for preparation of Drainage Master Plan of NCT of Delhi was assigned to IIT Delhi a long back. He further expressed his displeasure on the fact that the meeting has been convened to discuss the “**Drainage Master Plan of NCT of Delhi- Final Report- July 2018**”, submitted by IIT Delhi, though it should have been convened earlier, atleast to discuss the interim report by IIT Delhi. Thereafter he requested the Member-secretary to take up the agenda items:

1. It was apprised to the committee that Technical Expert Committee (TEC) was formed with the approval of Chief Secretary, vide letter No. EE/CD-XIV/MPD/11-12/Part File/7668-98 dated 19.12.2011. The terms of reference (TOR) for the committee are:-
 - a. To decide design parameters/technical inputs like rainfall intensity, return period, runoff coefficient, retention period etc. which is to be used by consultant for Preparation of Master Plan for NCT of Delhi.
 - b. To consider interim report for approval and thereafter consider and recommend final report or its submission by the consultant for acceptance by the Govt.
 - c. The Committee shall meet and function to coordinate with the Consultant on regular basis.

2. IIT in its interim report provided the scope of work, methodology and characteristics of basin with network deficiencies. The interim report were circulated to all stakeholder vide letter dated 11.04.2016.
3. IIT submitted draft final report alongwith design parameter adopted in framing the Master Plan. The same were circulated to all stakeholders and members of TEC vide letter dated 05.07.2017 and 20.05.2017 respectively with request to provide comments / feedback. It was also requested to the stakeholders to frame action plan in respect of recommendation of IIT Delhi.
4. Prof. A.K. Gosain made a presentation before the Committee about the objectives, salient features of study, methodology adopted, various scenarios generated in modelling and result thereof alongwith the recommendations.
5. After the presentation the chairman desired the replies/comments of IIT Delhi to the observations raised by CWC which were communicated State Govt. Vide letter dated 23.03.2019.
6. In response to this Prof. A.K. Gosain informed that replies of observation were forwarded to I&FC department today, i.e. date of meeting 21.05.2019 itself, by e-mail and handed over a hard copy of replies to the Chairman during the meeting.
7. The Chairman expressed his displeasure for not holding the meeting after submission of interim report. It was apprised that design parameter were provided by the IIT only in draft final report and copy of the same were circulated to all stakeholders vide latter dated 07.04.2017 and members of Technical Expert Committee vide letter dated 26.05.2017.
8. It was informed by IIT Delhi to the Chairman that the delay in completion of work occurred because all the stakeholders have not provided the drainage network data to IIT Delhi in time. After the intervention of then Chief Secretary, the data in raw form

were handed over to IIT Delhi through survey agencies, engaged by the stakeholders. IIT Delhi made lot of work to make the data fit for use in network framing. He further informed that despite of various letters by I&FC Department, the stakeholders have not verified and validated the data and report of IIT Delhi with respect to prevailing ground conditions.

9. Chairman expressed his displeasure that data provided by various stakeholders has not been verified by them. He mentioned that a report couldn't be accepted without verifying the authenticity of drainage network adopted in modelling by the respective stakeholders. He desired that 10-20% of the drainage network data should be verified by the concerned stakeholders within a fortnight. It was apprised to the Committee that I&FC department maintained proper communication with the all concerned department / stakeholders informed on regular basis. The interim report and draft final report were forwarded to all concerned department to validate the data, providing suggestion / comments on the report, so that same can be forwarded to IIT for its incorporation in Master Plan. Chairman, TEC desired that all stakeholders should actively involved in this exercise to provide all necessary/requisite information and data along with ground verification so that comprehensive and implementable Master plan can be prepared.

10. Some members raised interdepartmental issues viz

- i. Representative from DIAL, pointed out that the Airport Drain observed flooding and closure of Airport in 2013.
- ii. Representative from NHAI raised the issue of congestion in drain along NH-24 in East Delhi.

Chairman requested the members to focus on the mandated functions of committee and to suggest improvement in the Master Plan in a comprehensive manner, to address

the drainage problems of city in totaility.

- 11.The Chairman directed that all the stakeholders should submit their observations / suggestions, in respect of adoption of design parameters and acceptance of final report within a week time from today i.e. 21.05.2019 to I&FC department for compilation and onward transmission to IIT Delhi for clarification / incorporation in the report, in soft and hard copy at email **ifccdxiv@gmail.com**.
- 12.The IIT Delhi shall submit the clarification to the observation raised by stakeholder / other agencies of TEC meeting within a week time.
- 13.The stakeholder wise comments / suggestion and clarifications in a tabular form shall be placed in the next TEC meeting for perusal & consideration of Technical Expert Committee.
- 14.The Chairman requested stakeholders to share any advanced methodology or suggestions with IIT Delhi through I&FC department, which will helpful in proper implementation of final recommendations.
- 15.It was also desired by the Chairman that members of Technical Expert Committee as nominated by the order dated 19.12.2011 should attend the meeting in person so that best possible inputs can be made from appropriate level of the concerned departments / organizations and TEC can serve the purpose for which it is formed.
- 16.It was also desired by the Chairman that the agenda of the next meeting should be circulated well in advance to all stakeholders so that their firmied views may be suitably incorporated in the Final report of the Master Plan.
- 17.It was decided that the next TEC meeting will be held in on 18th July 2019, as per convenience and availability of Prof. Gussain, IIT Delhi at same venue and stakeholders should come up in the meeting with detail study and well prepared for further consideration of design parameter adopted in the plan of final report of Delhi

Drainage Master Plan.

**IRRIGATION & FLOOD CONTROL DEPARTMENT
GOVT. OF N.C.T. OF DELHI, L.M. BUND OFFICE COMPLEX;
SHASTRI NAGAR DELHI-110031.
Ph: 011-21210867-68, E-mail: ifccdxiv@gmail.com**

No. E.E.CD-XIV/I&FC/MPD/Vol-IV(N)/2020-21/

Dated:

Sub: MINUTES OF 3RD TEC MEETING HELD ON 20.08.2020 AT 3.00 PM UNDER THE CHAIRMANSHIP OF MEMBER (RM) THROUGH VIDEO CONFERENCING ON GOOGLE MEET, TO REVIEW THE PROGRESS MADE SO FAR ON THE FINALIZATION OF DELHI DRAINAGE MASTER PLAN SUBMITTED BY THE IIT, DELHI.

The 3rd meeting of the Technical Expert Committee (TEC) was held through Video Conferencing on 20.08.2020 with all the stakeholders and representatives of IIT Delhi at 3.00 PM, under the Chairmanship of Member (River Management), CWC, Govt. of India. The list of participants is annexed as Annexure-I.

Sh. Sanjay Saxena, Chief Engineer (I&FC) welcomed the Chairperson and other participants present online to attend the meeting. After brief introduction of the progress made so far in the process of finalization of report submitted by the IIT, Delhi on Delhi Drainage Master Plan, Chief Engineer (I&FC) requested the Chairperson of TEC for the start of the meeting. In his opening remarks, Chairperson of TEC stressed that the progress made in the case since 1st meeting of TEC is not satisfactory and there is lack of coordination among various stakeholders and IIT Delhi. Thereafter, he asked Member –Secretary to start the proceeding of the meeting.

In the meeting, the following issues were discussed:

1. Chairperson, Technical Expert Committee requested Prof. A.K. Gosain, IIT Delhi for brief presentation on the latest up-date on the topic under consideration. Prof A.K. Gosain informed that IIT Delhi has made several power point presentations in the past at different platforms on their report but due to late receipt of meeting notice of this meeting, he has not made any fresh PPT. He has, however informed that “Same questions are being repeated again and again on the report of IIT, Delhi which have been duly replied by the IIT from time to time. Despite clear directions of the 10 to 20% drain data verification/validation, as conveyed by the Minutes of the previous two meetings, majority of stakeholder have not verified that data as asked by the TEC. IIT Delhi has provided all the relevant Data / GIS layers to GSDL and all the stakeholders have to contact GSDL for any problem relating to access of data / GIS layers of their particular drains etc. Further despite IIT’s best efforts, no one is responding to the communications of I&FC and therefore, IIT is not able to submit their final input. He has further informed that more than 900 Nos. of students apart from senior faculty including professors from IIT Delhi were engaged to finalize the report but unfortunately IIT is having doubt that no one has read the report properly and to its entirety. Training has also been imparted to around 150 officers belongs to different stakeholders on both part i.e. to sensitize them

with the vital points of the report and how to implement it on the field? But no stakeholder has taken pain to live up to the expectation of having gone through the report and come up with specific problem faced by them in its implementation. Four different scenarios have been suggested in the report and if the stakeholders have really gone to the report, should have by now verified the solutions so suggested in the report physically. Unfortunately, everybody is more interested in data in hard copy rather than to read the report. The report has been read in Terms of Reference, which the IIT Delhi has never accepted and so not supposed to reply on such observations which are not relevant. IIT Delhi has given its report on the terms and condition which were accepted by it. As stated earlier, models given in the report will provide the volume / reduction by running them on software for two minutes. IIT has given the primary framework, which can be used by anyone to get instant output for use. Whatever is given in the report should have been appreciated and at least Scenario No.I should be implemented to get the results/ improvements, if any required.”

2. On completion of the input by the Prof. A.K. Gosain, Chairperson, TEC before requesting Chief Engineer (I&FC) for power point presentation mentioned that it was expected from the IIT Delhi to have power point presentation on the progress made so far. Chairperson TEC also stated that Terms of Reference are very important and relevant document from the preparation of the report. The report is by and large generic in nature so difficult in nature for practical implementation. The IIT should have come suo moto and to present the solution to the water logging problems on various hotspots identified by the Traffic Police so that the report should have been tested for its workability on the field. Further the onus should have been taken by the IIT Delhi to train more no. of Engineers on field for practical implementation of the report.
3. Brief power point presentation- was made by the Chief Engineer (I&FC) covering the following points:
 - Chronological sequence of events, including the constitution of TEC with its mandate.
 - Objectives intended behind the formulation of Delhi Drainage Master Plan.
 - Submission of report by the IIT without taking into consideration the primary objectives.
 - Observation of TEC and lukewarm response thereof from the different stakeholders.
 - Non compliance of the ToR of the Agreement by the IIT in the submission of its report.
 - Brief of the meeting held on this issue in the office of Hon'ble Chief Minister on 01.08.2018 and meeting held in NCRPB.
 - Analysis of the report viz a viz ToR.
 - Non receipt of response of the IIT on the various observations made available to it on the report on Delhi Drainage Master Plan.
4. During the power point presentation it was specifically pointed out that many of the major stakeholder like PWD, Municipal Corporations of Delhi including NDMC, DDA,

DSIIDC etc have not responded to them to physically verified / validate 10-20% data. It was also informed by the Chief Engineer (I&FC) that I&FC Department has already completed the assigned task, which is being compiled for further necessary action. The report, as it is, not implementable since it is not in consonance with the objectives with which it was intended for. The ToR is very important part of the contract, hence, the report of the IIT should match with the ToR, which the IIT has agreed in the understanding of standard terms and condition of the contract arrived between the Government through IFCD and the IIT, for consultancy dated 03.08.2012, which was forwarded on 23.08.2012 to the IIT. In that it was categorically mentioned that the contents of the letter dated 23.07.2012 shall be the part of the terms and condition the context of which were also found place in the minutes of various meetings held on the same topic at regular intervals on 28.07.2011, 14.09.2011, 31.10.2011 under the chairmanship of Secretary (I&FC). And other meetings held on 21.10.2011, 06.02.2012 under the chairmanship of Secretary (UD), Govt. of India. The ToR of the agreement handed over on 01.09.2011 to IIT, Delhi which are self explanatory.

5. Chairperson, TEC during the power point presentation intervened and clarified that the ToRs are important terms and conditions and there is no point that IIT Delhi assumes at its own level that these are not relevant. Further the IIT Delhi is not responding to the observations of TEC and also of other stakeholders sent to them by the I&FC Department, which is not acceptable and is delaying the finalization of the recommendation of the Committee on the IIT Report on Delhi Drainage Master Plan.
6. The issue of demand of Rs. 20.00 lakhs by IIT, Delhi for submission of design and drawing of one single drain i.e. Ratiemarg was also raised by the Chief Engineer (I&FC) during the power point presentation was not appreciated by the Chairperson TEC. Chief Engineer, IFCD also explained that with this demand the total cost of the design part for all the drain would come to Rs. 570 crore for the drains considered in the report.
7. Chairperson, TEC mentioned that the observations of the TEC on the following points are quite explicit but unfortunately neither the IIT Delhi nor the stakeholder departments are responding to the observations of the TEC, as such, things are not moving in the right directions & verification of data on ground, at least 10-20% by stakeholders within 15 days time limit but nothing on ground has been achieved so far
8. Director, FM-I, CWC pointed out that two meetings of the TEC on the subject under consideration have been held so far on 21.05.2019 & 08.08.2019 but no specific/satisfactory replies from the IIT Delhi of the observations raised in these meetings has been received. Further he has again reiterated the earlier observation on the report as under :
 - i. The report submitted by IIT Delhi appears to be generic in nature. The recommendations / deliverables of the report should be tangible so that they can be implemented by NCT of Delhi as short/medium/long term measures like identification of priority areas for de-siltation, capacity enhancement of drainage network, revamping of junctions etc. to address drainage congestion problem in an engineering manner.

- ii. In the last meeting it was decided by the Technical Expert Committee (TEC) that minimum 10% to 20% network data should be verified by the concerned stakeholder as the report could not be accepted without verification of the authenticity of the drainage network adopted in the model. In absence of verified / correct drainage network in the model, the calibration and validation of model is not possible. The output of un-calibrated and un-validated model cannot be accepted for use in formation of final report. Hence verification of network data used in model created by IIT Delhi, by all stakeholders is essentially required
 - iii. It has been noticed that flooding junction Ids in appendix for comparison purpose for all scenarios and 2/5 year return period flooding for various zones are not matching.
 - iv. In addition to that reduction of flooding volumes at various nodes in all scenarios is also not consistent. These discrepancies need to be reconciled and comparison should be made for identical nodes taking similar flood volumes and time period.
 - v. Current volume of flooding and reduction in flooding volume for all scenarios in each zone as a whole in tabular form should be mentioned in the report of IIT Delhi.
9. Chairperson, TEC after hearing the IFCD and of the views of the IIT, Delhi asked each of the representative of the stake-holding departments for their views, which are as follows:
- i. **EDMC, Sh. Pradeep Khandelwal, Chief Engineer pointed out that:**
 - EDMC could not even find the drains in MPD submitted by the IIT
 - The report is technically good but does not look like practically implementable.
 - Connectivity in the parks and water bodies, as projected in one of the scenario is not practically possible since waterbodies/parks of that number are not available in trans Yamuna area.
 - ii. **PWD CE Sh. Mathura Prasad pointed out that:**
 - Complete data have been made available to GSDL , which, however has been denied by GSDL.
 - No details for re-structuring / re-modelling of the drain has been suggested by the IIT in its report.
 - No additional drain has been proposed / suggested to take care of water logging problems.
 - The report is voluminous and so not easily understandable.
 - Minimum one more month time is required for PWD for the ground verification/validation of 10-20% data of the PWD drains which own 55% of the total drain network of Delhi.
 - iii. **SDMC pointed out that:**

- It has not able to pinpoint the shortfall on site as enumerated in the Report. Since the cross sections of the drains are not at the readable scale.
 - WHO – road get flooded and pumps have been deployed, as outfall is not having sufficient section and the report has not provided any readymade workable solution to that.
- iv. North Delhi Municipal Corporation was also represented by the representative of SDMC and stated that the data made available to the IIT Delhi only after having physical verification done.
- v. **DDA** – The representative of the DDA pointed out that :
- No access has been given for GIS model ie. ID & Password to them. However, it was confirmed by the IFCD that the same has already been provided to the Chief Engineer (QC) who has attended the meeting chaired by one member Committee headed by Sh. P.K. Tripathi on water logging appointed by the Hon'ble High Court of Delhi. Further this was also made available vide letter dated 26.09.2018.
- vi. **Delhi Cantonment Board** - – The representative of DCB pointed out that :
- Unable to read the report since not made available to them. However, it was confirmed by the IFCD that it was made available to DCB in the soft copy, the acknowledgement of which is available on file of the department. However, another soft copy will be made available.
- vii. **GSDL** – GSDL clarified as under :
- That Data was verified by the departments as per directions of the P.K. Tripathi's Report and GSDL is not aware of the 10-20% validation of the data by each of the stake holder in terms of TEC meeting.
 - No ground truthing done by any department with GSDL
 - We have only gathered data from all the department and gave it to IIT Delhi.
 - Committed to complete data after ground truthing by all the stakeholders and will provide the same to IIT Delhi.
 - GSDL has land-use and land-cover data in usable form upto year 2010 only.
10. To conclude, Chairperson TEC has expressed his serious concerns that the things are not looks like moving in the right directions and incidentally despite categorical observation on the validation/verification of the data at the site, no major stakeholder has complied with these directions. Further IIT Delhi has also not responded well to the observation of TEC and other stakeholders. It was also mentioned that many vulnerable locations like Prahalad Pur Pul, Minto Road are every year facing the water logging problems and to resolve them, IIT should have provided specific suggestion for such areas in its report

and help the department to implement those measures from this monsoon season so as to have its ground level impact. It was suggested that out of around 330 hotspots for drainage congestion, identified by Delhi Traffic Police, IIT Delhi should provide specific solutions to around 50 most important hotspots.

11. The following directions has however, been given to all the stakeholders for strict compliance:-

- One month time for ground validation / verification of 10-20% data of the drains, which has been relied upon the IIT Delhi in the formulation of its report.
- Each department has to appoint Nodal Officer to access the GIS portal provided by GSDL Delhi and password thereof shall be made available by the GSDL with proper training so that the department should not have any excuse of not having access to the GIS portal and ultimately to the data.

(All stakeholder/GSDL)

- Soft copy of the IIT report should once again be made available by the I&FC Department to those departments, which have stated that they have not got it so far. The issue may be flagged at the highest level by the IFCD since despite continuous persuasion by the IFCD and even after the direction of the Chairperson, TEC , majority of the departments have not taken the adequate step to read the report properly and have taken initiative to verify the 10-20% data at the field site to arrive any authentic conclusion on the available scenario as projected in the report vis-a-vis physically available on the ground. It will definitely have positive impact and would definitely force the department to fall in line and work on the report sincerely. Further the matter may also be taken up at the higher level in the IIT Delhi so that their feedback on the observations is received without further loss of time.

(I&FCD)

- Deliverables should be tangible and implementable. Further the framework is not acceptable so IIT has to provide workable, practical solution and for that at least, IIT should provide on field practical solution for minimum 50 hotspots like Airport, Hospital, Minto Bridge, Prahladpur Under Pass, Bheron Marg & other Sub ways etc out of more than 330 hotspots- water logging points identified by the Delhi Traffic Police so that the impact and on field practical solution of the water logging problem in consonance with IIT Report could be worked out. Generic report is not viable for implementation on the field.
- Current volume of flooding and reduction in flooding volume for all the scenarios in each zone, as a whole, in tabular form should be mentioned in the report of IIT Delhi so that it can be easily implementable and workable.
- IIT Delhi was asked to submit its replies on the observations in the right earnest as well as incorporation of those replies in its Report with practical solutions in a time bound manner so that final call on the implementation part of the report may be taken prior to making recommendations or otherwise to the government on the report submitted by the

IIT Delhi. The time period of response to be confirmed by the IIT to Chairperson TEC within next 2-3 days.

(IIT Delhi)

- IFCD, Govt of NCT Delhi should work in hand- holding manner with IIT Delhi regarding above observations as well as ground verification of model's output and framing the implementable recommendations.

(I&FCD) & (IIT Delhi)

To,

1. Member (River Management) Central Water Commission, Govt. of India, 2nd Floor (South) Sewa Bhawan, R.K. Puram, New Delhi-110066.
2. Director General, CPWD, Govt. of India, Nirman Bhawan, New Delhi-02.
3. Vice Chairman, National Disaster Management Authority, A-1, Safdarjung Enclave, New Delhi.
4. Pr. Secretary, Department of Environment, Govt. of NCT of Delhi, C-Wing 6th Level, Delhi Secretariat, I.P. Estate Delhi.
5. The Head of the Civil Engineering Department, Indian Institute of Technology, Delhi, Hauz Khas, New Delhi.
6. Chairman, Central Ground Water Board Authority, NH-4, Bhujal Bhawan, Faridabad-121001.
7. (i) Engineer-in-Chief, East Delhi Municipal Corporation, Udyog Sadan, Patparganj Industrial Area, Delhi-110092.
ii. Engineer-in-Chief, South Delhi Municipal Corporation, Civic Centre, J.L. Nehru Marg Minto Road, New Delhi-02.
iii. Engineer-in-Chief, North Delhi Municipal Corporation, Civic Centre, J.L. Nehru Marg Minto Road, New Delhi-02.
8. Engineer-in-Chief, Public Works Department, Govt. of Delhi, 12th Floor, MSO Building, I. P. Estate, New Delhi - 110002.

9. Engineer Member DDA, Vikas Sadan, INA, New Delhi-01.
10. Chief Engineer, NDMC, 15th Floor, Room No. 1512, Palika Kendra, New Delhi-02.
11. Chief Town Planner, Ministry of Urban Development, Govt. of India, E-Block, Vikas Bhawan, I.P. State, New Delhi 110002.
12. Chief Engineer, Northern Railways H/Q, Baroda House New Delhi.
13. Chief Engineer Delhi Cantonment Board, Delhi Cantt., New Delhi-10.
14. Director (Union Territories) Central Water Commission, North Wing, Sewa Bhawan, R.K. Puram, New Delhi.
15. Director (Land Management) DDA, Vikas Sadan, INA, New Delhi.
16. Managing Director DIMTS Ltd., Govt. of Delhi, ISBT, Kashmiri Gate, Delhi.
17. Chief Engineer, Delhi Metro Rail Corporation, Metro Bhawan, Barakhamba Road, New Delhi.
18. Chief Town Planner, Municipal Corporation of Delhi, 13th Floor Dr. S.P. Mukherjee, Civic Center, J.L. Nehru Marg, Minto Road, New Delhi-110002.
19. Town Planner, DDA, Vikas Sadan, 13th Floor, INA, New Delhi.
20. Chief Engineers, Zone-I & II, I&FC Department, L.M. Bund Office Complex, Shastri Nagar, Delhi 31.
21. Project Director, Delhi State Spatial Data Infrastructure Project, Govt. of Delhi, A-Block, IInd Floor, Pushpa Bhawan, Madangir Road, New Delhi-110062
22. Chairman, National Highway Authority of India, G-5 & 6, Sector-10, Dwarka, New Delhi.
23. (i) General Manager, Strategic Planning, Delhi International Airport (P) Limited,
New Udaan Bhawan, Opp. Terminal 3, IGI New Delhi-37.
ii. Chairman, Airports Authority of India, Rajiv Gandhi Bhawan, B-Block, Room No. 371,
Safdarjung Airport, New Delhi-03.
24. Joint Commissioner (Traffic), Delhi Police, MSO Building, IP Estate, New Delhi.
25. Chief Engineer (Yamuna) U.P. Irrigation and Water Resource Department, Okhla, New Delhi-110025.
26. Engineer-in-Chief, Haryana Irrigation Department, Sinchai Bhawan, Sector-5, Panchkula, Chandigarh.
27. P.S to Secretary (UD), Central Public Health & Environment Engineering Organization, MOUD, Govt. of India, Nirman Bhawan, New Delhi.

28. Joint Director, NCR Planning Board, Govt. of India, India Habitat Centre, 1st Floor, 4/4 B, Lodhi Road, New Delhi.
29. Superintending Surveyor of Works, I&FC Department, Govt. of Delhi, L.M. Bund Office Complex, Shastri Nagar, Delhi.
30. Dr. Ashok Khosla, Chairman, Development Alternatives, B-32, TARA Crescent, Qutub Institutional Area New Delhi - 110 016, India (Near Rock Land Hospital)
31. Sh. Akash Hingorani, 3172, Sector A, Pocket B, Gate no. 5, Vasant Kunj New Delhi – 110070.
32. Ms. Sujata Hingorani 3172, Sector A, Pocket B, Gate no. 5, Vasant Kunj New Delhi – 110070
33. Sh. Akshya Kaul, Landscape Ecologist. 199, Pocket-B, Sukhdev Vihar, New Delhi-11001.
34. Ms. Promita (Romi) Roy, 407, Technology Apartment, 24, I.P. Extension, Patpar Ganj, New Delhi-110092
35. Mr. Manu Bhatnagar, INTACH (India National Trust for Art & Cultural Heritage), 71, Lodi Estate, New Delhi-110003.
36. Sh. Bhisma Kumar Chugh, Special Advisor, Innovative Technologies & Systems, Govt. of NCT of Delhi, Delhi Sectt. I.P.Estate, New Delhi.
37. Sh. H.S. Dogra, Former D.G.(W), CPWD.A-7/1, Multi Storey Flat, Sector-13, R.K. Puram, New Delhi-110066. Mobile No.9818695335
38. Sh. A.K. Gupta, Retd. Chief Engineer, Irrigation & Flood Control Deptt. Govt. NCT of Delhi, 901, Tower No. 1, The Close South, Nirmana Country, Sector-50, Gurgaon (Haryana).

Yours faithfully

**CE Zone-II/SSW/ Member Secretary (TEC)
Irrigation & Flood Control Department**

No. E.E.CD-XIV/I&FC/ MPD/Vol-IV(N)/2020-21/ **711-769**

Dated: **26-08-2020**

Copy for kind information to:-

1. Pr. Secretary Urban Development, 9th Floor, Delhi Secretariat, New Delhi-02.
2. Chief Executive Officer, Delhi Jal Board, Varunalaya, Jhandewalan, New Delhi.
3. Secretary (I&FC), Varunalaya, Jhandewalan, New Delhi.
4. Secretary to Hon'ble Minister (I&FC), Delhi Secretariat, New Delhi-02.

5. CEO, Delhi Parks garden Society, Deptt. of Environment GNCTD, 6th Level, C-Wing, Delhi Secretariat, I.P. Estate, New Delhi-02.
6. CEO, DUSIB, I.P. Estate, ITO, New Delhi.
7. Prof. A.K. Gosain, Deptt. Of Civil Engineering, IIT Delhi-16.
8. Director General Meteorology, Govt. of India, Ministry of Earth Sciences, MET Office, Lodhi Road, New Delhi-03.
9. Managing Director, DSIIDC, Bombay Life Building, Connaught Place, New Delhi.
10. Managing Director, GSDL, 3rd Level, C-Wing, Vikas Bhawan-II, Civil Lines, Delhi-54
11. Additional Secretary to Hon'ble Chief Minister, Delhi, Delhi Secretariat, New Delhi-02.
12. Staff Officer to Chief Secretary, Delhi Secretariat, New Delhi-02.
13. Chief Conservator of Forest (H.Q.), Deptt. of Forest of Wild Life, Ist Floor, Talkatora Stadium, Annice Building, New Delhi.
14. All Superintending Engineer, I&FC Department Govt. of Delhi.



CE Zone-II/SSW/ Member Secretary (TEC)
Irrigation & Flood Control Department

Annexure-I**List of Participates**

S. No.	Name of Participate
1	Prof. A.K. Gosain IIT Delhi
2	Sh. B.K. Karjee, Chief Engineer, FMO, CWC
3	Sh. Piyush Kumar, Director, FM-1, CWC
4	Sh. Dharmendra Singh, Dy. Director, FM-1, CWC
5	Sh. O.P. Srivastava, Chief Engineer, Zone-I, I&FC
6	Sh. Sanjay Saxena, Chief Engineer, Zone-II, I&FC
7	Sh. Sharat Kumar, Chief Engineer, DSIIDC
8	Sh. Mukesh Gupta, DSIIDC
9	Sh. Mathura Prasad, CE, South PWD
10	Sh. Pradeep Khandelwal, Chief Engineer, EDMC
11	Sh. Rakesh Rana, Delhi Cantonment Board
12	Sh. Amit Tyagi
13	Sh. S.L. Meena, Superintending Engineer, North MCD
14	Sh. V.D. Vashistha
15	Sh. Pushkar Nath Thakur
16	Mrs. Sandhya Rawat
17	Sh. Rohit Goyal
18	Sh. S.M. GVB
19	Mrs. Pallavi Tomar, GSDL
20	Sh. Anil Sharma, Superintending Engineer, I&FC
21	Sh. Mukesh Kumar, Superintending Engineer, I&FC
22	Sh. Priith Rekh, Superintending Engineer, I&FC
23	Sh. Y.K. Sharma, Superintending Engineer, I&FC
24	Sh. Bhupender Singh, Administrative Officer, I&FC
25	Sh. Shiv Kumar, Executive Engineer, CD-XIV I&FC

(28)

IRRIGATION & FLOOD CONTROL DEPARTMENT
GOVT. OF N.C.T. OF DELHI, L.M. BUND OFFICE COMPLEX;
SHASTRI NAGAR DELHI-110031.
Ph: 011-21210867-68, E-mail: ifcdxiv@gmail.com

No. E.E.CD-XIV/I&FC/MPD/Vol-IV(N)/2019-20/2640-2677

Dated: 29/8/19

Minutes of Meeting

Please find enclosed herewith copy of Minutes of pre-meeting of stakeholders for Delhi Drainage Master Plan-2021 held on 08.08.2019 at 3.00 PM under the Chairmanship of Member (RM), CWC in his chamber, IInd Floor (South Wing), Sewa Bhawan, Central Water Commission, R.K. Puram, New Delhi-110066 regarding the issues of Delhi Drainage Master Plan-2021.

To,

1. Member (River Management) Central Water Commission, Govt. of India, 2nd Floor (South) Sewa Bhawan, R.K. Puram, New Delhi-110066.
2. (i) Engineer-in-Chief, East Delhi Municipal Corporation, Udyog Sadan, Patparganj Industrial Area, Delhi-110092.
(ii) Engineer-in-Chief, South Delhi Municipal Corporation, Civic Centre, J.L. Nehru Marg Minto Road, New Delhi-02.
(iii) Engineer-in-Chief, North Delhi Municipal Corporation, Civic Centre, J.L. Nehru Marg Minto Road, New Delhi-02.
3. Engineer-in-Chief, Public Works Department, Govt. of Delhi, 12th Floor, MSO Building, I. P. Estate, New Delhi - 110002.
4. Engineer Member DDA, Vikas Sadan, INA, New Delhi-01.
5. Chief Engineer, NDMC, 15th Floor, Room No. 1512, Palika Kendra, New Delhi-02.
6. Director General, CPWD, Govt. of India, Nirman Bhawan, New Delhi-02.
7. Chief Town Planner, Ministry of Urban Development, Govt. of India, E-Block, Vikas Bhawan, I.P. State, New Delhi 110002.
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9. Chief Engineer Delhi Cantonment Board, Delhi Cantt., New Delhi-10.
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11. Director (Land Management) DDA, Vikas Sadan, INA, New Delhi.
12. Managing Director DIMTS Ltd., Govt. of Delhi, ISBT, Kashmiri Gate, Delhi.
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21. Joint Commissioner (Traffic), Delhi Police, MSO Building, IP Estate, New Delhi.
22. Chief Engineer (Yamuna) U.P. Irrigation and Water Resource Department, Okhla, New Delhi-110025.
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26. Joint Director, NCR Planning Board, Govt. of India, India Habitat Centre, 1st Floor, 4/4 B, Lodhi Road, New Delhi.
27. Pr. Secretary, Department of Environment, Govt. of NCT of Delhi, C-Wing 6th Level, Delhi Secretariat, I.P. Estate Delhi.
28. Superintending Surveyor of Works, I&FC Department, Govt. of Delhi, L.M. Bund Office Complex, Shastri Nagar, Delhi.
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32. Sh. Akshya Kaul, Landscape Ecologist. 199, Pocket-B, Sukhdev Vihar, New Delhi-11001.
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34. Mr. Manu Bhatnagar, INTACH (India National Trust for Art & Cultural Heritage), 71, Lodi Estate, New Delhi-110003.
35. Sh. Bhisma Kumar Chugh, Special Advisor, Innovative Technologies & Systems, Govt. of NCT of Delhi, Delhi Sectt. I.P. Estate, New Delhi.
36. Sh. H.S. Dogra, Former D.G.(W), CPWD.A-7/1, Multi Storey Flat, Sector-13, R.K. Puram, New Delhi-110066. Mobile No.9818695335
37. Sh. A.K. Gupta, Retd. Chief Engineer, Irrigation & Flood Control Deptt. Govt. NCT of Delhi, 901, Tower No. 1, The Close South, Nirmana Country, Sector-50, Gurgaon (Haryana).

Yours faithfully



o/c CE Zone-II/SSW/ Member Secretary (TEC)
Irrigation & Flood Control Department



No. E.E.CD-XIV/I&FC/ MPD/Vol-IV(N)/2019-20/2678-2698

Dated: 29/8/19

Copy for kind information to:-

1. Pr. Secretary Urban Development, 9th Floor, Delhi Secretariat, New Delhi-02.
2. Chief Executive Officer, Delhi Jal Board, Varunalaya, Jhandewalan, New Delhi.
3. Secretary to Hon'ble Minister (I&FC), Delhi Secretariat, New Delhi-02.
4. CEO, Delhi Parks garden Society, Deptt. of Environment GNCTD, 6th Level, C-Wing, Delhi Secretariat, I.P. Estate, New Delhi-02.
5. CEO, DUSIB, I.P. Estate, ITO, New Delhi.
6. Director General Meteorology, Govt. of India, Ministry of Earth Sciences, MET Office, Lodhi Road, New Delhi-03.
7. Managing Director, DSIIDC, Bombay Life Building, Connaught Place, New Delhi.
8. Managing Director, GSDL, 3rd Level, C-Wing, Vikas Bhawan-II, Civil Lines, Delhi-54
9. Additional Secretary to Hon'ble Chief Minister, Delhi, Delhi Secretariat, New Delhi-02.
10. Prof. A.K. Gosain, Deptt. Of Civil Engineering, IIT Delhi-16.
11. Staff Officer to Chief Secretary, Delhi Secretariat, New Delhi-02.
12. Member Drainage, Delhi Jal Board, Varunalaya, Jhandewalan, New Delhi.
13. Chief Conservator of Forest (H.Q.), Deptt. of Forest of Wild Life, Ist Floor, Talkatora Stadium, Annice Building, New Delhi.
14. Chief Engineer-VI, DSIIDC, DSIIDC Bldg., 74, Ring Road, Lajpat Nagar, New Delhi-24.
15. Shri Jitendra Singh, Jt. G.M. (EC) AAI Rajiv Gandhi Bhawan, B-Block, Room No. 371, Safdarjung Airport, New Delhi-03.
16. All Superintending Engineer, I&FC Department Govt. of Delhi.

o/c CE Zone-II/SSW/ Member-Secretary (TEC)
Irrigation & Flood Control Department

Shri

**IRRIGATION AND FLOOD CONTROL DEPARTMENT
GOVT. OF NCT OF DELHI, L. M. BUND OFFICE COMPLEX,
SHASTRI NAGAR, DELHI-110031.**

No. E.E.CD-XIV/I&FC/ MPD/Vol-IV(N)/2017-18/

Dated:

Sub: Minutes of pre-meeting of stakeholders for Delhi Drainage Master Plan-2021 held on 08.08.2019 at 3.00 PM under the Chairmanship of Member (RM), CWC in his chamber, IIInd Floor (South Wing), Sewa Bhawan, Central Water Commission, R.K. Puram, New Delhi-110066 regarding the issues of Delhi Drainage Master Plan-2021.

The pre-meeting of stake holders for Delhi Drainage Development Master Plan-2021 was held on 08.08.2019 at 3.00 PM under the Chairmanship of Member (RM), CWC in his chamber. The list of participants is given at Annexure-I. The meeting was initiated by Director, FM-I, CWC in the beginning and welcomed the members present in the meeting. Later, CE(FMO), CWC and Member(RM), CWC joined the meeting. In the meeting, following points were discussed.

1. It has been pointed out by Director, FM-I, CWC that the report submitted by IIT Delhi appears to be generic in nature. The recommendations / deliverables of the report should be tangible so that they can be implemented by NCT of Delhi as short / medium / long term measures like identification of priority areas for desiltation, capacity enhancement of drainage network, revamping of junctions etc. to address drainage congestion problem in an engineering manner.
2. Director, FM-I, CWC pointed out that land use map of 2010 has been used in the study. Geo-spatial Delhi Limited (GSDL) should confirm the availability of latest land use map after 2010. He requested Professor A.K. Gosain to make zone wise short, medium and long term long recommendations which can be implemented by various stakeholders as short / medium / long term measures like identification of priority areas viz airport, railways, hospitals and schools. GSDL representative stated that land use data is updated regularly. They have updated land use data of year 2015.

In this connection Director , FM-I, CWC requested GSDL to confirm the actual position of latest map and submit their report.

3. In the last meeting it was decided by the Technical Expert Committee (TEC) that minimum 10% to 20% network data should be verified by the concerned stakeholder as the report could not be accepted without verification of the authenticity of the drainage network adopted in the model. In absence of verified / correct drainage network in the model, the calibration and validation of model is not possible. The output of uncalibrated and unvalidated model cannot be accepted for use in formation of final report. Hence verification of network data used in model created by IIT Delhi, by all stakeholders is essentially required. Inspite of aforesaid decision by TEC which was attended by representatives of all stakeholders and regular pursuance by I&FC Department, no agency has verified the network data so far. During meeting, on being asked, no stakeholder was in a position to confirm the verification of 10-20% of their drainage network as adopted / used in model by IIT, Delhi. Member(RM), CWC expressed displeasure over non-compliance of decision taken and directed to all stakeholders to verify the data within a week time, otherwise the matter will be raised to senior level officers i.e. Secretary / Chief Secretary, NCT of Delhi.
4. It was also desired that stakeholders should share information / data/ methodology which may be helpful in case of implementation of recommendations. For authenticity of creation of calibrated and validated model, operators of GSDL, well versed with the model functioning, should examine the model and confirm its correctness before acceptance of model results and their incorporation in final report to be accepted by TEC. Representative of GSDL present in meeting agreed for same and informed that they are capable to run and use the models in reference. GSDL has to give their

consent for the same including for further modification / changes in model for their implementation on ground with the help of IIT.

5. It has been noticed that flooding junction Ids in appendix for comparison purpose for all scenarios and 2/5 year return period flooding for various zones are not matching. Further, flooding volumes for all scenarios is also missing for various junction nodes in various zones. In addition to that reduction of flooding volumes at various nodes in all scenarios is also not consistent. These discrepancies needs to be reconciled and comparison should be made for identical nodes taking similar flood volumes and time period.
6. It was also decided that, current volume of flooding and reduction in flooding volume for all scenarios in each zone as a whole in tabular form should be mentioned in the report of IIT Delhi. .
7. **IIT, Delhi requested to review the water bodies in trans-Yamuna area as the water bodies shown are much more then actually existing / available water bodies.**
8. On being asked I&FC, Govt. of NCT of Delhi, representatives informed the scope of work. It was submitted that report still does not have following issues covered in respect of the awarded scope of work:-
 - (i) To formulate Action plan for implementation of Master Plan in phases.
 - (ii) To prepare feasibility reports for priority projects for first five years along with further plan to cater to the needs of NCT of Delhi as per MPD-2021.
 - (iii) Study of existing drainage system (entire NCT of Delhi) and inherent deficiencies in the system, compatible to the projections made in the MPD-2021.

- (iv) Improvement / Rehabilitation / remodelling of existing main drains and its tributaries including its design & drawings. The drains from five cusecs (5 Cusecs) on wards is to be taken into account for study and remodelling / rehabilitation.
- (v) New drainage facilities/proposals with design and drawings including study of schemes under pipe line / preparation stage.
- (vi) Use of rain water for rain water harvesting as envisage in MPD-2021.
- (vii) Review and designing of check dams and depressions to increase ground water table.
- (viii) The present system of desilting of drains and suggesting deficiencies and measures to improve the same by modern techniques.
- (ix) Requirement of pump house for areas experiencing drainage congestion, wherever required.

9. It was reiterated that TEC is mandated for

- (i) To decide design parameters/technical inputs like rainfall intensity, return period, runoff coefficient, retention period etc. which is to be used by consultant for Preparation of Master Plan for NCT of Delhi.
- (ii) To consider interim report for approval and thereafter consider and recommend final report on its submission by the consultant for acceptance by the Govt.

As Interim Report was not discussed in any meeting of TEC and IIT Delhi has already submitted its final report, it has been decided by Chairman, TEC that designated member of TEC, in person, should attend the next meeting with their comments / suggestions to finalize / decide the issue of acceptance of final report.

10. I&FC Department should make the details of stakeholder wise suggestions, response of IIT, Delhi and whether the agency concerned is satisfied with the response of IIT or not with reasons thereof, in tabular form, so that same can be discussed in next TEC meeting, to take a final view on such issues.
11. **It was decided that IIT, Delhi should modify the report as per above discussed issues within 1 month so that the same can be deliberated in detail in next meeting of TEC.**
12. Chairman TEC expressed displeasure for not attending the TEC by the nominated members and directed that hence forth nominated members should attend the meeting in person, so that objective of the formation of TEC consisting of senior officers of various agencies, can be fulfilled / achieved for fruitful deliberations and acceptance of the report by IIT, Delhi.



No. E.E.CD-XIV/I&FC/ MPD/Vol-VI/2021-22/ 1434-91

Dated: 10/08/2021

Minutes of Meeting

Please find enclosed herewith, Minutes of 4th TEC meeting held on 05.08.2021 at 3.00 PM under the Chairmanship of Member (RM) through video conferencing on Google Meet, received from Director FM-I vide letter No. T-22074/2/2019-FM-I dated 09.08.2021, regarding Delhi Drainage Master Plan-2021, with all stakeholders and IIT Delhi.

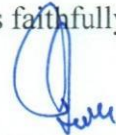
This issue with the approval of Member (RM), CWC / Chairperson TEC.

To,

1. Member (River Management) Central Water Commission, Govt. of India, 2nd Floor (South) Sewa Bhawan, R.K. Puram, New Delhi-110066.
2. Director General, CPWD, Govt. of India, Nirman Bhawan, New Delhi-02.
3. Vice Chairman, National Disaster Management Authority, A-1, Safdarjung Enclave, New Delhi.
4. Pr. Secretary, Department of Environment, Govt. of NCT of Delhi, C-Wing 6th Level, Delhi Secretariat, I.P. Estate Delhi.
5. (i) The Head of the Civil Engineering Department, Indian Institute of Technology, Delhi, Hauz Khas, New Delhi.
(ii) Prof. A.K. Gosain, Deptt. Of Civil Engineering, IIT Delhi-110016.
6. Chairman, Central Ground Water Board Authority, NH-4, Bhujal Bhawan, Faridabad-121001.
7. Chairman, National Highway Authority of India, G-5 & 6, Sector-10, Dwarka, New Delhi.
8. Engineer Member DDA, Vikas Sadan, INA, New Delhi-01.
9. Engineer-in-Chief, Public Works Department, Govt. of Delhi, 12th Floor, MSO Building, I. P. Estate, New Delhi - 110002.
10. (i) Engineer-in-Chief, East Delhi Municipal Corporation, Udyog Sadan, Patparganj Industrial Area, Delhi-110092.
(ii) Engineer-in-Chief, South Delhi Municipal Corporation, Civic Centre, J.L. Nehru Marg Minto Road, New Delhi-02.
(iii) Engineer-in-Chief, North Delhi Municipal Corporation, Civic Centre, J.L. Nehru Marg Minto Road, New Delhi-02.
11. Chief Engineer, NDMC, 15th Floor, Room No. 1512, Palika Kendra, New Delhi-02.
12. Chief Town Planner, Ministry of Urban Development, Govt. of India, E-Block, Vikas Bhawan, I.P. State, New Delhi 110002.
13. Chief Engineer, Northern Railways H/Q, Baroda House New Delhi.
14. Chief Engineer Delhi Cantonment Board, Delhi Cantt., New Delhi-10.
15. Director (Union Territories) Central Water Commission, North Wing, Sewa Bhawan, R.K. Puram, New Delhi.
16. Director (Land Management) DDA, Vikas Sadan, INA, New Delhi.
17. Managing Director DIMTS Ltd., Govt. of Delhi, 8th Floor, A Block, IT Park Road, Metro Vihar, Shastri Park, Shahdara, Delhi 110053.

18. Chief Engineer, Delhi Metro Rail Corporation, Metro Bhawan, Barakhamba Road, New Delhi.
19. Chief Town Planner, Municipal Corporation of Delhi, 13th Floor Dr. S.P. Mukherjee, Civic Center, J.L. Nehru Marg, Minto Road, New Delhi-110002.
20. Town Planner, DDA, Vikas Sadan, 13th Floor, INA, New Delhi.
21. Chief Engineers, Zone-I & II, I&FC Department, L.M. Bund Office Complex, Shastri Nagar, Delhi 31.
22. Project Director, Delhi State Spatial Data Infrastructure Project, Govt. of Delhi, A-Block, IInd Floor, Pushpa Bhawan, Madangir Road, New Delhi-110062
23. (i) General Manager, Strategic Planning, Delhi International Airport (P) Limited, New Udaan Bhawan, Opp. Terminal 3, IGI New Delhi-37.
(ii) Chairman, Airports Authority of India, Rajiv Gandhi Bhawan, B-Block, Room No. 371, Safdarjung Airport, New Delhi-03.
24. The Joint Commissioner (Traffic), Delhi Police, Dev Prakash Shastri Marg, Todapur Near Pusa, (Inderpuri / Naraina Loha Mandi) New Delhi-110012.
25. Chief Engineer (Yamuna) U.P. Irrigation and Water Resource Department, Okhla, New Delhi-110025.
26. Engineer-in-Chief, Haryana Irrigation Department, Sinchai Bhawan, Sector-5, Panchkula, Chandigarh.
27. P.S to Secretary (UD), Central Public Health & Environment Engineering Organization, MOUD, Govt. of India, Nirman Bhawan, New Delhi.
28. Joint Director, NCR Planning Board, Govt. of India, India Habitat Centre, Ist Floor, 4/4 B, Lodhi Road, New Delhi.
29. Superintending Surveyor of Works, I&FC Department, Govt. of Delhi, L.M. Bund Office Complex, Shastri Nagar, Delhi.
30. Dr. Ashok Khosla, Chairman, Development Alternatives, B-32, TARA Crescent, Qutub Institutional Area New Delhi - 110 016, India (Near Rock Land Hospital)
31. Sh. Akash Hingorani, 3172, Sector A, Pocket B, Gate no. 5, Vasant Kunj New Delhi - 110070.
32. Ms. Sujata Hingorani 3172, Sector A, Pocket B, Gate no. 5, Vasant Kunj New Delhi - 110070
33. Sh. Akshya Kaul, Landscape Ecologist. 199, Pocket-B, Sukhdev Vihar, New Delhi-11001.
34. Ms. Promita (Romi) Roy, 407, Technology Apartment, 24, I.P. Extension, Patpar Ganj, New Delhi-110092
35. Mr. Manu Bhatnagar, INTACH (India National Trust for Art & Cultural Heritage), 71, Lodi Estate, New Delhi-110003.
36. Sh. Bhisma Kumar Chugh, Special Advisor, Innovative Technologies & Systems, Govt. of NCT of Delhi, Delhi Sectt. I.P.Estate, New Delhi.
37. Sh. H.S. Dogra, Former D.G.(W), CPWD.A-7/1, Multi Storey Flat, Sector-13, R.K. Puram, New Delhi-110066. Mobile No.9818695335
38. Sh. A.K. Gupta, Retd. Chief Engineer, Irrigation & Flood Control Deptt. Govt. NCT of Delhi, 901, Tower No. 1, The Close South, Nirmana Country, Sector-50, Gurgaon (Haryana).

Yours faithfully



SANJAY SAXENA
CHIEF ENGINEER, ZONE-II

No. E.E.CD-XIV/I&FC/MPD/Vol-VI/2021-22/ 1434-91

Dated: 10/08/2021

Copy for kind information to:-

1. Additional Secretary to Hon'ble Chief Minister, Delhi, Delhi Secretariat, New Delhi-02.
2. Secretary to Hon'ble Minister (I&FC), Delhi Secretariat, New Delhi-02.
3. Staff Officer to Chief Secretary, Delhi Secretariat, New Delhi-02.

4. Pr. Secretary Urban Development, 9th Floor, Delhi Secretariat, New Delhi-02.
5. Chief Executive Officer, Delhi Jal Board, Varunalaya, Jhandewalan, New Delhi.
6. Secretary (I&FC), Varunalaya, Jhandewalan, New Delhi.
7. CEO, DUSIB, I.P. Estate, ITO, New Delhi.
8. Director General Meteorology, Govt. of India, Ministry of Earth Sciences, MET Office, Lodhi Road, New Delhi-03.
9. Managing Director, DSIIDC, Bombay Life Building, Connaught Place, New Delhi.
10. Managing Director, GSDL, 3rd Level, C-Wing, Vikas Bhawan-II, Civil Lines, Delhi-54
11. Chief Conservator of Forest (H.Q.), Deptt. of Forest of Wild Life, IInd Floor, Vikas Bhawan, New Delhi.
12. CEO, Delhi Parks garden Society, Deptt. of Environment GNCTD, 6th Level, C-Wing, Delhi Secretariat, I.P. Estate, New Delhi-02.
13. All Superintending Engineer, I&FC Department Govt. of Delhi.



CHIEF ENGINEER, ZONE-II

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग
केंद्रीय जल आयोग
बाढ़ प्रबन्ध-1 निदेशालय



Government of India
Ministry of Jal Shakti
Dept. of Water Resources, RD&GR
Central Water Commission
Flood Management-I Directorate

2nd FLOOR (Wing-1), West Block-2
R.K. PURAM, NEW DELHI-110066
Tel.: 01129583380
Email: - fm1dte-cwc@nic.in

दिनांक : 09.08.2021

To
The Chief Engineer,
Irrigation & Flood Control Department,
Govt. of N.C.T of Delhi,
L.M. Bund Office Complex,
Shastri Nagar, Delhi-110031

विषय: Minutes of 4th TEC meeting held on 05.08.2021 at 3.00 PM under the Chairmanship of Member (RM) through video conferencing on Google Meet, regarding Delhi Drainage Master Plan-2021.

सन्दर्भ: Email from Executive Engineer, IFCD, Delhi dated: 08.08.2021.

महोदय,

With reference to the above referred letter regarding above cited subject, please find the approved minutes of 4th TEC Meeting held on 05.08.2021.

This issues with the approval of the Competent Authority.

Yours's sincerely,

Signed by Piyush Kumar
(Piyush Kumar) 09/08/2021 18:01:50
Director
Reason: Approved

Sub: Minutes of 4th TEC meeting held on 05.08.2021 at 3.00 PM under the Chairmanship of Member (RM) through video conferencing on Google Meet, regarding Delhi Drainage Master Plan-2021.

The 4th meeting of the Technical Expert Committee (TEC) was held under the Chairmanship of Member (River Management), CWC through Video Conferencing with the all stakeholders and IIT Delhi on 05.08.2021 at 3.00 PM.

The meeting was chaired by the Member (RM), CWC the Chairman of TEC. The Chairman welcomed all the members present in the meeting.

The Chairman requested to Chief Engineer, (I&FC) to make a brief power point presentation on the Delhi Drainage Master Plan Status/ progress.

A brief power point presentation was made by the Chief Engineer, (I&FC) covering the following points:-

- ❖ Introduction of MPD and brief of report submitted by IIT Delhi.
- ❖ Objectives intended behind the formulation of Delhi Drainage Master Plan.
- ❖ Recommendations and Additional recommendations by IIT Delhi.
- ❖ Observation of TEC and Additional Chief Secretary (UD) Department during the meetings.
- ❖ Department wise drainage data as validated in GSDL.
- ❖ Latest status of directions of TEC and Additional Chief Secretary (UD) Department.
- ❖ Issues with IIT Delhi.

The Chairperson invited the all stakeholders/ members of TEC for their views on the Final report of Delhi Drainage Master Plan submitted by IIT Delhi.

1. Public Works Department

Sh. S.S. Garg, Chief Engineer, North (M) expressed his views as:

- During ground verification of 10-20 percent data with GSDL, it has been observed that there are 100 percent variation in data used in report.
- As regards to running the data of 50 vulnerable locations of waterlogging on IIT software, IIT Delhi had intimated that they cannot entertain such requests of each department.
- The report does not comprised any engineering solutions of the problems, it is not practical to implement Delhi Drainage Master Plan.
- No field officer knows how to run the software.
- However, PWD has taken its own measure at some spots biz. Minto Bridge which have given good result this year.

2. NCR Planning Board

Sh. Ramesh Dev, Deputy Director expressed his views as:

NCRPB has already submitted the comments on the Final report of Delhi Drainage Master Plan.

- It is observed that Master Plan provides recommendations for rejuvenation of water bodies. Further, to prevent illegal encroachment over these areas, it is suggested that recommendations for buffer zone along/ around water bodies

and promotion of recreational use along water bodies as suggested in the functional plan may also be given in this section.

- The functional plan on Drainage for NCT recommends for treatment of industrial waste in CETP. Therefore, it is suggested that analysing the existing status of treatment and disposal of industrial waste is required. The recommendation for managing the same may be given in the Master Plan.
- Recommendations for strengthening of local bodies, capacity building of the staff engaged in this field may be given in the Drainage Master Plan.
- Recommendation to encourage public participation in monitoring may be added in the Master Plan.
- Innovation methods for resource generation for implementation of Master Plan may be added in the Master Plan.

3. South Delhi Municipal Corporation

Sh. Manish Rastogi, Chief Engineer expressed his views as:

- The data validation report has already been sent to GSDL by all the four zones of SDMC.
- We cannot run the programme on Model / Software with GSDL.
- As per the list of 162 locations of water logging points in NCT of Delhi as given in **Annexure-III** of Delhi Drainage Master Plan, it is submitted that there is no water logging points in SDMC.
- The feasibility of drain connecting to the nearest water body has been reviewed. There are 13 water bodies in SDMC area wherein water exists only in 4 and remaining 9 are dry.
- The feasibility of drain connecting to the nearby parks has been reviewed and it is observed that in 23 cases storm/ sludge water can be treated with STP and can be supplied to nearby parks.

4. North Delhi Municipal Corporation

Mr. V.K. Malhotra, Chief Engineer North DMC expressed his views as

- Requisite information of drain data for uploading on GSDL submitted after ground truthing.
- MPD has not provided any measures where single drainage system exists to cater sewerage and storm water, particularly in the walled city area.
- No study undertaken in unauthorised colonies where habitation is much lower than invert level of outfall drain particularly Kirari Area.
- No recommendations for implementation of outfall drains which are unable to carry discharge of entire catchment areas due to large scale urbanisation.
- No software has been shared with us so far.
- It has been observed during ground truthing that only 46% of data is matching with GSDL used for preparing the MPD by IIT Delhi.
- They are of the view that North DMC may not be able to adopt this MPD report.

5. East Delhi Municipal Corporation

Mr. R.K. Alahwadi, Chief Engineer expressed his views as

- Feedback on data after ground truthing is not matching with IIT's Master Plan Report.

- 56% data was found changed after ground verification.
- He was of view that MPD cannot be implemented in its present form.

6. Delhi Development Authority

Sh. Ajay Kumar Agarwal, Chief Engineer expressed his views as

- About 234.55 Km of SW Drains are maintained by DDA which is about 6.2% of the total drainage system of Delhi. The 6.2% of the total drain length under the DDA is a very minor one.
- Issue related to verification of available Data with GSDL, the field unit of DDA checked and updated data of about 40 kms with minor modifications (about 40%) and rest with the major modifications. The GSDL Data available are relating to Modifications/ corrections in the size and slope of the drains at various places.
- IIT Delhi report does not state precisely what is to be done location wise. It is left on the implementing department to work out and carryout modifications.
As such there is nothing in the report to implement in the field. He further added that no practical solutions have been given in MPD.
- He emphasized one of the suggestion given in the ITT Delhi report that the management of all Delhi drains should be with one department as lack of coordination among the various department has been an issue and water ultimately from house needs to reach outfall uninterrupted.
- He further drawn additional recommendation in the ITT Delhi report that the government should enact a law that prohibits:
 - Sidewalk and pavement hawking.
 - Roadside delis and other eating places that do not have a hygienic and an organized pantry system within the premises for cleaning and washing of utensils.
 - Roadside auto service and repair shops as these require sophisticated waste handling, storage, stowing and disposal infrastructure.
 - Roadside auto dealerships that cater to both new as well as pre-owned vehicles.
 - Collection and stacking of construction related building and other wastes on public spaces.
 - Roadside piling of dirt and other solid wastes (road sweep) resulting from road, sidewalks and service roads.
 - Weekly markets without an installable (temporary) infrastructure to collect, store and safely stow business wastes prior to its disposal at formally designated locations and in accordance with formalized protocol.
 - Direct access to businesses from the roadside. Etc.

7. DSIIDC.

Sh. Mukesh Gupta, Chief Engineer expressed his views as

- Out of 98 km drain length written in report, 26 km does not belong to DSIIDC, it belongs to SDMC. Only 72 km drain belong to DSIIDC.
- There are minor drains in industrial area.
- No water logging point was observed.
- There is no feasibility to connect drain with water bodies/ parks.
- Data of DSIIDC drains have been matched during validation in GSDL but not matched for drains which are belongs to SDMC.

8. Delhi Cantonment Board

- No any representative of Delhi Cantonment Board has attend the meeting.

9. GSDL

Mr. Taneja, CS cum CFO expressed his views as:

- Major changes were found during data validation. Data of PWD and New Delhi Municipal Council were found totally mismatched with data provided in report and data of I&FC and Delhi Cantonment Board were found 100% unchanged.
- Department wise ground verification and length with changes in presentation made by I&FC department is as under:-

S. No	Name of Department	Total No. of 4 Ft. and above Drains	Length (in km.)	In percentage	Validation of 10-20% data with GSDL		
					Total Length Verify (km)	Total Length Verify (%)	Total Length Verify With Change (%)
1	PWD	1375	2142	56%	556.48	26%	100%
2	South DMC	287	300	7%	260.17	87%	62%
3	North DMC	176	141	3%	135.16	95%	55%
4	East DMC	182	146	4%	145.97	100%	56%
5	New Delhi Municipal Council	261	335	9%	39.14	12%	100%
6	Delhi Development Authority	124	251	7%	59.72	24%	42%
7	Irrigation and Flood Control	57	347	10%	252.41	73%	0%
8	DSIIDC	350	98	3%	38.65	39%	68%
9	Delhi	33	39	1%	11.97	30%	0%

	Cantonment Board						
10	NTPC	1	3	-	-	-	-
	Total drains	2846	3802		1499.67	39.5%	

Minor variation and major variation in length/ change of side slope of drain was observed at different places.

- GSDL has received only output GIS layers prepared under drainage master plan.
- IIT Delhi has used software Model SWMM and SWAT for analysis.
- Link of the Model SWMM software was received to GSDL via mail dated 29.09.2020.
- No link/ documentation related to SWAT Model has been shared with GSDL.
- Collected field data that is used to run the software has also not been shared with GSDL.
- IIT has not provided any detailed training to GSDL officials. So, in the absence of training and data, we are not able to run the Models.

10. New Delhi Municipal Council

Sh. T.R. Meena, Superintending Engineer expressed his views as

- As per IIT report Annexure-III, 162 water logging locations in NCT of Delhi has been provided by Traffic Police of Delhi. Out of them 18 locations of NDMC (New Delhi Municipal Council) area, water logging noticed due to some temporary blockage occurred by dry leaves/ polythene etc. on mouth of GTs/ bell mouth which were removed timely and water stagnation were cleared immediately.
- He informed that there is only two water logging locations i.e. Sikendra Road and Tilak Marg which are under jurisdiction of NDMC (New Delhi Municipal Council). Now additional drainage system has already been provided on both locations to avoid water logging.
- In view of above clarifications we can again say that there is no major water logging exists in jurisdiction of NDMC area.
- And further stated that our **department has ground validated the data in GSDL but nothing is matching.**

11. Town and Country Planning Department

Mr. Kapoor has stated that as Draft MPD-2041 with DDA and Master Plan of NCRPB 2041 are under preparation, there is no use of this Delhi Drainage Master Plan-2021 at this time.

12. IIT Delhi

Prof. Gosain and Prof. Khosa has attended the meeting and stated that:-

- The work was assigned to IIT Delhi in the year 2012 with amount of Rs. 80.00 lakh only. According to the agreement all the drainage data in digitized form was supposed to be provided to IIT Delhi (free of cost) but Delhi Govt. provided the drainage data after wasting of times in years and the complete data was made available to us in the year 2016. Data should have

been validated through various stakeholders before given to us & Now this is not a right way to raise the issue at this stage. We have prepared the MPD report on the data which was provided by the Delhi Govt. We are not responsible for incorrect data as pointed out by GSDL.

- Technical Expert Committee was also formed by the Delhi Govt. to decide design parameters etc. and to coordinate with the consultant. 1st meeting of TEC was held after submission of final report on dated 21.05.2019 i.e. after a laps of about 7 years from the award of work to IIT Delhi.
- Draft report was submitted on 20.03.2017 and no views were received by us during preparation of final report.
- Final report of Delhi Drainage Master Plan was submitted on 13.07.2018 and power point presentation to Hon'ble Chief Minister was also made on 01.08.2018 after request of Delhi Govt.
- All the software model etc. which were used for preparing the Master Plan Drainage had already been provided to GSDL.
- We also checked 10% data and was found correct.
- 150 officers of different department were trained by IIT and we can't give training to State officers again & again.

Considering the above views, Chairman, TEC concluded that:

1. The contract between IFCD, Delhi and IIT Delhi was made in September, 2011. Inception report on 11.02.2013, draft final report on 21.03.2017 and final report on 13.07.2018 was submitted to IFCD, Delhi by IIT Delhi but the matter was brought to TEC in 2019 after submission of final report. Member (RM), CWC, the current Chairman of TEC, took charge in second half of February, 2019. After that various measures were taken in this matter and the 1st meeting of TEC was held on 21.05.2019. Therefore, the decision of TEC is broadly based on the various TEC meetings and communications among various department including IIT Delhi after 1st TEC meeting.
2. During the last 3 TEC meetings as well as the 4 meetings chaired by ACS/SS, UD, Delhi (which consultant didn't attend) observations of various stakeholders on final report along with running of models/software on 50 hotspots was requested to IIT Delhi but there was not any significant reply from IIT Delhi towards incorporation of views in report, capacity building of State officers for running the model etc.
3. As per 10-20% data verification exercise by stakeholders, there is still large discrepancies between field data and data used in the model to prepare final report.
4. IIT Delhi stated that it has trained 150 officers of different departments but every department in the meeting has expressed that they are not able to run the model. GSDL also stated that it has not received the whole model package.
5. Considering the above discrepancies in data, incapability of stakeholders to run the model and non-satisfactory response from IIT Delhi to modify the report & capacity building of stakeholders, TEC feels that the final report submitted by the consultant is not worth considerable for recommendation and the mentioned report may not be accepted. The State Govt or Nodal Department may take a call in this matter accordingly.