Proceeding of the meeting date 18/11/2022 of the Departmental Bid Evaluation Committee (DBEC) for short listing of Consultants in connection with the consultancy for Selection of Consultant for "Mathematical Model Study on the Darakeswar-Rupnarayan River System in the Districts of Howrah, Hooghly, East and West Midnapore, West Bengal, India, under West Bengal Major Irrigation and Flood Management Project (WBMIFMP) in the State of West Bengal in India." REFERENCE NO.FOR REoI: CE/IW/SPMU-E01/02/22-23 Dated: 20.09.2022

The Government of India has received financing from the World Bank & Asian Infrastructure and Investment Bank towards the cost of the **West Bengal Major Irrigation and Flood Management Project (WBMIFMP)** Project and intends to apply part of the proceeds of this loan to pay for the implementation of Mathematical Model Consultancy.

Objective of the Project:

WBMIFMP aims to improve the existing irrigation network in the Damodar Valley Command Area (DVCA) within the State of West Bengal, to optimize conjunctive and sustainable use of ground and surface water across the DVCA in different irrigation seasons, and to reduce flooding in the Lower Damodar Sub-Basin (LDSB) in West Bengal.

The duration of the project as envisaged now is for 8.0 (Eight months). The Project will be executed by the Irrigation and Waterways Department of the Government of West Bengal by a 3-tier Project Management Unit (PMU) as the implementing agency / Employer, comprising a State Project Management Unit (SPMU), IWD being at the apex, having headquarters at Bidhannagar, District North 24 Parganas, followed by two District Project Management Units (DPMUs) at the next level and four District Project Implementation Units (DPIUs) of the IWD at the district level. The support of the Project Management Consultant (PMC) will be at the PMU at various levels i.e., the SPMU, DPMUs & the (DPIUs and is expected to fully assist the PMU in the planning and execution of the Project in all aspects under overall control of the IWD at the PMU.

The Damodar River originates from the Chhotonagpur Plateau at Latehar District in Jharkhand and flows through the districts of Latehar, Hazaribagh in Jharkhand and enters Purulia District in West Bengal which is the lowermost riparian State in Damodar Basin. Five reservoirs have been built on the Damodar and its tributaries in Jharkhand to moderate floods in the lower basin area in West Bengal and for irrigation. These are operated by Damodar Valley Corporation (DVC). The Damodar River bifurcates into two main branches, i.e. Mundeswari and Lower Damodar (Amta Channel) near the border of Burdwan and Hooghly Districts, and both the channels traverse through the districts of Hooghly and Howrah, and ultimately meets River Hooghly, which debouches into Bay of Bengal.

Objectives of Engagement of Mathematical Model Consultancy:

Development of a comprehensive hydro-dynamic (mathematical) model in 2D or coupled 1D2D for flood and 2D sediment, river morphology modelling (for riverbank erosion, sustainability of flood management like dredging) for Darakeswar-Rupnarayan River system by taking into consideration its entire catchment areas as presented in Plate 1. This new model is to be developed after reviewing/integrating the existing mathematical models already developed under the West Bengal Major Irrigation & Flood Management Project (WBMIFMP) for Lower Damodar-Mundeswari Sub Basin as well as under the Ghatal Master Plan (GMP) for Kangsabati-Shilabati Sub Basin. The model will also incorporate the effect of tidal lockage of river Rupnarayan from its origin at Bandar up to its outfall into river Hooghly at Geonkhali along with the effect of siltation. The relevant documents and reports, field survey and hydrographic survey data related to rainfall, water level, discharge, cross-section, bathymetry and sediment as primary input for boundary conditions will be provided by Irrigation & Waterways Department (IWD) for the purpose of the development of this model. Apart from

development, calibration and validation of the model, the objectives include, inter alia, suggesting suitable drainage improvement and other flood mitigation measures in the said river system.

Scope of the Consultancy Service:

Broad scope of the Consultancy Services are summarized below:

- a. Understanding the river system by site visits and desk studies on various records and documents, reports etc. to be provided by the Client.
- b. Analyzing survey data to be provided by the Client and deriving /processing any other secondary data required for the model study.
- c. Development of the flood inundation model, its calibration and validation.
- d. Identification of structural and non-structural measures that are consistent with the overall approach to reduce the depth-area-duration of flooding in the critically flood prone areas and to prevent bank erosion in vulnerable river reaches.

The scope has further been detailed below: -

- Understanding the river system and desk studies. i)
- a) The Consultant shall conduct site visits of critical flood prone zones, locations of vulnerable stretches due to erosion, outfall points of river Rupnarayan with Hooghly and outfall points of 12 other important rivers and drainage channels such as Dwarakeswar, Shilabati, Mundeswari, Hurhura, Chandreswar Arora, Buxi Khal, Palashpai, Durbachaty etc. The Consultant will also visit other important locations as considered by him for this comprehensive study.
- b) The Consultant shall perform desktop studies on available reports and documents pertaining to historical flood events, GIS based maps on river systems and their catchment areas; administrative boundaries up to mouza level; locations of important structures and gauging points, model parameters, satellite imageries etc.
 - ii) Analyzing survey data
 - a) The Consultant shall process, analyze and the survey and other data to be provided by the Client as the input for model study and also derive any other data to be required for building the model with a comprehensive and holistic approach as per relevant BIS publication (IS: 12094:2000) as required by the DoWR, RD & GR, Ministry of Jal Shakti, Government of India. It is mentioned that survey cross sections in the Dwarakeswar-Rupnarayan River system have been taken @ 500 m c/c (by RTK & ADCP). These apart, closer sections have also been taken at a few vulnerable eroding locations. In case of additional requirements, the Consultant would have to take the same, using the same methodology. The Consultant shall check the accuracy of survey data specially the RLs with respect to high resolution DTM (0.5 m x 0.5 m) available for limited areas of interest (AOI) say around 1100 sq. km out of combined catchment areas of 30762 sq. km and perform the conversion of reference datum from Earth Gravitational Model (EGM) of DTM to Great Trigonometric Survey (GTS) in meter (m) if necessary. These modified / corrected values shall be extrapolated in other areas for the purpose of estimation of the ground contours by using medium resolution DEM like SRTM 30.
- Development of the flood inundation model, its calibration and validation. iii)
- a) A 2D or coupled 1D-2D mathematical model is to be developed for river DarakeswarRupnarayan River system from Trimohini (bifurcation point of Darakeswar & Shankari, in Block Khanakul I, District Hooghly, near Lat 22.7944 N & Long 87.7659 E) to confluence of Rupnarayan & Hooghly, near Lat 22.2124 N & Long 88.0478 E at Geonkhali on the right (western) bank in district Purba Medinipur /Gadiara, on the left (eastern) bank in District Howrah, after taking into consideration all

the boundary conditions as proposed by the Client for critically flood affected zones by using MIKE+software (Mike 21 FM /Mike 21 C) having sedimentation module), already procured by the Client.

- b) The Consultant should calibrate and validate the model using high-resolution Digital Terrain Model (DTM) to be provided by the Client, along with tide data of 7 days for 12 hours a day @ 1 hour interval for one monsoon season (2022). at all boundary condition, bathymetry and topo sheet data (bank to bank or high to high points) in X, Y and Z (RL in GTS) format, discharge and suspended load data considering different tide phases. The Consultant should run the model for mud or sand transport sediment in the Rupnarayan to assess the rate of silt deposition or mechanism of chars/bars formation.
- c) The consultant should generate the hydrograph and tide curve (wherever applicable) for each boundary point for future prediction of the Rupnarayan river system.
- d) The Consultant shall study the approach and methodology being adopted to develop a comprehensive flood forecasting model by Damodar Valley Corporation (DVC) for entire Damodar River system from its origin in Jharkhand to its outfall into river Hooghly under National Hydrology Project (NHP).
- e) The Consultant will finally develop a 2D or coupled 1D-2D mathematical model for river Darkeswar-Rupnarayan for the stretch mentioned in Paragraph 15.3.1 above. While developing the model, the following requirements are to be fulfilled, i.e., a) The existing models of the Lower Damodar Sub-basin under WBMIFMP and that of SilabatiKangsabati River system under GMP would have to be integrated with the new model of Dwarakeswar-Rupnarayan. b) Four Rivers (Banka, Behula, Kana Nadi & Kana Damodar), which were offshoots /branches of Damodar River in the past but now delinked from the river, would have to be considered to have been carrying the share of discharge of Damodar (depending on their bankful capacities), on condition of bridging the missing links (from left bank of Damodar to their present offtakes). It would be desirable to understand the effect of the reduction of discharges of Damodar due to diversion of a part in to these rivers, in the entire Lower Damodar & the adjoining Dwarakeswar-Rupnarayan sub-basins, due to diversion of flow.
- f) Through repeated simulation runs including those representing the historical floods, the inundation model should be able to generate the flood inundation maps corresponding to the discharges having various return periods, i.e., 5-year, 10-year, 15-year, 20-year & 25-year and also the limiting discharge that cause overtopping of the banks and embankments, in the pre-project and post project condition. The modelling results are to be verified using satellite images of 14 inundation captured on the day of flood or as near a date after the flood as possible / recorded field observations /other existing information.
- g) It is important to mention here that apart from developing the inundation model, the other main focal point of the study is suggesting measures for increasing the conveyance capacity of the Darakeswar-Rupnarayan River System. In order to do this, the Consultant should provide HFL data at various control points against various return periods of floods, i.e., 5-year, 10-year, 15-year and 20-year & 25-year. Normally, return periods are denoted in terms of peak value of discharge. However, in the instant case, it would be necessary to relate the return period in terms of total flood volume flowing through the river system flowing during a specified period of time. While the peak discharge in the Darakeswar-Rupnarayan river system needs to be calculated based on suitable percentage of combination of peak discharges of all the tributaries, the flood volume may be calculated using hydrograph, with the condition that peak discharge flowing for 24 hours and dominant discharge (may be 75% to 80% of the peak) flowing for another 96 hours, thus covering a longer period (120 hours, more or less). This is due to the fact that, peak discharge of various rivers has lag times. It is to be

noted that HFL lines for all these discharges, should be drawn both in the pre (without interventions) as well as post (with interventions) project conditions.

- h) The calibration and validation exercises for these models may be carried out on the basis of observed records of historical floods, ensuring that over-fitting is not attempted to. The inundation model shall take into consideration, the effect of various combination of synchronization of critical flood discharges from all the subbasins of river Rupnarayan along with the effect of tidal lockage at the outfall points of all its important tributaries as well as the outfall point of it in river Hooghly. The model should be able to predict extent and depth of inundation, velocity of flood water and duration of inundation at any location in the critical flood zones as well as at critical stretches of river Rupnarayan. The model should also be capable of identifying the potential siltation zones in Rupnarayan through the development of a suitable model for sedimentation. The other key factors such as local precipitation, LULC, location of structures etc. should also be taken care of by the model during its development.
 - iv) Identification of structural and non-structural measures
- a) The Consultant will identify a comprehensive set of structural and non-structural measures in Darakeswar-Rupnarayan river system for lowering the HFL or containing the HFL within the 15 river valley to avoid bank spilling, from Trimohini to confluence of Rupnarayan & Hooghly, River, that are consistent with the overall approach to reduce the depth-area-duration of flooding in the critically flood prone areas, after due consideration of synchronization of discharges from all the tributary rivers /channels.
- b) These may include would include but may not be limited to, dredging /desiltation of river and drainage channels with proposed section of such desiltation works. Proposal of any desiltation /dredging work including removal of local sandbars in the Darakeswar-Rupnarayan System, from Trimohini to Geonkahli point, shall be accompanied with work methodology and disposal plan. Long-term sustainability of such desiltation /dredging proposals must be checked against the sediment load, which would be dominant from upland discharge during monsoon periods and from downstream tidal effect during non-monsoon periods.
- c) Another option could be raising and strengthening the existing embankments or constructing new lines of embankments, capable of sustaining floods varying magnitude, i.e., having return periods of 10-year & 25-year. As already stated in Paragraph 15.3.7 above, the return periods should be related to not only to the peak floods but also with the flood volume
- d) The Consultant will also suggest measures for prevention of bank erosion in the vulnerable stretches of river Darakeswar-Rupnarayan within the above said reach on the basis of results / outcomes of the final model. The location and extent of such critical zones, already identified by field verification and Google Earth Engine, will be provided by the Irrigation & Waterways Department, Govt. of WB.
- e) The Consultant will further suggest the suitability and details of interventions like new control structures, e.g., construction of outfall regulators at the confluence of various local drainage channels with River Rupnarayan, to avoid backflow in these channels from the main river, during critical flood periods.
- v) While recommending various structural measures, techno-economic analysis of various options should be carried out to choose the most cost-effective and viable /feasible option. This would require preparation of rough cost estimates based on the Scheduled /Analyzed rates. The Consultant

should also consider the land availability, transport facilities and access issues, while suggesting any interventions. Measures finally recommended by the Consultant shall be supplemented by designs, GA & layout drawings.

Frequency of Survey & Reporting:

i) Inception Report:

The Consultant shall provide an "Inception Report" clearly indicating how consultant has planned to achieve the assigned objectives of this consultancy. The report shall include objective of the study, detailed work plan along with time schedule, methodology for modelling and suggestive interventions for flood and erosion management, data requirement, review of available data and data gaps, if any. The inception report shall indicate the time schedule showing major milestones, task deliverables, completion dates and any interdependencies.

ii) Model Development Report:

This report should cover hydrodynamic model for flood management, sediment and morphology model for bank erosion and long-term sustainability of flood management measures. Model set up, initial calibration and validation, parameters used, model output will have to be included. The principal outputs of the model have already been detailed at Paragraph 21.4 & 21.5.

iii) Draft Final Report:

This will contain the complete data set, model development and output, drawings showing HFL lines at various locations for the specified sets of return periods of floods, inundation maps with and well as without interventions. The report will also cover output of different interventions (structural, non-structural) which would include but may not be limited to, dredging /desiltation of river and drainage channels with proposed section of such desiltation works, construction of hydraulic structures at outfall /other control points, and river training /bank protection works at eroding areas. Long-term sustainability of desiltation /dredging proposals tested through morphological modelling need to be covered in this report. A disposal plan for dredging will also be mentioned in the report. Various options of structural interventions on Rupnarayan for improvement of carrying capacity and minimization of flooding in the surrounding areas shall specifically be mentioned river shall specifically be mentioned, along with rough cost estimates and techno-economical viabilities.

iv) Final Report

Consultant shall submit the final report to the client after compiling all the comments. The Consultant will devise a User Manual / Technical Guide for handling/upgradation of the model.

Training & Capacity Building:

This programme will be done in the following manner:

- General capacity building in the form of consultation / discussion / knowledge sharing during the development phase of the model as and when necessary
- Fortnightly technical training with hand holding workshop for handling / upgradation of the model.
- Monthly management training programme that will cover operation and maintenance of the mode

Period of engagement of the Mathematical Model Consultant:

The Mathematical Modelling Consultant will be engaged for a period of 8 months.

The Terms of Reference (ToR) for Selection of Consultant for "Mathematical Model Study on the Darakeswar-Rupnarayan River System in the Districts of Howrah, Hooghly, East and West Midnapore, West Bengal, India, under West Bengal Major Irrigation and Flood Management Project (WBMIFMP) in the State of West Bengal in India is available in the website www.wbiwd.gov.in in the link "WBMIFMP".

The Shortlisting of Consultants will be done, based on their relative ranking determined on the basis of the documents furnished with the Expression of Interest, following the specifications in the World Bank's "Procurement Regulations for IPF Borrowers" (July 2016 Revised November 2017 and August 2018). The minimum technical score required to be eligible for shortlisting of firms is 75 marks.

The attention of interested Firms is drawn to paragraphs 3.14, 3.16 and 3.17 of Section III of the World Bank's "Procurement Regulations for IPF Borrowers" (July 2016 Revised November 2017 and August 2018 as amended from time to time [under IBRD Loans and IDA Credits & Grants] by the World Bank Borrowers), setting forth the World Bank's policy on conflict of interest.

A Consultant will finally be selected in accordance with the **Quality and Cost-Based Selection** (**QCBS**) method set out in the World Bank's "Procurement Regulations for IPF Borrowers" (July 2016 Revised November 2017 and August 2018).

The REOI and Terms of Reference (ToR) have been uploaded on the website of the Irrigation & Waterways Department (www.wbiwd.gov.in) in WBMIFMP link on 20.09.2022.The REOI was published on UNDB online also (Vide Borrower Bid Reference IN-IWD-274524-CS-QCBS).The Corrigendum-I was published on 20.09.2022 in the homepage of www.wbiwd.gov.in with respect to extended date of submission of EoI by 16.00 hours of 01.11.2022.

Eight (8) nos. Mathematical Model Consultant submitted their expression of interest up to the closing date, i.e., 01.11.2022. The received REoIs from the firms were evaluated by the Departmental Bid Evaluation Committee (DBEC).

The meeting of the Departmental Bid Evaluation Committee (DBEC)[constituted vide Office Memorandum No. 371-IB dated 13/10/2017 of IWD] was held in connection with the consultancy services stated above, on 18/11/2022 under the Chairmanship of the Secretary, Irrigation & Waterways Department at Jalasampad Bhawan, Bidhannagar and the following members participated in the evaluation.

- Sri N.J. Ghosh, Chairman
 Secretary to the Government of West Bengal Irrigation & Waterways Department
- Sri B.S. Saha, Member
 Deputy Financial Advisor (In charge of F.A)
 Irrigation & Waterways Department
 Government of West Bengal
- Sri Debasish Sengupta
 Chief Engineer & Project Director, SPMU, WBMIFMP Irrigation & Waterways Directorate
 Government of West Bengal

- Sri Nilay Chowdhury, Member Convener Additional Project Director-II, SPMU, WBMIFMP Irrigation & Waterways Directorate Government of West Bengal
- Sri S. Saha, Member Deputy Secretary Irrigation & Waterways Department Government of West Bengal
- Sri Soumya Sundar Bhattacharya, Member DPD (Civil) – VI, DPMU-II Irrigation & Waterways Directorate Government of West Bengal

In the published REoI, following evaluation criteria were specified:

The Short-listing criteria are:

1) The Firm should have at least twelve years' experience in the business of providing Consultancy Services. The firm should have at least ten years' experience in providing consulting services in water resources sector, particularly, preparation of Flood Management Projects, with special emphasis on drainage improvement /flood forecasting, in river basins involving model studies in flat alluvial flood plains, at the National or State level in India and abroad in World Bank assisted Projects or other State / Central / Multilateral Financial Institutions funded projects. It is desirable to have at least one of the assignments during last ten years in World Bank funded Projects. (The Consultant should provide a brief description of the organization including ownership details, date and place of incorporation/registration of the firm, objectives of the firm, and details of relevant / similar assignments undertaken during the last ten years).

(Total point under this criterion is 20.00; the firm with experience in maximum number of projects will get full marks, while marks to other firms will be assigned on pro-rata basis.)

2) The Firm should have completed at least three such assignments related to on providing consulting services for preparation / design of Flood Management Projects, with special emphasis on drainage improvement /flood forecasting in river basins involving model studies in flat alluvial flood plains, at the National or State level in India and abroad, with at least one project supported by the World Bank during last ten years. (The Consultant should provide a copy of the letter of Award of Contract / Contract Agreement from the Client, brief scope of assignment and documentary evidence of its completion in last ten years).

(Total point for this criterion is 25.00; Weightage of 60% will be given to number of completed similar projects stated above and 40% weightage will be given to World Bank funded projects. Marks will be provided on pro-rata basis).

3) The firm should demonstrate its capability to deploy qualified and experienced team of Experts for this assignment as detailed in the ToR.

A list of relevant experts including the Team Leader and their specific experience with qualification in brief may be given. Details of personnel along with their Name, Age, <u>Educational Qualification</u>, <u>Years of Experience</u>, <u>Similar and Relevant Project Experience</u> of all Key personnel should be provided in a tabular format. Bio-data / CV need not be provided at this stage.

(Total point for this criterion is 40.00 of which (a) 25% each will be given for each of the sub-criteria "Educational Qualification" & "Years of Experience" and balance 50% for "Similar and Relevant Project Experience" underlined above, and (b) 30% of the total weightage will be given to Team Leader, 30% to the Sr. Hydraulic Modeler and balance 40% weightage to other Specialists).

1)	Educational Qualifications (general education, training, etc.):	[25%]
2)	Years of Experience	[25%]
3)	Similar and Relevant Project Experience	[25%]
	Total weight:	100%

1)	Position: Team Leader -1	[10.00 points]
2)	Position: Sr. Hydraulic Modeler-1	[10.00 points]
3)	Position: Dy. Hydraulic Modeler-1	[7.00 points]
4)	Structural Engineer-1	[7.00 points]
50	Other positions (total)	[6.00 points]
	Total points for criterion (ii)	[40.00 points]

4) The Consultant must have achieved a minimum annual turnover of INR 50.00 million in any one of the last five completed financial years. i.e., 2021-22 to 2017-18. (The Consultant should provide copies of the Audited Financial Reports)

(Total point for this criterion is 15, and the firm having the yearly turnover of more than INR 100.00 million in any one of the last 5 years will get the full marks, while firms having such turnover in the range of 50.00 million to 100.00 million will get 75%, i.e., 11.25 marks. Those failing to meet the minimum criteria of turnover stated in SI.4, need not apply, as their proposals will not be considered for evaluation).

The minimum technical score required to be eligible for shortlisting of firms is 75.

The following firms responded and submitted their EOI's to SPMU. The names of the firms whose EOI's were received within the end date of the REoI, which was 01.11.2022, are as detailed below in Annexure – I

Annexure – I

SL	NAME OF FIRMS	Address CD:
NO		Address of Firms
1	DHI	Unit No. 815, Eighth Floor, DLF Prime Tower Plot No. F-79-80, Okhla Phase-I New Delhi-110020, India Tel/Fax: +91-11-4704-6256 Email: dhi-india@dhigroup.com
2	HASKONING DHV in JV with DHV Nederland	Green Boulevard, Tower-B Fourth Floor, Plot No. B-9A, Sector-62 Noida-201301 Tel: +91 120 4016100 Email: info.india@rhdhv.com
3	AQUALOGUS ASIA in JV with AQUALOGUS PORTUGAL	Rua Do Mar da China, n.°1 Escritorio 2.4 Parque das Nacoes Mob: +91-6742555310 Email: sanjit@aqualogusasia.com
4	AECOM India Private Limited JV with URS Scott Wilson India Private Limited	9 th Floor Infinity Tower -C, DLF Cyber City, DLF Phase-II, Gurgaon-122002 Haryana, India Tel: 9868728190 Email: manoj.chauhan@aecom.com
5	LEA Associates South Asia Pvt. Ltd. (LASA), India in Joint Venture with EPTISA Servicios de Ingenieria, S.L.(Spain)	B-1, E-27, Mohan Cooperative Industrial Estate, Mathura Road, New Delhi-110044 Tel: 91-11-2697-3950 Email: lasa@lasaindia.com
6	RODIC in JV with FLOODKON	1st Floor, YMCA Cultural Center cum Library Building 1, Jai Singh Road, New Delhi-110001, India Tel: +91 11 4943 4500 Email: bd@rodicconsultants.com
7	WAPCOS	Waman Ganesh Heights, Flat No. 401, Plot No 04, Above Café Peter, NDA Pashan Road Bavdhan Pune- 411021 Tel: 020-22952111 Email: pune@wapcos.co.in
8	ALLUVIUM	Vi-John Tower 393, Phase 3,Udyog Vihar Gurugram, Gurgaon, Haryana-122016 Tel: +61- 490267116 Email: simon.tilleard@alluvium.com.au

DBEC developed a format containing broad criteria with separate marking against each criterion, totaling to 100 (one hundred) marks. Each of the EOI's was scrutinized jointly by the members of the DBEC and marks were assigned. Thereafter, the marks have been averaged out and the final score has been tabulated in the said format in Annexure-II

The following 6 (six) firms out of total 8 (eight) applicant firms were considered by the DBEC as capable and competent for undertaking the assignment on the basis of documents furnished by these firms and accordingly shortlisted and recommended by the DBEC for issue of Request for Proposal (RFP)

Annexure - II

Sl. No.	Name of the Firm	Total Mark obtained (average of all	Rank	Remarks
1	HASKONING DHV in JV with DHV Nederland	evaluators markings) 95.5	1	Recommended for issue of Request for Proposal (RFP)
2	DHI	88.46	2	Recommended for issue of Request for Proposal (RFP)
3	ALLUVIUM	82.19	3	Recommended for issue of Request for Proposal (RFP)
4	AQUALOGUS ASIA in JV with AQUALOGUS PORTUGAL	79.19	4	Recommended for issue of Request for Proposal (RFP)
5	LEA Associates South Asia Pvt. Ltd. (LASA), India in Joint Venture with EPTISA Servicios de Ingenieria, S.L.(Spain)	78.60	5	Recommended for issue of Request for Proposal (RFP)
6	WAPCOS	76.35	6	Recommended for issue of Request for Proposal (RFP)
7	RODIC in JV with FLOODKON	64.92	7	Disqualified for not attaining stipulated 75 Marks
8	AECOM India Private Limited JV with URS Scott Wilson India Private Limited	61.86	8	Disqualified for not attaining stipulated 75 Marks

Evaluation Summary

REOI Scores/Ranking

Firms' Names		DHI	HASKONING DHV in JV with DHV Nederland	AQUALOGUS ASIA in JV with AQUALOGUS PORTUGAL	AECOM India Private Limited JV with URS Scott Wilson India Private Limited	LEA Associates South Asia Pvt. Ltd. (LASA), India in Joint Venture with EPTISA Servicios de Ingenieria, S.L.(Spain)	RODIC in JV with FLOODKON	WAPCOS	ALLUVIUM
Shortlisting Criteria stipulated in REoI	Total Score	Evaluated Scores	Evaluated Scores	Evaluated Scores	Evaluated Scores	Evaluated Scores	Evaluated Scores	Evaluated Scores	Evaluated Scores
Company Background, Overall Mathematical modelling Experience	20.00	16.67	20.00	11.33	4.00	14.67	8.67	8.67	9.33
Relevant Mathematical modelling Assignments including World Bank Assignment	25.00	16.79	22.5	12.86	5.36	11.43	1.25	12.68	17.86
Proposed staff	40.00	40.00	38.00	40.00	37.50	37.50	40.00	40.00	40.00
Turnover	15.00	15	15	15	15	15	15	15	15
Total score1	100.00	88.46	95.50	79.19	61.86	78.60	64.92	76.35	82.19
Rank	75.00 (Qualifying Marks)	2	1	4	Not Qualified	5	Not Qualified	6	3

(Soumya Sundar Bhattacharya) DPD (Civil) - VI, DPMU-II I&W Dte, Government of West Bengal

(S. Saha)

Deputy Secretary

I&W Deptt,

Government of West Bengal

(Nilay Chowdhury)

Sm 18/11/22 Additional Project Director - II,

SPMU, WBMIFMP

I&W Dte,

Government of West Bengal

(8 ahas 1.12022 (B.S. Saha)

Dy-Financial Advisor (In charge of

I&W Deptt, Government of West

Bengal

(Debasish Sengupta)

Chief Engineer & Project Director

SPMU, WBMIFMP

I&W Dte, Government of West Bengal

(N.J. Ghosh)

Secretary

I&W Deptt, Government of West

Bengal