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Government of Pakistan
Ministry of Water Resources
Office of the Chief Engineering Adviser &
Chairman, Federal Flood Commission

FC-1(2) NMP/WAPDA Telemetry/2026

6-Attaturk Avenue, G-5/1,
Islamabad, the September 22, 2026

**Sub: MEETING ON NATIONAL FLOOD TELEMETRY, FORECASTING AND
EARLY WARNING PROJECT, BETWEEN FFC, ADB AND MOWR HELD ON
10TH SEPTEMBER 2026 AT 1100 HRS IN THE COMMITTEE ROOM OF MoWR**

I have been directed to enclose herewith a copy of minutes of the meeting held between FFC, MoWR and ADB on 10th September 2026 at 1100 hrs under the chairmanship of Additional Secretary, MoWR, in the Committee Room of MoWR at Islamabad.

2. The concerned organizations are requested to take necessary action on the decisions recorded in the minutes.
3. This issues with the approval of Additional Secretary, MoWR.

Encl: **As above**



(Dr. M. Ejaz Tanveer)
Superintending Engineer (F)/
Deputy Engineering Adviser (C)

Distribution:

1. Member (Infrastructure), Planning Commission, Islamabad.
2. Director General, Pakistan Meteorological Department, H-8, Islamabad.
3. Member (Water), WAPDA, WAPDA House, Lahore.
4. Chief Executive Officer, Pakistan Railways, Lahore.
5. Pakistan Commissioner for Indus Waters (PCIW), Islamabad.
6. Chairman, National Highway Authority, Islamabad.
7. Chairman, Indus River System Authority, Islamabad.
8. Member (DRR), National Disaster Management Authority, Islamabad.
9. Secretary, Irrigation Department, Government of the Punjab, Lahore.
10. Secretary, Irrigation Department, Government of Sindh, Karachi.
11. Secretary, Irrigation Department, Government of Khyber Pakhtunkhwa, Peshawar.
12. Secretary, Irrigation Department, Government of Balochistan, Quetta.
13. Secretary, Water Management & Irrigation Department, Govt. of Gilgit-Baltistan, Gilgit.
14. Secretary, Irrigation & Agriculture Department, Government of AJ&K, Muzaffarabad
15. General Manager (HRM), WAPDA House, Lahore
16. Director General (WRD), Ministry of Water Resources, Islamabad.

17. Chief (WRS), Ministry of Planning, Development Special Initiatives, Islamabad.
18. Director General, Provincial Disaster Management Authority, Govt. of the Punjab, Lahore.
19. Director General, Provincial Disaster Management Authority, Govt. of Sindh, Karachi.
20. Director General, Provincial Disaster Management Authority, Govt. of K.P, Peshawar.
21. Director General, Provincial Disaster Management Authority, Govt. of Balochistan, Quetta.
22. Deputy Secretary (Water), Ministry of Water Resources, Islamabad.

Special Distribution:

23. Mr. Marwan Ladki, Senior Water Resources Specialist, ADB, Manila.
24. Mr. Asif Taurangzai, Project Team leader/PTL, ADB, Islamabad.

Copy for information to:

1. Senior Joint Secretary, Economic Affairs Division, Islamabad.
2. PS to Secretary, Ministry of Water Resources, Islamabad.
3. PS to Additional Secretary, Ministry of Water Resources, Islamabad.
4. PS to CEA & CFFC, Islamabad.

A handwritten signature in black ink, consisting of a stylized 'R' or 'K' shape with a vertical line extending downwards.

Government of Pakistan
Ministry of Water Resources
Office of the Chief Engineering Advisor & Chairman Federal Flood Commission

**Subject: MINUTES OF MEETING WITH THE ASIAN DEVELOPMENT BANK
ON THE PROPOSED PAKISTAN NATIONAL FLOOD TELEMETRY,
FORECASTING AND EARLY WARNING PROJECT**

A meeting requested by the Asian Development Bank (ADB) was held on 10 September 2026 at 1100 hours under the chairmanship of the Additional Secretary, Ministry of Water Resources (MoWR), in Islamabad. The list of participants is at **Annexure-I**.

2. The Chair welcomed the participants and invited ADB to brief the meeting on: (i) commencement of the reconnaissance survey; (ii) revision of the PC-I and possible implementation arrangements; and (iii) the proposed stakeholder workshop.

Reconnaissance Survey

3. ADB informed the meeting that consultants had been engaged for Khyber Pakhtunkhwa, Punjab and Balochistan, while arrangements for Sindh were under process. ADB proposed joint field validation by its consultants together with representatives of FFC, WAPDA and the concerned Provincial Irrigation Departments (PIDs), using a Kobo-based data-collection tool. ADB also indicated that it would arrange training and field transport, subject to confirmation of the detailed programme.

4. The participants noted that the survey should verify the technical and hydrological justification, forecasting value, coordinates, communications, access, land status, security and ownership of each proposed site. It should also identify destroyed, unsuitable, disputed, inaccessible, overlapping or donor-funded sites. The final number and agency-wise distribution of stations would be determined only after completion and reconciliation of the field survey.

5. The Chair observed that the survey should be undertaken in a coordinated and time-bound manner. FFC was requested to seek nominations and written confirmation of participation from WAPDA and the concerned PIDs. September–November 2026 was noted as the proposed survey period, subject to timely nominations, training, logistics, security arrangements and accessibility of sites.

6. Participating government organizations would examine the availability of resources for their respective staff in accordance with applicable rules and approved budgets. No additional financial commitment by MoWR was made in the meeting.

7. The meeting noted that effective flood forecasting requires adequate observation of the relevant flood-generating catchments, including upstream areas that cannot be covered by ground stations because of remoteness, difficult terrain, access constraints or location outside the practical reach of the ground-observation network. The Chair emphasized that material gaps in observation coverage could substantially compromise the benefits of the proposed telemetry system. Complementary technologies, including weather radar and satellite-based rainfall and remote-sensing products, were therefore discussed for remote or inaccessible areas, including AJ&K and Gilgit-Baltistan. ADB's technical team was requested to assess the observation gaps; identify technically suitable complementary options; define their integration, calibration and validation requirements; and provide indicative costs for

consideration in the revised project design. Any proposed option would remain subject to technical validation and approval under the applicable project procedures; no decision on inclusion or financing was taken at this stage.

PC-I and Institutional Arrangements

8. The meeting noted that ADB's Aide-Mémoire envisaged four project outputs, whereas the original PC-I was primarily focused on telemetry infrastructure. ADB indicated that it had no objection, in principle, to examination of a consolidated PC-I covering the components falling within MoWR's mandate.

9. As a basis for further examination, the following possible arrangement was discussed:

- a) MoWR as Sponsoring Agency;
- b) FFC as Principal Executing Agency;
- c) WAPDA as proposed Implementing Agency for Output 1;
- d) PMD as proposed Implementing Agency for Output 2;
- e) Relevant capacity-building activities under Output 4 to be aligned with Outputs 1 and 2; and
- f) Output 3/CBDRM to be processed by the competent agency under an appropriate arrangement.

10. The above arrangement was not treated as a final institutional decision. FFC was requested to develop a coordinated proposal after obtaining the written views/concurrence of WAPDA, PMD, NDMA, MoPD&SI, PIDs and other concerned entities. The proposal would be placed before the competent forums for approval in accordance with the applicable Rules of Business and project-approval procedures.

11. Station-specific operation, maintenance and security requirements, asset ownership, institutional responsibilities and financing arrangements would be developed after field validation. Data-sharing and integration arrangements would be discussed with the concerned institutions during the proposed stakeholder workshop. No commitment regarding federal financing of recurrent expenditure was made.

12. The Chair noted that Pakistan's flood sector operates through an interdependent chain: PMD/FFD and agencies operating observation networks support data collection and forecasting; MoWR/FFC coordinates national flood policy and protection planning; WAPDA, IRSA, PCIW and the PIDs provide river, reservoir, telemetry and flood-infrastructure functions; and NDMA, PDMA, DDMA and sector agencies carry warnings into preparedness, response, relief and recovery. The principal gaps were noted at the interfaces, particularly incomplete observation coverage, fragmented asset and data visibility, real-time data sharing, translation of forecasts into impact thresholds and authorized action, O&M&S, district readiness and performance verification. The Chair emphasized that the proposed project should strengthen this end-to-end service chain and address the identified interfaces rather than be confined to procurement of additional equipment.

13. The Chair observed that, for project preparation and appraisal, the revised PC-I should demonstrate the complete end-to-end public-safety service: observed data, validated forecasts, agreed impact thresholds, warnings issued by the competent authorities, protective action by the responsible agencies and subsequent performance verification. Telemetry hardware should accordingly be treated as an enabling input, while measurable reduction in flood risk and losses should be stated as the intended service outcome. FFC, in consultation

with PMD/FFD, WAPDA, NDMA, the PIDs and other concerned entities, was requested to reflect this service chain, the respective institutional responsibilities, O&M&S arrangements and verifiable performance indicators in the revised PC-I for consideration by the competent forums. This direction was for project formulation and did not constitute approval of any particular technical design, site, institutional arrangement, project scope, cost or financing commitment.

Proposed Stakeholder Workshop

14. ADB proposed holding a two-day stakeholder workshop on 1–2 October 2026. The first day would obtain policy-level views of the participating institutions, while the second would focus on technical matters, including data integration, forecasting, O&M&S and implementation arrangements. The dates and programme would remain subject to confirmation by ADB and availability of the concerned institutions.

15. FFC was requested to approach the relevant federal and provincial organizations for nomination and confirmation of participants. Participation of provincial institutions may be facilitated through the appropriate provincial authorities.

Understanding and Follow-up Actions

16. The following follow-up actions were identified:

- a) FFC will seek nomination of technical focal persons from WAPDA and the concerned PIDs and coordinate the proposed field survey.
- b) ADB will confirm the survey programme, Kobo Toolbox training, field-transport arrangements and the proposed workshop schedule.
- c) The joint teams will use a common station-wise checklist and document the technical justification, site condition, ownership, O&M&S implications and possible duplication of each site.
- d) FFC, with ADB, WAPDA and the PIDs, will reconcile the survey results and prepare a validated station inventory. Only duly validated sites will be considered for inclusion in the revised project scope.
- e) ADB's technical team will assess observation gaps in the relevant flood-generating catchments and identify technically suitable complementary options, including weather radar and satellite-based rainfall and remote-sensing products, together with their integration, calibration and validation requirements and indicative costs.
- f) FFC will prepare options for the PC-I and institutional arrangements after obtaining the views of all concerned agencies. These options will be submitted separately for consideration and approval by the competent authority.
- g) FFC, in consultation with PMD/FFD, WAPDA, NDMA, the PIDs and other concerned entities, will map the existing end-to-end flood-service chain and, for each proposed project component, identify the specific gap to be addressed, responsible institution, data and decision interface, O&M&S arrangement and measurable performance indicator.
- h) O&M&S, data-integration, governance and financing arrangements will remain subject to further stakeholder consultation, quantified assessment and approval by the competent forums.

17. The Chair observed that all proposals should be processed in accordance with the applicable rules, approved mandates and available budgetary provisions. Nothing recorded



in these minutes shall be construed as a final financial or institutional commitment by MoWR or by an organization not represented in the meeting.

18. The meeting ended with a vote of thanks to the Chair and the participants.

A handwritten signature, possibly reading 'J. V.', is located at the bottom center of the page.

LIST OF PARTICIPANTS

Ministry of Water Resources, Islamabad

1. Syed Muhammad Mehar Ali Shah
Additional Secretary, MoWR

In Chair

Federal Flood Commission (FFC)

2. Mr. Ather Hameed
Chief Engineering Advisor & Chairman FFC
3. Dr. M. Ejaz Tanveer
Superintending Engineer (F-I)
4. Mr. Zafar Iqbal
Superintending Engineer (F-II)

Asian Development Bank (ADB)

5. Mr. Asif Turangzai
CO-PTL
6. Dr. Asif Khan
Consultant
7. Miss Bushra Javed
Gender & Climate Consultant
8. Mr. Arif Anwar
Consultant (Online)
9. Mr. Azeem Ali Shah
Consultant (Online)
10. Mr. Rehmat Ullah
Consultant (Online)

