

MINUTES OF THE 17th MEETING OF THE HIGH-LEVEL EMPOWERED COMMITTEE (HLEC) HELD ON 13/06/2022 TO DISCUSS THE REVISED PROPOSAL ON DIGITAL RESURVEY PROJECT – PHASE 1

The meeting started at 3:30 PM with Chief Secretary in the chair. The RKI presented the context of the meeting.

In-principle approval of the Council of Ministers was accorded vide G.O.(Ms) No. 24/2021/P&EA dated 18/08/2021 for the project 'Digital Resurvey of 1550 Villages' at a total cost of ₹807.98 crore, in 4 phases in a total period of 3 years and 8 months. Subsequently, Administrative Sanction has been issued by RKI for Phase 1 (400 Villages) of the project as per G.O.(Rt) No.364/2021/P&EA dated 27/08/2021, at an estimated cost of ₹339.438 crore. The Survey and Land Records Department is the implementing agency of the project. The key benefits highlighted for the project are the issuance of single document as Record of Right (RoR) instead of multiple land documents to prove land ownership, Settlement of long pending land issues and disputes, etc.

The Department has reported progress on the following activities as part of the project:

- The establishment of CORS network is in progress (8 out of 28 stations has been completed).
- 200 villages have been identified for the digital survey for the 1st half of the Phase – 1. The digitization of survey records for these 200 villages has been completed.
- The draft of the proposed changes to be incorporated in the Survey and Boundaries Act, which is to be placed before the Legislative Assembly, has been prepared.
- The setting up of infrastructure for SPMU has been completed. Work order has been issued to NIC for the development and customization of resurvey management software.
- Regarding the purchase of survey instruments (1000 Real Time Kinematic machines (RTK) machines, 700 Electronic Total Stations (ETS) and 1700 Tab for each RTK Machine/ETS), the tender procedures are in its final stages.

For the procurement of equipment such as RTK and ETS, an amount of ₹168 crore has been set aside for the purpose as per the existing AS. Now, it has been reported by the Director – Survey and Land Records (DSLRL) Department that after competitive bidding, the required amount has come to ₹289.5 crore, excluding the amount required for Comprehensive Annual Maintenance Contract (CAMC).

The DSLRL reported before the Committee that the survey equipment falling under the limited production segment and limited availability of information on market prices in the public domain are some of the constraints faced in the estimate preparation. During the

process of procurement of survey equipment, as per the recommendations of the Technical Committee, certain improvements/advancements have been incorporated in the equipment specifications to ensure that the solution will best fit to digital survey workflow; however, it resulted in increased procurement cost. The DSLR informed the Committee that those changes are approved by the State Level Apex Committee for the Digital Survey Mission. The **major factors** contributing to the enhancement of cost from the initial AS amount for the Phase 1 is summarized in the table below.

Sl. No.	Description	Original AS amount (₹ crore)	Revised Estimate (₹ crore)
1.	Use of the Robotic ETS instead of the Normal ETS (cost escalation from the initial ₹8 lakh to ₹14.03 lakh per machine as per L1 bidder) for attaining more productivity and higher accuracy in the survey works with less human resources. The Robotic ETS is also capable of integration and data sharing with Tablet PCs.	56.00	98.25
2.	Increase in the number and change in specification of Tablet PC (from the initial 1000 no.s to 1700 no.s). The Department, as per the recommendation of the Technical Committee, has decided to go with the purchase of the industrial grade Tablet PC – Rugged Tablet instead of the Normal Tablet PC (cost escalation from the initial ₹17,000 per unit to ₹2.8 lakh per unit).	1.70	47.97
3.	Increase in the cost of the RTK rover machine from the initial ₹11 lakh per machine to ₹14.32 lakh per machine as per the L1 bidder, due to establishment of additional service centers, service support, software customization, training for the staffs etc.	110.00	143.26
	Total	167.70	289.48
	Difference in cost estimated		121.78

There is an expected savings of approx. ₹68 crore from the overall cost (i.e., including in the subsequent Phases 2, 3 & 4), and hence, an additional amount of approx. ₹50 crore only will be required for the project in 4 years. The Director, therefore, reported before the

Committee that the revised estimate for Phase 1 in the present circumstances comes to the tune of **₹438.46 crore**.

The Chief Secretary enquired about the technology solutions and the possible usage of the survey equipment/instruments after the completion of this project. The Director responded that the equipment purchased will not be kept idle, and that every village shall be provided with one machine each, and thus mutation sketches can be provided whenever a new land transaction happens. The Director further clarified that the proposed numbers of machines and the technology specified are required for completing the project within the time-frame of 4 years set for the project. The effectiveness and integration of the solution, and efficiency of the machines and technology shall be assessed prior to the commencement of the project and before accepting every lot of equipment. There is also a contractual provision for reducing or increasing the purchase quantity of equipment by 25%.

The ACS – WRD suggested the possibility of exploring the collaboration with start-ups and also technical institutions under APJ Abdul Kalam Technological University for the implementation of the survey-related activities under the project and the scope for leasing equipment as against outright purchase. However, CEO, RKI pointed out the non-availability of such leasing models for carrying out survey of this magnitude and sophistication.

Regarding the ACS & CEO – RKI's suggestion on exploring the possibility of engaging the contract employees on a productivity/deliverable-based approach instead of fixed monthly remuneration, the ACS – Revenue and Disaster Management concurred to the recommendation, and assured that the Department of Survey & LR will put a minimum performance benchmark for every month.

The Committee deliberated further on the proposal submitted by the Department, and gave the following recommendations:

Decisions

1. The HLEC recommended to place the revised proposal for in-principle approval of the Council of Ministers for the project at a revised cost of ₹858 crore.
2. The Department shall ensure the effectiveness and efficiency of the technology solutions and machines purchased at every stage of the project, and, given the high cost incurred, shall ensure the continued usage of the survey equipment/instruments even after the completion of this project.

The meeting ended at 04.00PM.

List of Participants

Sl. No.	Name	Designation
List of HLEC Members		
1.	Dr. V.P Joy	Chief Secretary & Chairman, HLEC
2.	Sri T.K. Jose	Addl. Chief Secretary, Water Resources Department
3.	Sri R.K. Singh	Addl. Chief Secretary, Finance Department; CEO, RKI & Member, RKI- IC
4.	Dr. A. Jayathilak	Addl. Chief Secretary, Revenue and Disaster Management Department
List of Other Officials		
1.	Sri Shri Mohammed Y Safirulla	Deputy CEO – RKI
2.	Sri Seeram Sambasiva Rao	Director – Survey and Land Records Department
3.	Smt Rahana.V.M	Joint Secretary, Law Department

DR V P JOY
CHIEF SECRETARY