No.18014/13/2010-LRD
Government of India
Ministry of Rural Development
Department of Land Resources

'G' Wing, NBO Building,
Nirman Bhawan, New Delhi

Dated 21st November, 2011

To,

The Principal Secretaries/Secretaries, Revenue of the all the States/UTs.

Subject: Revised Rates of Survey and Resurvey using different methodologies.

Sir,

I am directed to forward herewith the revised rates for Survey/resurvey and updating of survey and settlement records under the National Land Records Modernization Programme. Minutes of the meeting of the Core Technical Advisory Group (CTAG) held on 29.08.2011 in this regard are enclosed herewith. The instruction issued by the CTAG regarding survey/resurvey may kindly be followed. The rates will be effective from the date of issuance of this letter. This issues, with the approval of the finance division note No.1890/ASF/11/IFD dated 18.11.2011.

O/c

Yours faithfully,

(Charanjit Singh)
Director (LR)
Tel. No. 23062456

Copy to:

1. PPS to Secretary (LR)
2. PS to AS (LR)
3. PA to JS (LR)
Minutes of the 2nd meeting of the Core Technical Advisory Group (CTAG) held on 29.08.2011 to consider the unit cost of survey/resurvey and updating of survey and settlement records (including ground control network and ground truthing) under the National Records Modernization Programme (NLRMP).

The 2nd meeting of the CTAG was held under the chairmanship of Additional Secretary, Department of Land Resources on 29.08.2011 to consider the unit cost of survey/resurvey and updating of survey and settlement records (including ground control network and ground truthing) under the National Records Modernization Programme (NLRMP). The list of participants is annexed.

2. Director (LR) informed that the CTAG constituted under the NLRMP in its 1st meeting held on 11th March, 2011 considered the recommendations of the committee constituted to consider unit cost of survey/resurvey and updating of survey and settlement records (including ground control network and ground truthing). The CTAG after detailed discussions decided that the Committee will re-examine the Report keeping in view the observations of the CTAG members. The CTAG members had observed that the costs of some items were clubbed in the Report and item wise cost under each method needs to be indicated. The Committee has presented its revised Report on 14.07.2011. This revised Report needs to be considered by the CTAG members.

3. Additional Secretary (LR) requested each member to give his views on the Report of the Committee. After detailed discussions the following decisions including the unit rates for survey/resurvey and updating of survey and settlement records (including ground control network and ground truthing) were taken:
4. The Committee decided that keeping in view the accuracy standards required for cadastral survey, use of pure ground survey method is suggested for original cadastral survey/resurvey. This methodology is also suitable for densely vegetated areas and hilly areas. Use of hybrid methodology using aerial photographs and ETS & GPS is suggested for survey/resurvey of plain areas, where good quality cadastral maps are available. This technology is also appropriate for hilly areas where terrain corrected aerial photographs can be generated. Use of HRSI and ETS & GPS is recommended for resurvey of large open areas where bunds are prominent and good quality, reasonably up to date, cadastral maps are available.

5. Unit rates for different methodologies under survey/re-survey:

I. Pure Ground Survey Method using Electronic Total Station (ETS) and Global Positioning System (GPS) under this method of survey, the allowable rate is Rs.18000 per sq. km. This rate is inclusive for following activities:

A) Establishment of Primary, Secondary and Tertiary Ground Control Point and integration of primary control points with geodetic network of India & monumentation of primary, secondary and selected tertiary control points

B) Detailed survey by GPS/ETS (capturing of parcel measures and other required objects)

C) Processing and Map preparation

D) Printing of Maps

E) Integration of textual details with maps

F) Generation and Serving of notices along with Land Parcel Details with maps & dimensions to land owners

G) Sundry Expenditure including printing of various registers
II. Hybrid methodology using aerial photography and ground truthing by ETS and GPS under the methodology, allowable rate is Rs.16,500 per sq. km. This rate is inclusive for following activities:

A) Establishment of Primary, Secondary and Tertiary Ground Control Point and integration of primary control points with geodetic network of India & monumentation of primary, secondary and selected tertiary control points

B) Aerial photography (Acquisition of aerial photography, geo referencing, ground truthing and Ortho-image generation)

C) Feature capturing (Vectorization of parcel boundaries, point/line/polygon feature extraction)

D) Field validation (up-to 25% ground validation, corrections and final hard copy/ soft copy generation)

E) Printing of Maps

F) Integration of textual details with maps

G) Generation and Serving of notices along with Land Parcel Details with maps & dimensions to land owners

H) Sundry Expenditure including printing of various registers

III. High Resolution Satellite Imagery (HRSI) and ground truthing by ETS and GPS) under this resolution satellite imagery, allowable rate is Rs. 15,500 per sq. km. This rate is inclusive for following activities:

A) Establishment of Primary, Secondary and Tertiary Ground Control Point and integration of primary control points with geodetic network of India & monumentation of primary, secondary and selected tertiary control points
B) Satellite data base generation (Acquisition of HRSI satellite data georeferencing, ground truthing and Ortho-image generation)

C) Feature capturing (Vectorization of parcel boundaries, point/line/polygon feature extraction)

D) Field validation (up-to 25% ground validation, corrections and final hard copy/soft copy generation)

E) Printing of Maps

F) Integration of textual details with maps

G) Generation and Serving of notices along with Land Parcel Details with maps & dimensions to land owners

H) Sundry Expenditure including printing of various registers

6. The above rates are exclusive of local and central taxes. The taxes will be sanctioned/reimbursed, as per the actual, by the Government of India. The Committee recommends additional 20% of the above cost norms for NE States and hill States of Himachal Pradesh, Jammu & Kashmir and Uttarakhand.

7. The above rates are indicative in nature and for the purpose of reimbursement to the States. The States may sanction higher rates for the above technological options but the reimbursement will be done as per the above rates only. The balance funds will have to be borne by the State Government. The sanctioned rates for survey/re-survey may vary from one district to another in the State, but the overall reimbursement for the State will be as per the above norms only.

8. The CTAG decided that after the completion of survey/resurvey operations in a district, maintenance and updation of the digital data should be a regular exercise, so that the records remain updated in real time. For this purpose, while maintenance cost should be met by the State Government, modern survey equipments need to be given to
each District and Tehsil. Accordingly, 2 DGPS per district and 2 ETS per Tehsil may be given.

9. The use of modern technologies for survey/resurvey requires a high level of technological inputs and professional expertise at every stage. In order to complete the work within a reasonable time-frame, outsourcing is suggested for survey/resurvey operations. However, state governments need to have full control and responsibility for quality check.

The meeting ended with a vote of thanks to the Chair.
a) Rs.2/- for digitization of cadastral maps per parcel/plot (instead of Rs.2/- per map sheet) for normal plain areas.

b) Rs.2.50 for digitization of cadastral maps per parcel/plot or hilly terrain.

c) The exiting rate of Rs.10/- per FMB would continue.