MINUTES OF THE MEETING TO REVIEW INCEPTION REPORT SUBMITTED BY M/S RMSI FOR PROJECT "DEVELOPMENT OF WEB-DCRA & DSS TOOL FOR CYCLONE & ASSOCIATED IMPACTS" UNDER NCRMP (PH. II) HELD ON 04.07.2018 AT 3 PM in OPS. ROOM, NDMA BHAWAN, NDMA, NEW DELHI.

The meeting to review Inception Report for development of "Web based Dynamic Composite Risk Atlas (Web-DCRA) and Decision Support System (DSS) Tool" for Cyclone & associated impacts" under NCRMP (Ph. II) was held on 04th July, 2018 at 3 PM under the Chairmanship of Dr. Pradeep Kumar, Addl. Secretary & Project Director, NCRMP (NDMA), New Delhi. The meeting was attended by Experts from relevant organisations, and Officials from NDMA, Coastal States/UTs and M/s RMSI. List of participants is attached as **Annexure-I**.

- 2. The meeting started with a welcome note from the Addl. Secretary & Project Director, NCRMP, NDMA; followed by a brief introduction by the participants. A detailed presentation was made by RMSI Team on Inception report for development of Web-DCRA & DSS Tool. The presentation highlighted key objectives with overall approach to be adopted for developing the application, difference between studies under Phase I & II, proposed usage of Web-DCRA, requirements and availability of datasets including storm surge and flood model parameters, exposure database and cyclone tracks, methodology for (i) hazard risk profiling, (ii) storm surge model implementation including model inputs & outputs, (iii) real-time storm surge forecasting, cyclone & flood modeling, and key features of Web-DCRA & DSS Tool under phase II.
- 3. After deliberation involving views/suggestions of participants, following decisions were taken:
 - Mean Sea Level (MSL) correction has to be done in Chart Datum to be used in development of ADCIRC model.
 - ii. Survey of India (SoI)/ NRSC shall be approached for High-resolution DEM.
 - iii. ADCIRC model shall be coupled with Wave model (INCOIS, Hyderabad shall provide Wave model outputs).
- iv. 3rd domain for Northern limit of lower peninsular part is suggested to be increased to 15 degree latitude.
- v. Ingress of Odisha super cyclone on land shall also be checked for developing Storm Surge model.
- vi. Validation of model shall be done with recent Cyclones such as, Phailin, and Hudhud.
- vii. Web-DCRA shall be integrated with data from IMD & INCOIS and output/ product of the application shall also be integrated with EWDS (Component A) of NCRMP (both Phase I & II).
- viii. Fisherman landing centre has to be included in the Exposure database in Web-DCRA. Coastal States/UTs need to provide the data in GIS format.

- ix. Mechanism shall be explored for integration of Reservoir/ Dam generated flood with Web-DCRA.
- x. IMD's rainfall forecast data with resolution of 3Km x 3Km instead of 9Km x 9KM shall be used for real-time flood forecasting.
- 4. The followings shall be Outputs/ Products of the study under NCRMP (Ph. II):
 - Web based Dynamic Composite Risk Atlas (Web-DCRA).
 - Offline (Desktop) version of Web-DCRA (for updating the exposure data).
 - Android based mobile phone application: Web-DCRA app with "I AM SAFE" feature (to access features of DCRA and cyclone events specific to study area through location based technology).
 - Common Alert Protocol (CAP), as final product of the system, compatible to disseminate text-cum-visual product on risk based warning.
- 5. Timeline for the next deliverable (2nd deliverable out of total seven deliverables) "Development of probabilistic risk assessment maps/products and display through interactive map viewer" is 18th July, 2018.

The meeting ended with thanks to the Chair and all the participants.

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