

**MINUTES OF REVIEW MEETING ON ‘DELIVERABLE 6<sup>TH</sup> [EXPERIMENTAL PHASE] OF WEB-DCRA & DSS TOOL FOR CYCLONE & ASSOCIATED IMPACTS’ HELD ON 24.02.2022 AT 11AM IN OPS ROOM, NDMA BHAWAN, NDMA, NEW DELHI.**

A meeting to review 6<sup>th</sup> Deliverable [*Experimental Phase*] of Web based Dynamic Composite Risk Atlas (Web-DCRA) and Decision Support System (DSS) Tool for cyclone and associated impacts was held on 24<sup>th</sup> February 2022 at 11AM under the Chairmanship of Joint Secretary & Project Director (NCRMP), NDMA, New Delhi. The meeting was attended by Officials from NDMA, NHO, IMD, INCOIS, NRSC, the World Bank, coastal States/UTs, and Consultant (M/s RMSI). List of participants is attached as Annexure-I.

2. The Consultant (RMSI) team made presentation on Deliverable 6<sup>th</sup> reports including comparison of damage estimates from Web-DCRA Application with MHA situation reports for cyclonic events viz.; Gulab, Yaas, Tauktae & Burevi. Progress status of Deliverable 7<sup>th</sup> (Capacity Building & Trainings) and Deliverable 8<sup>th</sup> (Development of Hybrid Mobile App.) was also updated by RMSI.

3. As observed from comparison of damage estimates, MHA situation reports provide damage information on key exposure elements broadly. For example, a house damaged reflected in MHA situation report does not reflect on extent of damage and there is no information available on its geolocation. Moreover, estimated damaged numbers from MHA situation reports and the Web-DCRA & DSS Application reports do have differences because the study area in MHA situation Reports is different from that of the Web-DCRA & DSS Application (that is up to 10 m above mean sea level). Information provided in MHA situation reports is based on less granular information including exposure. The Joint Secretary & Project Director (NCRMP), NDMA suggested RMSI to refer updated situation reports from MHA for further comparison of damage estimates from Web-DCRA.

4. Dr. M. Mohapatra, DGM, IMD appreciated comparison of Web-DCRA derived damage estimates with the MHA's situation reports. He emphasised for launching the DSS tool along with the Mobile App. at the earliest. Mr. Anup Karanth, Sr. DRM Specialist & TTL (NCRMP), The World Bank stated that efforts should be made to launch and operationalize the application across all coastal States/UTs ensuring its utilization by all coastal States/UTs in coming cyclone season. Mr. Karanth stressed that the PDNA Tool developed under NCRMP Phase I might rather be utilised by the States for damage assessment in case a cyclone event, and the Mobile App. features viz.; “I’M SAFE” and “I’M

NOT SAFE” should be customised so that in case some states if desire, these features can be disabled. Further, he suggested for nomination of Nodal Officer from NEOC, MHA. Dr. V V Rao, Dy. Director, NRSC suggested to compare flood hazard maps with the satellite derived inputs from NRSC, and the database on infrastructure like buildings & roads, census information, etc. needs to be updated at regular intervals of time in order to give realistic assessment of the damages.

5. It was clarified by RMSI that flood hazard assessment derived from Web-DCRA was compared with the flood hazard maps based on satellite derived inputs from NRSC and presented in earlier meeting at NDMA. The RMSI assured to get the exposure database updated by States/UTs during the various training workshops proposed to be conducted shortly after installation of the Web-DCRA & DSS Tool on the system in the States. RMSI informed that the installation process has been completed in Tamil Nadu, Andhra Pradesh, Odisha and Karnataka, and under process in Lakshadweep, Andaman & Nicobar, Maharashtra and Kerala. The remaining five States (*Goa, Gujarat, West Bengal, Puducherry and Daman & Diu*) have not yet confirmed the requisite system configuration and login credentials. All concerned National Organizations and coastal States/UTs, except Maharashtra State have nominated Nodal Officers for Web-DCRA/ GIS Officers. Status of States’ confirmation on System credentials including login details (IP address), and details of nominated the Nodal Officers/GIS Officers from the concerned National Organizations and States/UTs are enclosed as **Annexure II**.

6. RMSI informed that modules for required features of the Hybrid Mobile App. have been developed. The Officials from IMD and coastal States/UTs asked for hands-on training required for adequate utilization of the Web-DCRA & DSS Tool, Mobile Application and Exposure management. The Dy. Project Director, NCRMP, NDMA assured for the proposed comprehensive trainings to be provided shortly by RMSI to all concerned national agencies, such as IMD, INCOIS, NRSC, etc. and States. States/UTs were asked to ensure optimum participation of concerned officials in the State level training workshops. The IMD’s Officials informed that approval from CDOT is required for SMS through the Mobile App. and WhatsApp business account needs to be subscribed. The JS&PD, NDMA asked IMD to send a proposal in this regard to NDMA.

7. After the deliberation involving views/suggestions of the participants, the following decisions were made:

- i. System configuration & login credentials to be confirmed by remaining States (*Goa, Gujarat, West Bengal, Puducherry and Daman & Diu*) to RMSI on priority.
- ii. Maharashtra State to confirm details of Nodal Officer for Web-DCRA/ Officer well versed with GIS on priority.
- iii. The NEOC, MHA to nominate a Nodal Officer for Web-DCRA. RMSI to share a draft letter to be sent to NEOC, MHA.
- iv. RMSI to provide hands-on trainings to the concerned National Agencies and coastal States/UTs on Web-DCRA & DSS Tool, Hybrid Mobile App & Exposure database updation.
- v. RMSI to ensure to get the exposure database updated by States/UTs during the various training workshops proposed to be conducted shortly after installation of the Web-DCRA & DSS Tool on the system in the States.
- vi. The Mobile App. features viz.; "I'M SAFE" and "I'M NOT SAFE" need to be customised so that in case some states do not desire these features, it can be disabled.
- vii. The "I'M NOT SAFE" button should be SOS type button in Hybrid Mobile Application.
- viii. The 'User Preference' module in the Hybrid Mobile App should have option to change language, configure the data collection tool, auto sync & Map display. In addition to Hindi & English, features of local languages [*Bengali, Odiya, Telugu, Tamil, Malayalam, Marathi, Gujarati, Kannada, & Konkani*] to be introduced in the Mobile App.
- ix. RMSI to schedule a meeting with NDRF to develop understanding on Resource Allocation template for enhancing capacity and Rescue operation.
- x. IMD to send a proposal to NDMA w.r.t. the requisite APIs to activate SMS and WhatsApp features in the Mobile App. A meeting with IMD will be scheduled in this regard.
- xi. The Web-DCRA & DSS Tool and the DCRA App. should be launched at the earliest.

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



(Rajeev Sharma)  
Project Manager  
NCRMP, NDMA

**Annexure-I**

**MINUTES OF REVIEW MEETING ON 'DELIVERABLE 6<sup>TH</sup> [EXPERIMENTAL PHASE] OF WEB-DCRA & DSS TOOL FOR CYCLONE & ASSOCIATED IMPACTS' HELD ON 24.02.2022 AT 11AM IN OPS ROOM, NDMA BHAWAN, NDMA, NEW DELHI.**

Sl. No.	Name of Officials with Designation	Organisation
1	Ms. Sreyasi Chaudhuri Joint Secretary & Project Director (NCRMP)	NDMA, New Delhi
2	Sh. Samir Kumar Dy. Project Director, PMU	NDMA, New Delhi
3	Sh. Rajeev Sharma Project Manager, PMU	NDMA, New Delhi
4	Dr. Sanjay K Sharma Env. Specialist, PMU	NDMA, New Delhi
5	Mr. Vijay Kumar Sharma Manager (IT), PMU	NDMA, New Delhi
6	Mr. Anup Karanth TTL & Sr. DRM Specialist	The World Bank, New Delhi
7	Dr. M. Mohapatra DGM	IMD, New Delhi
8	Dr. Anand Kumar Das Scientist 'E', Cyclone Warning Division	IMD, New Delhi
9	Dr. Shankar Nath Scientist 'E'	IMD, New Delhi
10	Dr. PLN Murty Scientist 'E'	IMD, New Delhi
11	Mrs. Monica Sharma Scientist 'D'	IMD, New Delhi
12	Mr. Amit Bhardwaj	
13	Representative	Directorate of Hydrology, Dehradun
14	Shri. R. S. Mahendra Scientist E	INCOIS, Hyderabad
16	Dr. V. V. Rao Dy. Director	NRSC, Hyderabad
17	Ms. T. German Amali Jacintha GIS Specialist	TNSDMA, Tamil Nadu
18	Dr. Balakrishna Sr.Consultant	APSDMA, Andhra Pradesh
19	Dr. B. N. Mishra Nodal Officer	OSDMA, Odisha
20	Dr. Rakesh Thakur GIS Specialist	OSDMA, Odisha
21	Project Manager	SPIU, Goa
22	Sector Manager	SPIU, Gujarat
23	Mr. Ratnakar Chowta Nodal Officer	SPIU, Karnataka
24	Mr. Pradeep .G.S Nodal Officer	Kerala
25	Mr. Sathya Kumar C J Nodal Officer	Kerala
26	Mr. Rajesh Sonune Sector Exert	SPIU, Maharashtra
27	Representative	SPIU, West Bengal

28	Shri Deen Mohammed Nodal Officer	Andaman and Nicobar
29	Project Manager	Lakshadweep
30	Sector Manager	Daman and Diu
31	Dr. G. Vijay Kumar Nodal Officer	Puducherry
32	Dr. Sushil Gupta Dy. Team Leader	M/s RMSI
33	Dr. Indu Jain Asst. General Manager, Sustainability	M/s RMSI
34	Mr. Lokendra Dixit Project Manager	M/s RMSI
35	Mr. Rajesh Mahana Sr. Technical Specialist	M/s RMSI
36	Mr. Sourabh Dev Software Engineer	M/s RMSI
37	Ms Aarti Sr. GIS Engineer	M/s RMSI



## Annexure-II

### A. Status of States' confirmation on System credentials including login details (IP address), and nomination of Nodal Officers for Web-DCRA/GIS Officers from the concerned National Organizations and States/UTs

Sl. No.	State	Status of contact details of Nodal Officer and GIS Expert	Status of system credentials and IP Address	Installation
1	Andhra Pradesh	Received	Received	Done
2	Odisha	Received	Received	Done
3	Tamil Nadu	Received	Received	Done
4	Goa	Received	Received system configuration; System's RAM needs to be upgraded	-
5	Gujarat	Details of GIS Expert not received	Not received	-
6	Karnataka	Received	Received	Done
7	Kerala	Received	Received	In process
8	Maharashtra	Details of Nodal Officer and GIS Expert not received	IP Address not received	In process
9	West Bengal	Received	Not received	-
10	Andaman & Nicobar	Received	Received	In process
11	Daman & Diu	Received	Not received	
12	Lakshadweep	Received	Received	In process
13	Puducherry	Received	Not received	-

### B. Details of nominated Nodal Officers for Web-DCRA/GIS Officers from the concerned National Organizations and States/UTs

Sl. No.	National Organization/ coastal States/UTs	Name & Designation	Nodal Officer/ GIS Expert	Contact details (Email ID & Mob. No.)
<b>National Organization</b>				
1	NDMA	Sh. Deepak Ahlawat Duty Officer (Ops/CR), Ops Division	Nodal Officer	ahlawat@ndma.gov.in 9999104111
2	IMD	Dr. Anand Kumar Das Scientist 'E'	Nodal Officer	akuda.imd@gmail.com 9868126275
		Ms. Monika Sharma Scientist 'D'	Alternate Nodal Officer	moniimd@gmail.com 9990389494
3	INCOIS	Sh. R.S. Mahendra Scientist 'E'	Nodal Officer	mahendra@incois.gov.in 9959629037
4	NRSC	Sh. Aakash Mohan Scientist 'D', DMSG	Nodal Officer	aakash_m@nrsc.gov.in
		Sh. B. Praveen Kumar Scientist 'C'	Alternate Nodal Officer	praveen_b@nrsc.gov.in
<b>Coastal States/UTs</b>				
1	Andhra Pradesh	Dr. Balakrishna Sr. Consultant,	Nodal Officer	seniorconsultantapsdma@gmail.com 7908006162

Sl. No.	National Organization/ coastal States/UTs	Name & Designation	Nodal Officer/ GIS Expert	Contact details (Email ID & Mob. No.)
		APSDMA		
		Dr. C. Poornachand Project Manager, APSDMA	-	purnachand.apsdma@gmail.com 9849030163
2	Odisha	Dr. B.N. Mishra GIS Expert	Nodal Officer	bnmishra.osdma@gmail.com 9437106251
		Dr. Rakesh Thakur GIS Professional	GIS Expert	rakeshgeo@hotmail.com 9438876555
3	Tamil Nadu	Tmt. T. Jeya Sheela Joint Director	Nodal Officer	tnsdma.training@gmail.com 9444446559
		Dr. K. Jayakumar Senior Consultant	Senior Consultant	tnseniorconsultant@gmail.com 9445289611
4	Goa	Smt. Sapana S.N. Bandodkar Under Secretary (Revenue - 11)	Nodal Officer	usrev2-sect.goa@nic.in 9766496377
		Shri Chandrakant Shetkar Dy. Collector (I.A)- North Officer	-	dycla-north.goa@nic.in 9922356241
5	Gujarat	Sh. Prashant Makwana Sector Manager	Nodal Officer	smgr5-gsdma@gujarat.gov.in 9825498315
		Shri Yashvant Singh Parmar Sector Manager	Nodal Officer	smgr5-gsdma@gujarat.gov.in 8469288345
6	Karnataka	Mr. Ratnakar Chowta Assistant Engineer, PWD Sub-Division	Nodal Officer	pdncrmprkar@gmail.com, chowtajeeekinmane@gmail.com 9845701225
		Mr. Vijay Kumar Pujari Disaster management professional -	-	ddpmnglr@gmail.com, dc.mnglr@gmail.com 8105246562
		Mr. Ravi Ojanala Disaster management professional	-	udupidc@gmail.com, dmc.udupi@gmail.com 7411226665
7	Kerala	Mr Pradeep G.S Hazard Risk Analyst	Nodal Officer	hraksdma@gmail.com 9895817557
		Mr Sathyakumar C.J. Hazard Analyst, DM	Nodal Officer	hadmkseoc@gmail.com 9744200741
8	Maharashtra	-	-	-
9	West Bengal	Sri. Ashim Kumar Bala WBCS Deputy Secretary	Nodal Officer	ashimbala2001@gmail.com 8637065545
		Sri Samir Paul IT Manager	-	itmgr.ncrmp2@wb.gov.in 8017179703
10	Andaman & Nicobar	Sh. Deen Mohammed Safety Officer	Nodal Officer	statecontrolroom@gmail.com 9434289234
		Shri Nasir Ahmed Computer Asst. (Gr. A)	Computer Assistant	statecontrolroom@gmail.com 9933294692
11	Daman & Diu	Sh. Bharat Chauhan Disaster project officer	-	disastercell-diu-dd@gov.in 9624805429

Sl. No.	National Organization/ coastal States/UTs	Name & Designation	Nodal Officer/ GIS Expert	Contact details (Email ID & Mob. No.)
		Sh. Sukar Anjani Port Officer I/c (Fishery Deptt.)	-	portofficer-diu-dd@nic.in 9824871515
		Shri Devang Patel Port Officer I/c	-	po-dmn-dd@nic.in 9408503333
12	Lakshadweep	Rafeek T K Assistant Director, DDMA, UTLA	Nodal Officer	rafeektk@gmail.com 9447863570
		Asiyabi K DM Staff, DDMA, UTLA		asiyarahman08@gmail.com 9496677681
13	Puducherry	Dr. G Vijayakumar Professor	Nodal Officer	9488931776 gvk@pec.edu>