No.DS_2B-26001/1/2019
Government of India
Department of Space

Antariksh Bhavan,
New BEL Road,
Bengaluru-560 094

April 11, 2019

OFFICE MEMORANDUM

Subject: Monthly Summary of the Department of Space for the month of March 2019—reg

The undersigned is directed to circulate herewith a copy of the monthly summary of the Department of Space for the month of March, 2019 for information.

Yours faithfully,
(Nandini P Anvekar)
Director (Budget)

Encl: As above

To:
All Members of Council of Ministers

Copy to: Shri. Bhaskar Dasgupta, Director, Cabinet Secretariat
GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
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Sub: Monthly Summary of Department of Space for the month of March, 2019
PART-I (Unclassified)

1. Important Policy decisions taken and major achievements during the month

A. Satellite Missions:

I. GSAT-31:
GSAT-31, a communication satellite was successfully launched by Ariane 5 VA-247 vehicle on February 06, 2019, from French Guiana. The satellite is performing satisfactorily.

II. PSLV-C45 / EMISAT:
PSLV-C45 was successfully launched carrying India’s EMISAT satellite and 28 customer satellites on 1st April 2019. EMISAT was placed in 748 km orbit, 28 customer satellites were placed in 504 km orbit and PS4 was established in 485 km orbit as an experimental platform for AIS, APRS and ARIS payloads

III. PSLV-C46 / RISAT-2B:
PSLV-C46 is scheduled to launch RISAT-2B, an earth observation satellite. Launch vehicle integration activities are in progress. Spacecraft assembly and integration activities are in progress. The launch is scheduled in 2nd quarter of 2019.

IV. GSLV Mk III M1 / CHANDRAYAAN-2 MISSION:
GSLV Mk III M1 will carry Chandrayaan-2, India's second mission to the Moon comprising of indigenous Lander (Vikram), Rover (Pragyaan) and Orbiter modules. Assembly, Integration and testing of these modules are in progress. Vehicle assembly activities are in progress. The launch is planned in 2nd quarter of 2019.
B. Earth Observation

<table>
<thead>
<tr>
<th>S.N</th>
<th>Project/Program</th>
<th>Achieved in this month</th>
<th>Cumulative achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Geo-MGNREGA (Geotags of activities / assets); for MoRD</td>
<td>No. of Geotags</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 Lakhs in Phase-I (accepted)</td>
<td>3.44 Crore in Phase-I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.79 Lakh in Phase-II</td>
<td>6.79 Lakhs in Phase-II</td>
</tr>
<tr>
<td>2.</td>
<td>IWMP-86,000 micro-watersheds – Geotags of Watershed Development Interventions; for MoRD</td>
<td>No. of Geotags &amp; Impact Report</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.03 Lakh</td>
<td>10 Lakh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>630 Impact assessment reports are under evaluation</td>
<td>750 Impact assessment reports delivered</td>
</tr>
<tr>
<td>3.</td>
<td>Housing for All (Urban) (Monitoring of construction of beneficiary houses); for MoHUA</td>
<td>No. of houses geotagged</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.1 Lakh</td>
<td>48.92 Lakh</td>
</tr>
<tr>
<td>4.</td>
<td>AMRUT Programme (Urban geospatial data for Master Plan preparation); for MoHUA</td>
<td>No. of Geotags</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very High Resolution Data: 5 Cities</td>
<td>195 Cities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ortho-Image: 18 Cities</td>
<td>133 Cities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Geospatial Database: 17 Cities</td>
<td>47 Cities</td>
</tr>
</tbody>
</table>

I. Land Use/ Land Cover (56m resolution, 15th Cycle) - DoS
- 120 AWIFSorthoimages were processed for deriving land use / land cover information.

II. National Hydrology Project – MoWR, RD&GR
- Near real time Actual Evapotranspiration (AET) product generation initiated from 01.03.19 onwards using multi-source satellite data including with INSAT3D/3DR.
- Mapping of glacial lakes and water bodies in Ganga basin is completed

III. Reservoir Water Dynamics
- Change in water surface area of 77 major reservoirs of India were estimated for February months of last three years (2017-2019) to understand surface water dynamics.
- It is observed that water surface area was lower by 26% in February 2019 as compared to February 2017.
IV. Sea Ice Advisory

- Daily sea ice advisory was provided to Voyage Leader of 38th Indian Scientific Expedition to Antarctica for safer ship navigation, during February 23 to March 25, 2019.

V. Geoportals: Bhuvan, MOSDAC & VEDAS

**Bhuvan**

- 3,147 new users registered during the reporting month (cumulative 1,92,136 users)
- Security fixes carried out for 101 web applications based on the fortnightly acunetix report
- Towards performance improvement, a third cluster of Bhuvan Database was created and load balancing was optimised

**MOSDAC**

- 220 registered users logged in during the reporting period, 76 new users registered (cumulative 4835 users)
- All India RIP Current Forecast System released on MOSDAC LIVE.

**VEDAS**

- Safer Ship Navigation system implemented using SCATSAT data for Arctic region

VI. Disaster Management Support program:

- Regular forest fire detections were carried out during the reporting period

**NDEM:**

- City Weather Forecast for around 350 cities, thunderstorm warnings have been integrated into NDEM Dashboard.

**International Charter/Sentinel Asia:**

- IRS data was provided to address Indonesia floods based on charter request.
- Prototype for Charter Operations System of International Charter is under development.
  - Value added products with flood index are incorporated.
VII. Data Acquisition and Dissemination Services
- 2,288 satellite passes (1,503 IRS and 785 Foreign) were acquired and archived.
- A total of 24,514 datasets were processed and 1,597 special products were generated, and used for crop analysis, watershed development programme and other user projects.
- 3,45,858 data products were disseminated, including 5,786 products through data supply chain, and 3,40,072 as free downloads through MOSDAC and Bhuvan

C. Capacity Building

<table>
<thead>
<tr>
<th>Training program</th>
<th>No. Of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG (M.Tech./M.Sc./PG Diploma) Courses in RS &amp; GIS (currently pursuing)</td>
<td>129</td>
</tr>
<tr>
<td>&quot;Remote Sensing with special emphasis on Digital Image Processing&quot; course under</td>
<td>22</td>
</tr>
<tr>
<td>Indian Technical and Economic Cooperation (ITEC), sponsored by M/o External Affairs</td>
<td></td>
</tr>
<tr>
<td>Distance Learning Programme course on “Advances in Forest Remote Sensing”</td>
<td>1170 (from 156 Institutions)</td>
</tr>
<tr>
<td>Distance Learning Programme course on “Polarimetric SAR Remote Sensing and its Data Processing”</td>
<td>1479 (from 177 institutions)</td>
</tr>
</tbody>
</table>

- ISRO signed MoU with 6 industries, for transfer of Lithium Ion cell technology.

D. International Cooperation:
- Implementing Arrangement (IA) between ISRO and CNES for Short Term Plan of Maritime Domain Awareness Mission was signed on 6th March 2019 at Bengaluru.
- MoU between India and Bahrain on co-operation in the exploration and uses of outer space for peaceful purposes was signed on 28th March 2019 in Manama, Bahrain.
- MoU between ISRO and ABE (Bolivia) on co-operation in the exploration and uses of outer space for peaceful purposes was signed on 29th March 2019 during the state visit of the President of India to Bolivia.
- ISRO participated in the GGE (Group of Governmental Experts) on PAROS (Prevention of Arms Race in Outer Space) during 18th-29th March 2019 at Geneva
- CSSTEAP conducted a joint high-level advocacy workshop/training in Nay PyiDaw, Myanmar during 11-15th March 2019 on institutional strengthening mission for more than 50 officials from various Government departments.
2. Compliance of CoS Decisions:

<table>
<thead>
<tr>
<th>No of CoS decisions pending for compliance</th>
<th>Proposed action plan/time lines for compliance of CoS decisions</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>180/4</td>
<td>Under implementation Status is being uploaded on a time bound manner in the online portal of e-Samiksha.</td>
<td>-</td>
</tr>
<tr>
<td>3942/12</td>
<td></td>
<td></td>
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<tr>
<td>3923/14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4075/1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. No of Cases of “Sanction for Prosecution” pending for more than three months :- NIL

4. Particulars of cases in which there has been a departure from the Transaction of Business Rules or established policy of the Government: - NIL

5. Status of implementation of e-Governance

<table>
<thead>
<tr>
<th>Total No. of files</th>
<th>Total No. of e-Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>300</td>
</tr>
</tbody>
</table>

6. Status of Public Grievances:

<table>
<thead>
<tr>
<th>No. of Public grievances readdressed during the month</th>
<th>No. of Public Grievances pending at the end of the month.</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>226</td>
</tr>
</tbody>
</table>

7. Information on the specific steps taken by the Ministry/Department for utilization of the Space Technology based tools and applications in Governance and Development.
   - 127 (out of 157) Space Technology projects are progressing as per schedule.


   The detailed status regarding all the posts pertaining to Department of Space has been updated on AVMS. The status of updation of vacancy as on 31.03.2019 is as follows:

   - Total number of posts required to be entered on AVMS: - 19
   - Number of posts filled as on date: - 18
   - Number of posts totally vacant as on date: - 0
   - Number of posts under additional charge arrangement: - 0
   - Number of posts that would fall vacant during the next 06 months: - 0

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