Addendum-1

In accordance with the ITB Clause- 8 of the Bid Document for the Establishment of Weather Presentation System at DHM, (Supply, Delivery, Installation and Commissioning) against Contract ID No: PPCR/DHM/G/ICB-47, following amendments in respective clauses/sub-clauses/heading has been made as indicated below in the Bid Document.

(i) Section-2: Bid Data Sheet, D. Submission and Opening of Bids, ITB 22.1 (page* 34) shall read as:

"The deadline for bid submission is:
Date: August 15, 2018
Time: 12.00 noon (Nepal Standard Time, NST)"

(ii) Section-2: Bid Data Sheet, D. Submission and Opening of Bids, ITB 25.1 (page 34) shall read as:

"The bid opening shall take place at:
Street Address: Department of Hydrology and Meteorology
Building Resilience to Climate Related Hazards Project,
Procurement Unit, Nagpokhari, Naxal, Kathmandu.
Date: August 15, 2018
Time: 13 Hours (NST)"

(iii) Section VII: Schedule of Requirements- 3. Technical Specification, Heading 8. Training Courses shall read as-

"The Supplier shall be responsible for delivering the following training program, broken down into four Training courses as specified in Sub-items 8.1-8.3.

(iv) Section VII: Schedule of Requirements- 3. Technical Specification, Heading 4. Hardware, Sub-Heading 4.5. Other studio equipment device (as per supplier’s best practice) (page 82) shall read as:

- HDMI video capture Device with Display Management System
- Good quality Audio System
- Wireless lavalier microphones with receiver units (2 pieces) with accessories. (Preferably available from Nepal for possible replacement).
- LED light panels
Section VII Schedule of Requirements - 3. Technical Specification, Heading 4. Hardware, Sub-Heading 4.5. Other studio equipment device (page 82) shall read as:

- Configured as per supplier’s best practice
- Minimum required backup time for the UPS is 10 Minutes.

(vi) Section VII Schedule of Requirements - 3. Technical Specification, Heading 1. Data ingest and processing, Sub-Heading 1.2 Radar data (as available and applicable) (Page -76) shall read as:

Support to data formats: JPG, PNG with projection and domain, GeoTIFF or NEXRAD

(vii) Section VII Schedule of Requirements - 3. Technical Specification, Heading 1. Data ingest and processing, Sub-Heading 1.3 Satellite data (As available and applicable) (Page -76) shall read as:

Support to data formats: JPG, PNG with projection and domain or GeoTIFF.
(the rest of the text in the specification is unchanged)

(viii) Section VII Schedule of Requirements - 3. Technical Specification, Heading 1. Data ingest and processing, Sub-Heading 1.4. NWP model data formats (as available and applicable) (Page-77) shall read as:

Support to data formats: GRIB 1&2
(the rest of the text in the specification is unchanged)

(ix) Section VII Schedule of Requirements - 3. Technical Specification, Heading 1. Data ingest and processing, Sub-Heading 1.5. Alphanumeric Data (Page-77) shall read as-

Alphanumeric data: API; XML or CSV or JSON or similar
(the rest of the text in the specification is unchanged)

(x) Section VII Schedule of Requirements - 3. Technical Specification, Heading 1. Data ingest and processing, Sub-Heading 1.6. Lightning data (Page-78) shall read as-

Desired data formats: API; XML or CSV or JSON or similar

(xi) Section VII Schedule of Requirements - 3. Technical Specification, Heading 2. Local data and set-up features, Sub-Heading 2.1. Terrain and land use data (Page-78) shall read as-

- Background geographical visualization shall contain at least three domains: global, regional and local, configurable by user.

- For regional and local domain, support to standard data formats: JPG, PNG with projection and domain or GeoTIFF, DEM and SHP.
- Satellite imagery (<100 m resolution) and DEM (<500 m resolution). For global view can be coarser.

- Land use data, with roads, rivers, major towns, admin boundaries, lakes, rivers etc. with resolution appropriate for the domain.

- Shape files for local GIS data will be provided by DHM

(xii) Section VII Schedule of Requirements- 3. Technical Specification, Heading 2. Local data and set-up features, Subheading 2.3. Tracking of tropical cyclones and typhoons (Page-79) shall read as-

- Support to standard data formats: API, XML, GML

(xiii) Section VII Schedule of Requirements- 3. Technical Specification, Heading 4. Hardware, Subheading 4.3. Broadcast presentation monitor (Page-82) shall read as-

- Standard 2D high resolution led display, 70", HDTV, with accessories (if any)

- Other features as per supplier’s best practice.

- Note that the 3D effects shall be created by the software e.g. by using ‘interposition’, ‘shading’, ‘linear perspective, etc. Stereoscopic features are not required!

- Touch screen is not required!

- Other features ‘as per supplier best practice’
Building Resilience to Climate Related Hazards Project  
Establishment of Weather Presentation System at DHM (Supply, Delivery, Installation and Commissioning)  
(Contract ID No: PPCR/DHM/G/ICB-47)

**Clarification - 1**

We received the following Clarification request through pre-bid meeting, official letter and email from the Consulting Firms. Our response is as follows:

<table>
<thead>
<tr>
<th>Query No</th>
<th>Reference to the Bid Document</th>
<th>Description of Queries</th>
<th>DHM / BRCH Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading 7. Inspections and Tests, Subheading 7.14. Pre-commissioning Tests, “Local cable infrastructure and physical connectivity must be checked simultaneously, with computer equipment”................. (Page-88)</td>
<td>Infrastructure, local installation, cabling within DHM facilities. Responsibility for lying cables within building and to network points for internet connectivity as well as video cabling?</td>
<td>Confirmed! The Weather Presentation System (WPS) will be installed in a facility consisting of two soundproof rooms: a ‘server’ room for any noise generating devices and a studio room where the video recording takes place. The studio and server rooms will be ready made soundproof, finished with required cabling to allow equipment installations &amp; commissioning. DHM will arrange access to the necessary cable connections I/O the server and studio rooms. Alternatively, as mentioned in Item 4. the server(s) can be placed in the National Information Technology Centre (NITC). The readymade facility will be available tentatively in Feb</td>
</tr>
</tbody>
</table>
| 2 | **Section VII Schedule of Requirements- 3. Technical Specification, Heading 8. Training Courses, Subheading 8.1. Training course for DHM forecasters on the basic tools and practices of the Weather presentation system, "Learning outcome: The trainee can ingest all................. (Page-89)** | **Please indicate background skill set of students/ trainees? Training expected to be in a classroom setting? The BDS describes 6-12 people per course, assuming that classroom setting would be sufficient? Also confirm (with) which equipment the training will be done on.**

**Note:** In the meeting, it was indicated that (a) the users have meteorological as well as general computer use knowledge, but not to assume they know any advanced graphics systems like Photoshop or similar. Also, the BDS describes "configure graphics", we assume (b) this is aimed at using and reapplying templates, not actual design or in-depth creation of graphics from scratch. Please confirm both (a) and (b) |

| | **Trainees will be experienced meteorologists/ hydrologists and IT technicians selected by DHM with skills using various computer applications in their duty work. The supplier shall recommend the skill level required of trainees.** |

Both classroom and the readymade studio shall be used for training as applicable. As stated in the specs, the supplier shall provide a training plan and detailed daily agenda with topics and type of training and which venue (classroom/studio) to be used.

After the training the trainees should be able to use already made graphics and templates to create their weather story for presentations. Both (a) and (b) confirmed.

**Note:** The text in the header: 2019. Actual date of availability will be announced a few months in advance. |
3 | Section VII Schedule of Requirements- 3. Technical Specification, Heading 8. Training Courses, Subheading 8.1. Training course for DHM forecasters on the basic tools and practices of the Weather presentation system, "Learning outcome: The trainee can ingest all................. (Page-89) | User training courses (2) - in parallel or consecutive? Same people different courses or different students for all courses?

Note: It was responded that the courses may need to be all consecutive, since the same students may need to take several of the courses. This indicates a total of 4 calendar weeks of training on site. Please confirm. | The four training courses are to be held consecutively. Repeated courses may have different trainees. The required training services are specified in Specs Item 8. Training courses. |

Refer Addendum-1 (iii)
<table>
<thead>
<tr>
<th>Section VII Schedule of Requirements- 3. Technical Specification, Heading 1. Data ingest and processing, &quot;Data&quot; (Page-76)</th>
<th>Please describe access methodology for NWP, radar, satellite. The BDS states file based, but will there be specific protocols?</th>
<th>Access to these data will be made possible using API and standard file formats. Details to be discussed during the implementation phase between the Data Management System (DMS) and WPS suppliers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading 1. Data ingest and processing, Subheading 1.2 Radar data, 1.3 Satellite data, 1.4 NWP model data formats, &quot;Data&quot; (Page-76 &amp; 77)</td>
<td>File access: Will there be meta data available for products? Flag files? Checksum files for file integrity? Or is there a repository database access available?</td>
<td>Metadata, QC flagged real time data and derived variables will be available from the so called climate (repository) database for Hydrological and Meteorological observation stations. File based gridded data will reside on separate file servers for e.g. Weather radar, Lightning, Satellite and NWP data. At present: Information on availability of Flag files, Checksum files is not available.</td>
</tr>
<tr>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading 1. Data ingest and processing, Subheading 1.3 Satellite data, &quot;Data&quot; (Page-77)</td>
<td>Precipitation intensity product: Decode and display, or process ready data? Please elaborate on whether all the data products listed are available on the DHM systems, or if any of these need to be created/derived from base data by the weather graphics system.</td>
<td>All data products that are readymade on the DHM system will be available in standard data formats during the installation and commissioning of the WPS. Depending on completion of some project components, data may need to be processed with the tools provided by the WPS.</td>
</tr>
<tr>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading 1. Data ingest and processing, Subheading 1.5 Alphanumeric data, “Data” (Page- 77)</td>
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<td>User application of listed data products/formats? There is no real use for several of these data product types in a TV Weather Graphics setting. Please, advise on application. Suggesting to TAKE OUT requirement for a lot of the alphanumeric products, unless a use case for these is provided to exemplify. For example, drop-sonde, Pirep, BUFR data typically is not used on TV display anywhere. Based on feedback by interested participants, the Minimum requirements for the data formats are now revised as shown below in this clarification.</td>
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<tr>
<td>Alerts and Advisories: Free form or static geometry references? API? Will alerts be available with time management (issue, valid, expiry and reference updates)? Is there an expectation for search-ability in alerts or just display? Should alerts be edited in the graphics system? Mobile/Smart push warnings? Note: Will the DHM systems provide geometries with the alert bulletins, or will geometries be static data? There was in general no explanation to this overall, except that the consensus was that the alerts are not to be edited in the graphics system. Please confirm. The WPS shall have an API to ingest current ready-made Alerts and all other required data in standard data formats from the DMS. The alerts are ready made(edited) by DHM forecasters using the GUI of the Hydro-Met Workstation (H-M WS) and coded according to CAP (Common Alerting Protocol, v. 1.2). CAP includes data elements for time management. Static geometry references i.e. warning areas are predefined according to various administrative areas (shape files will be provided by DHM). Ingest of the CAP messages to the WPS shall be negotiated between the DMS and WPS suppliers. Details on how to display alerts/warnings will be discussed and agreed during graphics development phase with the supplier.</td>
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<td>12</td>
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<tr>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading A. Background, Subheading A.1 Scope of the Project, &quot;Through this project the supplier shall develop, .......&quot;  (Page- 74)</td>
</tr>
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<tr>
<td>“Sent to TV studios for Broadcasting” Method of transfer, live SDI or file based? Network bandwidth? Internal studios or at broadcasters' facilities? Note: The meeting indicated that the DHM will establish own TV studios and that the recorded content will be sent to the broadcasters in a file-based workflow. Please confirm. The targeted bandwidth within Kathmandu is 100 Mbps. This will be confirmed after completion of the ICT infrastructure rehabilitation and data management development activities. The method of transfer will be file based.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section VII Schedule of Requirements- 3. Technical Specification, Heading A. Background, Subheading A.2 Inventory, &quot;The DHM and System Integrator (SI), will ..........&quot;  (Page- 74)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data products: A2 - Data access or actual provision of data? Note: Please confirm whether any data is expected to be provided BY the supplier or if the ‘task’ (‘access’) here is to create access to DHM’s own data products only. The WPS will rely on data provided by the data management systems (DMSs) being built as part of the present project. The supplier of the WPS shall coordinate with the Data Management Consultant and relevant project teams with help of DHM and SI to get access to these data. Supplier is encouraged to suggest additional (free of charge) data products not mentioned in the specs according to their best practice.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Section VII Schedule of Requirements- 3. Technical Specification, Heading A. Background, “A.6 The narrated weather presentation and individual images, videos, table etc. shall be ..........”  (Page- 75)</th>
</tr>
</thead>
<tbody>
<tr>
<td>App use of Data: Will the App data be served internally from a DHM based server? Will this be Postgres based or any other? Note: Please confirm that the App itself is NOT part of this tender. Also, please confirm whether the app use of The App data will come from the DHM based server (Met Workstation), DHM file servers and/ or Postgres based observation &amp; climate data base server.</td>
</tr>
<tr>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading A. Background, “A.6 The narrated weather presentation and individual images, videos, table etc. shall be ..........” (Page- 75)</td>
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<td><strong>16</strong></td>
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<td>Not relevant since Mobile App itself is not part of the tender.</td>
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</tbody>
</table>
| **19** ITB 6.6.1, Term | Support for 5 years. Should an indication for cost of extension of support beyond 5 years be included? **NO** | 9
<table>
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<tr>
<th>Page</th>
<th>Section</th>
<th>Note</th>
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<tbody>
<tr>
<td>20</td>
<td>Section VII Schedule of Requirements</td>
<td>On page 65 in Section VII &quot;Schedule of Requirements&quot; under point 1.2 we read &quot;Licenses to be quoted as one up front lump sum for subsequent five years after successful Operative Test of the system&quot;. Is it correct to interpret this as follows: One page in 46 in section IV Bidding forms in the table of price schedules we enter the firm fixed license price (lumpsum) to use the software for 5 years after the successful Operative test of the system together with the annual fee for this license for each year after these 5 years? Confirmed partly: &quot;The bidder shall enter the firm fixed license price (lumpsum) to use the software for 5 years after successful Operative test of the system.&quot; Please note: No change in the specifications; the specification doesn't cover years after the said five years.</td>
</tr>
<tr>
<td>21</td>
<td>A studio Room need to be created as per scope of the tender, the tender document says that the area provided for this room would be 3mx4m with a 3m height</td>
<td>It is good that the area is planned and defined, but it would be more helpful if the department can provide layout of the studio room. Remark: Larger area will provide space for large display, which will be very useful in visualizing multiple feeds and even single feed with large display showing more details at a single point of time. The studio room is planned tentatively to be at least 3 m x 4 m wide. The actual size of the studio and the server rooms will be confirmed when the building interior design is finished and available. As an option the servers can be located also at the National IT Centre (NITC) in Kathmandu.</td>
</tr>
<tr>
<td>22</td>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading 4. Hardware, Subheading 4.2. Work Screen &quot;As per supplier's best practice&quot; (Page- 82)</td>
<td>Quantity for workstations is not defined. It would be better if the department defines number of workstations/operator they are planning to put in the room. Please note that 'Work screen' means here Workstation with display and hardware which is capable for using the provided software. The supplier must quote a price for one 'Work screen'.</td>
</tr>
</tbody>
</table>
Section VII Schedule of Requirements- 3.
Hardware, Subheading 4.3. Broadcast presentation monitor “Standard high resolution led display, 70", HDTV or as per supplier’s best practice” (Page- 82)

Requested specs: In the software section, tender document mentions that software with 3D Stereo output capability is required, but here in the studio room the display is 2D only, and with 2D display the entire concept of having 3D capable software will not be fulfilled. We request department to add a projection based professional 3D display for actual 3D effect in the studio room. We also recommend following specifications for the 3D Display:

- Screen: 7ftx11ft, fixed frame, front projection.
- Display Technology: DLP chip or better
- Brightness: Up to 8000 or higher lumens
- Dynamic Contrast Ratio: 10000:1 or higher
- Resolution: Native WQXGA resolution - 2560 x 1600 @ 120 Hz (60Hz for each eye)
- Input Signal Compatibility: Up to 120 Hz frame sequential input for resolutions varying from VGA to WQXGA (2560 x 1600)
- Synchronization: 3D Sync Signal Out for Synchronization of 3D Glasses
- Lens Options: Appropriate lens to use minimum projection space possible, Short throw or zoom lenses with throw ratio of 0.8:1 or better, Motorized horizontal and vertical offset support
- Lamp and Running Capability: 24 X 7 operational capability (OEM certified), Capability for 360° rotation, Laser phosphor illumination technology, Light source lifetime exceeding 35,000 hours
- 3D Stereo Glasses: 20 Nos.
- 3D Stereo Emitter: 1 Nos.

Refer Addendum-1 (xiii)

Note:
Detailed specifications would only limit the participation of suppliers; therefore, this item is provided mostly as per supplier’s best practice.

It is better if department elaborate the requirement of capture card, this will help in designing a better solution. We recommend to add a display management system with following specifications:

- 2 TB for recording of session
- 2 Dual DVI/Display Port Outputs (Each supporting resolution of 2560x1600 @120 Hz for both 2D and 3D dataset)
- 2 DVI-D/HDMI Inputs (each supporting resolution of 1920x1080@60 Hz)
- 8 Inputs on IP
- 2 x Gigabit LAN Ports or more
- Integrated touch enabled display panel on the controller for troubleshooting tasks including source preview, temperature, Network Configuration etc.
- In-Built Recording Facility
- iPad/touch wireless controller
- Dual Redundant Hot Swappable Power Supplies
- Simultaneous display of 2D PIPs from external sources and 3D from IG.
- Auto-detection of various external input video sources connected to the hardware.
- Any change to the layout made via the controller software should reflect in the output on the main display wall in real-time
- Drag-and-drop user-interface to add or delete active input video sources to the main display wall and provide picture in picture (PIP) functionality on the main wall.

Refer Addendum-1 (iv)
• Naming and specifying position/size of various sources on the main display wall
• Support of controlling all input parameters using a simple GUI interface. The GUI interface should be hardware accelerated and provide a device-like look-and-feel.
• Support for connecting to any computer system over the local TCP/IP network running VNC servers and treating them as input video sources. It should be possible to control the remote applications by executing local mouse/keyboard/touch gestures control on the hardware on the remote systems.
• Support for defining layout presets for the entire display wall. Each preset should allow controlling the number of input sources along with the size and location of the sources on the output wall. Facility to save and reload these layout presets.
• Support for time-based switching of presets allowing different presets to become active during a user defined time interval.
• Support for recording any or all of the input video/audio sources on the hard drive as movie file or subsequent playback. The start, stop and pause operation should be controllable using an easy-to-use graphical interface.
• Support for storing the output of the complete display wall on the hard drive as a movie file or subsequent playback.
• Support for cloning of video sources on the display wall.
• Support for specifying a border width and color for video sources displayed on the wall.
- Support for hardware accelerated higher order interpolation of the video sources when scale on the display wall.  
- Support for contrast and brightness enhancement on input video sources.  
- Support for locking aspect ratio on scaled video sources  
- Support for extraction of EDID and force EDID  
- Support for color correction and applying various image filters on the video sources  
  - Bicubic  
  - Bilinear  
- The software should allow to start and shutdown of the multi display controller hardware. | It should be Uninterrupted power supply. It is desired that department should define backup time required for UPS based on power cuts and power backup systems. The recommended backup time for UPS is 60 Minutes. | Refer Addendum-1 (V) |
<p>| 26 | <strong>Section VII Schedule of Requirements</strong>- 3. Technical Specification, Heading 4. Hardware, Subheading 4.5. Other studio equipment device &quot;LED light panels.................&quot; (Page- 82) | Studio Room should also need to have a good audio system. | Refer Addendum-1 (iv) |</p>
<table>
<thead>
<tr>
<th>Page</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>27</strong></td>
<td>Our bank requests a change to the Bid Security (Bank Guarantee) document. Can we please add &quot;In any case, this guarantee will expire on 31st of December 2018 at the latest. &quot;just before the text &quot;Consequently, any demand for payment...&quot;? This is standard format and specification in the Bid Document, so we can't change it.</td>
</tr>
<tr>
<td><strong>28</strong></td>
<td>On the pages 74 and 75 we read &quot;recording equipment &quot;and &quot;equipment for audio/video recording of the Weather Presentations&quot;. Is it correct to interpret this that on page 46 in section IV Bidding Forms in the table of price schedules we must provide our price for at least one recording and editing workstation complete with professional recording/editing software? Confirmed: The supplier must provide their price for one recording and editing workstation complete with professional recording and editing software.</td>
</tr>
<tr>
<td><strong>29</strong></td>
<td>It is very important to have a soundproof separation between the studio (camera, studio monitor etc.) and the office where weather content is prepared and recording and editing is performed (workstations, audio mixer etc.). Ideally these two locations are situated in adjacent rooms. Because cables and possibly extenders are needed to connect the equipment in both locations, we have the following question: What distance needs to be provided for between the studio and the preparing/recording/editing office? Confirmed: The Weather Presentation System (WPS) will be installed in a facility consisting of two soundproof rooms: a 'server' room for any noise generating devices and a studio room where the video recording takes place. The studio and server rooms will be ready made soundproof, finished with required cabling to allow equipment installations &amp; commissioning. DHM will arrange access to the necessary cable connections I/O the server and studio rooms. The maximum distance between the studio and the preparing/recording/editing office will be 10 m.</td>
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<tr>
<td>30</td>
<td>We wish to make use of the electronic bidding submission procedures from the website: <a href="http://www.bolpatra.gov.np">www.bolpatra.gov.np</a> (CEPSON). However, the opportunity &quot;weather presentation studio PPCR/DHM/G/ICB-47&quot; (published on <a href="http://dhm.gov.np/notices">http://dhm.gov.np/notices</a>) cannot be found there. How can we electronically register our interest and submit our offer?</td>
</tr>
</tbody>
</table>
| 31 | **Section VII Schedule of Requirements- 3. Technical Specification, Heading 1. Data ingest and processing, Subheading 1.2 Radar data, “Level II and III;SIGMET;GRI 1 & 2, BUFR, GeoTIFF ” (Page- 76)** | Central processing of all radar data into common image formats such as JPG, PNG or GeoTIFF is much more efficient and robust than individually setting up formats and data paths.  
*Bidder Suggestion:* JPG, PNG with projection and domain, GeoTIFF or NEXRAD.  
Refer Addendum-1 (vi) |
| 32 | **Section VII Schedule of Requirements- 3. Technical Specification, Heading 1. Data ingest and processing, Subheading 1.3 Satellite data, "GRIB 1&2;XPIF;MPEF;HDF-4/5;LRIT;HRIT;ADDE;............ ” (Page- 76)** | Central processing of all satellite data into common image formats such as JPG, PNG or GeoTIFF is much more efficient and robust than individually setting up data paths for each different satellite format.  
*Bidder Suggestion:* JPG, PNG with projection and domain or GeoTIFF.  
Refer Addendum-1 (vii) |
| 33 | **Section VII Schedule of Requirements- 3. Technical Specification, Heading 1. Data ingest and processing, Subheading 1.4. NWP model data formats, "GRIB 1&2;NetCDF;BUFR,FGGE,HDF;.......... ” (Page-77)** | GRIB data given its smaller file sizes and standard format is much more practical to use in production environments as compared to NetCDF, BUFR, FGGE, HDF and Vis5D.  
*Bidder Suggestion:* GRIB 1&2  
Refer Addendum-1 (viii) |
<table>
<thead>
<tr>
<th>Page</th>
<th>Section VII Schedule of Requirements- 3. Technical Specification, Heading 1. Data ingest and processing, Subheading 1.5. Alphanumeric Data, “WMO alphanumeric messages.................”(Page- 77)</th>
<th>Central processing of all Alphanumeric data into an easily consumable API, using XML or JSON is desirable and provides the greatest reliability and robustness. <em>(Bidder Suggestion: API, XML or CSV/TXT)</em></th>
<th>Refer Addendum-1 (ix)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading 1. Data ingest and processing, Subheading 1.6. Lightning data, “Data formats: ASCII;XML;SFLOC;EUCLID;SAFIR.................”(Page- 78)</td>
<td>Central processing of all Alphanumeric data into an easily consumable API, using XML or JSON is desirable and provides the greatest reliability and robustness. <em>(Bidder Suggestion: API, XML or CSV/TXT)</em></td>
<td>Refer Addendum-1 (x)</td>
</tr>
<tr>
<td>37</td>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading 2. Local data and set-up features, Subheading 2.1. Terrain and land use data, &quot;Background geographical visualization shall contain.......&quot; (Page- 78)</td>
<td>We fully support the use of standard data formats for this critical data set. (Bidder Suggestion: JPG, PNG with projection and domain or GeoTIFF, DEM and SHP)</td>
<td>Refer Addendum-1 (xi)</td>
</tr>
<tr>
<td>38</td>
<td>Section VII Schedule of Requirements- 3. Technical Specification, Heading 2. Local data and set-up features, Subheading 2.3. Tracking of tropical cyclones and typhoons, (Page- 79)</td>
<td>We fully support the use of standard data formats for this critical data set. (Bidder Suggestion: API, XML, GML)</td>
<td>Refer Addendum-1 (xii)</td>
</tr>
</tbody>
</table>