**Releasable**

**DOD\AR 1695-1710 (Rev. 4) (Sufficient)**

**Submitted: 3/1/2024**

**Approved: 3/1/2024**

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| Serial Number | System Name | Center Lower Frequency (MHz) | Upper Frequency (MHz) | Emission Bandwidth (MHz) | Receiver Bandwidth (MHz) | System Use Type Name | Operation Area | Transmitter State | Transmitter Latitude | Transmitter Longitude | Receiver State | Receiver Latitude | Receiver Longitude | Frequency Remarks | Geographic Location associated with Timeline (AAO in this column indicates the timeline is associated with the geographic location defined by the Authorized Area of Operation in the frequency | Sharing Type (Indefinite, Temporary i.e. Coordinated, or None) | Temporary Sharing Timeline (Months After 1/31/2015) | Indefinite Sharing Timeline (Months After 1/31/2015) | Vacate Assignment Timeline (Months After 1/31/2015) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AR-1-C050542 | Sacramento, CA - GOES RCVR | 1694.5 | | 0.4 | 1.5 | MetSat | Sacramento, CA | SPC | xxxxxxx | xxxxxxxx | CA | 383550N | 1213234W | N/A | Sacramento, CA | Indefinite | | 39 | |
| AR-2-C050522 | Rock Island, IL - GOES RCVR | 1694.5 | | 0.4 | 1.5 | MetSat | Rock Island, IL | SPC | xxxxxxx | xxxxxxxx | IL | 413104N | 0903346W | N/A | Rock Island, IL | Indefinite | | 39 | |
| AR-2-C050542 | Rock Island, IL - GOES RCVR | 1694.5 | | 0.4 | 1.5 | MetSat | Rock Island, IL | SPC | xxxxxxx | xxxxxxxx | IL | 413057N | 0903352W | N/A | Rock Island, IL | Indefinite | | 39 | |
| AR-3-C050522 | St Louis, MO - GOES RCVR | 1694.5 | | 0.4 | 1.5 | MetSat | St Louis, MO | SPC | xxxxxxx | xxxxxxxx | MO | 383526N | 0901225W | N/A | St Louis, MO | Indefinite | | 39 | |
| AR-4-C050522 | Columbus Lake, MS - GOES RCVR | 1694.5 | | 0.4 | 1.5 | MetSat | Columbus Lake, MS | SPC | xxxxxxx | xxxxxxxx | MS | 333204N | 0883005W | N/A | Columbus Lake, MS | Indefinite | | 39 | |
| AR-5-C050522 | Vicksburg, MS - GOES RCVR | 1694.5 | | 0.4 | 1.5 | MetSat | Vicksburg, MS | SPC | xxxxxxx | xxxxxxxx | MS | 322047N | 0905010W | N/A | Vicksburg, MS | Indefinite | | 39 | |
| AR-6-C050542 | Omaha, NE - GOES RCVR | 1694.5 | | 0.4 | 1.5 | MetSat | Omaha, NE | SPC | xxxxxxx | xxxxxxxx | NE | 412056N | 0955734W | N/A | Omaha, NE | Indefinite | | 39 | |
| AR-7-C050522 | Cincinnati, OH - GOES RCVR | 1694.5 | | 0.4 | 1.5 | MetSat | Cincinnati, OH | SPC | xxxxxxx | xxxxxxxx | OH | 390610N | 0843035W | N/A | Cincinnati, OH | Indefinite | | 39 | |

| System Name | Total Pre-Auction Cost ($M) | Funds Requested Prior to Auction ($M) | Transition Implementation Cost ($M) | Total Cost ($M) | Begin Expenditure Timeline (Months after Receipt of Funds) | End Expenditure Timeline (Months after Receipt of Funds) | Expanded Capability Cost ($M) | Expanded Capability Description | Expanded Capability Justification |
|---|---|---|---|---|---|---|---|---|---|
| 1695-1710 MHz Army deployment related costs | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | Replaced by AR-12 (Direct Readout Ground Station Hardening) and AR-13 (Fixed/Transportable Monitoring Systems) |
| 1695-1710 MHz Portal (ITS) | 0.0000 | 0.0000 | 2.2200 | 2.2200 | 1 | 145 | | | The portal is developed and managed by ITS Boulder/NTIA. The DoD share of this cost is one-third ($6.67 million). The Army share of the DoD cost is one-third ($2.22 million). The Army also has additional coordination costs for coordination, analysis results verification, and interface required between site level and industry entities. |
| AR-12 (Direct Readout Ground Station Hardening) | 0.0000 | 0.0000 | 18.4960 | 18.4960 | 1 | 145 | | | Protection of DRGS |
| AR-13 (Fixed/Transportable Monitoring Systems) | 0.0000 | 0.0000 | 43.1550 | 43.1550 | 1 | 145 | | | The fixed and transportable systems will be capable of interference monitoring/detection/tracking at any DRGS location. |
| Cincinnati, OH - GOES RCVR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | Replaced by AR-12 (Direct Readout Ground Station Hardening) and AR-13 (Fixed/Transportable Monitoring Systems) |
| Columbus Lake, MS - GOES RCVR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | Replaced by AR-12 (Direct Readout Ground Station Hardening) and AR-13 (Fixed/Transportable Monitoring Systems) |
| Management, Oversite, Engineering Support (Army Spectrum Mgt Office) | 0.0000 | 0.0000 | 0.2500 | 0.2500 | 1 | 145 | | | Additional ASMO Support: Staff Engineers, Reporting, Assigners, Analysis, and Staff Support required for facilitating, reporting, regulatory, planning and travel. |
| Monitoring System - Hub | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | Replaced by AR-12 (Direct Readout Ground Station Hardening) and AR-13 (Fixed/Transportable Monitoring Systems) |
| Omaha, NE - GOES RCVR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | Replaced by AR-12 (Direct Readout Ground Station Hardening) and AR-13 (Fixed/Transportable Monitoring Systems) |
| Rock Island, IL - GOES RCVR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | Replaced by AR-12 (Direct Readout Ground Station Hardening) and AR-13 (Fixed/Transportable Monitoring Systems) |
| Sacramento, CA - GOES RCVR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | Replaced by AR-12 (Direct Readout Ground Station Hardening) and AR-13 (Fixed/Transportable Monitoring Systems) |
| Sequestration | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | |
| St Louis, MO - GOES RCVR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | Replaced by AR-12 (Direct Readout Ground Station Hardening) and AR-13 (Fixed/Transportable Monitoring Systems) |
| Vicksburg, MS - GOES RCVR | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | Replaced by AR-12 (Direct Readout Ground Station Hardening) and AR-13 (Fixed/Transportable Monitoring Systems) |
| **Total** | 0.0000 | 0.0000 | 64.1210 | 64.1210 | | | 0.0000 | | |

**DOD\AR 1695-1710 (Rev. 4) (Sufficient) - Interactions**

| Interaction Name | Interaction Description |
|---|---|
| 1. Federal Communications Commission (FCC) band allocation rules development and adoption | The allocation for and use of this band by non-federal fixed and mobile users will require the development of specific technical rules governing non-federal operations, such that sharing of the band between federal and non-federal users is feasible and jointly successful. The development of these rules does not appear to have been initiated at this time and are expected to be completed some months after the submission of this Transition Plan. These rules must be adopted prior to the auction of the 1695-1710 MHz band such that potential licensees are fully aware of the requirements that they must comply with to begin operations in the band. |
| 2. Development of Coordination Guidelines For Federal Agencies and Industry | Given the fact that most federal operations will still be in the band upon the award of licenses by the FCC and some federal operations will continue indefinitely in the band, specific coordination guidelines must be developed and published by NTIA (for federal agencies) and the FCC (for non-federal licensees). The formal development of these coordination procedures has not yet begun by NTIA and the FCC, but they will be essential to any early entry by licensees as well as for the long term sharing coordination that will be required. |
| 3. Update Commerce Assignments | We need to add the protected receive site information to the Commerce Assignment identified in Tab C. |

**DOD\AR 1695-1710 (Rev. 4) (Sufficient) - Impact Factors**

| Factor Name | Factor Description |
|---|---|
| 1. Spectrum Monitoring Equipment | We cannot implement and execute this transition plan without spectrum monitoring systems at our installations. |
| 2. Timeline Conditions | All timelines in this plan are based on the assumption that funding will be received three months after the close of the auction. Should the receipt of funds change, timelines may need to be adjusted accordingly. |
| 3. Incumbent Support | Incumbents will support interference testing to determine feasibility of co-existence and necessary equipment alterations, and they will support as necessary to address interference issues. |
| 4. Follow-on System Schedule and Operational Capability | If NOAA realizes delays or failures in follow-on weather satellite systems, then reliance on legacy GOES and POES systems must be sustained for DoD operations and resource protection. |

## DOD\AR 1695-1710 (Rev. 4) (Sufficient) - Notes

| Note Name | Note Text |
|---|---|
| 1 | The Department of Commerce (NOAA) needs to add the Army Corps of Engineering MetSat Receiver locations to the associated Department of Commerce (NOAA) joint assignment and that this effort is in process to ensure that the Transition Plan is not at risk of beign rejected by NTIA or the Technical Panel. |
| 2 | The IF Bandwidth is 1.5 MHz for the MetSat Systems and the Emission BW is understood to be 0.4 MHz. |
| 3 | Revision 1: USACE is concerned with protecting its Direct Readout Ground Stations (DRGS) from receiving out of band interference on the 1694.5 MHz GOES downlink. Implementation includes hardening of the DRGS and augment interference detection and analysis with a fixed and transportable monitoring capability. USACE and contract engineers will analyze the AWS-3 carrier submissions and ensure that GOES receivers are adequately protected. The fixed and transportable systems will be capable of interference monitoring/detection/tracking at any DRGS location. Data collected from all units will be transmitted to a central program for processing and will be accessible via network. The centralized component will receive the interference data from distributed equipment and identify the interference, performs data processing/analysis and archival functions to determine identity/type of the interference. Intrusion signals will be compared to data from NTIA, FCC, GMF and ITU knowledge bases. Output will used for upward reporting (within USACE, Army, DoD, NOAA, NTIA) and interference resolution. |
| 4 | Rev. 3: Updated contact information and the spending timeline to 145 months based on OMB approval 12/15/2022. |

**DOD\AR 1695-1710 (Rev. 4) (Sufficient) - Excluded Info**

| Table | Row | Column | CUI Category | Safeguarding and/or Dissemination Authority |
|---|---|---|---|---|