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**Department of the interior (DOI)
Metrological Satellite Systems
Transition Plan for the 1695-1710 MHz Band**

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Certification regarding Classified and Sensitive Information:

I, Russell Sveda, certify that this transition plan, is cleared for release to the public and contains no classified or sensitive information.



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Tab B: General Information

1	This Transition Plan includes pre-auction planning costs, as defined in Section O.2 of Annex O:		
	a. Total pre-auction planning costs (\$M):	\$0.155	
	b. The subtotal amount, if any, of pre-auction planning costs requested for pre-auction transfer (\$M):	\$0.155	
	c. The subtotal amount, if any, of pre-auction planning costs incurred after June 28, 2010, but before February 22, 2012 (\$M):	\$0.060	
	d. This organization attests that:		
	[1] To the fullest extent possible, this transition plan provides for sharing and coordination of eligible frequencies with non-federal users, including reasonable accommodation for the use of eligible frequencies by non-federal users during the transition period.	Yes	
	[2] This transition plan provides for non-federal users to be able to use eligible frequencies during the transition period in geographic areas where this organization does not use such frequencies.	Yes	
	[3] During the transition period, this organization will make itself available for negotiation and discussion with non-federal users not later than 30 days after a written request.	Yes	
	[4] During the transition period, this organization will make available to a non-federal user with appropriate security clearances any classified information regarding the relocation process, on a need-to-know basis.	Yes	
	[5] (Only applicable if the amount in 1b above is greater than \$0.00.) Funds transferred before an auction likely allow for timely implementation of relocation or sharing, thereby increasing net expected auction proceeds by an amount not less than the time value of the amount of funds transferred.	Yes	
2	There is additional information required to be included in the Transition Plan that is not included in this document because it is classified information, as defined in Section O.7 of Annex O.	No	
3	There is additional information required to be included in the Transition Plan that is not included in this document because it is <u>sensitive</u> information, as defined in Section O.7 of Annex O.	No	
4	a. Name of Responsible Officer:	Russell Sveda	
	b. (Optional) Office:	DOI OCIO	
	c. (Optional) Telephone Number:	303-236-5091	
	d. (Optional) E-mail:	russell_sveda@ios.doi.gov	
5	Total Transition Plan Cost (\$M):	\$34.325	

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Tab C: Abstract

Serial Number	Center Freq/ Lower Band Limit (MHz)	Upper Band Limit (MHz) (if appl)	Emission Bandwidth (20 dB) (MHz)	Rx IF Bandwidth (3 dB) (MHz)	Bureau	System Use	System Name	Authorized Area of Operation	TX State	TX Latitude	TX Longitude	RX State	RX Latitude	RX Longitude	Sharing/ Relocation	Alternate Frequency Assignment	Transition Timeline (Months)
DOC 860055	1702.5		1.328	1.328	USGS	MetSat	Sioux Falls, SD - POES (RRC EROSLRPS)	Sioux Falls, SD	NGSO	NGSO	NGSO	SD	433409N	0963733W	Indefinite	NONE	39
DOC 860056	1707		1.328	1.328	USGS	MetSat	Sioux Falls, SD - POES (RRC EROSLRPS)	Sioux Falls, SD	NGSO	NGSO	NGSO	SD	433409N	0963733W	Indefinite	NONE	39
DOC 860054	1698		1.328	1.328	USGS	MetSat	Sioux Falls, SD - POES (RRC EROSLRPS)	Sioux Falls, SD	NGSO	NGSO	NGSO	SD	433409N	0963733W	Indefinite	NONE	39
DOC 850523	1694.8		4	2.2	USGS	MetSat	Sioux Falls, SD - GOES (RRC EDDN-1)	Sioux Falls, SD	GSO	000000N	0750000W	SD	434406N	0963732W	Indefinite	NONE	39
DOC 850522	1694.5		4	2.2	USGS	MetSat	Sioux Falls, SD - GOES (RRC EDDN-1)	Sioux Falls, SD	GSO	000000N	0750000W	SD	434406N	0963732W	Indefinite	NONE	39
DOC 850543	1694.8		4	2.2	USGS	MetSat	Sioux Falls, SD - GOES (RRC EDDN-2)	Sioux Falls, SD	GSO	000000N	1350000W	SD	434418N	0963737W	Indefinite	NONE	39
DOC 850542	1694.5		4	2.2	USGS	MetSat	Sioux Falls, SD - GOES (RRC EDDN-2)	Sioux Falls, SD	GSO	000000N	1350000W	SD	434418N	0963737W	Indefinite	NONE	39
DOC 850543	1694.8		4	2.2	BLM	MetSat	Boise, ID - GOES (RRC NFIC)	Boise, ID	GSO	000000N	1350000W	ID	433403N	1161240W	Indefinite	NONE	39
DOC 850542	1694.5		4	2.2	BLM	MetSat	Boise, ID - GOES (RRC NFIC)	Boise, ID	GSO	000000N	1350000W	ID	433403N	1161240W	Indefinite	NONE	39
DOC 850523	1694.8		4	2.2	BOR	MetSat	Boise, ID - GOES (RRC BORPNRHA)	Boise, ID	GSO	000000N	0750000W	ID	433653N	1161508W	Indefinite	NONE	39
DOC 850522	1694.5		4	2.2	BOR	MetSat	Boise, ID - GOES (RRC BORPNRHA)	Boise, ID	GSO	000000N	0750000W	ID	433653N	1161508W	Indefinite	NONE	39
DOC 850523	1694.8		4	2.2	USGS	MetSat	Guaynabo, PR - GOES (RRC CWSC)	Guaynabo, PR	GSO	000000N	0750000W	PR	182526N	0660650W	Indefinite	NONE	39
DOC 850522	1694.5		4	2.2	USGS	MetSat	Guaynabo, PR - GOES (RRC CWSC)	Guaynabo, PR	GSO	000000N	0750000W	PR	182526N	0660650W	Indefinite	NONE	39
DOC 850523	1694.8		4	2.2	TVA	MetSat	Knoxville, TN - GOES (RRC TVARFC)	Knoxville, TN	GSO	000000N	0750000W	TN	355758W	0835513W	Indefinite	NONE	39
DOC 850522	1694.5		4	2.2	TVA	MetSat	Knoxville, TN - GOES (RRC TVARFC)	Knoxville, TN	GSO	000000N	0750000W	TN	355758W	0835513W	Indefinite	NONE	39

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Tab D: Transition Timeline

Serial Number	Geographic Location	Timeline (Months after Transition Start)		
		Temporary Sharing	Indefinite Sharing	Vacate Assignment
DOC 860055	SD Sioux Falls		39	N/A
DOC 860056	SD Sioux Falls		39	N/A
DOC 860054	SD Sioux Falls		39	N/A
DOC 850523	SD Sioux Falls		39	N/A
DOC 850522	SD Sioux Falls		39	N/A
DOC 850543	SD Sioux Falls		39	N/A
DOC 850542	SD Sioux Falls		39	N/A
DOC 850543	ID Boise		39	N/A
DOC 850542	ID Boise		39	N/A
DOC 850523	ID Boise		39	N/A
DOC 850522	ID Boise		39	N/A
DOC 850523	PR Guaynabo		39	N/A
DOC 850522	PR Guaynabo		39	N/A
DOC 850523	TN Knoxville		39	N/A
DOC 850522	TN Knoxville		39	N/A

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Tab E: Plan and Timeline for using Funds (SRF)

System Name	System ID	Total Pre-Auction Costs (\$M)	Pre-Auction Transfer Requested (\$M)	Pre-Auction Costs Incurred between 6-28-2010 and 2-22-2012	Equipment-Related Costs (\$M)	Deployment-Related Costs (\$M)	Total Cost for System (\$M)	Begin Expenditure of Funds	End Expenditure of Funds	Costs Associated with Expanded Capability	Description of Expanded Capability	Explanation/ Justification
Sioux Falls, SD - POES Sioux Falls, SD - GOES Sioux Falls, SD - GOES	(RRC EROSLRPS) (RRC EDDN-1) (RRC EDDN-2)	0.031	0.031	0.012	7.372	2.641	\$ 10.044	1 month	75 months			
Boise, ID - GOES	(RRC NIFC)	0.031	0.031	0.012	3.476	1.873	\$ 5.380	1 month	75 months			Boise sites are not co-located
Boise, ID - GOES	(RRC BORPNRHA)	0.031	0.031	0.012	3.476	1.873	\$ 5.380	1 month	75 months			Boise sites are not co-located
Guaynabo, PR - GOES	(RRC CWSC)	0.031	0.031	0.012	6.038	2.120	\$ 8.189	1 month	75 months			
Knoxville, TN - GOES	(RRC TVARFC)	0.031	0.031	0.012	3.374	1.927	\$ 5.332	1 month	75 months			

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Tab F: NTIA Interactions

Interaction required with NTIA to implement this Transition Plan	
1	Engage ITS Boulder to setup sharing coordination portal
2	Faciliate enforcement should interference above allowable levels occur at MetSat downlink sites discovered during monitoring
3	Facilitate coordination with FCC in developing initial coordination agreements and dealing with enforcement issues relative to band sharing arrangements

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 Tab H: Factors that could Impact Fulfillment of Transition Plan

	Factor	Impact on Fulfillment of Transition Plan
1	Technology/Development	Adequate and proper phasing of funds will be required to enable development of capabilities necessary to allow sharing of spectrum in accordance with legislation.
2	Frequency Sharing Coordination	Ability to validate entities' methodologies for sharing.
3	Regulatory Criteria	Regulatory criteria will provide private sector user incentive to not interfere with Federal stations without jeopardizing DOI/TVA ability to complete the mission and/or execute its primary mission essential functions.
4	Incumbent Support	Incumbents will support interference testing to determine feasibility of co-existence and necessary equipment alterations, and they will support the relocation plan and equipment deployment as necessary to address interference issues.

This transition plan identifies all the required actions and costs needed to make the 1695-1710 MHz band available for auction for shared use with wireless broadband providers.

In the establishment of protection distances around critical DOI and TVA MetSat locations used to receive environmental sensor data, DOI plans to install monitoring capabilities at each of the receiver locations to ensure compliance with the interference threshold criteria established by the FCC and to provide the ability to identify and mitigate any interference experienced from the wireless broadband providers in the shared band. This plan includes 3 years of Operations and Maintenance (O&M) after the monitoring is deployed and supports cost sharing for the compliance monitoring development by DOC/NOAA.

DOI also supports and is planning on the establishment of a spectrum coordination portal developed by ITS-Boulder. This portal development is in conjunction with the DOC/NOAA and DOD to facilitate the successful coordination between the AWS licensees and federal agencies of sharing arrangements now and into the future. This plan includes costs for a cost-sharing of the total cost for the portal development and 3 years of O&M.