

Analysis of SSA/SMA Compatibility for Current SSA Users

The following table lists SICs that have SSCs in the current NCCDS database and/or are identified in an MOC ICD annex.

The following SICs are excluded:

1. Shuttle SICs
2. ELV SICs
3. Test or demo SICs
4. SICs with only K-band SSCs

In some cases, SICs with similar characteristics are grouped together.

The SSA/SMA Compatibility Issues and Comments are based primarily on information in the SSCs. Except for the SSAF power mode parameter, this does not consider possible TDRS or user spacecraft signal strength concerns. This also does not consider how frequently a customer’s various SSCs are used operationally. There may some customers who require SSA for the majority of their support and who would not find it practical to use SMA, even though some of their SSA support could theoretically be switched to SMA.

	SIC	Name	MOC ICD	Service Types						SSA/SMA Compatibility Issues	Comments
				KuSAF	KuSAR	MAF	MAR	SSAF	SSAR		
1.	0200	Equipment Maintenance		X	X	X	X	X	X	SSAF SSCs have “Command Channel PN Modulation” equal NO.	Due to the special nature of this SIC, new SMAR and SMAF SSCs probably should be used independently of any previous SSCs.
2.	0338	TRMM	X					X	X	Some SSAF SSCs are RCP. Some SSAR SSCs are RCP. Some SSAR SSCs with max and initial data rate too high. SSAF freq mismatch. SSAR freq mismatch.	Probably not a good SMA candidate.

	SIC	Name	MOC ICD	Service Types						SSA/SMA Compatibility Issues	Comments
				KuSAF	KuSAR	MAF	MAR	SSAF	SSAR		
3.	0372	COBE				X	X	X	X	Some SSAF SSCs are high power mode.	Some current SSA support could be switched to SMA.
4.	1294	LNDST-4				X	X	X	X	Some SSAF SSCs are RCP. Some SSAR SSCs are RCP.	Some current SSA support could be switched to SMA.
5.	1310 1311 1312 1313 1314 1319	BRTS	X			X	X	X	X	None.	BRTS is a special case. Although it may be possible to schedule current SSA services on SMA, SSA support would probably still be scheduled on SSA.
6.	1315	BRTS -- MERRITT ISLAND	X			X	X			Not applicable.	MA-only.
7.	1316	BRTS -- CTV	X	X	X	X	X	X	X	Some SSAF SSCs are RCP. Some SSAR SSCs are RCP. SSAR SSCs with max and initial data rate too high. SSAR freq mismatch on some SSCs.	CTV is a special case. SMAR and SMAF SSCs probably should be used independently of any previous SSCs.
8.	1398	ERBS	X			X	X	X	X	Has one high power mode SSAF SSC.	Some current SSA support could be switched to SMA.
9.	1419	LANDSAT-5		X	X	X	X	X	X	Is K-band support concurrent with SSA support? Some SSAF SSCs are RCP. Some SSAR SSCs are RCP.	Some current SSA support could be switched to SMA.

	SIC	Name	MOC ICD	Service Types						SSA/SMA Compatibility Issues	Comments
				KuSAF	KuSAR	MAF	MAR	SSAF	SSAR		
10.	1446	HST	X			X	X	X	X	SSAR SSCs with max and initial data rate too high. SSAR freq mismatch on some SSCs. Some SSAF SSCs are high power mode.	Some current SSA support could be switched to SMA.
11.	1501 1502	LDBP	X			X	X	X	X	None.	No apparent reason to not use SMA.
12.	1873	EOS-AM1	X	X	X	X	X	X	X	Is K-band support concurrent with SSA support? Some SSAF SSCs are RCP. Some SSAR SSCs are RCP. SSAR SSCs with max data rate too high.	Some current SSA support could be switched to SMA.
13.	3097 3098	NASDA ETS-7						X	X	Some SSAF SSCs are RCP. Some SSAR SSCs are RCP. SSAF freq mismatch. SSAR freq mismatch.	Probably not a good SMA candidate.
14.	3782	UARS	X			X	X	X	X	Some SSAF SSCs are RCP. Some SSAR SSCs are RCP. SSAR SSCs with max data rate too high. Some SSAF SSCs are high power mode.	Some current SSA support could be switched to SMA.
15.	4007	DAS				X	X	X	X	None.	DAS is a special case. SMAR and SMAF SSCs probably should be used independently of any previous SSCs.

				Service Types							
	SIC	Name	MOC ICD	KuSAF	KuSAR	MAF	MAR	SSAF	SSAR	SSA/SMA Compatibility Issues	Comments
16.	4009	BOZEMAN						X		SSAF freq mismatch on one SSC. All SSAF SSCs are high power mode.	Does not have a SATIDEN, may be a special case. Probably not a good SMA candidate.
17.	4377	TOPEX	X			X	X	X	X	Some SSAF SSCs are RCP. Some SSAR SSCs are RCP. SSAR SSCs with max data rate too high.	Some current SSA support could be switched to SMA.
18.	4625	GRO	X			X	X	X	X	Some SSAF SSCs are RCP. Some SSAR SSCs are RCP. SSAR SSCs with max data rate too high.	Some current SSA support could be switched to SMA.
19.	5050	TDRSS INTERNET LINK			X	X	X	X	X	Is K-band support concurrent with SSA support? SSAF SSC has "Command Channel PN Modulation" equal NO. SSAF Data Rate exceeds 300 Kbps.	Does not have a SATIDEN, probably a special case. SMAR and SMAF SSCs probably should be used independently of any previous SSCs.
20.	5657	FUSE						X	X	All SSAF SSCs are RCP. All SSAR SSCs are RCP. All SSAF SSCs have "Command Channel PN Modulation" equal NO. SSAF freq mismatch. SSAR freq mismatch. All SSAF SSCs are high power mode.	Does not have a SATIDEN, may be a special case. Probably not a good SMA candidate.

	SIC	Name	MOC ICD	Service Types						SSA/SMA Compatibility Issues	Comments
				KuSAF	KuSAR	MAF	MAR	SSAF	SSAR		
21.	5981	PROJECT ANTENNA						X	X	SSAF freq mismatch on some SSCs. SSAR freq mismatch on some SSCs. All SSAF SSCs are high power mode.	Does not have a SATIDEN, may be a special case. Probably not a good SMA candidate.
22.	6001 6002	PORTCOM-1 PORTCOM-2				X		X		None.	Does not have a SATIDEN, may be a special case. But no apparent reason to not use SMA.
23.	6021 6022	PORTCOM-21 PORTCOM-22					X	X	X	None.	Does not have a SATIDEN, may be a special case. But no apparent reason to not use SMA.
24.	6581	XTE	X			X		X	X	Some SSAF SSCs are RCP. Some SSAR SSCs are RCP.	Some current SSA support could be switched to SMA.
25.	6650	PROJECT ANTENNA 2				X	X	X	X	SSAF freq mismatch on some SSCs. SSAR freq mismatch on some SSCs. All SSAF SSCs are high power mode.	Does not have a SATIDEN, may be a special case. Probably not a good SMA candidate.
26.	6951	EUVE	X			X	X	X	X	Some SSAF SSCs are RCP and are high power mode. Some SSAR SSCs are RCP. SSAR SSCs with max data rate too high.	Some current SSA support could be switched to SMA.
27.	7368	LNDST-7	X			X	X	X	X	None.	No apparent reason to not use SMA.

	SIC	Name	MOC ICD	Service Types						SSA/SMA Compatibility Issues	Comments
				KuSAF	KuSAR	MAF	MAR	SSAF	SSAR		
28.	7575	OP MISSIONS NODES				X	X	X	X	None.	Does not have a SATIDEN, may be a special case. But no apparent reason to not use SMA.
29.	8000	ISS	X	X	X			X	X	Is K-band support concurrent with SSA support? Some SSAF SSCs are RCP. Some SSAR SSCs are RCP. SSAR SSCs with max and initial data rate too high. SSAF freq mismatch. SSAR freq mismatch.	Probably not a good SMA candidate.
30.	8001	ISS-ECOM	X			X	X	X	X	Some SSAF SSCs are high power mode.	Some current SSA support could be switched to SMA.
31.	8002	ISS-ICM	X			X	X	X	X	None.	No apparent reason to not use SMA.
32.	8515	SOUTH POLE TDRSS RELAY			X			X	X	Is K-band support concurrent with SSA support? SSAF SSC is RCP. SSAR SSC is RCP. SSAF SSC has "Command Channel PN Modulation" equal NO. SSAF Data Rate exceeds 300 Kbps. SSAF freq mismatch. SSAR freq mismatch.	Does not have a SATIDEN, and is probably a special case. Probably not a good SMA candidate.
33.	8601	EO-1							X	Some SSAR SSCs are RCP. SSAR freq mismatch.	Probably not a good SMA candidate.

	SIC	Name	MOC ICD	Service Types						SSA/SMA Compatibility Issues	Comments
				KuSAF	KuSAR	MAF	MAR	SSAF	SSAR		
34.	8603	GP-B	X								In MOC ICD, but no SSCs.