

Legend for Cat Column:

E	Editorial
R	Review
C	Confusing, clarification, erroneous information, inconsistency, or invalid argument
A	Additional material
S	Serious – resolution of comment requires special attention (includes regional difference with potential operational impact)

Legend for Status Column

[TBD]

Comments and contributions received from the following. Initials are used throughout the comment matrix.

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1 Definitions	SV5-0139	TK	COMMENT: The definitions need to be administratively updated just prior to completion. Terms generally will only be included if used in the document. (Editors Note 2 in v0.5) SUGGESTED CHANGE:	R	21-Sep-11-TK – Defer to after IR-SVTF/3. 3-Dec-11-TK - Added terms, acronyms and definitions that are used in the document.	
Apx B (Formerly Apx A)	SV5-0152	TK	COMMENT: Editor’s note 18 (v0.5). — SK/TK – The definitions that follow were taken from GOLD, 1st Edition and commented with Ed Notes for further resolution. Editor’s note 19 (v0.5). — SK/TK – The safety requirements for this specification currently refer to the GOLD, Appendix B. These safety requirements still need to be reviewed for their applicability in the RCP allocations for voice communications. SUGGESTED CHANGE:	R	23-Jul-11-TK - Delete Ed Notes and maintain status using comment matrix. Ed note 18 is information for review only and can be closed. Ed note 19 to review and clarify safety requirements is in work.	
Apx B (Formerly Apx A)	SV5-0168	TK/SK (IR-SVTF Web/2)	COMMENT: The presentation concluded that further work will continue in future versions of SVGM. The IR-SVTF should consider the following for ground-to-air (GTA) calls:	A	23-Aug-11-TK – This comment is text taken from the IR-SVTF Web/2 SoD. 23-Feb-12-TK – Concerning:	

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Other sections and New Apx			<p>a) Dialing should be automated (where possible) to lessen impact of manual dialing and voice prompts (this provides acceptable means of compliance).</p> <p>b) GTA calls should require security; any security measures that affect latency, continuity, availability and integrity would be part of actual performance against RCP specifications (per Doc 9869 definitions), but the requirements for security measures themselves, e.g., PIN access, would not be part of the specification and would be treated separately. The following security measures should be considered in the SVG: <ol style="list-style-type: none"> 1) Dialing a GTA call requires PIN access and indication of ATC/AOC level priority; 2) Aircraft and/or flight crew procedures should provide means to ensure appropriate priority level for GTA caller authentication. Note that Aircraft ICAO codes are public information on internet; and 3) More security measures could be added for GTA calls, if needed. </p> <p>c) Validation of RCP specifications: <ol style="list-style-type: none"> 1) Are intended uses of SATCOM voice consistent with intended uses of HF voice? Note TT 95% time may be too stringent. Total time = 275, which is <350 sec; 2) Do proposed time allocations need to be adjusted?; 3) Need to review safety requirements related to RCP parameters in a SATCOM voice application; 4) PARC CWG planning operational evaluations that will contribute to validating RCP specifications; and 5) Others should contribute to validation activities. </p> <p>d) Begin development of component definition and performance criteria applicable to “direct from controller” communications (RCP 400).</p> <p>e) Begin development of new Appendix for guidance on</p>		<p>Item a) – See 3.2.4.3, which makes reference to autodial as means to comply with performance specifications.</p> <p>Item b) – See 3.2.2.5, which provides guidance for ANSP to ensure that the SATVOICE service provision meets applicable security requirements through SSPs authorizing CSPs to provide SATVOICE services, CSPs administering accounts to authorized subscribers with PIN and priority level calling, restricting calls to the flight deck and/or alerting the flight crew of call priority.</p> <p>Item c) – At IRSVTF/3, adjusted allocations at IRSVTF/3 based on preliminary data collection from PARC CWG SATVOICE project and FAA Technical Center and developed safety requirements based on input from Steve Kong, which are included in v0.8.6..</p> <p>Item d) – Still in work.</p> <p>Item e) – Appendix has been created.</p>	

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			post-implementation monitoring. SUGGESTED CHANGE:			
Apx B (Formerly Apx A) B.3.2.2	SV5-0156	TK	COMMENT: Editor's note 24 (v0.5). — SK - It may not be clear at the time of this submittal, what type of error rate would reflect this measure. SUGGESTED CHANGE:	C	23-Jul-11-TK - Delete Ed Note and maintain status using comment matrix. See also comment SV5-0152, related to safety requirements. Integrity will be addressed via a number of ways, e.g., software assurance, architecture, etc, and may not have a specific error rate for comm., but may contribute to operational errors and pilot deviations. 3-Jan-12-TK – Check with Steve Kong.	
Apx C (formerly Apx B) (Formerly Apx A)	SV8-0353	TK	COMMENT: Use of SATVOICE for position reporting should meet criteria for the RSP 400 specification SUGGESTED CHANGE: Consider development of a SATVOICE model for its use to fulfill the flight crew's position reporting requirements.	A	14-Feb-12-TK – Included new Appendix which still needs to be completed.	
Apx D (Formerly Apx C) (Formerly Apx B) (formerly Apx A, A.3.2.1)	SV7-0272	GL	COMMENT: Currently, F to J time measurement also includes failed attempts to contact HF aircraft. This skews the RCP times therefore a method of filtering will be required. (A.3.2.1 Appendix A SVG M) SUGGESTED CHANGE:	C	3-Jan-12-TK – Reassign comment to Apx B. The performance specifications are intended to provide criteria for “operational” performance, so to not necessarily filter out failed attempts. To be “operational,” the specs need to include acceptable latency to include failed HF attempts. If you filter the failed attempts on HF and this is a high frequency of occurrence, the data may appear to be good when, in fact, operationally, it is unacceptable. Similarly, if SATVOICE failed and communication was successful on HF voice, the failed attempts on SATVOICE would be included in the HF latency measurements. The reliability of the communication becomes a factor in the radio operator's decision on which media to use to contact the aircraft. 23-Feb-12-TK – Comment relevant to Appendix D.	

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Apx D (Formerly Apx C) (Formerly Apx B)	SV4-0138	TK	COMMENT: Guidance is suggested on post-implementation monitoring and analysis on the performance of SATCOM voice for ATS use, similar to what we have for data link in GOLD, Apx D. SUGGESTED CHANGE: Include an Appendix that provides guidance on post implementation monitoring and analysis of SATCOM voice.	A	23-Sep-11-TK – Make Apx B for now. 23-Feb-12-TK – Comment relevant to Appendix D.	
Apx D (Formerly Apx C) (Formerly Apx B) 2 nd para last sentence	SV8-0391	DRM	COMMENT: Who organizes how ANSP's operators, etc participate in reporting and resolving problems SUGGESTED CHANGE: Be more specific.direct them to formulate a working group etc.	A	23-Feb-12-TK – Comment relevant to Appendix D.	
Z_Next Comment	SV8-0439		COMMENT: SUGGESTED CHANGE:			
0_General	SV8-0436	EN	COMMENT: Editorial changes SUGGESTED CHANGE:	E	16-Feb-12-TK – Done. I think. Close.	C
0_General	SV8-0423	TK	COMMENT: Document uses SATCOM Voice and SATVOICE. SUGGESTED CHANGE: Use SATVOICE consistently throughout document	S	16-Feb-12-IRSVTF/3 – AMS(R)S, No one knows what this is SATCOM Voice (SCV) - Used a lot, has been used, Sometime SATCOM used without voice or data and this is confusing; Satellite Voice Communication (SATVOICE) (SV), New now to other terms used previously, SATVOICE ensures we know what we are talking about, SATVOICE will be used more easily operationally. It has emerged very quickly due to its ease in use and brevity. Document uses: Satellite Voice (SATVOICE) Communications SATCOM voice and SATVOICE are synonymous Change throughout document. Close.	C
0_General	SV8-0346	BC	COMMENT: 17-Oct-11. After discussions with	S	2-Nov-11-TK – See attached file beginning with	C

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			<p>several team members I would like to make a proposal to the team and get some level of consensus before we try and roll this new process into the specification.</p> <p>After much review we are proposing that both ARINC and SITA manage a database of "mode S code and airplane tail number". Since ARINC and SITA are the only communication providers that provide SATCOM Voice service capable of providing ATC communication services it seems only logical that they become the official keepers of the respective data bases. This will change the current INMARSAT process of "emailing" out a list every so many days. In this new proposal both INMARSAT and Iridium would provide updates to the ARINC and SITA databases.</p> <p>I am also proposing that the information be kept up to date in a 24hour update basis. In a future environment where SATCOM will be viewed as an LRCS having an extended period such as we have to day with the informal INMARSAT process. It would be the responsibility of the operator to ensure that if any maintainance is performed then the operator needs to ensure both the voice and data systems on the SATCOM system are properly registered with their respective SATCOM provider. This process will ensure that we have an up to date database of mode S and tail numbers available on a 24 hour basis.</p> <p>If we followed this proposal then the radio operators automation systems could check the respective databases every 24 hours.</p> <p>So now out to the floor. What you folks think of this proposal?</p> <p>SUGGESTED CHANGE:</p>		<p>“SV8-0346_...” in the Relevant Material folder on the IRSVTF website.</p> <p>4-Nov-11-TK – IRSVTF Web/4 meeting - The IRSVTF discussed a concept for access number management. The concept will be used to develop a proposal for SVG M as follows:</p> <p>a) Concept – Chapter 2 consideration</p> <ol style="list-style-type: none"> 1) ATC/aeronautical station can contact aircraft with PIN, priority level, and aircraft address (represented in octal code); 2) SSP (Inmarsat, MTSAT, and Iridium) maintains database that cross-references aircraft address, aircraft registration, AES ID and other information needed to contact the aircraft; and 3) For the longer term, ATC/aeronautical station will get aircraft registration and aircraft address (in hex format) from flight plan and convert aircraft address to octal code format. In transition, for a period of time to be determined later, the SSP will continue to provide the cross reference of aircraft registration to aircraft address (represented in octal code), referred to as the golden email. Iridium will also need to provide the “golden email” during this transition period. A means is needed for ATC/aeronautical station to call the aircraft via MTSAT or INMARSAT. <p>b) What does Operator do and with whom do they coordinate? – Chapter 3.2 guidance considerations</p> <ol style="list-style-type: none"> 1) Operators will be required to register with their CSP (ARINC or SITA) to manage access numbers to aircraft, such as for new aircraft, sold aircraft, i.e., change in aircraft address/aircraft registration to existing aircraft; 2) What about maintenance action, e.g., change in SIM card, Inmarsat, MTSAT, to ensure aircraft access number is maintained; 3) File aircraft address (Hex 	

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					representation) in flight plan; and 4) How are last minute changes to aircraft on a flight handled. c) What does ATC/aeronautical station do? – The facility converts aircraft address from flight plan to hex to octal. Provide answer in Chapter 3.1.4. d) What does CSP do and with whom do they coordinate? – Consider guidance in Chapter 3.1.5. e) What does SSP do and with whom do they coordinate? – Consider guidance in Chapter 3.1.6. 3-Dec-11-TK – Updated revision 0.8.2, Figure 2-1 and 3-1. Revised paragraph 2.6. Revised Chapter 3. Close.	
0_General	SV1-0013	TK	<p>COMMENT: FAA offers FAA policies on High Frequency (HF) Communications MMEL Requirements when taking account of SATCOM voice, as a reference to consider in formulating global SATCOM voice guidance material.</p> <p>SUGGESTED CHANGE:</p>	R	12-Jan-11-TK – See attached file beginning with <comment number>. 23-Sep-11-TK – Provides reference in developing the SVGM. Considered and addressed. Make specific comment on v0.8, as necessary. Close.	C
0_General	SV1-0014	TK	<p>COMMENT: FAA offers Draft AC 20-150A, which provides acceptable means of compliance to applicable airworthiness requirements for the installation of SATCOM voice equipment in aircraft. SATCOM Voice TF is invited to use this material as a reference to consider in formulating global SATCOM voice guidance material. In addition, we solicit comments on the document.</p> <p>SUGGESTED CHANGE:</p>	R	12-Jan-11-TK – See attached file beginning with <comment number>. 23-Sep-11-TK – Provides reference in developing the SVGM. Considered and addressed. Make specific comment on v0.8, as necessary. Close.	C

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0_General	SV1-0015	JC1/EN	<p>COMMENT: There are two documents that may be useful for the work of the Task Force; I don't have a electronic copy only a paper copy. The documents are:</p> <p>-RTCA/DO-222 "GUIDELINES ON AMS(R)S NEAR-TERM VOICE IMPLEMENTATION AND UTILIZATION"</p> <p>-RTCA/DO-231 "DESIGN GUIDELINES AND RECOMMENDED STANDARDS FOR THE IMPLEMENTATION AND USE OF AMS(R)S SERVICES IN A DATALINK ENVIRONMENT"</p> <p>SUGGESTED CHANGE:</p>	R	<p>12-Jan-11-TK – These documents are only available in hard copy for fee from RTCA. They were developed by SC-165 in 1994 and 1996.</p> <p>23-Sep-11-TK – Provides reference in developing the SVGM. Considered and addressed. Make specific comment on v0.8, as necessary. Close.</p>	C
0_General	SV1-0008	AL	<p>COMMENT: If the intention is to allow clearances via SATCOM voice then if the aircrew have any doubt with a clearance they have received on SATCOM voice, standard procedure should be that they call the ground station to confirm such. Pilot and controllers procedures need to be as near to real world HF operations as possible and not over complicated. KISS theory.</p> <p>If these draft procedures can be consolidated into a more useable format that are easily understood it is more importantly that they will be complied with by aircrew and ground stations alike</p> <p>SUGGESTED CHANGE:</p>	R	<p>12-Jan-11-TK – See also attached file beginning with <comment number>.</p> <p>29-Jun-11-IR-SVTF- Agree. For further consideration, provide specific comments. Close.</p>	C
0_General	SV7-0230	IM	Suggest use ICAO ANSP rather than the term ATSP through the document.	E	14-Sep-11-IR-SVTF/2 – Discussed previously and decided to use ATSP. No change. Close	C
0_General	SV8-0397	DW (Australia)	<p>COMMENT: Refer to IRSVTF/3 WP/2</p> <p>3.1 That Australia's position is recognized that the current version 0.8.3 of the SVGM allows too much flexibility in its potential to deliver the worst possible outcome, in an unmanageable timeframe.</p> <p>SUGGESTED CHANGE:</p>	C	<p>10-Feb-12-TK - Regarding Section 3 of the paper, I don't understand where in SVGM it "allows too much flexibility." Knowing more specifically what flexibility it allows that it shouldn't allow and having specific paragraphs would help.</p> <p>14-Feb-12-TK – Discuss with DW. Addressed at IRSVTF/3. No change. Close.</p>	C

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0_General 3.4	SV8-0398	DW (Australia)	<p>COMMENT: Refer to IRSVTF/3 WP/2</p> <p>3.2.1 That to deliver any interim or final solution, flight planning requirements to notify aircraft contact numbers are implemented globally in line with ICAO 2012 changes including the use of which code or number that should be displayed.</p> <p>SUGGESTED CHANGE:</p>	C	<p>10-Feb-12-TK - 3.2.1 - Flight plan filing requirements are provided in paragraph 3.4 of SVGM notifying ANSPs and Aero Stations of aircraft contact numbers prior to and after implementation of the 2012 FPL. All aircraft are contacted by access number provided by their CSP when the account is set up, they are provided a user ID (for Iridium), PIN, priority calling, and aircraft address (from flight plan in hex representation or by conversion of aircraft registration) converted to octal code, which is the aircraft contact number to call the aircraft via SATVOICE. This is described in Section 2 of the SVGM and appropriate guidance provided in Section 3, 4 and 5 as appropriate.</p> <p>14-Feb-12-TK – Discuss with DW. Addressed at IRSVTF/3. No change. Close.</p>	C
0_General	SV8-0399	DW (Australia)	<p>COMMENT: Refer to IRSVTF/3 WP/2</p> <p>3.2.2 That the decision on which of the five items/scenarios considered in the scope of work includes an appropriately agreed implementation timeframe. Australia projects these changes to be reasonably managed in a minimum of two to ten years, depending on how extensive the changes agreed are.</p> <p>SUGGESTED CHANGE:</p>	C	<p>10-Feb-12-TK - 3.2.2 - Implementation timeframes are outside the scope of the guidance material. The SVGM is intended to support implementation timeframes as determined within the Regions and States and should be used as the basis for SATVOICE provisions and aircraft equipage and use.</p> <p>14-Feb-12-TK – Discuss with DW. Addressed at IRSVTF/3. No change. Close.</p>	C
0_General	SV8-0400	DW (Australia)	<p>COMMENT: Refer to IRSVTF/3 WP/2</p> <p>3.2.3 That the states be given time to properly analyse the projected cost/benefits from a decision on the items/scenarios agreed upon within the scope of work. This may involve a considerable period of survey against the RCP 400 or 240 specifications. The results of this study would then be relayed to IATA and other interested parties and agreed upon, prior to implementation of any changes.</p>	C	<p>10-Feb-12-TK – 3.2.3 - The costs and benefits are outside the scope of the guidance material. The SVGM is intended to support implementations of SATVOICE provisions and aircraft equipage if an ANSP, Aeronautical Station, or aircraft operator chooses to introduce SATVOICE capability into their operations. Operators need to be aware of AIP restrictions in particular airspace, which is covered in paragraph 3.2 (for States/ANSPs to notify of SATVOICE services and requirements/restrictions,</p>	C

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			SUGGESTED CHANGE:		3.3 (Operators preparation) and 3.4 (flight plan filing according to AIP restrictions) of the SVGM. 14-Feb-12-TK – Discussed with DW. Addressed at IRSVTF/3. No change. Close.	
0_General	SV8-0401	DW (Australia)	COMMENT: Refer to IRSVTF/3 WP/2 3.2.4 That should a global decision be ratified, then regional exceptions will be expected and that compliance would be managed in a co-operative regional response. This recognizes ICAOs commitment to states with less ability to financially implement the significant technological shift that the SVGM proposes. SUGGESTED CHANGE:	C	10-Feb-12-TK - 3.2.4 - I don;t understand what global decision is to be made other than the guidance on introduction of SATVOICE should local need determines a benefit. The paper does not indicate where SVGM implicitly or explicitly indicates a "significant technological shift." It only provides guidance on the introduction of the provision and use of SATVOICE. 14-Feb-12-TK – Discussed with DW. Addressed at IRSVTF/3. No change. Close.	C
0_General	SV8-0402	DW (Australia)	COMMENT: Refer to IRSVTF/3 WP/2 3.2.5 That should a global decision be ratified and implemented regionally, prior to a global solution being delivered, then manufacturers and operators are made aware of regional limitations and schedule and flight plan appropriately. SUGGESTED CHANGE:	C	10-Feb-12-TK - 3.2.5 - SVGM addresses regional (or State) limitations via AIP in Section 3.2 and 3.4. The SVGM provides a global solution to implement SATVOICE provisions and capability independent of synchronizing timeframes for implementation. 14-Feb-12-TK – Discussed with DW. Addressed at IRSVTF/3. No change. Close.	C
0_General	SV8-0403	DW (Australia)	COMMENT: Refer to IRSVTF/3 WP/2 3.2.6 That should a global decision be ratified, and implemented regionally, prior to a global solution being delivered then ANSP and CSP bodies do not attempt to gain business through lobbying operators to insist on their current service provider implementing SCV services. SUGGESTED CHANGE:	C	10-Feb-12-TK - 3.2.6 - The business of SATVOICE implementation is outside the scope of the SVGM. SVGM is intended to provide a global solution for safe and globally consistent operation of SATVOICE when business and benefit determined within a State or Regionally, so indicate the need. 14-Feb-12-TK – Discussed with DW. Addressed at IRSVTF/3. No change. Close.	C
0_General	SV8-0404	DW (Australia)	COMMENT: Refer to IRSVTF/3 WP/2 3.3 That Australia supports the general principle that	C	14-Feb-12-TK –SVGM intended to support implementation of SATVOICE with appropriate planning and costing, in an appropriate timeframe.	C

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			<p>SCV is a potentially viable technology that can be utilised as a LRCS and be implemented with the appropriate planning and costing, in an appropriate timeframe.</p> <p>SUGGESTED CHANGE:</p>		Discussed with DW. Addressed at IRSVTF/3. No change. Close.Close.	
0_General	SV7-0228	IM	<p>Why remove FAA specific references? – OK to use in ICAO.</p>	C	14-Sep-11-IR-SVTF/2 – OK, we don't have to remove them. Revised AC20-150 to AC20-150A. Close	C
0_General	SV8-0413	FR	<p>COMMENT: In many areas of the document, we specify that “radio operator/controller answers the incoming call”, “route the call to the appropriate radio operator/controller”. In the “real world” other ATS staff may be involved in SATCOM. For example you could have an Air Traffic Assistant answering a call at a facility and transfer the call to the appropriate ATC or flight service specialist (who is neither ATC nor radio operator) or in some cases the assistant will check with the controller and then provide information to the pilot (eg pilots call ACC via SATCOM, advising the assistant he is unable to reach the controller on frequency XYZ; assistant calls ATC and ATC asked assistant to relay message to pilot to contact ATC on frequency ABC). All I am trying to say is that we may need to be more generic (ATS staff) instead of being specific (radio operator/controller)</p> <p>SUGGESTED CHANGE:</p>		15-Feb-12-IRSVTF/3 – Close for this Edition. Possible consideration for next Edition.	C
0_General	SV4-0122	EN	<p>COMMENT: SATCOM voice vs AMS(R)S. I propose to use AMSRS once in the Foreword (maybe in the title too) then add in the brackets “commonly referred as SATCOM voice” and continue as is.</p> <p>SUGGESTED CHANGE:</p>		<p>29-Jun-11-IR-SVTF- AMS(R)S includes both voice and data, so when referring to AMS(R)S, the term should be qualified with AMS(R)S voice.</p> <p>Title of document – Group prefers to keep it as is. ACTION: Elkhan will develop some language in Foreword and/or Chapter 1 to address relationship between SATCOM voice and AMS(R)S.</p> <p>22-Jul-11-TK – Action completed. See resolution</p>	C

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					to comment SV4-0130. Close.	
0_General Foreword	SV2-0017	EN	COMMENT: Produced draft Foreword to document SUGGESTED CHANGE:	A	30-Mar-11-TK – See attached file beginning with <comment number>. 31-Mar-11-TK – Incorporated text into v0.3. Close	C
0_General Foreword 2.4 line 1 &2	SV8-0371	DRM	COMMENT: change familiar to knowledgeable and change Various to Appropriate SUGGESTED CHANGE: See above		13-Feb-12-TK – Revised to, “The following personnel and organizations should be knowledgeable with relevant aspects of its contents.” Close.	C
0_General Foreword 1.2	SV2-0019	FT	COMMENT: Paragraph 1.2, suggest to add sentence SUGGESTED CHANGE: 1.2 Over the oceanic and remote continental areas, flights have historically been conducted with high frequency (HF) radios due to the advantage of being able to transmit and receive air/ground communications for thousands of miles. Most competent authorities hence required two independent HF sets on-board.	C	31-Mar-11-TK – Incorporated text into v0.3. Close	C
0_General Foreword 1.2	SV2-0032	BP	SUGGESTED CHANGE: Insert the word “communications” after the word “flight”. See also comment about para 2.1.1 of the Draft Guidance (below)	C	31-Mar-11-TK – Revise to “... aeronautical communications have historically been conducted with high frequency (HF) radios...” Close	C
0_General Foreword 1.4	SV7-0278	CNY	COMMENT: ADS-C is usually considered as a surveillance mean instead of communications mean. Moreover, both FANS 1/A type of ADS-C and CPDLC are usually not used in radar areas. SUGGESTED CHANGE: CPDLC and ADS-C were seen as the normal or preferred means of ATS communications <u>and surveillance over the oceanic and remote continental areas.</u>	E	23-Sep-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
0_General Foreword 1.4	SV2-0020	FT	<p>COMMENT: Paragraph 1.4, suggest to insert “airborne.”</p> <p>SUGGESTED CHANGE: In 1995, the initial future air navigation system (FANS 1/A) provided an integrated airborne CNS package.</p>	C	31-Mar-11-TK – Incorporated into v0.3. Close	C
0_General Foreword 1.4	SV3-0094	JK	<p>COMMENT: Last para would indicate all aircraft became equipped.</p> <p>SUGGESTED CHANGE: From that time some aircraft became equipped with SATCOM voice capability.</p>		28-May-11-TK – Accept comment. The last sentence is referring to FANS 1/A aircraft discussed in the previous sentences. Revise to, “At the same time, these aircraft became equipped with SATCOM voice capability.” Close	C
0_General Foreword 1.5	SV3-0095	JK	<p>COMMENT: This last sentence needs additional wording.</p> <p>SUGGESTED CHANGE: It was noted that the use of SATCOM voice had proven to be very useful during periods of HF blackout. Although the cost implications and the delay in Set Up times were unknown to the wider users.</p>		28-May-11-TK – Accept comment. The comment is more relevant to paragraph 1.6 where further discussions took place at NAT SPG/44. In review of paragraphs 1.6 against the NAT SPG/44 report, the following apply: 2.4.22 The main conclusions from the SVTF are summarised as follows: a) the trials were successful in proving that the radio operators and crew procedures defined in the trials Guidance Material for the use of SATCOM voice for routine communications were adequate; b) the security measures defined in the trials Guidance Material were adequate for the use of SATCOM voice for routine ATS communications; c) the call setup times needed to be improved to allow quicker access to the communication media by ATS providers; d) the priority Q12 should be reserved for ATS usage by CSPs that supply the service and this should become mandatory and globally implemented; and e) network and ground systems capacity needed to be tested and implemented as required and related costs needed to be recovered.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>NAT SPG Conclusion 44/13 That, considering that the migration to the use of SATCOM voice for routine communications was endorsed, the NAT Implementation Management Group (NAT IMG):</p> <p>a) develop an implementation plan which:</p> <ul style="list-style-type: none"> i) would take account of the need to amend documentation; ii) could be adapted for global use; and iii) identified dependencies; and <p>b) report to NAT SPG/45.</p> <p>2.5.9 The NAT IMG should also consider the question of HF Minimum Equipment List (MEL) relief. It was acknowledged that any decision regarding MEL relief was contingent on the decision to use SATCOM voice for routine ATS communications (paragraph 2.4.23 above refers) and it was recognised that any MEL relief was subject to approval by State authorities.</p> <p>Revised para 1.5, 1.6 and beginning of 1.7 as follows:</p> <p>1.5 In June 2001, the 37th Meeting of the NAT SPG (12-14 June 2001) agreed that a study would be initiated to assess the viability of using satellite voice communications for waypoint position reporting as an initial step. The study was accompanied by the NAT trials that had been successful and demonstrated that while there were costs associated with implementation and use, SATCOM voice could be an effective and reliable long range communication system to support ATS voice communications.</p> <p>1.6 In 2003, the 39th NAT SPG Meeting (17-19 June 2003) agreed that the NAT SUPPs needed</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>to be amended to clearly state the conditions under which SATCOM voice could be used. In 2008, the 44th Meeting of the NAT SPG (17-20 June 2008) agreed that the authorization to use SATCOM voice for all ATS communications would permit reduction in risk of communications failure, improve safety of operations, and alleviate HF congestion. However, guidance material would be needed to address a number of issues related to call setup times, security and system performance and capacity. It was further concluded that any decision regarding MEL relief of one HF radio was subject to approval by the appropriate authority.</p> <p>1.7 Some regulatory authorities have granted some operators MEL dispatch relief for a limited time whereby the aircraft may be ...</p> <p>Close</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
0_General Foreword 1.6	SV2-0021	FT	<p>COMMENT: Paragraph 1.6, suggest revisions.</p> <p>SUGGESTED CHANGE: 1.6 In 2003, the 39th NAT SPG Meeting (17-19 June 2003) agreed that the NAT SUPPs needed to be amended to clearly state the conditions under which SATCOM voice could be used. Since then, flight crews are using SATCOM voice instead of HF voice for urgent communications or when HF voice was not operational due to atmospheric conditions. In most cases the involved aircraft have hence today on-board three systems for long range communications (2 HF + 1 SATCOM). In 2008, the 44th Meeting of the NAT SPG (17-20 June 2008) agreed that the authorization to use SATCOM voice for all ATS communications would permit reduction in risk of communications failure, improve safety of operations, alleviate HF congestion and, without detriment to the safety objectives, provide for MEL relief by removing a requirement to carry the second HF radio. Therefore, another series of trials were carried out with participation of the NAT airspace users, ANS and communications service providers that demonstrated that SATCOM voice is an effective and reliable long range communication system to support all ATS communications.</p>	C	31-Mar-11-TK – Incorporated into v0.3. Close	C
0_General Foreword 1.6	SV3-0096	JK	<p>COMMENT: Editorial change required in 2nd sentence.....</p> <p>SUGGESTED CHANGE: In some cases (not most cases).....</p>		<p>28-May-11-TK – Accept comment. Deleted the two sentences, as they are out of place in the sequence of background information and no longer accurate, since flight crews can use SATCOM voice for routine use:</p> <p>Since then, flight crews are using SATCOM voice instead of HF voice for urgent communications or when HF voice was not operational due to atmospheric conditions. The involved aircraft have three systems on board for long range communications (2 HF + 1 SATCOM).</p> <p>See also resolution to comment SV3-0095. Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
0_General Foreword 1.6	SV3-0097	JK	<p>COMMENT: Last sentence needs additional wording for clarification and accuracy of report....</p> <p>SUGGESTED CHANGE: Therefore,to support all ATS communications but with noted deficiencies as outlined in the SVTF Report, namely, Set-Up delays, Single Channel use and Cost implications.</p>		28-May-11-TK – Accept comment. See resolution to comment SV3-0095. Close.	C
0_General Foreword 1.7	SV6-0170	GL	<p>COMMENT: What is permanent MEL dispatch relief?</p> <p>SUGGESTED CHANGE:</p>	C	<p>4-Sep-11-TK – I didn’t realize this would raise a question. The previous sentence refers to “time-limited” dispatch. “Permanent” simply refers to no time limit. Do these terms need to be defined? Or is there another term?</p> <p>21-Sep-11-TK – Revise to “Some State authorities have granted some operators time-limited MEL dispatch relief of one HF radio whereby the aircraft may be dispatched for a limited period of time (e.g., 5 or 10 days) with only a single operational HF radio system and a single operational SATCOM voice system. Operators are now seeking MEL dispatch relief of one HF radio with no time limits by demonstrating that either the Iridium or Inmarsat SATCOM voice system meets the long range communication system (LRCS) requirements.” Close.</p>	C
0_General Foreword 1.7	SV3-0098	JK	<p>COMMENT: This para is exaggerated in the extreme. I propose to delete the sentence (In the interest.....requirements) Also delete the last sentence (These capabilities.....)</p> <p>There is no evidence that costs are lowered, if anything they are higher. Does not streamline efficiency. It is much slower and time consuming. Does not provide better comms tools. All it does is add additional options for comms.</p>		<p>28-May-11-TK – Accept comment. Revised paragraph 1.7 as follows:</p> <p>“1.7 Some State authorities have granted some operators time-limited MEL dispatch relief of one HF radio whereby the aircraft may be dispatched for a limited period (5 or 10 days) with only a single operational HF radio system and a single operational SATCOM voice system. Operators are now seeking permanent MEL dispatch relief of one HF radio by demonstrating that either the Inmarsat</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Aircraft operators are not turning to SATCOM Voice, Quite the contrary in fact based on NAT usage. There is little or no usage of SATCOM voice and some of the bigger airline operators instruct crews not to use it. Evidence available.</p> <p>SUGGESTED CHANGE: Delete relevant section.</p>		<p>or Inmarsat SATCOM voice system meets the long range communication system (LRCS) requirements.”</p> <p>Close</p>	
<p>0_General Foreword 1.9 (Page vi)</p>	<p>SV3-0071</p>	<p>ML</p>	<p>COMMENT: " ... SATCOM voice as a standalone LRCS for ATS..."</p> <p>This sentence has to be clarified. Does “standalone LRCS” mean: without any HF at all?</p> <p>In addition, the scope of the document could be clarified. Does it consider the use of SATCOM in regions where only one HF is required? Or is the scope only to consider the use of SATCOM where 2 HFs are required.</p> <p>SUGGESTED CHANGE:</p>	<p>C</p>	<p>28-May-11-TK – Accept comment. Revise last sentence as follows:</p> <p>This guidance material may facilitate the appropriate authority in establishing its policies on MEL for some dispatch relief. However, it assumes that sufficient HF voice infrastructure must remain in service and that the aircraft must be equipped with at least one operational HF voice system. It does not at this time provide guidance on the use of SATCOM voice as a stand alone LRCS for ATS purposes as standards for this use have not yet been developed.</p> <p>Close.</p>	<p>C</p>

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
0_General Foreword 1.9	SV2-0018	IM	<p>COMMENT: One comment on the Foreword draft. My understanding is that the TF came to the clear conclusion that SCV is not yet ready to be approved as a stand alone LRCS and more work needs to be done by OPLINK P etc. However, until you read 2.3 e) this is not stated at all. Having already had one airline, who heard of our involvement with the TF apply for such use, then I suggest a more up front statement in Section 1.</p> <p>SUGGESTED CHANGE: Some words to paragraph 1.9: This edition of the Satellite Voice Guidance Material (SVGGM) provides for a comprehensive update of various regional and State guidance material to use SATCOM voice for ATS communications as an alternative to the carriage of one HF radio. It does not at this time provide guidance on the use of SATCOM voice as a stand alone LRCS for ATS purposes as standards for this use have not yet been developed. The manual includes the incorporation of performance-based specifications and associated guidance on data collection, monitoring, and analysis.</p>	C	31-Mar-11-TK – Accept comment, except transposed last two sentences. Revised to, “This edition of the <i>Satellite Voice Guidance Material</i> (SVGGM) provides for a comprehensive update of various regional and State guidance material to use SATCOM voice for ATS communications as an alternative to the carriage of one HF radio. This includes the incorporation of performance-based specifications and associated guidance on data collection, monitoring, and analysis. It does not at this time provide guidance on the use of SATCOM voice as a stand alone LRCS for ATS purposes as standards for this use have not yet been developed.”	C
0_General Foreword 1.9	SV8-0346	IM	<p>COMMENT: The SVGGM also provides details to ANSPs to support SV.</p> <p>SUGGESTED CHANGE: ...and analysis as well as material for ANSPs on the infrastructure required to support SV.</p>		13-Jan-12-TK – Revise to, “This edition of the <i>Satellite Voice Guidance Material</i> (SVGGM) provides for a comprehensive update of various regional and State guidance material for ANSPs and operators to use SATCOM voice for ATS communications.” The guidance material is intended for the regions and States to use in regulatory oversight of ANSP/operator use. See Foreword, paragraph 2 on purpose and scope, which calls out the details for ANSPs. Close.	C
0_General Foreword 1.9	SV3-0099	JK	<p>COMMENT: The reference in this para....(as an alternative to the carriage of one HF radio) should not be included in this para as we had decided that MEL was outside our remit and in any case it contradicts 2.3 (d) in section 2 and 3.2.1.1 in Section 3.2..</p>		28-May-11-TK – See resolution to comment SV3-0071. Close	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE: Delete relevant section.			
0_General Foreword 2.2	SV7-0208 (Duplicate comment number assigned)	LP	COMMENT: not consistent with paragraph 2.3 a) Also service provider in different region not exact same and a/c equipage also difference SUGGESTED CHANGE: delete “seamless and” in paragraph 2.2	R & C	21-Sep-11-TK – Paragraph 2.2 is simply stating that the GM is promoting seamless operations. Paragraph 2.3 a) is intended to allow flexibility using RCP framework without implication to seamless operations, interoperability and safety. The service provider and a/c equipage can be different without implications to seamless operations and interoperability. Revise paragraph 2.3 a) to, “build on the ICAO required communication performance (RCP) framework to provide States with flexibility to apply different standards for different uses, without implication to seamless operations, interoperability and safety.” Close.	C
0_General Foreword 2.2	SV8-0347	IM	COMMENT: include remote SUGGESTED CHANGE: in oceanic and remote environments.	E	13-Jan-12-TK – Accept. Close.	C
0_General Foreword 2.2	SV2-0022	FT	COMMENT: Paragraph 2.2, suggest revisions. SUGGESTED CHANGE: Correct spelling error, “high-desity” to “high-density.”	E	31-Mar-11-TK – Incorporated into v0.3. Close	C
0_General Foreword 2.2	SV7-0277	MM	COMMENT: “This edition limits itself to current and near term operations. Future editions...capability in the high-density continental areas”. There is a wide range of function between even near term functionality and the possible use of Satcom in high density continental areas. SUGGESTED CHANGE: Change to “This edition encompasses current and near-term operations for oceanic communications. Additional requirements to meet safety and situational awareness needs are also described to provide a basis for development in the next	C	21-Sep-11-TK – Generally accept the comment. Editorially revise suggested change to: “This edition provides guidance material for current and near term operations in oceanic environments. It also includes an appendix, which provides SATCOM voice features not currently available, to serve as a basis for development of future SATCOM voice systems. Future editions are expected to incorporate guidance for expansion of SATCOM voice capability in the high-density continental areas.” Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>phase of satcom voice development. Requirements for long term use for expansion into high density continental areas will be considered in future editions.”</p> <p>Show requirements as Phase 1 and Phase 2 since they are known requirements that we should be working towards now in either procedures, testing or next level of development.</p>			
0_General Foreword 2.3 a	SV7-0288	DRM	<p>COMMENT: Need to briefly define what the safety objectives are</p> <p>SUGGESTED CHANGE: Talk to Tom and provide the objectives</p>	A	21-Sep-11-TK – Revised text to generally refer to “... seamless operations, interoperability and safety...” Steve Kong has action to provide safety requirements as part of RCP 400 specification in Appendix A. Reference comments SV7-0208, para 2.2 SV5-0152, Apx A Close.	C
0_General Foreword 2.3.a)	SV2-0023	FT	<p>COMMENT: Paragraph 2.3.a), suggest revisions.</p> <p>SUGGESTED CHANGE: a) build on the ICAO required communication performance (RCP) framework to provide States with flexibility to apply different standards for different uses, without implication to seamless operations and providing that the safety objectives are satisfied;</p>	E	31-Mar-11-TK – Incorporated into v0.3. Close	C
0_General Foreword 2.3.d)	SV2-0024	FT	<p>COMMENT: Paragraph 2.3.d), suggest revisions.</p> <p>SUGGESTED CHANGE: d) do not specifically address MEL matters, but serve to facilitate State or sub-regional regulatory authorities in establishing policies in such matters; and</p>	E	31-Mar-11-TK – Revise to “...to facilitate State regulatory authorities or Regional Safety Oversight Organizations (RSOOs)...” Close	C
0_General Foreword 2.3.e)	SV2-0025	FT	<p>COMMENT: Paragraph 2.3.e), suggest revisions.</p> <p>SUGGESTED CHANGE: e) do not address the use of SATCOM voice in isolation (i.e., HF voice capability remains available on board and in the ground infrastructure).</p>	E	31-Mar-11-TK – Incorporated into v0.3. Close	C
0_General	SV3-0085	BC	COMMENT: Refer to		28-May-11-TK – Accept comment. Revise to,	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
Foreword 2.3b)			<p>b) provide a basis for States in determining acceptability of any implementation, taking into account routine and emergency use, the provision of ATS using SATCOM voice communications, procedures for the radio operator, controller and flight crew, performance specifications and qualification;</p> <p>SUGGESTED CHANGE: Not sure what this is saying. Can we make it more clear? We are also providing guidance on how to add SATCOM voice to the existing radio facilities.</p>		<p>“b) provide a basis for States in determining acceptability of any implementation within an ATS facility, a radio facility or aircraft equipage, ...</p> <p>Close.</p>	
0_General Foreword 2.3c) (Page vi)	SV3-0072	ML	<p>COMMENT: “The following principles were adhered to in the development of this guidance material: c) do not address the subject of the in-flight use of portable SATCOM phones as this is not allowed”</p> <p>SUGGESTED CHANGE: I would precise: SATCOM phones <u>in the cockpit</u></p>	C	<p>28-May-11-TK Accept comment, revise to “c) note that in-flight use of portable SATCOM phones for ATS communications is not allowed, according to many existing State operating regulations;”</p> <p>Close.</p>	C
0_General Foreword 2.5	SV7-0209	LP	<p>COMMENT: add “material” after guidance</p> <p>SUGGESTED CHANGE:</p>	A	<p>21-Sep-11-TK – Accept. Close.</p>	C
0_General Foreword 2.5 a) 3)	SV6-0171	GL	<p>COMMENT: I don’t think we address this issue anywhere in this document.</p> <p>SUGGESTED CHANGE:</p>	A	<p>4-Sep-11-TK – If I were an organization within a State responsible for airworthiness, which includes assessment of intended function, the document will be useful in supporting the State work programs to develop airworthiness requirements.</p> <p>14-Sep-11-IR-SVTF/2 – Close</p>	C
0_General Foreword 2.5.2 a	SV7-0289	DRM	<p>COMMENT Remove Operational Approval and discuss Eligibility requirements.</p> <p>SUGGESTED CHANGE remove section and discuss</p>	S	<p>16-Sep-11-TK – Related to operational approval issue. Will follow resolution rules for operational approval issue. Rule for resolution No ops approval required specifically for SATCOM Voice. However, the operator should consider following guidelines in establishing training and maintenance:</p> <p>21-Sep-11-TK – Replaced “approval” with</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					“eligibility.” Close.	
0_General Foreword 2.5.a)	SV2-0026	FT	<p>COMMENT: Paragraph 2.5.a), suggest revisions.</p> <p>SUGGESTED CHANGE: Change “operational authorizations” to “operational approval.” Change “design approval” to “airworthiness certification.”</p>	E	31-Mar-11-TK – Incorporated into v0.3. Close	C
0_General Foreword 2.5.a) 3)	SV2-0033	BP	<p>COMMENT: Existing and near-future systems have already been designed, according to current ICAO requirements (inc. SARPs etc).</p> <p>SUGGESTED CHANGE: Insert the word “future” so sentence would read “design approval of future aircraft SATCOM voice systems”.</p>	E	<p>28-May-11-TK – Not accepted. It would be inappropriate in this context. Certification includes airworthiness directives and if unsafe condition is determined on aircraft already certified, previously certified installations may require modification. Also, if previously certified aircraft do not meet criteria, their use will need to be limited by some mechanism.</p> <p>Close.</p>	C
0_General Foreword 2.5.b) and 2.5.d) Also relevant to Draft Guidance, para 3.1.4 onwards, and to Editor’s Notes 4 and 5.	SV2-0034	BP	<p>COMMENT: The guidance should not determine contractual arrangements as suggested by 2.5.b); rather, it should focus upon operational and functional matters.</p> <p>The role, capability and responsibility of “communication service provider” will vary according to “who” this is – ie satellite network operators (Inmarsat, MTSAT, Iridium, others in the future), ground earth station or gateway operators (Stratos, Vizada, Iridium, and possible others), or ARINC/SITA.</p> <p>In addition, CNS are sub-systems or functions within the ATN overall; the regulatory framework in the EU includes a list of systems for ANS of which the European ATM Network includes eight separate classes of systems, of which “Communications systems and procedures...” is only one of these eight.</p> <p>There is a need for a clear definition of the CSP which takes into account all stages of the link from the controller or radio operator, to the flight crew, and recognizes the diversity of sub-systems, technologies,</p>	C	<p>28-May-11-TK – this language is same as per the GOLD. The paragraph doesn’t say that the guidance will determine contractual arrangements. However, the operational, functional, and performance are within scope and may be considerations for ATSPs and Operators in negotiating their service agreements and/or contracts.</p> <p>Satellite network operators should not be considered CSPs. We still need an agreed to definition for CSP.</p> <p>The guidance material is intended to be globally applicable, taking into consideration European laws and definitions.</p> <p>Agree on need for definition of CSP. See proposals and submit specific comments on what is proposed.</p> <p>We do need to provide clarity, within the regulatory framework, which includes aircraft certification,</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>and participants, and yet remains technology-neutral.</p> <p>GOLD doesn't define the CSP, but there are definitions in other documents, which refer to (for example) the "Satellite Communications Service Provider", the "Satellite Network Operations Provider", the "Terrestrial Network Service Provider", etc. The AMSRS Manual Part 1 includes diagrams 2-1 and 2-2a which also illustrate this; the CSP link is shown to have more than one permutation in these definitions and diagrams.</p> <p>Similarly, Document 9869 (on RCP), diagram on p38, shows the "Communications Service" as the link between the "Ground System" and the "Aircraft System", these in turn being separate "systems" from the crew and controller HMIs.</p> <p>There are essentially three categories of user to whom the Draft Guidance is primarily directed; the controller, radio operator, and flight crew, and the "CSP" is therefore the collective and respective system and network operators and service providers, in their various permutations, which link these users.</p> <p>The draft guidance does not need to address matters relating to approval as these are already addressed elsewhere, however it might be appropriate for the Guidance to note that there may be a need for new categories of RCP to be developed to support Satcom voice services, taking into account the end-to-end definition of the "CSP" and the components of this.</p> <p>NB Draft Guidance 3.1.4.1 and 3.1.4.2; Appendix A at A1 appears consistent with this: "C-M" is several stages.</p> <p>SUGGESTED CHANGE: Delete 2.5.b).</p> <p>It is possible to develop a definition of "communication</p>		<p>ops approvals and ANSPs "approvals." The CSP is a link to either the operator or ANSP, recognizing indirect links to satellite network providers and satellite operators via the CSP.</p> <p>29-Jun-11-IR-SVTF – ACTION: Filippo will develop some words in paragraph 3.2 to clarify "operational approval" not to mean a specific ops spec.</p> <p>There is some apparent disagreement among the group on the scope of the document. Should this document be directed solely at the use or include guidance to support approvals by States. ACTION: All. Prepare proposals to clarify the scope of GM at subsequent meetings.</p> <p>22-Jul-11-TK – See comment SV4-0135, for completion of Filippo action item to clarify operational approvals.</p> <p>23-Sep-11-TK – Actions complete. Prepare further comments and proposals on specific language provided by v0.8 version. Close.</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>service provider” which refers to the relationship between this collective entity and the relationship with the three categories of “user”, and a definition which itself includes additional definitions for the sub-systems and their operators and providers, such as “Satellite Communication Service Provider”, “Satellite Network Operations Provider,” “Terrestrial Network Service Provider” etc, using definitions in other relevant published documents such as the AMSRS Manual.</p> <p>As diagrams are used in other documents, then there may be increased clarity to be gained from the inclusion of a simple “strip” diagram (as in Appendix at A1) to show examples of the relationship between the entities which may constitute the “CSP” and their relationship to the users, a similar diagram exists on page 38 of Document 9869 on Required Communications Performance.</p>			
0_General Foreword 2.5.d)	SV2-0027	FT	<p>COMMENT: Paragraph 2.5.d), suggest revisions.</p> <p>SUGGESTED CHANGE: Revise to, “d) operational monitoring, analysis, and exchange of operational data among regions, Regional Safety Oversight Organisations (RSOOs), States, and communication service providers.</p>	E	31-Mar-11-TK - Revise to “...among regions, States, RSOOs and communication service providers...” Close	C
0_General Foreword 3.1	SV7-0210	LP	<p>COMMENT: add “document” after guidance</p> <p>SUGGESTED CHANGE: replace principles with “provisions” as SARPs considered as provisions And word “designed” may be replaced with “developed”</p>	E	21-Sep-11-TK – Inserted “document” after “guidance.” Revise last sentence to, “It may also comprise material prepared as an amplification of the basic provisions in the corresponding SARPs to assist the user in the application of the SARPs and PANS.” Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
0_General Foreword 4	SV2-0028	FT	<p>COMMENT: Paragraph 4, suggest new paragraph.</p> <p>SUGGESTED CHANGE: 4.2 Although this material does not apply to SATCOM data, the latter could be implemented following the same approach for the definition of the safety objectives.</p>	E	<p>31-Mar-11-TK – No change. Data link is already being addressed in GOLD and not within scope of this document.</p> <p>28-May-11-TK – Added new paragraph 2.6, “Guidance material and information concerning SATCOM data communications is not within the scope of this guidance material and can be found in the Global Operational Data Link Document (GOLD).”</p> <p>Close.</p>	C
0_General Foreword 4.1	SV7-0211	LP	<p>COMMENT: remove word “complementary” as this is sole and comprehensive GM for SCV</p> <p>SUGGESTED CHANGE:</p>	E	21-Sep-11-TK - Accept. Close.	C
0_General Foreword 4.1	SV7-0290	DRM	<p>COMMENT: Remove complimentary 3rd line</p> <p>SUGGESTED CHANGE: Serves no purpose to the document</p>	E	21-Sep-11-TK – Accept. Same as comment SV7-0211. Close.	C
0_General Foreword 6	SV2-0029	FT	<p>COMMENT: Paragraph 6, suggest new item.</p> <p>SUGGESTED CHANGE: r) European Commission Regulation (EC) No 859/2008 of 20 August 2008 amending Council Regulation (EEC) No 3922/91 as regards common technical requirements and administrative procedures applicable to commercial transportation by aeroplane (so called “EU-OPS” having replaced the former JAR OPS-1).</p>	E	31-Mar-11-TK – Incorporated into v0.3. Close	C
0_General Foreword 6 References	SV4-0127	EN	<p>COMMENT: I suggest that the references on this list kept at the level of ICAO and industry standardization bodies. National references should be avoided.</p> <p>SUGGESTED CHANGE: Delete Para 6 r)</p>		23-Jul-11-TK – Accept. Also deleted Ed Note at top of reference list. Close.	C
0_General Foreword 7	SV7-0212	LP	<p>COMMENT: “all” before may be removed as not sure it applicable for All regions for example may not be used for EUR Region</p> <p>Also first edition perhaps will be available after 3rd</p>	C	21-Sep-11-TK – Accept. Deleted “all.” Revised table to reflect Amendment date, APAPIRG/23 in Sep 2012 and effective date of 1 October 2012 to more accurately reflect current plans. This can all	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			meeting of IRSVTF and necessary changes to the APANPIRG process should be updated		be updated just prior to issue of First Edition. Close.	
0_General Foreword 7	SV6-0172	GL	COMMENT: Change “data link” to “SATCOM voice” in two places. SUGGESTED CHANGE:		4-Sep-11-TK – Accept, Revise “data link” to “SATCOM voice.” Close.	C
00_Foreword, 2.2	SV8-0313	MM	COMMENT: “Future editions...capability in the high-density <u>continental</u> areas”. SUGGESTED CHANGE: Would operators really use Satcom in high-density <u>continental</u> areas, where less costly VHF is usually available?	C	1-Nov-11-TK – The future is difficult to predict. Revise sentence, “Future editions are expected as experience is gained in the use of SATCOM voice capability for ATS communications.” Close.	C
00_Foreword, 2.4	SV8-0314	MM	COMMENT: “While directed primarily at ATS personnel and Flight crews...” SUGGESTED CHANGE: I don’t think this should be stated so restrictively since there are many roles involved.	C	1-Nov-11-TK – Revise lead-in sentence to, “The following personnel and organizations should be familiar with various aspects of its contents:” Close.	C
1 Definitions	SV7-0241	RS	COMMENT: The definition of Preemption contemplates Ruthless preemption. Ruthless Preemption, to the extent that it aborts crew communication in progress, usurps crew authority and, as such, creates potential for an unintended adverse safety implications. In the spirit of performance specification (rather than functional specification), the document should speak to the intent rather than the implementation. SUGGESTED CHANGE: Change text from: Preemption. The immediate and automatic seizure of resources allocated to a lower-priority call. to: Preemption. <u>Higher priority communications are connected without delay.</u>	S	16-Sep-11-TK – Related to Priority Management issue. Reference comments SV7-0244 (contains resolution status from IR-SVTF/2) see also SV7-0264 SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241 20-Sep-11-DR-Priority, Preemption AC 20-150A, section 7 PPP states “We define	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>preemption as the immediate and automatic seizure of resources allocated to a lower-priority call. The satellite voice equipment reallocates the resources to a higher-priority call. Trade-offs of flight safety requirements versus passenger satisfaction should not be a consideration, except for camp-on calls.</p> <p>The AC allows for the pilot to use the camp-on procedure to prevent the “seizure” of a call that the flight crew may wish to remain connected. Not sure additional change is necessary.</p> <p>Recommend Consideration to be given to allow for conferencing versus the automatic seizure of resources in addition to camp-on allocated to a lower-priority call if GES configuration is allowed.</p> <p>21-Sep-11-DRM - Still believe that the comp-on or conference call is essential to the pilot so that he can prioritize what and when he wants to take a call</p> <p>21-Sep-11-TK – Using resolution rules from IR-SVTF/2, revise definition for Preemption:</p> <p>Preemption. A higher priority call will interrupt communication resources being used by a lower-priority communication to establish a connection without any indication or delay.</p> <p><i>Note.— If the intervening call is the same or lower, the current call will not be preempted and the intervening caller will get an indication that the line is not available. The effects of preemption can be minimized by multiple channels and conference calling, but not completely eliminated.</i></p> <p>Close.</p>	
1 Definitions	SV8-0328	MS	COMMENT: No GOLD	E	1-Nov-11-TK – Added to Chapter 1. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE: Add GOLD definition			
1	SV7-0279	CNY	<p>COMMENT: To define</p> <ul style="list-style-type: none"> - Aero Station; - Aero Radio Service; and - Aero Radio Facilities. <p>(Some ANSPs may not be familiar with these terms)</p> <p>SUGGESTED CHANGE:</p>	E	<p>21-Sep-11-TK – Revised as follows:</p> <p>Use of term “Aero Station” in 2 places changed to “aeronautical station.”</p> <p>Use of term “aero radio service” in 1 place, changed to “aeronautical station.”</p> <p>Use of term “aero radio facilities” and “aero radio” changed to aeronautical station.</p> <p>Where reference is made to either aeronautical station or ATC, the ATC component is referred to as the “ATS unit.” Chapter 1 includes ICAO definition for “aeronautical station.” Close.</p>	C
1 (Definitions)	SV7-0213	LP	<p>COMMENT: CLI and PIN may be included as they are seen in the text part and consideration for a new term may be given for Aeronautical Radio</p>	C	<p>21-Sep-11-TK – Added the following to Chapter 1: CLI. The symbol used to designate caller line identification.</p> <p>Caller line identification. A display of the identification of a caller to the recipient prior to answering the call.</p> <p>Note.— For the purposes of ATS communications, caller line identification to the flight crew is a display of facility name or the facility designator for the aeronautical station or ATS unit. For the controller it is a display of the aircraft identification.</p> <p>PIN. The symbol used to designate personal identification number.</p> <p>Personal identification number. [TBD].</p> <p>ACTION: Need definition of “Personal identification number.”</p> <p>23-Sep-11-TK – Got one from Wikipedia and some input from Chapter 4 group on use for ATC purposes.</p> <p>Personal identification number. A secret numeric password shared between a user and a system that</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					can be used to authenticate the user to the system. Note.— For the purposes of ATS communications, all PIN numbers are issued for the same purpose, as there is no PIN that grants higher priority or access than another. The priority of the call is determined by the dialing string and GtA calling service used. Calling Line Identification (caller ID) is just a substitute for the operator not having to dial the PIN number for GtA calls. When CLI is implemented for the customer, then all calls made from the phone numbers provided to the GES provider will not be prompted for a PIN when the call is placed to the aircraft. If the switch does not recognize the pre-defined CLI list provided to the GES, then the caller will be prompted for the PIN code. Close.	
1	SV7-0232	ML	COMMENT: The “RTF” acronym needs to be define (refer to paragraph 3.3.2: “M1” for an INMARSAT RTF capability, “M2” for an MTSAT RTF capability). Does it stand for Radio Telephony? SUGGESTED CHANGE:	C	14-Sep-11-IR-SVTF/2 – Research PANS-ABC (8400) 21-Sep-11-TK – Added ICAO definition: RTF – radiotelephone. Close.	C
1	SV7-0280	CNY	COMMENT: The definitions of ANSP and ATSP are the same. SUGGESTED CHANGE: To combine the terms.	C	21-Sep-11-TK – Document consistently uses ATSP. Deleted all references to ANSP, air navigation service provider. Close.	C
1	SV7-0281	CNY	COMMENT: The term “on an aircraft with an average flight of 6 hours” is not clear. Does it mean “only for aircraft with an average flight time of 6 hours”? Aircraft system availability (A_{AIR}). The required probability of available capability on an aircraft with an average flight of 6 hours.	C	21-Sep-11-TK – Revised Chapter 1 and Appendix A. Deleted the phrase “with and average flight of 6 hours. The average flight of an aircraft is determined as part of the assumptions made in the statistical analysis and should not be part of the definition of the term. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE:			
1	SV7-0282	CNY	<p>COMMENT: The following definition could be interpreted as “accumulating only those durations in excess of the unplanned outage duration limits” or “accumulating the entire outage time of each unplanned outage that exceeds the unplanned outage duration limit”</p> <p>Maximum accumulated unplanned outage time (min/yr). Measured by accumulating <i>only</i> the duration times for unplanned outages greater than the unplanned outage duration limit during any 12-month period. The accumulation is performed separately for each relevant operational airspace or FIR</p> <p>SUGGESTED CHANGE:</p>	C	<p>21-Sep-11-TK – The intent is to measure as you have correctly in the first interpretation, i.e., by including only those outages whose duration exceeded the duration limit. In these cases, the transaction attempts during this outage period are removed from the latency measurements and are not counted toward availability. For outages less than the duration limit, transactions attempted during these periods would be included in the latency measurements and count toward measuring the continuity requirement. I don’t see the second interpretation from the current definition, which indicates that only unplanned outages that exceed the limit are measured. Revise Chapter 1 and Apx A to clarify:</p> <p>Maximum accumulated unplanned outage time (min/yr). A criterion applied to a given operational airspace of FIR that defines the maximum time allowed for the total sum of the unplanned outages that exceed the unplanned outage duration limit in any twelve month period</p> <p><i>Note.— The criterion does not apply to unplanned outages that are less than the unplanned outage duration limit or planned outages. Unplanned outages that are less than the unplanned outage duration limit are considered against the criterion for continuity.</i></p> <p>Maximum number of unplanned outages (per year). A criterion applied to a given operational airspace or FIR that defines the maximum number allowed for unplanned outages in any twelve month period. Close.</p>	C
1	SV7-0283	CNY	<p>COMMENT: The text of the following definition appears to be defining the calculation of an “Unplanned outage duration” instead of a limit that each outage</p>	C	<p>21-Sep-11-TK – Revise Chapter 1 and Appendix A to clarify: Added new term:</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>should not exceed.</p> <p>Unplanned outage duration limit (minutes). Time after the unplanned outage begins at which there is an operational impact. Measured from when an unplanned outage begins to when the ATSU receives notification that the service has been restored.</p> <p>SUGGESTED CHANGE:</p>		<p>Unplanned outage duration (minutes). The time from when an unplanned outage begins to when the ATSU receives notification that the service has been restored.</p> <p>Revised: Unplanned outage duration limit (minutes). A criterion applied to a given operational airspace or FIR that defines the maximum time for the duration of an unplanned outage at which time there is an operational impact.</p> <p>Close.</p>	
1	SV5-0159	FT	<p>COMMENT: Reference definition for “Communication service provider.”</p> <p>SUGGESTED CHANGE: Definition (as proposed by Elkhan) now included. I would perhaps slightly modify the note below: Note.— A radio facility is under the managerial responsibility of a CSP. The rationale is that: - The “facility” is a piece of hardware (+ software), while the CSP is an organisation (people, procedures, manuals, etc....): the two shall not be confused; - “managerial responsibility”, means either staffed , operated and maintained directly or operations contracted or delegated to a different entity under specified conditions.</p>	C	<p>4-Sep-11-TK – Deleted the note. Added the ICAO PANS definitions of “aeronautical station” and “aeronautical mobile service.” with a note stating that “Aeronautical station is commonly referred to as a radio facility.” Add term, Radio facility. A term commonly used to refer to an aeronautical station.”</p> <p>They are synonymous in the recently approved NAT Regional SUPPs, para 3.4.1</p> <p>“ ...</p> <p>d) AMS(R)S voice communications should be made to aeronautical stations rather than ATS units unless the urgency of the communication dictates otherwise.</p> <p><i>Note 1.— ... Dedicated AMS(R)S voice telephone numbers (short codes) for air-ground radio facilities and air traffic control facilities are published in national AIPs where approved. “</i></p> <p>Per Doc 4444, PANS/ATM Aeronautical mobile service (RR S1.32). A mobile service between aeronautical stations and aircraft</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies. Aeronautical station (RR S1.81). A land station in the aeronautical mobile service. In certain instances, an aeronautical station may be located, for example, on board ship or on a platform at sea. Close.	
1 Under "CSP" in Definitions	SV3-0113	TP	COMMENT: Insert a "Note" after CSP to indicate that a CSP may also include a "radio facility" SUGGESTED CHANGE:	C	1-Jun-11-TK – Accept. Added "Note.— A radio facility is a CSP." Close.	C
1	SV8-0315	MM	COMMENT: Missing definitions for certain acronyms: Define AFN – used in FANS 1/A def. Add GES and correspondingly, "Ground Earth Station", used throughout document Add MMEL as acronym, like MEL is listed. Both have expanded named definitions. NOTAM – include "Notice to Airmen" in the definition. SUGGESTED CHANGE:	A	1-Nov-11-TK – Made the following changes: AFN – In note for definition for FANS 1/A, change "AFN" to "data link initiation capability." MMEL - Added to chapter 1. GES – Added to chapter 1. NOTAM – Per ICAO this is simply NOTAM. See Doc 8400. Close.	C
1	SV7-0227	IM	COMMENT: Include definition of Long Range Communication System (LRCS). SUGGESTED CHANGE: Long-range communication system (LRCS). A system that uses satellite relay, data link, high frequency, or another approved communication system which extends beyond line of sight.	A	14-Sep-11-IR-SVTF/2 – Should research and make sure it does not contradict existing definitions and check to see if ICAO has definition. May be necessary to annotate definition with what constitutes an LRCS. 21-Sep-11-TK – Accept. The suggested definition is identical to the FAA CFR, Part 1 definition. Could not find an ICAO definition. Added definition and acronym to SVGM, Chapter 1. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
1	SV6-0192	GL	<p>COMMENT: Add definitions:</p> <p>Preemption. The immediate and automatic seizure of resources allocated to a lower-priority call.</p> <p>Priority Level. An indication of call precedence for ground-to-air or air-to-ground calls. Priority level may be used to establish preemption.</p> <p>SUGGESTED CHANGE:</p>	A	4-Sep-11-TK – Accept. Close.	C
1	SV5-0157	MM/BEG	In sec 2.2.1, the acronyms, LEO, MEO & GEO are defined and used. Do they need to be added to the Chapter 1 definitions?	A	23-Aug-11-TK – Added acronyms to chapter 1. Close.	C
1 Definitions	SV3-0114	TP	<p>COMMENT: Insert additional definition for an ANSP</p> <p>SUGGESTED CHANGE: ANSP = Aeronautical Navigational Services Provider</p>	A	<p>1-Jun-11-TK – I’ve added a definition and the acronym. The document currently uses air traffic service provider (ATSP). In the GOLD, there was some debate between ANSP and ATSP. ICAO Montreal preferred the term ATSP, so that is what we used. Can we be consistent? Do we need both terms? What is the difference between one term over the other?</p> <p>The term “ANSP” currently is not used anywhere in the document and all terms not used in the final document will be removed in the final editing of the document.</p> <p>29-Jun-11-IR-SVTF – Guidance material will use ATSP. ACTION: Elkhan will define terms ATSP, CSP and SSP. SSP will interface CSP, CSP will interface ATSP. SSPs today do not follow business models where they would provide service direct to ATSP and have no plans for changing the model.</p> <p>22-Jul-11-TK – See resolution to comment SV4-0128. Close.</p>	C
1 (definitions)	SV3-0084	FT	COMMENT: Editor suggested definition for CSP in Chapter 1.	A	1-Jun-11-TK – Accept. Included definitions, with minor edits to third one: A CSP is usually referred	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Three definitions are hence proposed</p> <p>SUGGESTED CHANGE:</p> <ul style="list-style-type: none"> • Communication services (COM) Aeronautical fixed and mobile services to enable ground-to-ground and/or air-to-ground communications for safety and regularity of flight; • Communication Service Provider (CSP) Any public or private entity providing COM services for general air traffic; • Satellite Communication Service Provider (SAT CSP) A CSP providing, via satellite, aeronautical fixed services and/or aeronautical mobile services at least from the signal in space to/from aircraft, to the attachment point of the Ground Earth Station (GES) to the ground COM network. 		<p>to as the entity for which operators and ANSPs hold contracts or service agreements in the provision of communication services. An SSP services other elements, such as land mobile and maritime, and typically will provide satellite services to CSPs that service ANSPs and operators and are not themselves CSPs.</p> <p>Satellite service provider. An entity or group of entities that provide, via satellite, aeronautical fixed services and/or aeronautical mobile services at least from the signal in space to/from aircraft, to the attachment point of the ground earth station (GES) to the ground communication services network.</p> <p>Close.</p>	
1 as an additional "Definition"	SV3-0112	TP	<p>COMMENT: Additional item needed</p> <p>SUGGESTED CHANGE: Insert the acronym "SSP" to indicate that SATCOM voice will be transported by a "Satellite Service Provider"</p>	A	1-Jun-11-TK – Accept. See also resolution to comment SV3-0084. Close	C
1	SV2-0070	TK	<p>COMMENT: Add definitions.</p> <p>SUGGESTED CHANGE:</p>	A	31-Mar-11-TK – Incorporated a starting point into v0.3. Close	C
1 Definitions	SV4-0128	EN	<p>COMMENT: I propose to align and re-use Abbreviations and Definitions from ICAO Doc 9925</p> <p>SUGGESTED CHANGE: Add: Satellite Communications Service Provider. Typically provides the inter-working unit of the terrestrial sub-system which connects the satellite ground earth station, or Gateway, and the terrestrial network in support of AMS(R)S. Commonly referred to as SSP (see SSP definition)</p>		22-Jul-11-TK – Accept. Incorporated definitions in Chapter 1. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Satellite Network Operations Provider. Typically provides the satellite sub-system which includes the satellite(s) and may or may not include the ground earth stations or Gateway. Commonly referred to as SSP (see SSP definition)</p> <p>Terrestrial Network Service Provider. Typically provides the aviation centric terrestrial sub-system which provides connectivity to the end-users, such as ATS providers, airlines and flight departments. Commonly referred to as CSP(see CSP Definition)</p>			
1 Definitions	SV4-0129	EN	<p>COMMENT Use of CSP and SSP is not described in Doc 9925. This is an interesting situation as we use CSP and SSP all the time.</p> <p>SUGGESTED CHANGE See the line above</p>		22-Jul-11-TK – See resolution to comment SV4-0128. Close.	C
1 Definitions	SV4-0130	EN	<p>COMMENT: ICAO term for SATCOM is AMS(R)S. Understanding that changing that everybody got used to, suggest to add in the Definitions list AMS(R)S once and add “commonly referred to as SATCOM voice” SATCOM</p> <p>SUGGESTED CHANGE: Add AMS(R)S Aeronautical mobile satellite (route) service. Includes both voice and data, The use of AMS(R)S for voice communications is commonly referred to as SATCOM voice. This convention is maintained throughout this Document,</p>		1-Jul-11-EN - See also SV4-0122 22-Jul-11-TK – Accept. Incorporated term in Chapter 1. Close.	C
1 (definitions)	SV6-0201	FT	<p>COMMENT: in version 0.6 GM there is a definition for MEL, which is copied from Annex 6. However there is no definition for Master MEL. A definition for MMEL is contained in EC Regulation EU-OPS: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLE</p>	A	4-Sep-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>G:1991R3922:20080920:EN:PDF</p> <p>This definition clarifies that the MMEL is not a list of equipment which shall be installed on board as a minimum; but only a list of the installed equipment which can be “temporarily” inoperative at beginning of the flight.</p> <p>SUGGESTED CHANGE Include in the SATCOM Voice GM a new definition for MMEL, adapted from mentioned EC Regulation:</p> <p>Master Minimum Equipment List (MMEL). A master list appropriate to an aircraft type which determines those instruments, items of equipment or functions installed on board that, while maintaining the intended level of safety, may temporarily be inoperative at commencement of the flight.</p>			
2 3.2.2.3 3.2.2.7 3.2.4.1 3.2.5.6 3.3.2.4	SV8-0419	LP	<p>Satellite voice communication should be changed to “SATCOM voice” the redundant word “communication after voice should be deleted;</p>	E	16-Feb-12-IRSVTF/3 – See resolution to comment SV8-0423. Close.	C
2	SV5-0140	TK	<p>COMMENT: Text previously in 2.1 was moved to Foreword, rephrased to be globally applicable, and augmented. Chapter 2 is intended to provide an overview of satellite voice communications, including system architecture and components. (Editor’s Note 3 in v0.5)</p> <p>SUGGESTED CHANGE:</p>	R	23-Jul-11-TK – Delete Ed Note. Submit specific comments, as appropriate. Close.	C
2	SV2-0030	MM	<p>COMMENT: Suggest new text for chapter 2.</p> <p>SUGGESTED CHANGE:</p>	A	30-Mar-11-TK – See attached file beginning with <comment number>. 31-Mar-11-TK - Incorporated into v0.3. Close	C
2	SV4-0123	EN	<p>COMMENT: I think we should describe MTSAT to the</p>		1-Jul-11-EN - Deleted. See SV4-0132. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			same extent as Inmarsat and Iridium. I am thinking to invite our Bangkok or Japanese colleagues to provide a couple of paragraphs on this. SUGGESTED CHANGE:			
2	SV4-0124	EN	COMMENT: There are a few paragraphs mentioning other satellite systems which I think we should remove. In particular Lightsquared, this one turns out a bit messy. SUGGESTED CHANGE:		1-Jul-11-EN - Deleted. See SV4-0131. Close.	C
2.1	SV2-0069	TK	COMMENT: Text previously in 2.1 was moved to Foreword, rephrased to be globally applicable, and augmented. Chapter 2 is intended to provide an overview of satellite voice communications, including system architecture and components. SUGGESTED CHANGE:	E	31-Mar-11-TK – Deleted text in 2.1 as redundant to new Foreword. Close.	C
2.1.1	SV8-0415	LP	COMMENT: “The guidance material provided in this document is intended for use of SATCOM Voice equipment ... etc” --- the whole doc. Is a GM. SUGGESTED CHANGE: “This guidance material is intended for use of SATCOM voice system ... etc.	E	16-Feb-12-IRSVTF/3 – Accept. Close.	C
2.1.1	SV2-0035	BP	COMMENT: The phrase “Oceanic and remote airspace flight communications have...” is not as clear as the equivalent text in Foreword, para. 1.2, which refers to “remote continental areas”. SUGGESTED CHANGE: Replace, to read eg “Over the oceanic and remote continental airspace, flight communications have...”	C	31-Mar-11-TK – See comment SV2-0069. Deleted text. Close	C
2.1.1 and 2.1.3 Also, Editor’s Note 5	SV2-0036	BP	COMMENT: Reference to CNS as parts within ATM overall, and introduces concept of LRCS as used within US regulation, NB that EU doesn’t use that term and has a different approach, listing 8 systems used for ANS and making up the European ATM Network. SUGGESTED CHANGE: Add additional text at end of	C	31-Mar-11-TK – See comment SV2-0069. Deleted text. Close	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			2.1.1 or of 2.1.3 to reflect different terminology, but essentially technologically-neutral, approach adopted in both USA and EU.			
2.1.2	SV8-0422	DA	<p>COMMENT: First sentence doesn't make sense. Not relevant for global applicability.</p> <p>“SATCOM voice communication initiated due to HF propagation difficulties does not constitute urgency.”</p> <p>SUGGESTED CHANGE: Delete</p>		15-Feb-12-TK – IRSVTF/3 G2 discussed and agreed that this statement is not relevant to global guidance material. Deleted sentence.	C
2.1.3	SV8-0428	MM	<p>COMMENT: This description of what SATCOM voice is and is not seems to be an excellent framework for this document. The focus should be on providing a means for air carriers to use Long Range Communications Systems to maintain communications and flight safety throughout the flight. It should show that SATCOM voice is a complementary means to that objective.</p> <p>SUGGESTED CHANGE: Maintain this theme throughout the document, rather than shifting to a sole focus on SATCOM voice, as seen in the comments below.</p>	S	16-Feb-12-IRSVTF/3 – Agree. See resolutions to specific comments for changes. Close.	C
2.1.3	SV8-0405	FT	<p>COMMENT: SATCOM voice can at least partially replace HF (e.g. one SATCOM_ + 1 HF on board</p> <p>SUGGESTED CHANGE: delete ‘HF voice communications’ from 1st sentence in 2.1.3</p>	R	13-Feb-12-TK – Revise to, “SATCOM voice is not a replacement for ADS-C, CPDLC or HF voice communication capability.” The point of the comment is covered in the second part of the paragraph. Removing “HF voice communications” from 1 st sentence is misleading in that SATVOICE is not intended to be a replacement for HF voice communications capability. Close.	C
2.1.4	SV8-0406	FT	<p>COMMENT: Not only States and not only MEL in last sentence.</p> <p>SUGGESTED CHANGE: Read last sentence: ‘This GM may be used to facilitate alignment of airspace requirements with airborne equipment and MEL policies at State or regional level.</p>	R	13-Feb-12-TK – Use language consistent with paragraph 3.3.2. This guidance material may be used to facilitate alignment of airspace requirements with State (or Regional) MEL policies and long range radio equipment requirements (Refer also to paragraph 3.3.2). Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
2.1.5	SV2-0037	BP	<p>COMMENT: A term such as “separate and dissimilar” emphasizes why the SATCOM equipment is carried (and used) and so also explains why the guidance is needed.</p> <p>SUGGESTED CHANGE: After “...due to atmospheric conditions.” insert the additional sentence “SATCOM voice and data systems have therefore also proven to be an appropriate equivalent, separate and dissimilar long range communications solution.”</p>		31-Mar-11-TK – See comment SV2-0069. Deleted text. Close	C
2.2 Sub-title	SV7-0214	LP	<p>COMMENT: It should be changed to Aeronautical Satellite Communication Systems Overview as we do not concern ---how satellites are built etc.</p>	E	21-Sep-11-TK – Accept. Close.	C
2.2.2	SV4-0132	EN	<p>COMMENT: 2.2.2 should also include mentioning of MTSAT in the same way as it’s done in Doc 9925. Also this para could be shorten as the same details are repeated further down the text.</p> <p>SUGGESTED CHANGE: MODIFY as follows</p> <p>2.2.2 Today there are three satellite systems servicing the aeronautical market. Inmarsat and MTSAT are GEO and Iridium is a LEO satellite system. All satellite systems use AMS(R)S L-band frequencies reserved for aeronautical safety services.</p>		22-Jul-11-TK – Accept with slight edit. Revise to, “Today there are three satellite systems servicing the aeronautical market. Inmarsat and MTSAT are GEO and Iridium is a LEO satellite system. These satellite systems use AMS(R)S L-band frequencies reserved for aeronautical safety services. ...” Close.’	C
2.2.3 2.2.5	SV4-0131	EN	<p>COMMENT: These paragraphs describe systems that are not AMS(R)S</p> <p>SUGGESTED CHANGE: DELETE 2.2.3.-2.2.5</p>		22-Jul-11-TK – Accept. Deleted. Close.	C
2.2.4 (Page 2-1)	SV3-0073	ML	<p>COMMENT: “In November 2010 a new company, LightSquared, targeting the United States 4G market, launched their first satellite and is positioned it over North America”</p>	E	1-Jun-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE: suppress “is”			
2.2.4 (Page 2-1)	SV3-0074	ML	<p>COMMENT: “Even though they are not currently targeting the aeronautical market they are planning to use the same AMS(R)S L-band frequencies as Inmarsat and Iridium, as well as frequencies adjacent to GPS”</p> <p>SUGGESTED CHANGE: To be more precise, LightSquared only uses INMARSAT frequencies, that are adjacent to GPS & Iridium ones (LightSquared doesn't use Iridium frequencies).</p>	C	1-Jun-11-TK - Revised sentence to, “Even though they are not currently targeting the aeronautical market they are planning to use Inmarsat AMS(R)S L-band frequencies that are adjacent to frequencies used for GPS.” I am not aware of any concerns with use of this service near Iridium frequencies. Sentence that follows only addresses GPS. Close.	C
2.2.4	SV4-0133	EN	<p>COMMENT: 2.4.4 on MTSAT should be separate para 2.5</p> <p>SUGGESTED CHANGE: Ident 2.4.4 as 2.5 MTSAT</p>		22-Jul-11-TK – Accept. Close.	C
2.3.2	SV8-0369	LR/CM	<p>COMMENT: – 2nd sentence ends with two periods “..”</p> <p>SUGGESTED CHANGE:</p>	E	16-Jan-12-TK – Search document for all double periods and removed. Close.	C
2.3.3	SV8-0370	LR/CM	<p>COMMENT: – 2nd sentence.... Should read “...next generation satellite system called “Iridium Next” by the end of 2017.” “Call” should be replaced by “called”.</p> <p>SUGGESTED CHANGE:</p>	E	16-Jan-12-TK – Revise to “... referred to as ‘Iridium Next,’...” Close.	C
2.4	SV8-0355	LR/CM	<p>COMMENT: Two different Inmarsat satellite types are in operation today but they do not provide the same commercial service. For example, section 2.4.3 talks about SBB users of I-4 but does not clarify this service does not exist with I-3. This can lead one to expect services are the same as that is the implication of the Iridium Next satellites (as I understand it). Clarify safety services exist in both and other commercial service differences between I-3 and I-4 are outside the scope of the document.</p> <p>SUGGESTED CHANGE:</p>		16-Jan-12-TK – Revise as follows: Added new paragraph: 2.2.1 This section provides an overview of the aeronautical satellite communication systems concerning SATCOM voice services. A full description of these systems is beyond the scope of this document. Revise paragraph: 2.4.3 Swift Broadband, which is new to the Inmarsat I-4 satellites, will have available Voice over Internet Protocol (VoIP) capability. The ground user network interface doesn't exist as yet but is expected to evolve in time.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					Close.	
2.4.1	SV3-0110	TP	<p>COMMENT: the word “rational” is used in the final sentence of this para.</p> <p>SUGGESTED CHANGE: the correct word to be used in this context would be “rotation”.</p>	E	1-Jun-11-TK – Accept. Close.	C
2.4.1	SV7-0248	AH	<p>COMMENT: The term “geosynchronous” is not correct. A geosynchronous orbit (sometimes abbreviated GSO) is an orbit around the Earth with an orbital period that matches the Earth's sidereal rotation period.^[1] The synchronization of rotation and orbital period means that for an observer on the surface of the Earth, the satellite appears to constantly hover over the same meridian (north-south line) on the surface, moving in a slow oscillation alternately north and south with a period of one day, so it returns to exactly the same place in the sky at exactly the same time each day.</p> <p>However, the term is often popularly used to refer to the special case of a geosynchronous orbit called a geostationary orbit.^[2] This is a geosynchronous orbit that is circular and at zero inclination, that is, directly above the equator. A satellite in a geostationary orbit appears stationary, always at the same point in the sky, to ground observers. Communications satellites are often given geostationary orbits, or close to geostationary, so that the satellite antennas that communicate with them don't have to move, but can be pointed permanently at the fixed location in the sky where the satellite appears.</p> <p>SUGGESTED CHANGE: Change “geosynchronous” to “geostationary”.</p>	C	21-Sep-11-TK – Accept. Close.	C
2.4.1	SV8-0356	LR/CM	<p>COMMENT: Is RCP met at 82 degrees North and</p>		16-Jan-12-TK – Added new paragraph at the end:	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>South with Inmarsat? If this is talking about Satcom Voice for Safety Services, the info given should either be restricted to locations that satisfy the RCP or should mention degraded service is expected above certain levels or in upper/lower latitudes where the bands overlap. Also, Inmarsat supports both global beams and spot beams but with some equipment (Aero-I) I think voice will only work in spot beams. It might be beneficial to note that voice coverage may be limited based on equipage capability.</p> <p>SUGGESTED CHANGE:</p>		<p>2.4.4 Depending on the aircraft equipment capabilities, the particular SATCOM voice services being used (i.e., Aero I), and location (i.e., high north and south latitudes), the Inmarsat SATCOM voice capability may be limited or perform in a degraded mode.</p> <p>Close.</p>	
2.4.2	SV8-0357	LR/CM	<p>COMMENT: The topic of “secondary Iridium receive allocation” is raised but not defined previously. Is primary/secondary the distinction between L-band and Ka-band Iridium connections or in this case is there an assumption that Inmarsat is primary means of communication and Iridium is secondary if a customer desires to operate both systems on a single aircraft platform?</p> <p>SUGGESTED CHANGE:</p>		<p>16-Jan-12-TK – I agree. If Inmarsat interferes with Iridium, I think the text needs to move to Iridium section and better explained.</p> <p>15-Feb-12-TK – Incorporated changes provided by Steve Kong. Close.</p>	C
2.4.3	SV3-0079	SK/GC	<p>COMMENT: While VoIP (or packetized voice) will indeed offer advantages over traditional dedicated voice circuits, it is not for certain that the billing of voice under this technology will be via “data bits used”. In fact for the user, it should be billed consistently as “voice” regardless of circuit or packet switched modes. Affordability should be addressed and inferred as an action outside of this document.</p> <p>SUGGESTED CHANGE: Delete the following: “This will allow voice connectivity charges based on the data bits used, significantly lowering the cost of use.”</p>	C	1-Jun-11-TK – Accept. Close.	C
2.4.3	SV8-0358	LR/CM	<p>COMMENT: last sentence talks of Iridium’s Next satellite system and indicated availability potential of VoIP but this is the Inmarsat section. Recommend</p>		<p>16-Jan-12-TK – Accept. Moved to paragraph 2.3.3.</p> <p>Revise paragraph:</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>moving this commentary to the Iridium section. Is SBB VoIP seen as a possible connection for safety services? If not, make it clear VoIP for safety voice services is currently out of scope but may be revisited once ground infrastructure is in place.</p> <p>SUGGESTED CHANGE:</p>		<p>2.3.3 Iridium satellites current system was launched in the late 1990's and became operational in early 2000. The original life expectancy of Iridium's satellites was calculated to be seven plus years. A recent study indicates that the current system is expected to last through 2017. Iridium is planning to design, build and launch their next generation satellite system, referred to as "Iridium Next," by the end of 2017. Iridium's Next satellite system has indicated the possible availability of these VoIP services.</p> <p>Revise paragraph: 2.4.3 Swift Broadband, which is new to the Inmarsat I-4 satellites, will have available Voice over Internet Protocol (VoIP) capability. The ground user network interface doesn't exist as yet but is expected to evolve in time. Consequently, VoIP is not addressed in this guidance material.</p> <p>18-Jan-12-LR - Section 2.4.3: delete the word "these" from the last sentence since the VoIP services are not discussed prior to the sentence. Change to: "Iridium's Next satellite system has indicated the possible availability of VoIP services."</p> <p>13-Feb-12-TK – Comment above is concerning paragraph 2.3.3. Accepted change. Close.</p>	
2.4.4 Inmarsat	SV3-0083	YM	<p>COMMENT: suggest new paragraph</p> <p>SUGGESTED CHANGE: 2.4.4 MTSAT is a GEO satellite system. The specification is equivalent to that of I-3 except for the footprint which is limited to the Asia and the Pacific Ocean. MTSAT is interoperable with I-3 so that the subscriber unit can seamlessly carry out the handover between MTSAT and I-3 (and legacy communication module of I-4).</p>	A	1-Jun-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
2.5.1 3, 4, 5 and Apx A	SV3-0086	BC	<p>COMMENT: Good background material but let's not scare them. Basically you need to ensure you are using a reliable two stage dialing system. We should also mention that there are appropriate security measures available to protect against unintended calls.</p> <p>SUGGESTED CHANGE:</p>	A	<p>1-Jun-11-TK – Need additional material and suggested changes. Chapter 2 is intended to be an overview of the system. Guidance material, i.e., containing “should” will be placed in appropriate Chapters 3, 4, 5, or specifications in Apx A.</p> <p>16-Dec-11-TK – Revised 0.8.2, Chapter 2 and 3. Close.</p>	C
2.5.1	SV7-0215	LP	<p>COMMENT: Additional words may be added based on latest report of APANPIRG/22 (proposed added wording are shown in the file)</p> <p>“End of Life (the EOL) of MTSAT-1R is expected to occur during Japanese Fiscal Year 2014. A comprehensive study for next generation satellite was conducted in 2010 by JCAB. JCAB decided not to replace MTSAT-1R, but to continue to provide AMSS through MTSAT-2 after the termination of MTSAT-1R AMSS payload. The calculation of remaining fuel showed that MTSAT-2 has an outlook of four year expansion of its EOL from 2015. JCAB believes that MTSAT System by single satellite will still meet the requirements of Communication Service mainly due to the high redundancy of ground system”</p>	A	<p>21-Sep-11-TK – Revise para 2.2.2 to move Inmarsat and Iridium specific text on same subject to their respective paragraphs, 2.4 and 2.3, respectively. 2.2.2 now reads,</p> <p>2.2.2 Today there are three satellite systems servicing the aeronautical market. Inmarsat and Japan operate GEO satellite systems, and Iridium operates a LEO satellite system. These satellite systems use AMS(R)S L-band frequencies reserved for aeronautical safety services.</p> <p>Added new paragraph 2.3.3 for Iridium, text taken from 2.2.2:</p> <p>2.3.3 Iridium satellites current system was launched in the late 1990's and became operational in early 2000. The original life expectancy of Iridium's satellites was calculated to be seven plus years. Iridium is planning to design, build and launch their next generation satellite system call “Iridium Next” by the end of 2017. A recent study of their current system indicates that the original satellite system should last through 2017.</p> <p>Added text at the end of 2.4.1 for Inmarsat, text taken from 2.2.2.</p> <p>2.4.1 ... Inmarsat is currently replacing their older generation I-3 satellites with new technology I-4 satellites providing advanced services. That project is nearly complete. The end of life for Inmarsat I-3's is 2018.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>Added new paragraph 2.5.2, per suggested comment with slight edits:</p> <p>2.5 Japan Multi-Function Transport Satellite (MTSAT)</p> <p>2.5.1. ...</p> <p>2.5.2 Japan expects end of life of MTSAT-1R to occur during 2014. In 2010, Japan conducted a comprehensive study for the next generation satellite system. Based on the results, Japan decided not to replace MTSAT-1R, but to continue to provide AMSS through MTSAT-2 after the termination of MTSAT-1R AMS(R)S payload. The calculation of remaining fuel showed that MTSAT-2 has an outlook of four year expansion of its end of life from 2015. Japan believes that MTSAT system by single satellite will still meet the requirements of communication service mainly due to the high redundancy of ground system.</p> <p>Close.</p>	
2.5.2	SV8-0359	LR/CM	<p>COMMENT: Clarify there is no functional difference between MTSAT-1R and MTSAT-2. As I understand, both provide the same service but MTSAT-2 is in standby mode until MTSAT-1R's payload is terminated so currently, use of a single satellite is all that is possible. This section as written makes it sound like there are two satellites in use today but only one planned for use after MTSAT-1R's payload is terminated. Does use of the MTSAT connection require unique Satcom equipment on the aircraft? Can any Inmarsat installation provide voice services using this constellation? If not, clarify equipage dependency for Satcom voice in Japan.</p> <p>SUGGESTED CHANGE:</p>		<p>16-Jan-12-TK – Yeah, I think there are a number of questions concerning MTSAT. I believe that you can access MTSAT from any Inmarsat aircraft installation, but the operator must use SITA as the CSP to access those services.</p> <p>15-Feb-12-TK – Incorporated changes provided by Steve Kong. Close.</p>	C
2.6 2.6.1	SV8-0416	LP	<p>COMMENT: title :” Access to Satellite Communication Voice Services” & first sentence of 2.6.1</p>	E	16-Feb-12-IRSVTF/3 – See resolution to comment SV8-0423. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>“The aeronautical satellite communication system ..” may be changed to “The aeronautical SATCOM voice System uses</p> <p>SUGGESTED CHANGE: consistent with rest part of document</p>			
2.6 3	SV7-0307	LP	<p>COMMENT: Refer to sentence, “In instances where the reliability of the ground telephone network is poor consideration should be given for a satellite link to the ground party”</p> <p>This sentence is not introduction or overview but a recommendation. It is stakeholder’s responsibility</p> <p>SUGGESTED CHANGE:</p>	C	<p>21-Sep-11-TK – Refer to comment SV7-0243.</p> <p>16-Dec-11-TK – See revised 0.8.2, section 2.6 and Chapter 3. Please resubmit comment and suggested changes, if necessary. Close.</p>	C
2.6 (formerly 2.5 (Page 2-3)) Also Chapter 3 and 4. 3	SV3-0076	ML	<p>COMMENT: This section could be extended with typical examples of use by ATC centers to call an aircraft by using INMARSAT and Iridium (is the A/C can be contacted directly using a public phone number?)</p> <p>SUGGESTED CHANGE:</p>	A	<p>1-Jun-11-TK – Need additional material.</p> <p>22 Aug 11, MM: We need to collaborate with Inmarsat and Iridium on more specific calling examples. Will take an action to follow-up with Steve Kong and Brian Pemberton.</p> <p>14-Sep-11-IR-SVTF/2 – JK – last sentence on cost. GM should be phrased around the SSPs to provide architecture definition and associated costs as necessary (Maybe in Chapter 3)</p> <p>21-Sep-11-TK – Above discussion on last sentence, revise and move to Chapter 3, pending review and adjustment to Chapter 3 organization of material. Examples for ATC centers to call an aircraft can be provided in Chapter 4, with guidelines for calling.</p> <p>16-Dec-11-TK - See revised 0.8.2, section 2.6, which clarifies access and provides some general examples. Please resubmit comments with suggested changes, if necessary. Close.</p>	C
2.6 3	SV7-0243	IM	COMMENT	A	21-Sep-11-DRM – Concur with comment.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Public Switched Telephone Networks</p> <ul style="list-style-type: none"> This section needs far more detail to support aeronautical operations. The same priority system described in 3.1.6 needs to be supported to the gateway and required performance, availability etc. Basically it needs the same performance and support as a high performance private network. <p>SUGGESTED CHANGE:</p>		<p>21-Sep-11-TK - . Refer to sentence, “In instances where the reliability of the ground telephone network is poor consideration should be given for a satellite link to the ground party.” Consideration should be given by whom? This should be moved to Chapter 3, and read something like, “In cases where the reliability of the ground telephone network is unacceptable, the aeronautical station or ATSP should employ a satellite link or other means to the earth station.” Chapter 3, already refers to Appendix A, RCP specifications, as a basis for determining the acceptability of the public switched telephone network.</p> <p>Refer also to comment SV7-307.</p> <p>Above discussion, deleted sentence in Chapter 2. Revise text and move to Chapter 3, pending review and adjustment to Chapter 3 organization of material.</p> <p>16-Dec-11-TK - Added far more detail to revision 0.8.2, paragraph 2.6. Revised Chapter 3. Close.</p>	
2.6.1	SV8-0329	MS	<p>COMMENT: No process for MTSAT</p> <p>SUGGESTED CHANGE: Add process for MTSAT</p>	E	<p>1-Nov-11-TK – I need a sentence that explains what MTSAT process is.</p> <p>20-Dec-11-DA – We have seen some airlines switching to MTSAT as their prime data link means in our FIR where MTSAT covers. The data link connection works fine, but we can not raise them on SAT Voice when they are using MTSAT. How do we communicate on Sat Voice when an airline is using MTSAT. Shoichi told me we should just go through SITA, but that doesn't appear to work. We need your engineering expertise.</p> <p>3-Jan-12-TK – Does MTSAT work?</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					15-Feb-12-TK – Incorporated changes provided by Steve Kong. Close.	
2.6.1	SV6-0193	GL	<p>COMMENT: Delete space before “(SNAC)”</p> <p>SUGGESTED CHANGE:</p>	E	4-Sep-11-TK – Accept. Close.	C
2.6.2	SV8-0360	LR/CM	<p>COMMENT: If other parties own and operate parts of the network or network access switches, does that mean users not authorized by the SSP could have access to the network? If not, recommend clarification that access is controlled regardless of owner/operators.</p> <p>SUGGESTED CHANGE:</p>		<p>16-Jan-12-TK – Good point. Revise paragraph:</p> <p>2.6.2 The SSP authorizes CSPs (or aeronautical communication service providers) to provide network access to users. However, the authorization may allow the CSP to use parts of the network or some of the network access switches that are owned and operated by other parties, which are also authorized by the SSP.</p> <p>This section is descriptive only. See also paragraph 3.2.6.2 for guideline to SSP.</p> <p>18-Jan-12-LR - 3. Section 2.6.2: I think my main point was missed. I was more concerned about system security and preventing unauthorized voice access to aircraft. Recommend adding a sentence that says, "The CSP is responsible for protecting against unauthorized access to aircraft if any part of the ground network is owned or operated by other parties."? I am not a SATCOM system expert so I am not sure how unauthorized access is prevented when pieces controlled by third parties are used.</p> <p>14-Feb-12-TK- Section 2 is description. Suggested language implies guidance material for CSP. Added guideline to Section 3.2.5</p> <p>3.2.5.7 The CSP should ensure service agreements include relevant specifications for equipment and services that are owned and operated by other parties.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					Close.	
2.6.4 Table 2-1	SV8-0372	DRM	<p>COMMENT: before we put examples in this table we should talk specifically about the categories in the body of the guidance rather than five examples. I will try and develop the suggested guidance material for the meeting. The examples of SATCOM Voice examples needs work.</p> <p>SUGGESTED CHANGE:</p>	A	<p>14-Feb-12-TK – Added to column for Q12 and Q10 priority levels: Q12 – Typically assigned to calls for ANSP. Q10 – Typically assigned to calls for aeronautical operational control (AOC). Close.</p>	C
2.6.4 d) 2.6.7	SV8-0361	LR/CM	<p>COMMENT: – does the ground caller derive the octal code and if so, will this be easy to ensure the code is not derived incorrectly and thus, a call made to the wrong aircraft? Isn't the aircraft registration also part of the filed flight plan? Why would a "means" need to be made to correlate the two?</p> <p>SUGGESTED CHANGE:</p>		<p>16-Jan-12-TK – Revise "ground party" to ground party/system" in two places. paragraph 2.6.7 states "...uses a means to..." This will undoubtedly be via automation and data base provided by guidelines in paragraphs 3.2.2 and 3.2.4. The flight plan includes aircraft registration and may include aircraft address in Hex representation. Some means is needed to convert these aircraft identifications provided by the flight plan into the octal code, which is used to call the aircraft identified in the flight plan. Close</p>	C
2.6.6	SV8-0417	LP	<p>COMMENT: Elkan and I unable to locate reference in Annex 10, Volume II but "provisions in ICAO Doc 9925 (Part III)</p> <p>SUGGESTED CHANGE: Change the reference</p>	C	16-Feb-12-IRSVTF/3 – Accept. Close.	C
2.6.8 2.6.9 Chapter 2 Table under para. 2.6.8 & 2.6.9 Text to Figure 3-1	SV8-0418	LP	<p>COMMENT: The sample table may be numbered Table as Table 2-2 and Table 2-3</p> <p>SUGGESTED CHANGE: For Figure 3-1 -- SATCOM Voice Services contracted by organizations</p>	E	16-Feb-12-IRSVTF/3 – Accept. Close.	C
2.6.8	SV8-0362	LR/CM	<p>COMMENT: Example GtA initiated call – The description identifies both "the user" and "caller". It is</p>		16-Jan-12-TK – I'm not sure if more than one User ID or PIN is issued under the service agreement. I	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>not clear to me if they are one in the same or if, using the User ID [Iridium] as an example, the CSP gives the ID to the user and the caller has to get that ID from the user somehow before attempting a call.</p> <p>SUGGESTED CHANGE:</p>		<p>don't know that it matters or is relevant in the revised text. Revised to:</p> <p>For Iridium, the SSP assigns a user ID, which the CSP provides to the aircraft operating agency, aeronautical station or ATSU. Each caller will have to input a 4 digit user ID. The call will be dropped after three invalid entries.</p> <p>The SSP assigns a PIN, which the CSP provides to the aircraft operating agency, aeronautical station or ATSU. Each caller will have to input a 4 digit PIN code. The call will be dropped after three invalid entries.</p> <p>Closed.</p>	
3	SV7-0309	TK	<p>COMMENT: Organization of Chapter 3 is confusing.</p> <p>SUGGESTED CHANGE: Suggest following:</p> <ul style="list-style-type: none"> 3.1 ATSP SATCOM voice service provision 3.1.2 System validation – contains guidelines for ATSP and aeronautical station to provision service 3.1.3 Aeronautical information, notifications, and interfacility agreements 3,1,4 Aeronautical station considerations 3.1.5 CSP considerations 3.1.6 SSP considerations <p>Reorganize guidelines in a v0.81 that only revises Chapter 3 of the SVGM.</p>	S	<p>23-Sep-11-TK – Per IR-SVTF/2: Chapter 3 Administrative provisions related to SATCOM voice operations For ATSPs, CSPs, aeronautical stations, and airspace planners to plan for and implement SATCOM voice services, including ATC/AS automation, and interfacility agreements. For ATSPs and operators to negotiate contractual arrangements with CSPs. For operators to plan for, maintain and use the SATCOM voice system.</p> <p>If guidance to SSP is necessary, we should include a section in Chapter 3.</p> <p>Steve provided figure for Chapter 2, overview of Aeronautical SATCOM voice system and will be used to further organize chapter 3 and the document, and understand terms and interrelationships of components. This figure is included in SVGM. V0.8.</p> <p>21-Nov-11-TK – Reorganized Chapter 3. Make</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					specific comments for further changes. Close	
3.1	SV3-0111	TP	<p>COMMENT: The acronym “ATSP” is generally not used in the UK</p> <p>SUGGESTED CHANGE: replace ATSP with “ANSP”</p>	R	<p>1-Jun-TK – See resolution status to comment SV3-0114. What do I do if another State says use ATSP? Can we at least agree on common terminology and save the debate for the harder stuff?.</p> <p>22-Jul-11-TK – See resolution to comment SV3-0114. Document will use ATSP. Close.</p>	C
3.1	SV7-0216	LP	<p>COMMENT: Sub-title may be amended in line with text in the immediate following paragraph</p>	E	22-Sep-11-TK – Made consistent. Close.	C
3.1.1	SV7-0291	DRM	<p>COMMENT: Remove the last 5 words of the para and insert the ICAO document that pertains to communications</p> <p>SUGGESTED CHANGE: Check ICAO for reference</p>	C	22-Sep-11-TK – Deleted phrase. Revise to, “in accordance with Doc 4444 and Volume II of Annex 10.” Close.	C
3.1.1	SV3-0087	BC	<p>COMMENT: Refer to “provide these services consistent with voice communication procedures, regardless of the technology used.” In other words... SATCOM voice will use the same phraseology as is used today with HF voice.</p> <p>SUGGESTED CHANGE:</p>		1-Jun-11-TK – See paragraph 4.1.1 and 5.1.2. Statement in 3.1.1 is broader and encompasses phraseology, performance, capability, etc. Close.	C
3.1.2	SV3-0115	TP	<p>COMMENT: Change the title</p> <p>SUGGESTED CHANGE: Replace existing text to read “Functional requirements for SATCOM voice”</p>	R	1-Jun-11-TK – 3.1.2 and its subordinates probably needs fair consideration beyond comments provided on 3.1.2 and its subordinate paragraphs. The intent is to provide guidance for the ANSP/ATSP in managing their communication services. The SSPs are overseen by ANSPs or CSPs. The guidance material should be clear on allocated requirements to each of these entities if necessary. Paragraph 3.1.4 is intended to provide the requirements for the CSP/SSP or at least considerations for contractual/service agreement arrangements. Paragraph 3.1.2 is intended to provide the requirements for the ANSP/ATSP in validation. How will this guidance material be invoked? Once we agree to that, I think Chapter 3	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>needs work. SVTF discussion needed</p> <p>23-Sep-11-TK – Included the following as a starting point.</p> <p>3.1.2.1 The ATSP should ensure a validation process that confirms their equipment and procedures and/or its aeronautical stations are reliable and adequate for the intended use. This process should include:</p> <ul style="list-style-type: none"> a) A system safety assessment which demonstrates that the service provision meets the safety objectives. The ATSP should conduct a system safety assessment through a functional hazard analysis or a documented system safety case for initial implementation as well as for future enhancements. b) Integration test results confirming interoperability for operational use of the aircraft and ground systems; and c) Confirmation that the ATS operation manuals are compatible with those of adjacent providers. <p>3.1.2.2 Following the safety assessment, the ATSP should institute measures including its aeronautical stations, CSPs and SSPs, to ensure acceptable mitigation of the identified failure conditions.</p> <p>3.1.2.3 The ATSP should ensure that it provides communication services that meet the performance specifications provided at Appendix A, and that its aeronautical stations, the CSP and SSP meet their performance allocations under expected capacity and loading conditions.</p> <p>3.1.2.4 The ATSP should ensure appropriate procedures or other means either by the ATSU/controller or its aeronautical stations/radio operators to:</p> <ul style="list-style-type: none"> a) Maintain access numbers so controllers and/or 	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>radio operators can contact flights with SATCOM voice capability;</p> <p>b) Ensure appropriate priority level when initiating calls, in accordance with Table 3 1; and controller/radio operator procedures contained in Chapter 4.</p> <p>c) Respond to SATCOM voice calls, where SATCOM voice services are provided;</p> <p>d) Notify adjacent ATSUs of system failures, software upgrades (or downgrades) or other changes, which may impact them. Such notification procedures will normally be detailed in letters of agreement between adjacent units; and</p> <p>e) Notify airspace users of SATCOM voice service outages, performance degradation, and restoration.</p> <p>3.1.2.5 The ATSP should ensure that the controllers and radio operators receive appropriate training in accordance with ICAO Annex 1 and obtain any necessary approval from the State.</p> <p>3.1.2.6 The ATSP should ensure that the SATCOM voice service provision meets applicable security requirements, considering its ATSUs/controllers and/or its aeronautical stations/radio operators. Close</p>	
3.1.2	SV7-0217	LP	COMMENT: who should provide these for validation? CSP –” Sub-title may be rename as “CSP performance requirements validation”	E	21-Sep-11-TK – See comment SV3-0115. Close.	C
3.1.2	SV8-0316	MM	<p>COMMENT: Requirements seem like ICAO standards. I think it would be better to reference the ICAO standard than stating them here as though they are SatVoice Guidance standards only.</p> <p>SUGGESTED CHANGE:</p>	C	<p>1-Nov-11-TK – I don’t understand the comment. 3.1.2 is ATSP system validation and operational readiness. The only place “requirement” appears is in 3.1.2.6 related to security and no reference is made to ICAO standards.</p> <p>16-Dec-11-TK – See revisions in v0.8.2. The SVGM is intended to provide guidelines supporting ICAO standards as they apply to satellite voice services. Validation will be an important part of implement operational satellite voice services for</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					long range communication systems. If comment not addressed, resubmit with suggested changes.	
3.1.2.1	SV7-0263	GL	<p>COMMENT: ANSPs do not have a procedure in place to provide updated aircraft SATCOM telephone numbers from Iridium, updates only occur from Inmarsat. (3.1.2.1 SVGM) Iridium phone numbers are only updated from the operators.</p> <p>Note that updates confirmed at Oakland working verification from New York</p> <p>SUGGESTED CHANGE:</p>	S	<p>15-Sep-11-TK – Issue “access number management.”</p> <p>16-Sep-11-TK - Reference comments: SV7-0263 SV7-0258 SV1-0010 SV3-0093 SV2-0039 SV7-0262 Action for Brad and Joe</p> <p>23-Sep-11-TK - Added 3.1.2.4 a) a) Maintain access numbers so controllers and/or radio operators can contact aircraft capable of receiving SATCOM voice calls;</p> <p>Close.</p>	C
3.1.2.1	SV3-0117	TP	<p>COMMENT: Delete ANSP</p> <p>SUGGESTED CHANGE: Replace ANSP with “CSP”</p>	E	<p>1-Jun-11-TK – See resolution status to comment SV3-0115.</p> <p>23-Sep-11-TK – Moved to CSP section. Close.</p>	C
3.1.2.1	SV1-0009	FR	<p>COMMENT: SATCOM should be in capital letters</p> <p>SUGGESTED CHANGE:</p>	E	31-Mar-11-TK – Incorporated into v0.3. Close	C
3.1.2.1	SV6-0173	GL	<p>COMMENT: SSPs provide the data ANSPs and CSPs for Inmarsat and operators presently provide Iridium data.</p> <p>SUGGESTED CHANGE:</p>	C	<p>21-Sep-11-TK - This section is intended for ATSP or aeronautical station to validate SATCOM voice service provision. This item is not related to validation nor does either party provide telephone lists to themselves. Suggest revising to indicate “who” and move this item to appropriate section, whoever provides the list, i.e., CSP?</p> <p>23-Sep-11-TK – Moved to CSP section. Close.</p>	C
3.1.2.1	SV3-0116	TP	<p>COMMENT: In every sub-paragraph use new text to precede the word “Provide”</p>	A	1-Jun-11-TK – See resolution status to comment SV3-0115. Here the intent is that the ANSP should	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE: Introduce each sub-para with the phrase “The SSP should provide.....”		validate that the SSP or CSP provides ... 23-Sep-11-TK – Guidelines for SSP, CSP etc moved to appropriate section. Deleted here. Close.	
3.1.2.1 – 3.1.2.6	SV7-0273	JC2	COMMENT: Who provides? This section needs to be clarified. SUGGESTED CHANGE:	C	21-Sep-11-TK – these are validation guidelines for ATSP or aeronautical station intending to provide SATCOM voice services. 23-Sep-11-TK – Clarified per above and IR-SVTF/2 Resolution rules for document organization. Close.	C
3.1.2.2	SV7-0285	JM2	COMMENT: It is not clear where this reliability figure of 99.9% comes from. SUGGESTED CHANGE: We add a reference to a RTCA DO document that has required performance figures for this sub-network.	R	21-Sep-11-TK - This needs to refer to Appendix A, RCP specification, which provides acceptable criteria for transaction times, integrity, continuity and availability. 23-Sep-11-TK – Deleted and replaced with: 3.1.2.3 The ATSP should ensure that it provides communication services that meet the performance specifications provided at Appendix A, and that its aeronautical stations, the CSP and SSP meet their performance allocations under expected capacity and loading conditions. Close.	C
3.1.2.2	SV7-0284	CNY	COMMENT: Is this performance standard for the ATSU segment only? SUGGESTED CHANGE:	C	21-Sep-11-TK – Refer to comment SV7-0285. Close.	C
3.1.2.2	SV7-0292	DRM	COMMENT: 99.9% reliability factor has no basis – what is the requirement and measurement SUGGESTED CHANGE:	C	21-Sep-11-TK – Refer to comment SV7-0285. Close	C
3.1.2.3	SV7-0310	TK	COMMENT: Where are SVTF findings. This reference will not mean anything after publication. SUGGESTED CHANGE:	E	23-Sep-11-TK – Revise to: 3.1.2.6 The ATSP should ensure that the SATCOM voice service provision for its ATSUs and/or its aeronautical stations meets applicable security requirements.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					Close.	
3.1.2.4	SV8-0330	MS	<p>COMMENT: For security, some Airlines require use of a secure database before releasing aircraft numbers to an ATSP</p> <p>SUGGESTED CHANGE: Highly recommend ATSPs use a secure database where aircraft numbers are retrieved by tail number without displaying the number to any but essential staff.</p>	S	<p>1-Nov-11-TK – This comment goes beyond paragraph 3.1.2.4. See paragraph 3.1.2.6, Added note, beneath 3.2.1.6:</p> <p><i>“Note.— To ensure access numbers for the aircraft are protected, the ATSP may use a secure database where the controller/radio operator can contact a flight using its call sign and the access number for the aircraft is accessible only by qualified staff on a need-to-know basis.”</i> Close.</p>	C
3.1.2.4	SV6-0174	GL	<p>COMMENT: SSP provides info to ANSPs and CSPs then it is passed to operators</p> <p>SUGGESTED CHANGE:</p>	C	<p>23-Sep-11-TK – Revised to 3.1.2.4 e)</p> <p>e) Notify airspace users of SATCOM voice service outages, performance degradation, and restoration.</p> <p>Added to CSP section</p> <p>3.1.4.3 The CSP should provide notification of SATCOM voice service outages, performance degradation, and restoration to aeronautical stations, ATS units, and aircraft operators that use the service.</p> <p>Close.</p>	C
3.1.2.5	SV7-0244	IM	<p>COMMENT:</p> <p>ATSP call priority must be at least Level 2 - otherwise the technology doesn't provide and guarantee the priority required for operational use. Compare this to VHF or HF mediums.</p> <p>SUGGESTED CHANGE:</p>	S	<p>15-Sep-11-TK – Issue “Priority management.” –</p> <p>16-Sep-11-TK - Priority levels</p> <p>Level 1 (Q15) / EMG (Emergency)</p> <p>Level 2 (Q12)/ HGH (Safety)</p> <p>Level 3 (Q10)/ LOW (Non-Safety)</p> <p>Level 4 (Q9)/ PUB (Public)</p> <p>Currently, there are no provisions for Inmarsat ground to call on Level 1 / EMG. Is this a requirement? Yes, it is an interpretation of an Annex 10 requirement.</p> <p>Resolution rule – SATCOM voice is another means available to for the radio operator to use the most expeditious means available to alert the flight crew of the situation</p> <p>In the absence of conference calling, ruthless preemption only occurs when the priority levels of the current call and intervening call is higher; if the</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>intervening call is the same or lower, the current call will not be preempted and the intervening caller will get an indication that the line is not available.</p> <p>As a guidance document, “must” will be a “should.” If this is a requirement, need to be placed in appropriate requirements document, e.g., Annex, PANS</p> <p>Reference comments SV7-0244 (contains resolution status from IR-SVTF/2) see also SV7-0264 SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241</p> <p>17-Sep-11-IR-SVTF/2 - What are the uses of priority level today? Are we using it correctly today? Currently, Inmarsat GES is not capable of making EMG priority calls today, Annex 10 allows it, but this capability has not been implemented in the current configuration. Confirm with Brian - When Iridium comes on line, is it intended to provide “EMG priority calling from the ground capability” in their initial build? Put in the desirable appendix Dennis, Grant and Dave R will develop criteria on the use of priority/preemption to sort this issue out</p> <p>20-Sep-11-DR- Priority Management- Suggest</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>alignment with AC 20-150A , section 7.e which states “The satellite voice equipment should configure the cockpit default priority to level 2. The flight crew must have the capability to set the priority level for an individual call. “</p> <p>21-Sep-11-TK – I believe the comment suggests strengthening the guideline using “must.” Also, the guideline is referring to the ATSU/aeronautical station initiating a level 2 priority call. The DR response is related to airworthiness and flight crew procedures to establish call priority. For this specific comment, I suggest possibly new section for ATSP/aeronautical station “automation guidance,” or move to para 3.1.5.3, rather than validation guidance, presumably to complement a requirement in ICAO Annex 10???. If no requirement exists and we think there should be one, then we need to make a recommendation to PIRGs as outside of scope of our work.</p> <p>23-Sep-11-TK – Revised section per comment 0115, and included references in section for aeronautical station, see 3.1.4.3 f) Provide for the ability to prioritize, preempt and establish precedence on outgoing calls in accordance with Table 3 1.</p> <p>Close.</p>	
3.1.2.5	SV7-0264	GL	<p>COMMENT: Oakland Oceanic only calls at priority 2 / Q12. New York does not use a priority level when calling aircraft. What is the intended priority level for the ATSP? (3.1.2.5 SVGM)</p> <p>SUGGESTED CHANGE:</p>	S	<p>15-Sep-11-TK – Issue “Priority management.” –</p> <p>Reference comments SV7-0244 (contains resolution status from IR-SVTF/2) see also SV7-0264 SV5-0162 SV7-0242 SV7-0294</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241 20-Sep-11-DR/DRM - GES Priority Management – The Ground Earth Station Equipment should be configured to prioritize calls to the cockpit to default priority level 2. The controller must have the capability to set the priority level for other priority levels as necessary. 21-Sep-11-TK – Per above, does GES set priority to level 2 regardless of requested priority level? Isn't this an automation and procedure issue for aeronautical station/ATSU? Also, comment pertains to potential current implementation issue. May want to confirm default at New York, but not relevant to guidance, which calls for minimum priority level 2 calls. I would be concerned if GES are changing priority level assignment from the initiator of the call, unless in a restrictive way. If 3.1.2.5 is a guideline for GES, then editorially it would be moved to para 3.1.6. 23-Sep-11-TK – See resolution to comment SV7-0244. Close.	
3.1.2.5 (Page 3-1)	SV3-0077	ML	COMMENT: “Provide ATSP priority level”. Question: is this priority level definition as per AC 20-150? SUGGESTED CHANGE:	A	1-Jun-11-TK – See resolution status to comment SV3-0115. 4-Sep-11-TK – See resolution to comment SV6-0194. Close.	C
3.1.2.5	SV6-0194	GL	COMMENT: Change to read, “The ATSP call priority level should be established at level 2 as defined by AC 20-150A and figure 3-3 of this chapter.”		4-Sep-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE:			
3.1.2.6	SV3-0088	BC	<p>COMMENT: Refer to, “Provide acceptable timely call establishment and connectivity (Current connection times exceed 1 minute”</p> <p>SUGGESTED CHANGE: Employ the use of an auto-dialer system that correlates the updated SATCOM telephone list with the flight number/tail number combination held in the FDP.</p>	A	<p>1-Jun-11-TK – See resolution status to comment SV3-0115.</p> <p>21-Sep-11-TK – Per IR-SVTF/2 discussions, Resolution rules Chapter 3 - Autodial is a means to meet the performance specification in Appendix A. Example Safety requirement for Appendix A - The ground system or radio operator shall ensure the correct and timely dialing of calls to the aircraft. Note: This safety requirement is to eliminate errors in the dialing sequence. The requirement may be achieved through the use of autodial feature.</p> <p>23-Sep-11-TK – Revise to 3.1.2.3 The ATSP should ensure that it provides communication services that meet the performance specifications provided at Appendix A, and that its aeronautical stations, the CSP and SSP meet their performance allocations under expected capacity and loading conditions. Close.</p>	C
3.1.2.6	SV6-0175	GL	<p>COMMENT: What is acceptable?</p> <p>SUGGESTED CHANGE:</p>		4-Sep-11-TK – Revised to “3.1.2.6 Provide acceptable timely call establishment and connectivity per specifications provided at Appendix A.” Close.	C
3.1.2.6	SV2-0048	MM	<p>COMMENT: Suggest new item.</p> <p>SUGGESTED CHANGE: 3.1.2.6 Provide acceptable timely call establishment and connectivity (Current connection times exceed 1 minute)</p>		31-Mar-11-TK – Incorporated into v0.3. Close	C
3.1.3.1	SV7-0274	JC2	<p>COMMENT: Editorial cleanup up with sentence structure needed.</p> <p>SUGGESTED CHANGE: “This notification shall include:”</p>	E	21-Sep-11-TK – Revise sentence to, “3.1.3.1 The ATSP should notify operators of SATCOM voice services using the AIP or NOTAM, which includes:” Close.	C
3.1.3.1	SV3-0089	BC	COMMENT: Do we need to add a note to remind folks	A	1-Jun-11-TK – Covered in paragraph 3.1.1, 4.1.1	C

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			to make these SATCOM procedures consistent with HF voice? Where to contact, when to contact,,,, no need to SELCAL on SATCOM. SUGGESTED CHANGE:		and 5.1.2. As for where to contact, when to contact,,,, no need to SELCAL on SATCOM, this sounds like guidance material for the flight crew in Chapter 5. 21-Sep-11-TK – per above already in SVG. Close.	
3.1.3.1 c)	SV7-0219	LP	COMMENT: Word “FORM” may be replaced with “field element”	E	21-Sep-11-TK – The term “form” is consistent with ICAO Doc 4444 and GOLD. No change. Close.	C
3.1.4	SV3-0090	BC	COMMENT: This whole section concerns me. We need to ensure interoperability otherwise the system will not work. And we are not about to start certifying CSPs. SUGGESTED CHANGE:	S	1-Jun-11-TK – See also comment SV2-0038. See resolution status to comment SV3-0115. 29-Jun-11-IR-SVTF – Scope of document issue. ACTION: All. Prepare to discuss further at subsequent meetings with proposed changes to document. 15-Sep-11-TK – Issue “CSP approval.” – 16-Sep-11-TK – Reference comments: SV3-0090 SV7-0249 SV7-0311 23-Sep-11-TK – Partially address. Remove sections related to CSP approval. 21-Nov-11-TK – Related to SV7-0309. Added figure to show relationships of safety oversight and service agreements among different organizations involved in provided SATCOM voice communication services. Close.	C
3.1.4	SV8-0407	FT	COMMENT: Safety oversight is a responsibility delegated by States to FAA, CAA, RSOO or similar aviation authority. It is not a responsibility of the ATS provider (or ATS authority, which is the same). SUGGESTED CHANGE: Delete ‘ATS’ from 2 nd line	R	14-Feb-12-TK – Definition of ICAO: Appropriate authority. a) Regarding flight over the high seas: The relevant authority of the State of Registry. b) Regarding flight other than over the high seas: The relevant authority of the State having	C

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			of 3.1.4		sovereignty over the territory being overflown. (ICAO) Revise to “appropriate authority.” Close.	
3.1.4	SV5-0141	TK	COMMENT: Need definition for CSP (Chapter 1). CSP is considered to include both satellite and network service providers. (Editor’s Note 5 in v0.5) SUGGESTED CHANGE:	R	23-Jul-11-TK – See resolution to comment SV3-0084. Delete Ed Note. Close.	C
3.1.4	SV5-0142	TK	COMMENT: Editor’s note 3 (v0.5). — The following areas need to be addressed. 1. Approval by whom? 2. It’s envisioned that each state would not need to approve every CSP. 3. Current EASA rules imply that a state of residence of the CSP (in this case a satellite) is to be responsible for its approval and certification, as well as on going oversight and audits. (check IMO approval processes for CSP). This is just an example. 4. Are the current Annex 10 provisions adequate? Additional questions relating to Annex 10 and other guidance material. a) Do they ensure inoperability? b) Will the interface to the end users be the same regardless of which CSP is used? c) Compatible and interoperability security requirements and automation. d) Questions were raised about the OPLINKP and SARPS amendment timeframes and processes to allow progressing upgrade of SATCOM voice. (Editor’s Note 6 in v0.5) SUGGESTED CHANGE:	R	23-Jul-11-TK – Submit specific comments with suggested changes to document text. Delete Ed. Note. Close. 23-Aug-11-FT – 1. Approval by the competent aviation authority established on a national (e.g. FAA) or regional (e.g. EASA for pan-European CSP) level. 2. In principle each State should approve the CSP. However, has it happens in many fields of aviation: - “Reciprocal acceptance” of approvals may be facilitated by multi□ or bi□lateral agreements (in order to avoid duplication of technical work among authorities, while each authority needs to issue its own approval); or - Law applicable on a regional scale (e.g. EASA Basic Regulation (EC) 216/2008 as amended by Regulation (EC) 1108/2009) may contain provisions for the automatic “mutual recognition” (i.e. not even further administrative work required by a competent authority, when a certificate, complying with said law, has been issued by EASA or an authority at national level). 3. According to Art. 22a of mentioned EASA Basic Regulation, EASA directly issues certificates to CSPs located outside the territory	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>of the EU Member States (e.g. iridium, should this organization apply) and to providers of services on a pan-European (or larger) scale, located in one of the EU member States (e.g. Inmarsat should this organization apply). The necessary implementing rules for this article have been adopted by the European Commission and are expected to be published on the Official journal of the EU before end 2011. In my knowledge (but please check), in the maritime community no requirements for the providers (i.e. on the organizations taking managerial responsibility, not on the technical features of a service) , as stringent as in aviation, do exist;</p> <p>4. Annex 10: Standard 2.4.1 in current edition of Annex 10 states that: 2.4.1 Each State shall designate the authority responsible for ensuring that the international aeronautical telecommunication service is conducted in accordance with the Procedures in this Annex. However, in my humble belief, the standard is too short to be clearly interpreted and applied. Other Annexes (e.g. 6 and 14) are much clearer in terms of the oversight obligation of the States (through the State Safety Programme) and on the obligations (e.g. Safety Management System) of the regulated organisations. We could perhaps recommend to amend Annex 10 in this respect. In such a case ICAO should consider also the civil Navigation Service Providers (e.g. EGNOS already certified in the EU) and the Surveillance Service Providers;</p> <p>a) Interoperability is a technical matter (e.g. modulations, protocols) not linked to the oversight of the CSP; in other words, technology may change, but the CSP approval (as organization) remains valid;</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>b) Yes; this depends on the interoperability specifications and not on the oversight of the CSP;</p> <p>c) Most probably the CSP will need also to comply with security requirements: technical requirements embedded in the system (e.g. PIN, authentication or else), but also control of personnel and physical security of the premises and facilities;</p> <p>d) I would try to decouple the publication of the SATCOM GM from possible amendments of other documents. In my present understanding:</p> <ol style="list-style-type: none"> i. Our version 0.5 of the GM is complying with mentioned standard 2.4.1 in Volume 2 Annex 10; ii. Does not contrast GOLD; iii. Hence we, once the document will be finalized, could recommend publication to ICAO. iv. However subsequent further work may be needed: <ul style="list-style-type: none"> • To amend Annex 10 to be clearer on the oversight of C, N and S SPs; • To refine in GOLD the requirements for data link integrity. In this moment I have in mind 10-3 for SATCOM voice (already achieved and blocking the operational exploitation for routine communications), 10-5 (end-to-end; i.e. including the upper protocol layers in the end systems, which are not under the managerial responsibility of the CSP) for initial data link applications (like in GOLD and ED 120 and 122), but a more stringent value of 10-7 (still end-to-end) for more advanced future 	

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					applications (i.e. SESAR and NexGen); for this latter requirement GOLD may need to be updated.	
3.1.4 and Foreword References 6.r.	SV4-0121	EN	COMMENT: We shouldn't refer to EU docs all the time. We may only limit it to examples. SUGGESTED CHANGE:		1-Jul-11-EN - Deleted. See SV4-0127. Close.	C
3.1.4	SV2-0031	FT	COMMENT: Suggested text for paragraph 3.1.4 SUGGESTED CHANGE:		30-Mar-11-TK – See attached file beginning with <comment number>. 31-Mar-11-TK – Incorporated into v0.3. Close	C
3.1.4 onwards, and Editor's Notes 4 and 5. Also relevant to Foreword, 2.1.1 and 2.1.3.	SV2-0038	BP	COMMENT: See also the Comments and Suggested Change for Foreword, 2.1.1 and 2.1.3 above. Is it appropriate for operational guidance to include guidance on approval and implementation? If so, then the Guidance should state that there are existing approval mechanisms within ICAO and should note that these have already been applied to certain systems for AMSRS. ICAO has already verified Inmarsat, MTSAT and Iridium for AMSRS. Whilst additional regional and national procedures for conformity assessment in some cases also apply, it would probably be inappropriate to list these here, and would be burdensome upon ICAO (Secretariat) to try to maintain an up-to-date and exhaustive list, and so it is appropriate simply to note that these additional regional and national procedures may apply (and should also be published in SUPPs). International mutual recognition of certificates and licenses is referred to in the CICA 1944. IMO "recognition" process is unique to satellite systems used in the GMDSS, is not applied to other systems and	C	1-Jun-11-TK – See also comment SV3-0090. See resolution status to comment SV3-0115. 16-Dec-11-TK – All Editor's notes now removed. See revision 0.8.2, Chapters 2 and 3 and, if comment not addressed, please resubmit comment against latest version of SVGM. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>services, and doesn't look at end-to-end performance, and so would not be appropriate for the evaluation of the CSP as it is proposed to be defined here, or in the context of other documents.</p> <p>SUGGESTED CHANGE: Editor's Note 4 can be addressed with the definition of "CSP" as discussed above, including definitions of the operators and providers of subsystems and functions, and their relationships to each other and to the users/</p> <p>Unless this section 3.1.4 is removed as being inappropriate for the guidance to include approval and implementation procedures as well as operational guidance, then as discussed in Comments and Suggested Changes for Foreword, 2.1.1 and 2.1.3 above, and consequential to those changes:</p> <p>Editor's Note 5.1: Approval means different things at different levels – ICAO already has requirements and verification processes for systems in general. Individual aircraft equipment installations are approved (and licensed) by the state of registry. Fixed infrastructure such as ground earth stations and gateways are also licensed generally according to where they are located.</p> <p>Editor's Note 5.2: As long as the satellite component meets the overall ICAO requirements, this individual element or sub-system should not need approval by each state; the CSP overall (as it is proposed to be defined here) may be subject to particular regional or domestic requirements, but these should be published in SUPPs and addressed domestically through national aircraft operator licensing, and airworthiness and certification requirements, and associated administrative procedures; the principle of mutual recognition should apply.</p> <p>Editor's Note 5.3: As there are several permutations of</p>			

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			<p>subsystems which might make up a CSP, and as these are likely to be both multinational and international, the “approval” of these will be necessarily fragmented. In the case of a satellite network, there are international (ITU) procedures in place, as well as domestic compliance and licensing for the satellite network and its operator. Ground earth stations and gateways (and other fixed infrastructure) are assumed to be licensable according to their location (similarly, VHF or HF installations are the responsibility of the state in which they are located, aircraft installations are the responsibility of the state of registry.</p> <p>Editor’s Note 5.4.a): “Interoperability” between the different elements of the CSP is the responsibility of the CSP itself and may occur at different points in the CSP chain overall.</p> <p>Editor’s Note 5.4.b): This is a matter for the HMI equipment manufacturer and their customer (controller, radio operator, aircraft operator); the implication of different interfaces becomes a matter for the customer to address through training etc.</p> <p>See also Comment on Editor’s Note 9, associated with 3.1.5 onwards, below.</p> <p>Editor’s Note 5.4.c): Security concerns were raised in the meeting 27-29 January. These are already addressed in the AMSRS Manual and so there is no need for additional material here; if any reference is necessary, reference to the Manual should be sufficient; it is for individual facilities to ensure they have adequate security provisions in place.</p> <p>Editor’s Note 5.4.d): Administrative and Secretarial matter – No comment or suggested change.</p>			
3.1.4.1	SV8-0317	MM	COMMENT: “...in accordance with performance		1-Nov-11-TK – Revise sentence to, “To provide	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			specifications.” Note the particular Specs.		SATCOM voice radio services at a full operational level, the radio facility should be able to accept or place a SATCOM voice call given the necessary infrastructure to handle the expected SATCOM voice traffic demand and in accordance with performance specifications as prescribed in Regional SUPPs, AIP or equivalent. ” Added note, “Note.— See Appendix A for applicable performance specifications.” Close.	
3.1.4.1.1	SV7-0286	JM2	<p>COMMENT: It is not clear where this reliability figure of 99.9% comes from.</p> <p>SUGGESTED CHANGE: We add a reference to a RTCA DO document that has required performance figures for this sub-network.</p>	R	<p>21-Sep-11-TK – I believe comment is referring to 10**3 per flight hour. This is ambiguous without knowing what the safety objective is. There is action to include safety requirements as part of Appendix A. Safety requirements will be derived from safety objectives. Suggest reference to Appendix A is all that is needed here.</p> <p>Revise sentence to “3.1.4.1.1 The CSP should ensure that the SATCOM voice service meets the performance criteria as prescribed by the aeronautical station or ATSP in accordance with RCP specifications provided in Appendix A.” Close.</p>	C
3.1.4.1.1	SV5-0143	TK	<p>COMMENT: MM - Ch 2/Ch 4 Group - These times in Appendix A were challenged in Paris and are still questionable and need agreement. (Editor’s Note 7 in v0.5)</p> <p>SUGGESTED CHANGE:</p>	R	23-Jul-11-TK – See resolution to comment SV3-0109. Ed Note is relevant only to Apx A. Delete Ed Note. Close.	C
3.1.4.1.4	SV7-0249	AH	<p>COMMENT: What is an authorized service provider? The service provider authorization is not defined.</p> <p>SUGGESTED CHANGE: Delete the word “authorized”.</p>	S	<p>15-Sep-11-TK – Issue “CSP approval.” –</p> <p>16-Sep-11-TK - What does this mean? Rules for resolution Remove opinions, etc. Remove concept of “approval” or “authorization.” Refer to guidelines allocated to CSP as considerations for ANSPs or operators in service agreements/contractual arrangements</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					Reference comments: SV3-0090 SV7-0249 SV7-0311 23-Sep-11-TK – Partially address. Remove sections related to CSP approval. 21-Nov-11-TK – Authorized service provider removed. Make specific comments and suggested changes on v0.8.2 for further changes. Close	
3.1.4.1.4	SV4-0136	FTO	<p>COMMENT: It would be interesting to have ICAO material on the evolution of the integrity requirement (e.g. 10E-3 for digitized voice, 10E-5 for current data link applications and 10E-7 for SESAR/NextGen) which drives requirements for COM service provider and software assurance level. However: The issue is still controversial and therefore may delay publication of the SATCOM voice material; The subject could be better discussed in the next edition of GOLD; In any case this material will not lead to additional requirements for SATCOM voice and therefore it may not be necessary in related GM.</p> <p>SUGGESTED CHANGE: Remove last sentence, which refers to Appendix D</p>	C	22-Jul-11-TK – Accept. Close.	C
3.1.4.2 (c)	SV8-0332	MS	<p>COMMENT: See comment above about security of aircraft numbers</p> <p>SUGGESTED CHANGE: Add “Where permitted/authorised by the aircraft operator” or similar.</p>	S	1-Nov-11-TK – See comment SV8-0318, same paragraph item. Added text to go down the path of securing the access numbers. If the aircraft operator does not authorize/permit or want to provide the access number to ANSP/aeronautical stations, then the controller/radio operator will not be able to contact the aircraft and the SATCOM voice radio could not be approved as one of two required long range communication systems. If	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					operators want that option, then I think a bigger comment and suggested change is needed in the greater scheme of things to include the concept of an “unlisted” access number. Please write another comment, if this is the intent. Close.	
3.1.4.2 c & e, and 3.1.5.1.2	SV8-0318	MM	COMMENT: items c & e need to be updated per the recent email change on “Proposal for Satcom Phone # Mgmt.”		1-Nov-11-TK – Comment needs to suggest text for incorporation into document. Revised, as follows: “c) Secure and maintain aircraft access numbers as new SATCOM radio facilities become operational (See also paragraph 3.1.2.6). d) ... e) Establish procedures with operators to verify correct SATCOM voice access number prior to the flight in the event of a SATCOM voice access number change to a specific airframe.” Deleted 3.1.5.1.2. Close.	C
3.1.4.2 c)	SV8-0331	MS	COMMENT: No MTSAT SUGGESTED CHANGE: Add MTSAT	E	1-Nov-11-TK – See comment SV8-0318, same paragraph item. Close.	C
3.1.4.2.4	SV4-0134	EN	COMMENT: 3.1.4.2.4 for consistency suggest append the last sentence to start with “For instance” SUGGESTED CHANGE: 1.1.1.1.1 For instance, this latter ICAO provision is transposed in the EU by so called “EU-OPS” in respect of commercial air transport operators and by so called “common requirements ” for		22-Jul-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			ATSPs .			
3.1.4.2.5 3.1.4.3.1 3.3.1	SV7-0260	GL	COMMENT: Flight planning requirements that include the addition of SATCOM in “Line 10 and 18” of the ICAO flight plan will not notify most “Unbundled CSPs” (i.e., ARINC) (3.1.4.3.1 SVGM) of the desire to use SATCOM Voice (3.3.1 SVGM) as they do not view the ICAO flight plan. ANSPs and “Bundled CSPs” (i.e., Gander Radio) (3.1.4.2.5 SVGM) can normally view the request as they have the ability to view the ICAO flight plan. SUGGESTED CHANGE:	S	15-Sep-11-TK – Issue “Flight planning.” – Concept of “Unbundled CSP” removed. Aeronautical station is now defined as part of ATSP. Close.	C
3.1.4.2.5	SV6-0176	GL	COMMENT: organisation,” should be “organization.” SUGGESTED CHANGE:		4-Sep-11-TK – I think it depends on which English, British or American. I’ll let ICAO tackle that. Close.	C
3.1.4.3	SV8-0319	MM	COMMENT: item c, remove 2 nd “SATCOM” word, so that the calls are routed to the appropriate radio operator. The radio facility should decide is the Satcom calls will be handled by Satcom operators or all radio operators handling both HF and Satcom.		1-Nov-11-TK – Accept. Close.	C
3.1.4.3	SV2-0049	MM	COMMENT: Paragraph 3.1.4.3 refers to Appendix A. These times in Appendix A were challenged in Paris and are still questionable and need agreement SUGGESTED CHANGE:		31-Mar-11-TK – Incorporated Ed Note into v0.3. Comment really is relevant to Appendix A. Close	C
3.1.4.3 (a &b)	SV8-0333	MS	COMMENT: MTSAT is a different access to INMARSAT SUGGESTED CHANGE: Add MTSAT	E	1-Nov-11-TK – Generalized and revised list for parallel construction: a) Place and receive SATCOM voice calls to eligible SATCOM access points. b) Place authorized SATCOM voice calls using the correct authorization personal identification number (PIN) for eligible SATCOM networks. c) Answer and route incoming SATCOM voice calls to the appropriate radio operator.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					d) Auto-dial the access number to enable faster call setup times. e) Exchange air traffic control information with ATC. f) Prioritize, preempt and establish precedence on outgoing calls in accordance with Table 3 1. Close.	
3.1.4.3.1	SV7-0221	LP	COMMENT: Figure 3-2 may be used to replace 3-Y	E	21-Sep-11-TK – Accept. Close.	C
3.1.4.3.1	SV7-0250	AH	COMMENT: Figure 3-2 has term “over sight” broken across two lines, when it should be one word, and so needs a hyphen. The meaning is different. SUGGESTED CHANGE: change “over sight” to “over-sight” or put all on one line as “oversight”.	E	21-Sep-11-TK – Accept. Close.	C
3.1.4.4.2	SV7-0238	AJ	COMMENT: Satcom implies AES, assume CSP relates to terrestrial services? SUGGESTED CHANGE: operate and maintain the infrastructure and facilities to support GTA calling and acceptance of ATG communications.	C	21-Sep-11-TK – I’m not sure I understand the comment. This paragraph reads, “3.1.4.4.2 Law adopted on a regional or national level should specify the privileges and obligations of the authorized CSPs.” SATCOM does not appear in 3.1.4.4.2. I’m not sure what an “authorized CSP” is. I thought CSPs were contracted or formed agreements with its users, ATSPs and aircraft operators. Refer also to comment SV7-0249. I’m not sure what “law” to which the paragraph refers, such as in international airspace, is that the Annexes, PANS and Regional SUPPs. 16-Dec-11-TK – the comment no longer relevant as concept of “authorized CSP” has been removed. Close.	C
3.1.4.4.3 c)	SV6-0177	GL	COMMENT: I think this should be associated with a Satellite Service Provider not the CSP. SUGGESTED CHANGE:	S	4-Sep-11-TK – Comment seems to make sense. Defer to broader review of this section. 15-Sep-11-TK – Issue “Allocation of guidelines to ATSP, CSP, SSP, Aero Station, Operator.” –	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					21-Nov-11-TK – Removed concept of “authorized CSP.” Close.	
3.1.4.4.4 (b)	SV3-0119	TP	COMMENT: delete (t) in the word “ort” SUGGESTED CHANGE:	E	1-Jun-11-TK – Accept. Close.	C
3.1.5	SV8-0408	FT	COMMENT: Same as to 3.1.4 SUGGESTED CHANGE: Delete ‘ATS’ from 3 rd line of 3.1.5 and replace by ‘aviation’	R	14-Feb-12-TK – Revise to “appropriate authority.” Close.	C
3.1.5	SV7-0245	IM	COMMENT: Radio Facility Considerations <ul style="list-style-type: none"> Provide recording and logging data (PIN, time, switching) of all calls. SUGGESTED CHANGE:	C	15-Sep-11-TK – Also consider recording requirements associated with Apx A. Issue “Allocation of guidelines to ATSP, CSP, SSP, Aero Station, Operator.” 16-Sep-11-TK – Refer to SVGM v0.7, paragraph 3.1.7 21-Sep-11-TK – Defer to after reorganization of Chapter 3. 23-Sep-11-TK – moved 3.1.7 to 3.1.2, and revised title of 3.1.2, to include operational readiness. Close.	C
3.1.5	SV8-0342	FT	COMMENT: In the EU a SATCOM SP can be legally certified under “Single Sky” and EASA Law. The paragraph on direct certification of the CSP, which was present in v 0.7, and which remains a possibility, should be reinserted. The fact that this possibility is today not used, does not mean that it is available and that ICAO should acknowledge it. SUGGESTED CHANGE: Reinsert text and figure on direct certification of the CSP		29-Sep-11-TK/FT - TK - OK Filippo, I'm pondering some ideas to resolve this comment, but before I propose anything can you help me understand a few things: a) Does the European law apply to oceanic (ICAO allocated airspace)? FT - It may, if so decided by member States (ref. par. 5 of attached paper which I presented to our first meeting).	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>TK - b) Are you aware of any law anywhere else outside of Europe that allows and includes provisions for safety oversight of a CSP as a separate (unbundled) entity?</p> <p>FT - No. But there is the general standard in Vol II of Annex 10 which requests States to establish oversight (through certification or other means).</p> <p>TK - c) Are there any "certified" or "approved" CSPs today (as an unbundled entity) for the purposes of providing SATCOM voice for ATS communications in "domestic" Europe or anywhere else?</p> <p>FT - Not yet. But in Europe we have already EGNOS SP, "unbundled" provider certified for radio navigation signals via satellite and a huge number of unbundled providers at national level (e.g. aerodrome operators providing some ANS).</p> <p>TK - d) Are there plans to implement SATCOM voice services provided by CSP in the near term (next 5 years) and CSP will be approved as an unbundled CSP?</p> <p>FT - Yes. Through the Iris Programme lead by the European Space Agency, in which context however, voice will not be the driving factor, but instead advanced data link applications.</p> <p>TK - e) If the answer to c) is none, and d) is no, do you have a feel for when the first CSP will be approved as an unbundled entity for the purposes of providing SATCOM voice for ATS communications?</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>FT - However, I may accept that the issue of the unbundled SATCOM Service Providers applies more to data link rather than to voice services. A solution could be not to include such information in our current SATCOM Voice GM, which I really hope to finalize as soon as possible, but put the draft material on hold, in the perspective of the next edition of GOLD.</p> <p>But in the latter case, I would like to know the opinion of my ICAO friends in Cc, in order to assess the feasibility.</p> <p>1-Nov-11-TK – No change. Close per above.</p>	
3.1.5.1	SV3-0120	TP	<p>COMMENT: in the first sentence insert the word “currently” after “facilities</p> <p>SUGGESTED CHANGE:</p>	A	<p>1-Jun-11-TK – The first sentence is historical information and not guidance material. Chapter 3 should provide guidance material. Revise to, “To provide SATCOM voice radio services at a full operational level, the radio facility should be able to accept or place a SATCOM voice call given the necessary infrastructure to handle the expected SATCOM voice traffic demand and in accordance with prescribed performance specifications.”</p> <p>Close.</p>	C
3.1.5.1	SV2-0050	MM	<p>COMMENT: Suggest revision to text.</p> <p>SUGGESTED CHANGE: 3.1.5.1 Many radio facilities provide the capability to initiate and receive SATCOM voice calls. However providing SATCOM voice radio services at a full operational level means more than simply accepting and placing a SATCOM voice call. The necessary infrastructure will need to be developed and implemented to provide the capability to handle any expected SATCOM voice traffic demand. Additionally, radio facility providers must ensure that adequate resources are available in the event that SatVoice and</p>	A	<p>31-Mar-11-TK – Incorporated into v0.3, except SATCOM data out of scope for this document. Refer to GOLD for data link. Revise to, Additionally, radio facility providers must ensure that adequate resources are available in the event that SATCOM voice services are disrupted.</p> <p>See also resolution to comments SV2-0050, SV2-0057, SV2-0060, and SV2-0061.</p> <p>Close</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			DataLink services are disrupted.			
3.1.5.1	SV3-0091	BC	<p>COMMENT: Refer to, "...capability to handle any expected SATCOM voice traffic demand. ..."</p> <p>SUGGESTED CHANGE: Any? That is not guidance. Suggest we just say expected...</p>		<p>1-Jun-11-TK – Accept. Revise to, "The necessary infrastructure will need to be developed and implemented to provide the capability to handle expected SATCOM voice traffic demand in accordance with prescribed performance specifications."</p> <p>Close.</p>	C
3.1.5.1.1.	SV8-0320	MM	<p>COMMENT: There could be a cost trade-off for the user community on performance of the satellite provider. Therefore, performance criteria are somewhat relative.</p>		<p>1-Nov-11-TK – performance criteria are relative to the intended use and safety, not the cost. The intended use, capability and what is provided is relative to cost. No suggested change provided. Revised as follows: "3.1.5.1.1 The CSP should ensure that the SATCOM voice service meets the performance criteria as specified by the aeronautical station or ATSP. <i>Note.— When specifying performance criteria for the CSP, refer to Appendix A for applicable RCP specifications, which provide allocations to the CSP.</i>" Close.</p>	C
3.1.5.1.2	SV8-0334	MS	<p>COMMENT: As previous re security</p> <p>SUGGESTED CHANGE: Add "if permitted/authorised by the aircraft operator" or similar</p>	E	<p>1-Nov-11-TK – See comment SV8-0332 and SV8-0318. I deleted 3.1.5.1.2. Though I don't think this issue is completely resolved. Close.</p>	C
3.1.5.2	SV5-0163	DR	<p>COMMENT: "Camp-on" capability should be made available for system use.</p> <p>SUGGESTED CHANGE: The satellite voice equipment may also allow flight crew members to place their call request at the top of a queue – that is, to "camp-on" while awaiting free resources. Flight crew procedures should include explicit instructions defining how the flight crew can use "camp-on" capability</p>	S	<p>23-Aug-11-Web/3 – No change. Where is "Camp On" defined. This is legacy and other methods are used today. If a pilot wants to make a call they will make a call via the two channels, or pilot dials through any busy channel because it is automatic. This was a holdover from original days with limited antennas and GESs to get in queue. For ATS traffic, this does not apply.</p> <p>See also Comment SV7-0234</p> <p>Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.1.5.2 (new)	SV6-0180	GL	<p>COMMENT: Add new item, “Establish procedures with operators to verify correct SATCOM voice number in the event of a SATCOM voice number change to a specific airframe with less than 24 hour notice.”</p> <p>Will 24 hours be sufficient update notification for CSPs to adjust numbers within their systems.</p> <p>SUGGESTED CHANGE:</p>		4-Sep-11-TK – Accept. Close.	C
3.1.5.2 a)	SV3-0092	BC	<p>COMMENT: Refer to, “Enable operators to register SATCOM voice capabilities and means to contact the aircraft. (only applies to MEL relief)</p> <p>SUGGESTED CHANGE: Why only MEL relief?</p>	C	<p>1-Jun-11-TK – Operators may opt to not provide SATCOM phone number, but still use SATCOM voice capability, as is done today by some operators. They could not get MEL relief in this case. They may not want MEL relief in this case, but they might want the SATCOM voice capability.</p> <p>21-Sep-11-TK – Deleted parenthetical phrase. Close.</p>	C
3.1.5.2.c)	SV2-0051	MM	<p>COMMENT: Delete this sentence about phone numbers in flight plan due to safety risk and security issues.</p> <p>SUGGESTED CHANGE: Delete “(we might need to have the operators also file the aircraft phone number in the flight plan in case they change equipment during the 28 day cycle)”</p>	C	31-Mar-11-TK – Incorporated into v0.3. Close	C
3.1.5.3	SV1-0032	DR	<p>COMMENT: 3.1.5.3 When supporting satellite voice communications, radio facilities should provide automation support that allow the radio operator to provide SATCOM voice services for the intended operations:</p> <p>SUGGESTED CHANGE: add (g). Provide for the ability to prioritize, preempt and establish precedence on outgoing calls.</p>	A	31-Mar-11-TK – Incorporated into v0.3. Close	C
3.1.5.3 e) Apx D	SV7-0259	GL	<p>COMMENT: When receiving an air-to-ground call presently, the systems at most CSPs have one to four inbound phone numbers that will “roll” to any available</p>	S	15-Sep-11-TK – Issue “Safety requirements” & “non-compliance of current systems”.” –	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>RO. To accommodate “Conference Calling” CSPs are considering associating a SATCOM phone number with a specific HF frequency “family group.” Pilots would contact the RO based on geographic location associated with an HF “family of frequencies.” Charting currently does not accommodate this effectively. This will most likely require an RO to assign a SATCOM number, Primary and Secondary HF frequencies when entering a new FIR or when changing frequencies. (3.1.5.3 SVGM)</p> <p>SUGGESTED CHANGE:</p>		<p>23-Sep-11-TK – From IR-SVTF/2 review:</p> <p>What is it? When more than two parties are involved (within practical limits) Air conference - Radio operator or controller talking to two or more aircraft Ground conference - Aircraft talking to Radio operator, AOC, or controller or all three or others – can be done by aeronautical station via “phone patch”</p> <p>What is the purpose? To facilitate resolution of an operational issue where multiple parties at different locations are involved, e.g., broadcast on HF, ACARS, whatever means are used today There is no operational requirement for this capability</p> <p>Some issues – We do it on VHF today, but on SATCOM, it is confusing cause you cut people off due to SATCOM delays Related to “ruthless” preemption – may mitigate against the effects of interrupting essential or critical communications 2-channel could potentially mitigate the effects Procedures and proper use of priority levels could potentially mitigate the effects</p> <p>Resolution rules - use procedures and existing priority scheme/capability to mitigate against the effects of ruthless preemption</p> <p>Also, resolution rule implies that conference calling is not a requirement. Will highlight in desirable appendix. Moved all related comments to new Apx D and deleted item e). Close.</p>	
3.1.5.3 e) Apx D	SV6-0182	GL	COMMENT: This means that when calling the SATCOM RO the aircraft will be joining a “Conference Call” in progress. This technology is not implemented	S	4-Sep-11-TK – CSP or radio facility? Or ATS unit? Is it a requirement? Or even a guideline?	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			by any CSP at this time. SUGGESTED CHANGE:		15-Sep-11-TK – Issue “Performance/safety specifications” and “non-compliance of current systems.” 23-Sep-11-TK – See comment SV7-0259 for resolution status. See all comments on 3.1.5.3 e) SV7-0259 SV6-0182 SV7-0257 SV2-0053 SV2-0040 SV7-0251 Close.	
3.1.5.3 e) Apx D	SV7-0257	GL	COMMENT: “Conference Calling” inbound to the CSP, as directed in 3.1.5.3 (e) of the SVGGM, is not accommodated by any CSPs (NAV Canada, ARINC, Shanwick (IAA)). SUGGESTED CHANGE:	S	15-Sep-11-TK – Issue “Performance/safety specifications” and “non-compliance of current systems.” 23-Sep-11-TK – See comment SV7-0259 for resolution status. See all comments on 3.1.5.3 e) SV7-0259 SV6-0182 SV7-0257 SV2-0053 SV2-0040 SV7-0251 Close.	C
3.1.5.3.d	SV2-0052	MM	COMMENT: Change “rapid” to “faster.” SUGGESTED CHANGE: Auto-dial capability to enable faster call setup times.	C	31-Mar-11-TK – Incorporated into v0.3. Close	C
3.1.5.3.e Apx D	SV2-0053	MM	COMMENT: This paragraph should be removed entirely as I believe it reduces the Safety Case and also introduces the possibility of mis-interpretation and potential callsign confusion. To have this facility would need extensive trials and Safety Case reviews. (Comment by Irish Aviation Authority). Refer to “Accept a new call from a flight crew as a	S	1-Jun-11-TK – SVTF discussion needed. 15-Sep-11-TK – Issue “Performance/safety specifications” and “non-compliance of current systems.” 23-Sep-11-TK – See comment SV7-0259 for resolution status. See all comments on 3.1.5.3 e)	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>participant of an existing SATCOM voice communication already in progress, e.g., the new caller should be able to hear the transmission already in progress and standby for an opportunity to intervene. (This is an example of “Conference”, ...)”</p> <p>SUGGESTED CHANGE: Delete item.</p>		<p>SV7-0259 SV6-0182 SV7-0257 SV2-0053 SV2-0040 SV7-0251 Close.</p>	
3.1.5.3.e) Apx D	SV2-0040	BP	<p>COMMENT: Is this a “requirement” or is only “desirable”? If this is a “requirement” (and so, new) then it will need to be examined and defined separately.</p> <p>SUGGESTED CHANGE: Remove text.</p>	S	<p>1-Jun-11-TK – SVTF discussion needed.</p> <p>15-Sep-11-TK – Issue “Performance/safety specifications” and “non-compliance of current systems.”</p> <p>23-Sep-11-TK – See comment SV7-0259 for resolution status. See all comments on 3.1.5.3 e) SV7-0259 SV6-0182 SV7-0257 SV2-0053 SV2-0040 SV7-0251 Close.</p>	C
3.1.5.3e Apx D	SV7-0251	AH	<p>COMMENT: Conference calling is not a required feature, is not part of the ICAO SARPs for AMS(R)S, is not part of the DO-210D requirements, is not part of AC 20-150A requirements, and is a potential safety hazard.</p> <p>SUGGESTED CHANGE: Delete entire clause “e”.</p>	S	<p>15-Sep-11-TK – Issue “Performance/safety specifications” and “non-compliance of current systems.”</p> <p>23-Sep-11-TK – See comment SV7-0259 for resolution status. See all comments on 3.1.5.3 e) SV7-0259 SV6-0182 SV7-0257 SV2-0053 SV2-0040 SV7-0251 Close.</p>	C
3.1.6.1	SV8-0321	MM	<p>COMMENT: Caller ID is not currently <u>displayed</u> to the receiving party (aircraft avionics). However, the satellite voice system (ground switch) should provide Caller ID</p>		<p>1-Nov-11-TK – No suggested change provided. Deleted “for display” from the sentence. Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			and PIN security for incoming calls from the radio facility. Inmarsat does today; Iridium's may too.			
3.1.6.1 b)	SV6-0184	GL	COMMENT: "ATS" should be "ATS / CSP." SUGGESTED CHANGE:		4-Sep-11-TK – Revise to "The satellite service should enable ATS unit or radio facility access to the aircraft ..." Close	C
3.1.6.1 b)	SV6-0195	GL	COMMENT: Delete language and create new section below to accommodate Priority Preemption and Precedence (PPP) New section for PPP taken partially from AC 20-150A 3.1.6.2 Priority, Preemption, Precedence (PPP). The priority level column of figure 3-3 shows the order of precedence in setting up and receiving a satellite voice call. Preemption is the immediate and automatic seizure of resources allocated to a lower-priority call. Trade-offs of flight safety requirements versus passenger satisfaction should not be a consideration. a.) Technological limits of PSTNs and AMS(R)S may require CSPs and SSPs to use indications of priority levels different than those indicated in figure 3-3. When a SATCOM voice call is transmitted to and from an aircraft, the priority indicated to flight crews will conform with Annex 10, Volume II and the levels indicated in Figure 3-3. Ed Note: Because the CSPs and SSPs don't account for the levels in the same method as indicated in Figure 3-3 I added the clarification. b) Satellite voice calls should be prioritized consistent with figure 3-3. If the equipment differentiates between levels the priority should be Level 1 / EMG, Level 2 / HGH, and Level 3 / LOW, and Level 4 PUB. The satellite voice equipment should configure the cockpit default priority to level 2 / HGH. Level 4 / PUB calls should not be routed to the flight deck.		4-Sep-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status						
			<p>Ed Note: Several operations don't comply with this requirement.</p> <p>c) The flight crew must have the capability to set the priority level for all calls. The satellite voice equipment must provide the flight crew the means to preempt any call at any time. The equipment must provide the means for automatic preemption of all cabin communications.</p> <p>d) If a satellite voice channel is in use and the ground earth station wants to send a higher-priority call, the satellite voice equipment should clear the lower-priority channel. If all available channels are in use, the equipment should preempt the channel supporting the lowest priority channel in favor of the higher-priority call.</p> <p>Figure 3-3. Priorities for Satellite Voice Calls</p> <table border="1"> <thead> <tr> <th>Priority Level</th> <th>Application Category</th> <th>Satellite Voice Call Examples</th> </tr> </thead> <tbody> <tr> <td> 1 / EMG <i>Emergency</i> (highest) Safety of Flight </td> <td> Distress and Urgency </td> <td> Rapid Descent, Urgent Sidestep for Weather </td> </tr> </tbody> </table>	Priority Level	Application Category	Satellite Voice Call Examples	1 / EMG <i>Emergency</i> (highest) Safety of Flight	Distress and Urgency	Rapid Descent, Urgent Sidestep for Weather			
Priority Level	Application Category	Satellite Voice Call Examples										
1 / EMG <i>Emergency</i> (highest) Safety of Flight	Distress and Urgency	Rapid Descent, Urgent Sidestep for Weather										

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>2 / HGH <i>Operational High</i> (second highest) Safety of Flight</p> <p>Flight Safety Altitude Request</p> <hr/> <p>3 / LOW <i>Operational Low</i> (third highest) Safety of Flight</p> <p>Regularity of Flight, Meteorological, Administrative Air Traffic Information Service, Redispach, Maintenance</p> <hr/> <p>4 / PUB <i>Nonoperational</i> (lowest) Nonsafety</p> <p>Public Correspondence Public Phone Calls</p> <hr/> <p>Ed Note: Added table from AC 20-150 with the addition of EMG/HGH/LOW/PUB.</p> <p>SUGGESTED CHANGE:</p>			
3.1.6.1.a)	SV2-0054	MM	<p>COMMENT: Change “should” to “must.”</p> <p>SUGGESTED CHANGE: Revise to, “a) The ground earth station must be capable of preventing unauthorized calls to aircraft;”</p>	E	31-Mar-11-TK – As a guidance material, use of “must” is not any different than “should.” Where is the Annex requirement? See also comment SV2-0041. Close.	C
3.1.6.1.c)	SV2-0055	MM	<p>COMMENT: Change “should” to “must” and add PIN information</p>		31-Mar-11-TK – As a guidance material, use of “must” is not any different than “should.” Where is the Annex requirement? Incorporated additional	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE: Revise to, “c) The SATCOM voice system must provide Caller ID with PIN security information for display to the receiving party.		PIN information. Address use of “must” as a separate comment. Close.	
3.1.6.1.c) Note	SV2-0056	MM	COMMENT: Correct spelling SUGGESTED CHANGE: Revise “duel” to “dual.”		31-Mar-11-TK – Incorporated into v0.3. Close	C
3.1.6.1.Note	SV8-0335	MS	COMMENT: MTSAT omitted SUGGESTED CHANGE: Add MTSAT	E	1-Nov-11-TK – Deleted technology-specific note. Chapter 2 provides descriptions of SATCOM systems. Also, last sentence is inappropriate and will most likely not be valid after SVGM is published. The sentence is statement regarding a finding of compliance. SVGM is intended to provided acceptable criteria. Findings of compliance are the responsibility of the State or their delegated entity. Close.	C
3.1.6.2 Table 3-1	SV8-0322	MM	COMMENT: Since ICAO Annex 10 refers to Q priorities, and Inmarsat uses those priorities, it would be good to add the Q priorities to the table: Q15, Q12, Q10, and Q9.		1-Nov-11-TK – No suggested change. Hope I did it right. Close.	C
3.2.1	SV8-0343	DRM	COMMENT: SUGGESTED CHANGE: Replace all of paragraphs under 3.2.1 with the following: 3.2.1.1 The general principle of granting to properly rated pilots the authorization to use on board radio equipment, as part of their privileges, is however implicitly based on several underlying assumptions, such as: a) the aircraft, including its avionics, has an airworthiness approval covering the type of envisaged IFR operations (e.g. long range) and a radio license; b) the complexity of using radio equipment, including SATCOM, does not present particular challenges; c) the concept and systems upon which the operation will be carried out are mature enough (= not “new”), which is the case of SATCOM voice;	C	1-Nov-11-TK – Deleted paragraph 3.2.1.1 through 3.2.1.6 (except for the list in 3.2.1.6) and replaced with: 3.2.1.1 An operator is eligible to use SATCOM voice equipment under its normal operational approval. When using SATCOM voice equipment, the operator should address flight crew training and qualification, maintenance, MEL, user modifiable software, service agreements with the CSP. The operator should also ensure that aircraft equipment has been approved for the intended use. Note.— A specific or written operational authorization from the State of Registry or State of the Operator should not be necessary. However, a State may under certain circumstances require explicit approval, taking into account several underlying assumptions, such as:	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>d) the risk associated with improper operation (including for third parties in the air or on the ground) is tolerable, which is the case for SATCOM voice since the transmission, if unclear can be repeated, and for which, a totally independent long rang communication system (i.e. HF) exists;</p> <p>e) availability and continuity of SATCOM voice is ensured, under responsibility of a communication service provider as explained in previous paragraph 3.1.4;</p> <p>f) appropriate standards for quality and management are established;</p> <p>g) accuracy and integrity of the address data base is ensured;</p> <p>h) appropriate training and checking standards and procedures for using SATCOM equipment exist and are implemented mainly for pilots; and</p> <p>i) provision of information (e.g. MMEL and training requirements) from holders of Type Certificates (TC) to air operators, throughout the life cycle of the aircraft is ensured.</p> <p>3.2.1.2 There will be no requirement for operators of SATCOM voice operations to obtain written authorization to use the equipment. Pilots that are properly trained/current and typed rated in the aircraft are granted privileges to use all systems onboard the aircraft.</p> <p>3.2.1.3 (formerly 3.2.1.7 unchanged) Should one or more of the requirements listed above not be substantiated, then the competent authority at national or regional level, should assess whether rules and procedures for an explicit approval are necessary. Historically this has been the case in several instances in the navigation domain, but it has almost never been considered necessary in the communication domain.</p>		<p>[list formerly in 3.2.1.6 follows as part of the note].</p> <p>Deleted 3.2.1.7, as covered at the beginning of the note. Close.</p>	
3.2.1	SV4-0135	FTO	<p>COMMENT: Paragraph on operational authorization needs to clarify which are the safety requirements, when State of Operator may impose a “specific approval” (i.e. additional application/letter of authorization process,</p>	A	22-Jul-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>which is however the last exception and not the rule); MEL and details for operator come after. These clarifications are necessary, because Annex 6 is not totally clear and this has led to unnecessary proliferation of “specific approvals” in the NAV domain. The same should be prevented in COM, while ICAO may find the material also useful (with proper adaptations) for guidance in the NAV domain.</p> <p>SUGGESTED CHANGE: Proposal for replacement of par. 3.2.1.</p> <p>References: I.e. draft rule CAT.IDE.A.330 (Radio communication equipment) in Opinion 2011/04: http://www.easa.europa.eu/agency-measures/docs/opinions/2011/04/Annexes%20to%20Regulation.pdf</p> <p>AMC4-CAT.IDE.A.345 Communication and navigation equipment for operations under IFR, or under VFR over routes not navigated by reference to visual landmarks in http://www.easa.europa.eu/rulemaking/docs/crd/part-ops/CRD%20b.3%20-%20Resulting%20text%20of%20Part-CAT%20(A,H)-corrigendum-1.pdf</p> <p>3.2.1 Operational authorization to use satellite voice communications</p> <p>3.2.1.1. Pilots holding an instrument rating (and where necessary a type rating) have the privilege to fly an aircraft under Instrument Flight Rules (IFR): e.g. en-route following a series of VOR (VHF Omni-Range) stations in the domain of navigation or using on-board radio equipment to liaise with Air Traffic Control in the domain of communication. Granting to pilots privileges linked to possess of a valid licence and proper ratings, is the normal way used by States to “authorize” aviation operations, without requiring additional administrative</p>			

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>processes. However the meaning of “authorization”, although this word is widely used in Annex 6, is not defined.</p> <p>3.2.1.2 Attachment E to Annex 6 Part I clarifies that an “approval” is an active response by the competent aviation authority established by State(s) to a matter submitted for its review, constituting a finding or determination of compliance with the applicable standards. An approval will be evidenced by the signature by the approving official, the issuance of a document or certificate, or some other formal action (e.g. a letter). Same Attachment explains that an “acceptance” does not necessarily require an active response by the authority to a matter submitted for its review. In other words this is a form of “silent approval”, unless the authority specifically rejects all or a portion of the matter under review, usually after some defined period of time after submission.</p> <p>3.2.1.3 Hence in this guidance material the word “authorization” refers to a privilege granted by the applicable rules to persons holding the required licences or certificates and enjoying the related privileges (no additional administrative process). The word “approval” indicates an administrative procedure based on an application and an explicit written reply by the competent authority. The word “acceptance” means that a certified organisation (e.g. a commercial air operator) submits a document (e.g. a change to the operations manual) to the competent authority and, if the latter does not object within a given time, the change is in fact accepted.</p> <p>3.2.1.4 Authorizations and approvals may be applied also to general aviation. On the contrary, since in most ICAO Contracting States an Air Operator Certificate (AOC) is not required for general aviation, the “acceptance” process does not apply to this segment of aviation.</p> <p>3.2.1.5 From the point of view of air operators, the authorization (i.e. no additional administrative</p>			

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>procedures) is normally preferred in comparison to the approval (i.e. written application followed by written reply by the authority).</p> <p>3.2.1.6 The general principle of granting to properly rated pilots the authorization to use on board radio equipment, as part of their privileges, is however implicitly based on several underlying assumptions, such as:</p> <ul style="list-style-type: none"> a) the aircraft, including its avionics, has an airworthiness approval covering the type of envisaged IFR operations (e.g. long range) and a radio licence; b) the complexity of using radio equipment, including SATCOM, does not present particular challenges; c) the concept and systems upon which the operation will be carried out are mature enough (= not “new”), which is the case of SATCOM voice; d) the risk associated with improper operation (including for third parties in the air or on the ground) is tolerable, which is the case for SATCOM voice since the transmission, if unclear can be repeated, and for which, a totally independent long rang communication system (i.e. HF) exists; e) availability and continuity of SATCOM voice is ensured, under responsibility of a Service Provider as explained in previous paragraph 3.1.4; f) appropriate standards for quality and management are established; g) accuracy and integrity of the address data base is ensured; h) appropriate training and checking standards and procedures for using SATCOM equipment exist and are implemented mainly for pilots; and i) provision of information (e.g. MMEL and training requirements) from holders of Type Certificates (TC) to air operators, throughout the life cycle of the aircraft is ensured. <p>3.2.1.7 Should one or more of the requirements listed above not be substantiated, then the competent authority</p>			

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>at national or regional level, should assess whether rules and procedures for an explicit approval are necessary. Historically this has been the case in several instances in the navigation domain, but it has almost never been considered necessary in the communication domain.</p> <p>3.2.2 Radio equipment to be carried on board</p> <p>3.2.2.1 Competent authorities also establish the minimum number of long range radio equipment to be carried on board. For instance, in the European Union (EU) the competent regional authority (i.e. EASA) has proposed that, at the level of legally binding rules (See references) aeroplanes shall be equipped with the radio communication equipment required by the applicable airspace requirements. Radio communication equipment shall include at least two independent radio communication systems necessary under normal operating conditions to communicate with an appropriate ground station from any point on the route, including diversions. This means that in principle one set of SATCOM and one set HF could be approved in regions where both services are available.</p> <p>3.2.2.2 The possible acceptance of one set of SATCOM and one set of HF on long range routes, is further clarified by proposed EASA Acceptable Means of Compliance (AMC) clarifying that:</p> <ul style="list-style-type: none"> a) An HF - system is considered to be long range communication equipment; b) Other two-way communication systems may be used if allowed by the relevant airspace procedures. <p>3.2.2.3 The proposed EASA rules mentioned above, would hence allow national authorities in the EU Member States to accept, as normal communication equipment used by aircraft on long range routes, one set of SATCOM voice and only one set of HF radio. These rules are expected to enter into force in 2012.</p> <p>NOTE: it would be nice to insert examples from other continents.</p>			

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>3.2.2.4 If changes to the Minimum Equipment List (MEL) are desired to allow dispatch with one satellite voice communication system and only one HF radio system, the air operator should obtain operational approval or acceptance authorization from the State of the Operator or State of Registry.</p> <p>3.2.3 Criteria for aircraft operators</p> <p>3.2.3.1 Aircraft operators should meet the following criteria: ... (to end of current 3.2.1., Existing 3.2.2 would become 3.2.4)</p>			
3.2.1	SV8-0373	DRM	<p>COMMENT: This section should be moved....seems out of position or should be a note</p> <p>SUGGESTED CHANGE:</p>		<p>14-Feb-12-TK – Revise to:</p> <p>“3.2.1 When providing SATCOM voice services whether through an aeronautical station or an ATSU, the ANSP should provide these services consistent with voice communication standards and recommended practices, in accordance with Doc 4444, Doc 9432 and Volume II of Annex 10.” Close.</p>	C
3.2.1.1 Ed Note 6	SV2-0057	MM	<p>COMMENT: Refer to: “What about CPDLC for MEL considerations?” This is for another forum and out of scope of this Task Force.</p> <p>SUGGESTED CHANGE:</p>	C	<p>31-Mar-11-TK – Incorporated into v0.3 as part of Ed Note. See also resolution to comments SV2-0050, SV2-0060, and SV2-0061. Close</p>	C
3.2.1.2.a)	SV2-0058	MM	<p>COMMENT: Correct spelling.</p> <p>SUGGESTED CHANGE: from phreasiology to phraseology</p>		<p>31-Mar-11-TK – Incorporated into v0.3. Close</p>	C
3.2.1.2.b)4) Ed Note 7	SV2-0059	MM	<p>COMMENT: Refer to “Editor’s note 7. — For contact information, change to read ANSP. Just an idea.”</p> <p>No leave as is. Some use different ATC and Comms providers.</p>	C	<p>31-Mar-11-TK – In GOLD, the term “ATSP” is used instead of ANSP. In this context, I do not understand the comment. Added MM comment to Ed Note. Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE:			
3.2.1.2.b)5)	SV2-0060	MM	<p>COMMENT: Revise to include data link failures</p> <p>SUGGESTED CHANGE: 5) Procedures when SATCOM voice fails and DataLink services fail where both are linked;</p>	A	31-Mar-11-TK – No change. Data link out of scope for SATCOM voice guidance material. Data link addressed by GOLD. I think the “where both are linked” is referring to common cause failure, which is also beyond the scope of this document, but should be considered as part of total comm. failure. See also resolution to comments SV2-0050, SV2-0057, and SV2-0061. Close.	C
3.2.2	SV8-0345	DRM	<p>COMMENT:</p> <p>SUGGESTED CHANGE: Add new text: 3.2.3 Testing and Evaluation 3.2.3.1 Evaluate the general arrangement and operation of controls, displays, circuit breakers, annunciators, alerts, and any placards of the satellite voice system. a) Evaluation should verify that operational procedures minimize the requirement for the flight crew to back-out of multiple branches of the menu structure in order to initiate/answer a call. b) Evaluate any self-test features and failure mode displays and annunciators c) Evaluate the satellite voice system installation for satisfactory identification, accessibility, and visibility. d) Purposely insert input errors to verify the system is robust. e) Evaluate the satellite voice and other aircraft systems for mutual non-interference, which may be associated with radio frequency emissions. f) Evaluate the integration of the satellite voice system with other systems. Evaluate othersystems as necessary to show the satellite voice system does not interfere with their operation. g) Determine whether the satcom voice system can be used within acceptable workload and with a minimal reliance upon flight crew memory.</p>	A	<p>1-Nov-11-TK – This is material from AC 20-150A, and would not be new Heading 3 sections, but part of existing section 3.2.4? The SVGM already states that, “</p> <p>3.2.4.1 The installations should be approved by the State of Registry or State of the Operator in accordance with FAA AC 20-150A (or equivalent), and verified to comply with the following:</p> <p>Following the list in 3.2.4.1 and the note, I added the following, which is an edited version of the text provided by the comment.</p> <p>3.2.4.2 The aircraft manufacturer or avionics supplier should evaluate the general arrangement and operation of controls, displays, circuit breakers, annunciators, alerts, and any placards of the satellite voice system. Specifically, the aircraft manufacturer should:</p> <p>a) verify that the installation will enable the flight crew to easily initiate and receive calls without backing out of multiple branches of a menu structure;</p> <p>b) evaluate any self-test features and failure mode displays and annunciators;</p> <p>c) evaluate the installation for acceptable identification, accessibility, and visibility;</p> <p>d) verify the system is robust by purposely</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>3.2.4 Airplane Flight Manual (Supplement) Wording</p> <p>3.2.4.1 The airplane flight manual (AFM) supplement or other appropriating document (as required by competent authority) should provide a description of normal and non-normal procedures for the use of the system operation, including what actions are expected by the flight crew for each case.</p> <p>a) Operating Procedures. The normal operating procedures of the AFM supplement should identify the criteria used in the airworthiness assessment. For example, "The Federal Aviation Administration has evaluated the SATCOM voice equipment in accordance with AC20-150A as a supplement to other means.</p> <p>Renumber existing: 3.2.3 to 3.2.5 3.2.4 to 3.2.6/ 3.2.5 to 3.2.7</p>		<p>inserting input errors;</p> <p>e) evaluate the satellite voice installation and other aircraft systems for mutual non-interference, which may be associated with radio frequency emissions;</p> <p>f) evaluate the integration of the satellite voice system with other systems. Evaluate other systems, as necessary, to show the satellite voice system does not interfere with their operation; and</p> <p>g) determine whether the SATCOM voice system can be used within acceptable workload and with a minimal reliance upon flight crew memory.</p> <p>3.2.4.3 The aircraft manufacturer or avionics supplier should include in the airplane flight manual (AFM) supplement, or equivalent, the following:</p> <p>a) a description of normal and non-normal procedures for the use of the system operation, including what actions are expected by the flight crew for each case; and</p> <p>b) criteria and intended uses that provided the basis and means of compliance for the airworthiness approval. For example, "The [appropriate authority] has evaluated the SATCOM voice equipment as a supplement to other means of communication, in accordance with AC20-150A. This does not constitute operational approval."</p> <p>Close.</p>	
3.2.2	SV6-0206	FT	<p>COMMENT: On 28 June 2011 EASA has published an NPA aiming at establishing common EU specifications for MREL: http://www.easa.europa.eu/rulemaking/docs/npa/2011/NPA%202011-11.pdf Any citizen from any country in the world may comment until end of October 2011.</p> <p>These provisions will replace JAA Temporary Guidance</p>	A	4-Sep-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>leaflet 26.</p> <p>Some text from this NPA (which however may not yet be 100% tuned with the above) could be included in the GM.</p> <p>SUGGESTED CHANGE: Add a new last paragraph in 3.2.2:</p> <p><u>On 28 June 2011 EASA has published NPA 2011-11 aiming at establishing common EU specifications for MMEL (and replacing JAA TGL 26). Therein it is clarified that since not all ATC facilities are yet adequately equipped to handle SATCOM data or voice as the primary means of communication, the relief for dispatch with one HF and a backup SATCOM is restricted to 3 calendar days, to ensure that reliance on SATCOM is limited. In other words in areas requiring two operational Long Range Communication Systems at least one must be HF-voice.</u></p>			
3.2.2 and Editor's Note 8	SV2-0045	BP	<p>COMMENT: The "Global" nature of the guidance means this should be minimum common practices – additional requirements should go in SUPPs.</p> <p>SUGGESTED CHANGE: Only list ICAO docs?</p>	C	<p>31-Mar-11-TK – Now Ed Note 10. I believe the Ed Note agrees with the comment. The intent of the note was to remove FAA specific references, such as AC 20-150 in para. 3.2.2.1. or generalize.</p> <p>Revise Ed Note to "Need to remove FAA-specific references." Close</p>	C
3.2.2.1	SV6-0202	FT	<p>COMMENT: The first thing to clarify is which equipment shall be installed on board. In principle this equipment shall be operative at beginning of the flight. The MMEL/MEL only allow installed to be "temporarily" inoperative.</p> <p>Therefore to have on board, as normal fit, one HF and one SATCOM, the issue is neither in the MMEL nor in the MEL.</p> <p>ICAO Annex 8 does not prescribe how many</p>	C	4-Sep-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>communication systems have to be installed on board. In the EU EASA CS-25.1307(d), applicable to large aeroplanes, requires two systems for two-way radio communications. No specific types of radio equipment are mentioned in CS-25.</p> <p>Radio equipment is also prescribed by OPS rules, namely par; 7.1.1 in ICAO Annex 6, Part I. However ICAO does not prescribe therein a minimum number of radios on board. Most States or Regions prescribe two. In the EU, current “EU-OPS” (rule OPS 1.865) in fact requires two independent radio communication systems. No clarification is given in the EO-OPS on the acceptability of one HF + one SATCOM, instead than 2 HF on long range routes.</p> <p>However, EASA has already (01 June 2011) delivered its “Opinion” (i.e. draft EU Regulation) 04/2011 to the European Commission for adoption (expected in 2012). These rules will be accompanied by AMCs. One of them clarifies that “other” COM systems, different from HF, may be accepted to reach the minimum number of two installed. M/MEL only deals with serviceability of installed equipment and not with the minimum number of sets to be installed.</p> <p>Paragraphs 3.2.2.X could be expanded a little bit to clarify the above. Only a reference s necessary in 3.2.2.1</p> <p>SUGGESTED CHANGE:</p> <p>Competent authorities also establish the minimum number of long range radio equipment to be carried on board. For instance, in the European Union (EU) the competent regional authority (i.e. EASA) has proposed that, at the level of legally binding rules (Opinion 04/2011 of 01 June 2011) for aircraft operators,</p>			

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			aeroplanes shall be equipped with the radio communication equipment required by the applicable airspace requirements. Radio communication equipment shall include at least two independent radio communication systems necessary under normal operating conditions to communicate with an appropriate ground station from any point on the route, including diversions. This means that in principle one set of SATCOM and one set HF could be approved in regions where both services are available <u>for routine communications</u> .			
3.2.2.1	SV1-0016	DR	COMMENT: SUGGESTED CHANGE: add (c) RTCA, Inc. Document (RTCA/DO)-262A, Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite Systems (NGSS), Normative Appendix, section 2, dated December 16, 2008	A	31-Mar-11-TK – Incorporated into v0.3. Close	C
3.2.2.1 c)	SV8-0392	DA	COMMENT: What is meant by this???		14-Feb-12-TK – Deleted item. Close.	C
			c) Confirmation that the ATS operation manuals are compatible with those of adjacent providers SUGGESTED CHANGE:			
3.2.2.1.d) (Page 2-1)	SV3-0075	ML	COMMENT: “d) Add ARINC 761 (Iridium) ” SUGGESTED CHANGE: to be replaced by: Add ARINC 761 (Iridium)	E	1-Jun-11-TK – Accept. Removed “Add.” Close.	C
3.2.2.2	SV6-0203	FT	COMMENT: Se explanation above in relation to 3.2.2.1 SUGGESTED CHANGE: Modify 3.2.2.2 and add a new paragraph immediately after. 3.2.2.2 The possible acceptance of one set of SATCOM and one set of HF on long range routes, is further clarified by proposed EASA Acceptable Means of Compliance (AMC4-CAT.IDE.A.345) <u>expected to be</u>	C	4-Sep-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p><u>promulgated by EASA in 2012 immediately after the adoption of the above mentioned rules by the European Commission and</u> clarifying that:</p> <p>a) An HF - system is considered to be long range communication equipment;</p> <p>b) Other two-way communication systems may be used if allowed by the relevant airspace procedures.</p> <p><u>NEW PARAGRAPH: “Other” (e.g. voice SATCOM) two-way communication systems may be used “if allowed by the relevant airspace procedures”. Therefore aircraft operators established in the European Union, may ask to have installed on board one set of HF and one SATCOM if, from applicable ICAO Regional Supplementary Procedures (Doc 7030) or published AIPs, it emerges that both services are available for routine use along the intended routes (including diversions).</u></p>			
3.2.2.2	SV8-0374	DRM	<p>COMMENT: Does anyone monitor or validate the requirements of this para.</p> <p>SUGGESTED CHANGE:</p>		14-Feb-12-TK – Varies from State to State. Some States have safety oversight of ANSPs in which case the answer to your question is yes. Close.	C
3.2.2.2 c)	SV8-0344	DRM	<p>COMMENT:</p> <p>SUGGESTED CHANGE: Correct spelling of “vocie” to “voice.” Add note: “Note: The FAA has recently updated its position through Policy Letter-106 and is essentially in agreement with that of EASA and EU.”</p>	A	<p>1-Nov-11-TK – Revised text to put Region specific stuff as notes and added new note:</p> <p>Note 2.— The FAA has recently updated its position through Policy Letter-106, which is consistent with that of EASA and EU.</p> <p>Still not sure what the guideline to the operator is.</p> <p>Close.</p>	C
3.2.2.3	SV6-0204	FT	<p>COMMENT: We should distinguish from requirements for minimum number of radios to be installed, from requirements for serviceability of the installed equipment. Only the latter is covered by</p>	C	4-Sep-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>MMEL and MEL.</p> <p>SUGGESTED CHANGE: Slightly modify 3.2.2.3:</p> <p>The proposed EASA rules mentioned above, would hence allow national authorities in the EU Member States to accept, as normal <u>requirement for minimum number and type of communication equipment installed on aircraft intended to be used</u> on long range routes, one set of SATCOM voice and only one set of HF radio, <u>providing that said services are available for routine communications.</u></p>			
3.2.2.4	SV6-0205	FT	<p>COMMENT: MMEL and MEL only deal with temporary unserviceability, not to be confused with the minimum number and type of equipment to be installed.</p> <p>Par. 3.2.2.4 could be made clearer.</p> <p>SUGGESTED CHANGE: Modify 3.2.2.3 (and if necessary split in more than one paragraph:</p> <p><u>In principle installed equipment has to be operational when commencing a flight. However experience has demonstrated that temporary unserviceability may be in some cases be tolerated. Several ICAO Contracting States hence require aircraft manufacturers to provide a Master MEL, The MMEL contains a list of which equipment can be tolerated as unserviceable at commencement of flight and for how long. The MMEL is approved by the authority designated by the State of Design (e.g. FAA in the USA and EASA in the EU).</u></p> <p><u>Aircraft operators are mandated (e.g. by rule OPS 1.030 in the EU) to establish a Minimum Equipment List (MEL), based upon, but no less restrictive than the relevant MMEL. The MEL is approved by the competent authority established by the State of the Operator or State</u></p>	C	4-Sep-11-TK – Added two new paragraphs before 3.2.2.4, renumbered remaining paragraphs. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p><u>of Registry.</u></p> <p>If changes to the Minimum Equipment List (MEL) are desired to allow dispatch with one satellite voice communication system and only one HF radio system, the operator should obtain operational approval or acceptance from the State of the Operator or State of Registry.</p>			
3.2.2.4	SV5-0146	TK	<p>COMMENT: Editor's note 10 (v0.5). — What about CPDLC for MEL considerations? MM - This is for another forum and out of scope of this Task Force.</p> <p>SUGGESTED CHANGE:</p>	C	23-Jul-11-TK - Delete Ed Note and maintain status using comment matrix. CPDLC is data link and beyond the scope of this document. Refer to GOLD for CPDLC. Also, PARC CWG concluded that CPDLC would not suffice for MEL relief since it is not a good communication application for emergency and non-routine communications. Finally, we did agree at IR-SVTF/1 that the SVGM would "facilitate civil aviation authorities (CAAs) and regional safety oversight organizations (RSOOs) in establishing MEL policies. I think we just need to find the right language in this document. Close.	C
3.2.2.4	SV8-0393	DA	<p>COMMENT: Refer to:</p> <p>3.2.2.4 When satellite voice communication services are provided, the ANSP should:</p> <p>a) Establish interfacility agreements and provide aeronautical information and notifications in accordance with section 3.2.3;</p> <p>b) Ensure that its aeronautical stations and ATSUs meet the guidelines provided in section 3.2.4, that the CSP meet guidelines provided in section 3.2.5; and that the SSP meets the guidelines provided in section 3.2.6.</p> <p>Why are these paragraphs needed?</p> <p>SUGGESTED CHANGE:</p>		14-Feb-12-TK – Deleted paragraph. Close.	C
3.2.2.4	SV8-0375	DRM	<p>COMMENT: I think we should get with an ANSP and</p>		14-Feb-12-TK – This is not too unlike guidance for	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
(formerly 3.2.2.5)			<p>help outline some basic training requirements and put it into the document. I looked in Annex 1 and I do not find what the basic are for training.</p> <p>SUGGESTED CHANGE:</p>		<p>flight crew. The intent is that the guidance material provides a basis for establishing procedures and developing training program that ensures procedures are followed. Revise as follows:</p> <p>3.2.2.4 The ANSP should ensure that the controllers and radio operators receive appropriate training in accordance with ICAO Annex 1 taking into account the guidance material contained in this document, and obtain any necessary approval from the State.</p> <p>3.3.3.2 The operator should ensure the flight crews and staffs receive appropriate training in accordance with ICAO Annex 1 and Annex 6, taking into account the guidance contained in this document, and are licensed.</p>	
3.2.2.5 (Formerly 3.2.2.6)	SV8-0376	DRM	<p>COMMENT: Someone has to define what is meant by basic security and how do they comply?</p> <p>SUGGESTED CHANGE:</p>		<p>14-Feb-12-TK – I am not aware of any security requirements. I would presume they would be determined by the State having statutory jurisdiction over the airspace. The note really does not make sense since the phone number is the aircraft address represented in octal code. The only security is the Access Number and PIN, provided by CSP, and anyone can obtain one of these.</p> <p>15-Feb-12-IRSVTF/3 – Revise note to reflect security means such as priority level calling, and restricting calls to flight deck, using PINs and CSP guidance in administering accounts to authorized users.</p> <p>15-Feb-12-TK – Revise note to, “<u>Note.</u>— This guidance includes means to secure SATVOICE calls through CSPs administering accounts to authorized subscribers with PIN and priority level calling, restricting calls to the flight deck and/or alerting the flight crew of call priority.” Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.2.2.7	SV8-0420	LP	15 days, just query any reference for 15 days? Why not for 30 days?	S	16-Feb-12-IRSVTF/3 – use 30 days. Close.	C
3.2.2.7	SV8-0437	EN	COMMENT: Change recording from 15 days to 30 days. SUGGESTED CHANGE:	S	16-Feb-12-IRSVTF/3 – use 30 days. Close.	C
3.2.2.7 (formerly 3.2.2.8)	SV8-0409	FT	COMMENT: Not only ANSPs have to maintain records. Also CSP and SSP SUGGESTED CHANGE: Second sentence in 3 rd line to read: ‘The ANSP, CSP or SSP should’	R	14-Feb-12-TK – Revise to “The ANSP, including their CSP(s) and SSP(s), should make these records available for air safety investigative purposes. “ Close.	C
3.2.2.7 (formerly 3.2.2.8)	SV8-0394	DA	COMMENT: Refer to: CSP(s) and SSPs retain records of satellite voice communications for at least 30 days to allow for accident/incident investigation purposes. 15 days??? Recording of 3415/3416 SUGGESTED CHANGE:		14-Feb-12-TK – Revise to 15 days. Close.	C
3.2.2.8 (formerly 3.1.7.1)	SV7-0295	DRM	COMMENT: First line insert recording after Voice SUGGESTED CHANGE:	C	16-Sep-11-TK – “Voice” does not appear in the first line of this paragraph. 16-Dec-11-TK – Revise to “... retain records of satellite voice communications for at least 30 days to allow for accident/incident investigation purposes.” Close.	C
3.2.3.1 (formerly 3.1.3.1)	SV7-0218	LP	COMMENT: Not sure if AIP and NOTAM are issued by ATSP or ANSP. The sentence may be amended as: Aircraft operator (or air space users) should be notified of SAT COM Voice through AIP	C	21-Sep-11-TK – The suggested change introduces ambiguity, if not the ATSP or ANSP, then who? Note this language is consistent with language in the GOLD. 16-Dec-11-TK – The whole section is written for the ANSP. Maybe we need to revise to include the “State”? 28-Dec-11-TK – Revise sentence to,	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					“3.2.3.1 The ANSP should ensure that aircraft operators are notified of SATCOM voice services using the AIP (or equivalent), which includes:” Close.	
3.2.3.1.b)4)	SV5-0147	TK	COMMENT: Editor’s note 11 (v0.5). — For contact information, change to read ANSP. Just an idea. MM - No leave as is. Some use different ATC and Comms providers. SUGGESTED CHANGE:	C	23-Jul-11-TK – Delete Ed Note. The comment is not clear as the text is relevant to operator procedures and contact information is for the aeronautical stations or the ATS facility. Is their a need for flight crews to have contact info for an ANSP? Resubmit comment if necessary. Close.	C
3.2.3.2 Also 3.1.5 onwards, and Editor’s Note 9	SV2-0046	BP	COMMENT: Note comments also for 3.1.5 etc above. SUGGESTED CHANGE: Emphasize that this is the responsibility of the aircraft operator.	C	31-Mar-11-TK – I don’t understand the comment. All of 3.2 is “operator eligibility.” According to ICAO definition, an “operator is a person, organization or enterprise engaged in or offering to engage in an aircraft operation.” 3.1.5, 3.1.6, and 3.1.7 are not intended to contain guidelines for the operator. 1-Jun-11-TK – Close.	C
3.2.3.2	SV8-0377	DRM	COMMENT: maybe a discussion on how to notify about outage SUGGESTED CHANGE: Short term through Notams long term through AIP-applicable publication. Direct communications with operators and Operations centers, etc.		14-Feb-12-TK – Added sentence to the end, “For example, the ANSP may use Notams and direct communications with aircraft operators for short term notifications or AIP (or equivalent) for longer term notifications.” Close.	C
3.2.3.2	SV2-0061	MM	COMMENT: Revise to include data link failures SUGGESTED CHANGE: 3.2.3.2 The operator should establish procedures to ensure its flight crews and dispatchers are notified of significant degradation of SATCOM and DataLink service, e.g., outage.		31-Mar-11-TK – No change. Data link is out of scope of SATCOM Voice GM. Refer to GOLD. See also resolution to comments SV2-0050, SV2-0057, SV2-0060, and SV2-0061. Close.	C
3.2.4 (formerly 3.1.5)	SV7-0258	GL	COMMENT: Radio facilities do not have a procedure in place to provide updated aircraft SATCOM telephone numbers from Iridium, updates only occur from Inmarsat. (3.1.5 SVGM) Iridium phone numbers are only	S	15-Sep-11-TK – Issue “Access number management.” – 16-Sep-11-TK - Reference comments:	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>updated from the operators.</p> <p>SUGGESTED CHANGE:</p>		<p>SV7-0263 (closed) SV7-0258, contains resolution status from IR-SVTF/2, see also open related comments: SV1-0010 SV3-0093 SV2-0039 SV7-0262</p> <p>16-Sep-11-IR-SVTF/2 – Open action to Brad and Joe How does someone know what the phone number is for the aircraft? Ad Hoc, Inmarsat every 14 days send out a list that includes all that want to use via email, tail numbers and Mode S, with octal code numbers. Plan is to have one list with all numbers for Inmarsat or Iridium, or whatever ARINC and SITA will need to be involved because they sell the SIM cards Address security issue when we address access number management Resolution action to Brad and Joe</p> <p>16-Dec-11-TK – See revision 0.8.2, revised text now in section 3.2.4, particularly 3.2.4.2 a). Please resubmit comment if not addressed.</p>	
3.2.4 (formerly 3.1.5.2 3.1.5.3 f)	SV5-0162	DR	<p>STATEMENT: Per ICAO SARPS Annex 10, Table 3.2 Mapping of ATN communication priorities, Priority levels are recommended. Due to the potential difference in applicant system configuration there maybe an impact to pilot and crew training.</p> <p>COMMENT: The satellite voice equipment should configure the cockpit default priority to level 2 or level 3, The flight crew must have the capability to set the priority level for an individual call. Will this option create additional pilot</p>	S	<p>24-Aug-11-Web/3 - Develop guidance material to address priority calling and identify the priority levels and how/when to use them. There needs to be performance-based criteria (not based on technology or implementation) and associated procedures for the controller/radio operator/pilot for meeting the criteria.</p> <p>ACTION: Grant LeClaire agreed to prepare draft language for the SVGM that would address priority calling and levels.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>training for the unknown configuration?</p> <p>SUGGESTED CHANGE:</p> <p>a) The satellite voice equipment should configure the cockpit default priority to level 2. The flight crew must have the capability to set the priority level for an individual call.</p>		<p>15-Sep-11-TK – Issue “Priority level management.” –</p> <p>16-Sep-11-TK – Reference comments SV7-0244 (contains resolution status from IR-SVTF/2) see also SV7-0264 SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241</p> <p>20-Sep-11-DR – Priority Level no change recommendation needed.</p> <p>20-Sep-11-DRM – Concurs with suggested change.</p> <p>21-Sep-11-TK – Close per above, except added reference to Table 3-1 for item 3.1.5.3 g). g) Provide for the ability to prioritize, preempt and establish precedence on outgoing calls in accordance with Table 3 1.</p> <p>16-Dec-11-TK – Close per above.</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.2.4 (formerly 3.1.5.2 c)	SV1-0010	FR	<p>COMMENT: This may not be practicable from an ANSP's perspective. Currently in Canada the telephone number is not picked up from field 18 but the process is automated through the comparison of aircraft registration of the flight plan against the master aircraft phone number list</p> <p>SUGGESTED CHANGE:</p>	S	<p>1-Jun-11-TK – SVTF discussion needed.</p> <p>15-Sep-11-TK – Issue “Access number management.” –</p> <p>16-Sep-11-TK - Reference comments: SV7-0263 (closed) SV7-0258, contains resolution status from IR-SVTF/2, see also open related comments SV1-0010 SV3-0093 SV2-0039 SV7-0262 Action Brad and Joe</p> <p>16-Dec-11-TK – Current guidance allows for use of aircraft registration and comparison. This provision would need to be done by the ANSP or through service agreements with other party. See revision 0.8.2, paragraph 2.6.7 and 3.2.4.2 a). Close.</p>	C
3.2.4 (formerly 3.1.5.2 c)	SV3-0093	BC	<p>COMMENT: Refer to, “Maintain, on a 28-day update cycle, INMARSAT’s and Iridium’s master aircraft phone number list as new SATCOM radio facilities become operational.”</p> <p>SUGGESTED CHANGE: Where is the section that describes the process for maintain the master lists.</p>	S	<p>1-Jun-11-TK – SVTF discussion needed.</p> <p>29-Jun-11-IR-SVTF –ACTION: Joe and Brad will develop a proposal for guidance material to ATSP, CSP and SSP on maintaining phone numbers.</p> <p>15-Sep-11-TK – Issue “Access number management.” –</p> <p>16-Sep-11-TK - Reference comments: SV7-0263 (closed) SV7-0258, contains resolution status from IR-SVTF/2, see also open related comments SV1-0010 SV3-0093 SV2-0039 SV7-0262 Action Brad and Joe.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					16-Dec-11-TK – See revision v0.8.2, paragraph 2.6 and 3.2.4. ANSPs obtain info from flight plan and data bases they maintain. Operators file correct aircraft registration and aircraft address in flight plan. If more needed, please submit comment with suggested changes. Close.	
3.2.4 (formerly 3.1.5.2.c) 3.1.5.3.b) Also relevant to Editor's Note 9 and 3.3.3	SV2-0039	BP	<p>COMMENT: 3.1.5, 3.1.6 and 3.2.1 suggest general problems about security and how the contact information is protected. Compare with ITU-R's "MARS" database?</p> <p>Does the PIN mean the radio operator/controller PIN?</p> <p>Master update list provided every 28 days might be insufficient by itself; additional identifiers (such as IMEI, or aircraft call-sign, might also be needed, and a means of adding newly-commissioned terminals.</p> <p>As well as master lists of numbers, equipment identifiers and eg SIMs (and PINs?), it is possible for aircraft identifiers (however defined – call-sign, address, registration-mark etc) to be cross-referred to these by a look-up table, and update and amendment of this can be done automatically and in real-time or near-real-time.</p> <p>However, where SIMs are removable, then the management of this must be addressed by the operator – problems with this should become almost immediately apparent to the body responsible for service activation for the terminal or SIM.</p> <p>SUGGESTED CHANGE: Note also the definitions of "Aircraft Identifier" in GOLD, and other identifiers (call-sign, address, registration mark).</p>	S	<p>1-Jun-11-TK – SVTF discussion needed.</p> <p>15-Sep-11-TK – Issue "Access number management, Security management." –</p> <p>16-Sep-11-TK - Reference comments: SV7-0263 (closed) SV7-0258, contains resolution status from IR-SVTF/2, see also open related comments SV1-0010 SV3-0093 SV2-0039 SV7-0262 Action Brad and Joe</p> <p>16-Dec-11-TK – PIN has been clarified in 0.8.2 and previous versions</p> <p>28-day cycle and master lists of numbers, equipment IDs, etc. generalized. See para 2.6 and 3.2.4.</p> <p>ICAO terminology adopted for aircraft address, registration, and other related terms, consistent with GOLD.</p> <p>Please resubmit comment with specific changes if not addressed. Close.</p>	C
3.2.4	SV6-0178	GL	COMMENT: Inform CSP of Equipage?	C	4-Sep-11-TK – If SATCOM voice is to be acceptable LRCS, then wouldn't controller/radio	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
(formerly 3.1.5.2 a)			SUGGESTED CHANGE:		facility need to know that they have the capability and what number to dial to get them? How do they know? 16-Dec-11-TK – See revision 0.8.2, para 3.2.4.2 a) and 3.3, flight planning. Please resubmit comment with suggested change, if not addressed. Close.	
3.2.4 (formerly 3.1.5.2 c)	SV6-0179	GL	COMMENT: See 3.1.2 SUGGESTED CHANGE:	C	4-Sep-11-TK – Maybe redundant of 3.1.2.1? Not sure I understand the comment. 16-Dec-11-TK – Please resubmit comment with suggested change on 0.8.2, if not addressed. Close.	C
3.2.4.1	SV5-0165	DR	COMMENT: Correct version on referenced documents SUGGESTED CHANGE: Add “or equivalent” when referencing documents consistent with 3.2.4.1 AC 20 150 or equivalent.	E	23-Aug-11-TK – I’m not sure I understand the comment text already has (or equivalent). But see also comment sv5-0148. 24-Aug-24-Web/3 – Close its in there	C
3.2.4.2	SV8-0378	DRM	COMMENT: Define adequate resources is rather vague SUGGESTED CHANGE: should....develop specific alternative means of communications in the event....		14-Feb-12-TK – Accept, revise to, “3.2.4.2 The aeronautical station/ANSP should develop specific alternative means of communications in the event that SATCOM voice services are disrupted.” Close.	C
3.2.4.2 f) (for ground system) 3.3.4 (for aircraft system) (formerly 3.1.6.1.c) (Also, Editor’s Note 9?)	SV2-0043	BP	COMMENT: Caller ID can be done but from discussions it is not clear what the “ID” used should actually be (beyond “ not a string of numbers”), nor whether they need to reflect radio-telephony convention. GOLD shows some examples within particular message formats, but these might not be perfectly compatible with radio-telephony voice conventions. As noted above it is also possible for these various user, terminal, aircraft and other identifiers to be maintained in a look-up table in the terminal as well as in master directories, and for these different identifiers to be selected by the user for display on their terminal, and subjected to security measures.	S	1-Jun-11-TK – SVTF discussion. 23-Jul-11-TK – See comment SV1-0011. 15-Sep-11-TK – Issue “Safety requirements”, “Security requirements” and “non-compliance of current systems.” 16-Dec-11-TK – maybe a guideline that if CLI is displayed, it displays facility name for aircraft display or flight ID for ground display. Keep open. 28-Dec-11-TK – See definition for CLI, which includes a note on what is displayed. To paragraph 3.2.4.2, added new item:	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>SUGGESTED CHANGE: State that it is possible for a unique and unambiguous identifier to be used to identify the caller to the recipient, and that there are options for what sort of identification is used, and that it is possible for the recipient terminal operator to select a preferred “identifier” for display on their terminal from systems using a cross-reference or look-up table.</p>		<p>“g) If CLI is used to display incoming calls, display the aircraft identification to the radio operator/controller; and”</p> <p>Added new paragraph: “3.3.4.2 If CLI is used to display incoming calls, the satellite voice equipment should display the facility name or the facility designator for the aeronautical station or ATS unit to the flight crew.”</p> <p>Further guidance will be provided in Appendix D, planning for desirable features. Close.</p>	
<p>3.2.4.2. d) (Previously 3.1.5.3 d) Apx A</p>	<p>SV7-0261</p>	<p>GL</p>	<p>COMMENT: Autodialing is not available at some CSPs at this time. Conducting the trial / evaluation prior to this technology being implemented would have a negative impact on RCP times. (3.1.5.3 (d) SVG M)</p> <p>SUGGESTED CHANGE:</p>	<p>S</p>	<p>15-Sep-11-TK – Issue “Performance specifications” and “non-compliance of current systems.” –</p> <p>23-Sep-11-TK – From IR-SVTF/2, see summary of discussion for IR-SVTF Web/2 meeting, charts presented at IR-SVTF/2 and Appendix A. There is pending action to derive safety requirements for Appendix A. The following resolution status will apply to close this comment. Resolution rules Chapter 3 - Autodial is a means to meet the performance specification in Appendix A. Example Safety requirement The ground system or radio operator shall ensure the correct and timely dialing of calls to the aircraft. Note: This safety requirement is to eliminate errors in the dialing sequence. The requirement may be achieved through the use of autodial feature.</p> <p>16-Dec-11-TK – autodialing mentioned as acceptable means in chapter 2, but the criteria are provided by the specification in Appendix A. Revised to “Dial the access numbers in accordance with performance specifications.” Please resubmit comment with suggested changes if not addressed in v0.8.2. Close.</p>	<p>C</p>

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.2.4.2. d) (Previously 3.1.5.3 d)	SV6-0181	GL	COMMENT: One touch dialing will require a technology upgrade at ARINC to accommodate this. SUGGESTED CHANGE:	C	4-Sep-11-TK – This is a means of compliance issue, SVGM should provide success criteria. Is one touch dialing a requirement or a means to meeting the requirement? 16-Dec-11-TK – Same as comment SV7-0261. Close.	C
3.2.5 (formerly 3.1.5.5 3.1.5.6)	SV7-0311	TK	COMMENT: Refer to “Direct certification of the CSP” and “Privileges and obligations of authorized CSPs” Do we do this anywhere today or in the near future? Suggest to remove the concept of “direct certification of the CSP” or move to a region specific appendix and indicate where this is done. SUGGESTED CHANGE:	S	17-Sep-11-IR-SVTF/2 - What does “CSP approval” mean? Rules for resolution Remove opinions, etc. Remove concept of “approval” or “authorization.” Refer to guidelines allocated to CSP as considerations for ANSPs or operators in service agreements/contractual arrangements 23-Sep-11-TK –Reference comments: SV3-0090 SV7-0249 SV7-0311 Removed per IR-SVTF/2 resolution rules. 16-Dec-11-TK – References to Direct certification of CSP and privileges and obligations of authorized CSPs removed per above. Close.	C
3.2.5.2	SV8-0379	DRM	COMMENT: Not sure how the CSP does this ? SUGGESTED CHANGE:		14-Feb-12-TK – Me neither, but means of compliance is outside the scope of this document. Close.	C
3.2.5.4 (formerly 3.1.4.1.2)	SV7-0220	LP	COMMENT: It may be an issue when CSP will directly inform AIS/AIM service on its performance status	R	28-Dec-11-TK – Revise sentence to: “3.2.5.4 The CSP should establish means for aeronautical stations, ATSU’s and aircraft operators to report in-service difficulties and to resolve identified problems.” This should be included in service agreements. Close.	C
3.2.5.5 3.2.5.6	SV8-0363	LR/CM	COMMENT: I did not read the full document but have the following question based on a quick scan of the rest of the document:		16-Jan-12-TK – Apx A, paragraph A.3.2.2 provides 10 minutes for “Unplanned outage notification delay.”	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>For unplanned outages, is there a time window for which the CSP must provide notice of the outage (within 10 min, 3 hours, 2 days)? Does the CSP have the ability to set some code in ground equipment that communicates with the aircraft to notification of communication loss is provided to flight crew? If so, would be nice to add flight crew (via equipment failure indication perhaps) to the list of those that get notification.</p> <p>SUGGESTED CHANGE:</p>		<p>Definition of “Unplanned outage notification delay:” Notification to the ATSU of an unplanned outage. Measured from when the unplanned outage begins to when the ATSU receives notification.</p> <p>Notification is typically to ANSPs (ATSU or Aero Station) and Aircraft Operating Agencies, who inform the controllers, radio operators, and flight crews via established procedures. Flight crews are part of the aircraft operator. Any technical means to notify flight crews via equipage capability may be appropriate for Apx D, but not sure exactly how this would work. Suggest to resubmit a proposal for Apx D, if desired. Close.</p>	
3.2.5.7	SV8-0421	LP	Last word “equipment may be changed to “system”	E	16-Feb-12-IRSVTF/3 – Accept. Close.	C
3.2.6 (formerly 3.1.6.1.c)	SV1-0011	FR	<p>COMMENT: I am not sure that this is achievable since the call is not made directly to the aircraft but to a central unit prior to be dispatched to the aircraft, or vice-versa. Furthermore most ATC unit block off their phone ID for lines of that nature.</p> <p>SUGGESTED CHANGE:</p>	S	<p>1-Jun-11-TK – SVTF discussion.</p> <p>23-Jul-11-TK – Caller ID is included in guidance for provisions and maybe Chapter 4 (CLI?), but there are no guidelines in Chapter 5, which refers only to verifying the “ATC priority” of the call. Document should be consistent on use of caller ID. What is CLI?</p> <p>15-Sep-11-TK – Issue “Safety requirements”, “Security requirements” and “non-compliance of current systems.”</p> <p>16-Dec-11-TK – Reorganized moved and revised to paragraph 3.2.6. Moved CLI to desirable appendix section. See also clarifications in paragraph 2.6. Please resubmit comment with suggested changes if necessary. Close.</p>	C
3.2.6 (formerly	SV7-0265	GL	<p>COMMENT: Iridium and Inmarsat systems cannot currently provide CLI and PIN information to the receiving aircraft. (3.1.6.1 (c) SVG M) (Par. 7 (j) AC 20-</p>	S	15-Sep-11-TK – Issue “Safety requirements”, “Security requirements” and “non-compliance of current systems.”	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.1.6.1.c) Apx D			150A) SUGGESTED CHANGE:		23-Sep-11-TK – Move to appendix as “desirable.” 16-Dec-11-TK – Close per above.	
3.2.6 (formerly 3.1.6.2)	SV6-0208	AJ	COMMENT: Tom, in researching some issues with regard to sat voice, I find that there seems to be a conflict between the method of assigning priority levels between Inmarsat and Iridium. In AC20-150 (Sat Voice Equipment as a means for ATS Comms) which is written around Inmarsat, the priority levels are 1- highest and emergency with 4-being lowest non-safety. In the DO-262A normative appendix for Iridium, it is exactly opposite 1- being the lowest and 4 being the highest. If the priority levels are intended only for network priority assignment, it may not matter, but if they are assignable by the flight crew, we do not want a different ops standard between Iridium and Inmarsat. We may wish to consider raising this issue at the next PARC meeting? SUGGESTED CHANGE:	S	4-Sep-11-TK – Frem email, dated 24-Aug-11. 14-Sep-11-IR-SVTF/2 – HMI should translate for consistent display of priority level. RTCA plans to revise definitions of the number DO-210 and 262 16-Sep-11-TK – Related to Priority management issue. Reference comments SV7-0244 (contains resolution status from IR-SVTF/2) see also SV7-0264 SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241 21-Sep-11-DRM – Noted. 16-Dec-11-TK – See 0.8.2, para 2.6. Please re-submit comment with suggested changes, if necessary.	C
3.2.6 3.3.4 (formerly 3.1.6.2)	SV7-0242	RS	COMMENT: Same as above. SUGGESTED CHANGE: Change text from: Preemption is the immediate and automatic	S	15-Sep-11-TK – Issue “Safety requirements” 16-Sep-11-TK – And Issue Conference calling and Priority/preemption Reference comments SV7-0244 (contains resolution status from IR-	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>seizure of resources allocated to a lower-priority call. Trade-offs of flight safety requirements versus passenger satisfaction should not be a consideration.</p> <p>to:</p> <p>Preemption is the <u>connection of higher priority communications without delay.</u></p>		<p>SVTF/2) see also SV7-0264 SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241</p> <p>20-Sep-11-DR – Issue Safety Management-Consideration should be given to allow for conferencing versus the automatic seizure of resources allocated to a lower-priority call if GES configuration is allowed.</p> <p>21-Sep-11-DRM - This can be included in the annex of future development that can be included with the other items we discussed at the meeting. Concur with suggested change.</p> <p>16-Dec-11-TK – Revised definition for “Preemption” in Chapter 1. Deleted definition in 3.2.6 and moved text related to aircraft equipage to 3.3.4. Significantly revised text to address other comments. Please re-submit comment with suggested changes, if necessary. Close.</p>	
<p>3.2.6 (formerly 3.1.6.2. d)</p>	<p>SV7-0294</p>	<p>DRM</p>	<p>COMMENT: Incoming ground call to aircraft should not preempt the lower priority call but should join in on the conference when appropriate</p> <p>SUGGESTED CHANGE Comply with proper Radio discipline :</p>	<p>S</p>	<p>16-Sep-11-TK – Related to priority/preemption issue. Will follow resolution rules discussed at meeting, i.e., use of flight crew procedures and automation support to ensure priority calls are not preempted.</p> <p>Reference comments SV7-0244 (contains resolution status from IR-SVTF/2) see also</p>	<p>C</p>

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					SV7-0264 SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241 16-Dec-11-TK – Move conference calling and multiple channels to desirable section. See revised text. Please resubmit comment with suggested change, if necessary. Close.	
3.2.6 (formerly 3.1.6)	SV7-0222	LP	ICOMMENT: It is talking about other Stakeholders for provision of SAT voice service	E	28-Dec-11-TK – Revised entire section. Resubmit comment if still valid. Close.	C
3.2.6 (formerly 3.1.6.2 c) 3.2.4	SV7-0308	TK	COMMENT: Reference: c) The flight crew must have the capability to set the priority level for all calls. The satellite voice equipment must provide the flight crew the means to preempt any call at any time. The equipment must provide the means for automatic preemption of all cabin communications. This is a guideline for aircraft equipment. SUGGESTED CHANGE: Rephrase as necessary and move to 3.2.4	E	16-Dec-11-TK – Moved text to Chapter 1, definitions, 2.6, and 3.2.4, as appropriate. Close.	C
3.2.6 (formerly 3.1.6)	SV3-0100	JK	COMMENT: Under the <i>Note</i> .- Additional sentence required. SUGGESTED CHANGE: Iridium must meet the requirement for Quick Dial Access in Air to Ground and Ground to Air.	C	1-Jun-11-TK – Except for the first sentence, the contents of the whole note is misplaced. Some may be appropriate for Chapter 2 in overview, other parts may be the basis for formulating performance-based guidance material. The specific text in the comment is one way to meet a performance requirement for establishing a call, measured from	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>the time it shows up in the radio operators queue to when the flight crew answers the call. SVTF discussion needed.</p> <p>28-Dec-11-TK – Revised whole section to be performance based. Quick dial is a feature of the aeronautical station/ATSU, for which guidelines are addressed in section 3.2.4, particularly for this point, see paragraph 3.2.4.2 d). Moved note to below paragraph 3.2.4.2 and added sentence: “<i>Note.— See Appendix A for applicable performance specifications. Automation may employ autodial capability, data bases and other features to meet performance specifications.</i>” Close.</p>	
3.2.6 (formerly 3.1.6.1, <i>Note in italics</i>)	SV2-0044	BP	<p>COMMENT: The text in the <i>italicized note</i> is not entirely accurate but to clarify it in this document would require reference to both technology and techniques, and so would introduce too much detail for Guidance.</p> <p>SUGGESTED CHANGE: Remove text; Refer to SARPs and associated Manuals if at all.</p>	C	<p>1-Jun-11-TK – Accept comment. Resolution deferred and will be addressed by resolution and closure to comment SV3-0100. SVTF discussion needed.</p> <p>16-Dec-11-TK – Deleted note. See revised text. Please resubmit comment with suggested change if necessary. Close.</p>	C
3.2.6 (formerly 3.1.6.1.a)	SV2-0041	BP	<p>COMMENT: Not solely the responsibility (or capability) of the GES/Gateway, but the functionality/capability will exist at some point in the communications chain between the controller/radio operator and the flight deck, and the emphasis should be on the existence of the capability and the ability to implement or exercise it.</p> <p>SUGGESTED CHANGE: Restate so that the requirement is that the “CSP” should have this capability, having regard to the definition of CSP and the permutations of possible components and participants, as proposed above; it need not be stated exactly where in the CSP this capability, or the ability to exercise it, may be.</p>	C	<p>31-Mar-11-TK – If this is a CSP requirement, then it should be moved to 3.1.4.</p> <p>1-Jun-11-TK – For this particular guideline, all the vulnerabilities should be assessed and appropriate measures put in place, including the GES, network, radio facility, etc. Paragraphs 3.1.4, 3.1.5, and 3.1.6 are all related to CSP. Chapter 3 structure needs to be revisited. SVTF discussion needed.</p> <p>16-Dec-11-TK – Accept comment. See revised text in 0.8.2. Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.2.6.1 (formerly 3.1.6.1 Note)	SV5-0144	TK	COMMENT: Editor’s note 3 (v0.5). — The note that follows contains “must” and “will require,” which is not appropriate for notes. Furthermore, the guidance material should be performance-based and not based on any specific technology. Description of operation should be considered for inclusion in Chapter 2. Guidelines should be provided to support requirements of Annex 10 or elsewhere. Reference comment SV3-0100. (Editor’s Note 8 in v0.5) SUGGESTED CHANGE:	R	23-Jul-11-TK – Reference other comments on 3.1.6.1 Note. Delete Ed Note and maintain status using comment matrix. 16-Dec-11-TK – Removed “must” from guidance document, per ICAO rule. Close.	C
3.2.6.1 (formerly 3.1.6.1)	SV7-0252	AH	COMMENT: Term “Ground Earth Station” is unique to Inmarsat Classic Aero systems. The concept should allow Land Earth Stations, RANs, SANs, or Gateways to also inhibit unauthorized calls to the aircraft. SUGGESTED CHANGE: Change “Ground Earth Station” to “Satellite Point-of-Presence”.	C	16-Dec-11-TK – guideline applies to more than ground earth station. Revised to address guidelines more generally to satellite voice services. Close.	C
3.2.6.1 b) (formerly 3.1.6.1 b)	SV7-0293	DRM	COMMENT: Do not believe the Pin should be displayed on an incoming call to the aircraft. SUGGESTED CHANGE: Need to develop proper safeguards to Caller ID	S	16-Sep-11-TK – Related to security management issue. 16-Dec-11-TK – Here the guideline does not require display, just to pass the information. Display guideline moved to desirable section in previous version. Close.	C
3.2.6.1 b) (formerly 3.1.6.1 b)	SV7-0266	GL	COMMENT: Iridium cannot currently comply with the preemption requirements. (3.1.6.1 (b) SVGGM) SUGGESTED CHANGE:	S	15-Sep-11-TK – Issue “non-compliance of current systems.” 16-Sep-11-IR-SVTF/2 - We need to be sensitive about the current fleet, but we need to be reasonable about what is needed to standardize and globally harmonize SATCOM voice operations All issues have been resolved. Aircraft that do not alert to flight crew for loss of SATCOM voice capability (aircraft equipment) will need to be updated	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					16-Dec-11-TK – Iridium presentation indicates that their ATS switch will provide this capability. Close.	
3.2.6.1 b) (formerly 3.1.6.1 b) (Formerly 3.1.6.1 c)	SV6-0185	GL	COMMENT: World Fleet not capable of accommodating this requirement. SUGGESTED CHANGE:	S	4-Sep-11-TK – Is this a necessary requirement, or does the fleet have to change. I propose we deal with any recommendations for “nice-to-have” in an appendix, or state conditions under which it is a requirement, and which it is not required. 15-Sep-11-TK – Issue “Safety requirements”, “Security requirements” and “non-compliance of current systems.” 16-Sep-11-TK – See also comment SV7-0266. 16-Dec-11-TK – Guideline is for SSP to provide to receiving party. There is no guideline here on what receiving party is to do with the CLI and PIN. See desirable section for use by receiving party. Close.	C
3.3 (formerly 3.2) (Previously 3.1.2.7 by comment author)	SV5-0161	DR	STATEMENT: Due to the concerns of 4G broadband terrestrial communication system towers within the proximity of airports. Verification of SATCOM maybe not be possible. COMMENT: Dispatch procedures should be provided when SATCOM voice is unable to be verified prior to take-off due to local broadband interference. SUGGESTED CHANGE: Provide dispatch procedure when SATCOM Voice is unable to be validated prior to take-off.	S	24-Aug-11-Web/3 – Guidance may need to indicate that some sort of status check of SATCOM radios is needed prior to dispatch. 23-Sep-11-TK – Reassigned comment to section 3.2 pertaining to operator eligibility. 3.1 is for ATSP, ATSU’s, aeronautical stations, CSPs, and SSPs. 16-Dec-11-TK – Keep open. 3-Jan-12-TK – What would the dispatch procedure be? 15-Feb-12-IRSVTF/3 – Procedures would be no different than when tests cannot be performed for HF voice. No additional guidance is needed. Close.	C
3.3	SV7-0296	DRM	COMMENT: Entire section has to be redone.....totally	S	16-Sep-11-TK – “I assume comment refers to	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
(formerly 3.2)			missing the point of SatCom equivalent to HF SUGGESTED CHANGE:		equivalency from an approval standpoint. 16-Sep-11-IR-SVTF/2 – Rule for resolution No ops approval required specifically for SATCOM Voice. However, the operator should consider following guidelines in establishing training and maintenance: 16-Dec-11-TK – See revised section. Acceptance criteria measured against performance specification, which is based on HF voice. Please resubmit comment with suggested changes, if necessary. Close.	
3.3 (formerly 3.2.1.1)	SV7-0275	JC2	COMMENT: The last sentence does not make any sense. What is it referring to? SUGGESTED CHANGE:	C	16-Dec-11-TK – See 0.8.2 revised text. Sentence is removed.	C
3.3.1	SV8-0341	MS	COMMENT: Fleets may use MTSAT in its coverage and INMARSAT when outside the MTSAT coverage area, how do we flight plan SATVOICE capability when a flight transits several regions? SUGGESTED CHANGE: Address this issue and possibly flight plan both?	S	1-Nov-11-TK – I suppose you could also have Iridium, Inmarsat and MTSAT and you would file one or more, as applicable to the aircraft capability. I believe that this is covered in paragraph 3.3.2 for 2012 FPL. I revised 3.3.1 to read similar, using “(s)” after “identification” and “type” and inserting “and/”: Now whether the flight data processing systems can handle it, I don’t know. I’ll wait for the comment, since I’m not sure everyone is reading this comment matrix. b) Insert in item 18, Other information, the text “COM/” followed by the word SATVOICE, followed by further identification(s) of the type(s) of equipment such as INMARSAT, MTSAT and/or IRIDIUM.” Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.3.1 & 3.3.2	SV7-0223	LP	COMMENT: word “valid” be replaced with “applicable” as ICAO has clear definition and they different	E	16-Dec-11-TK – Accept. Close.	C
3.3.1	SV8-0323	MM	COMMENT: Per Paul Radford’s info, add Item 10A with Satellite Provider info: ICAO 2012 FPL has Field 10a > ATC RTF SATCOM M1 = INMARSAT M2 = MTSAT M3 = Iridium.		1-Nov-11-TK – 3.3.1 applies prior to 2012 FPL format. Reference to M1, M2 and M3 only applies after 2012 FPL and is already in 3.3.2, which applies to 2012 FPL. Split 3.3.1 into two paragraphs to clarify. Close.	C
3.3.1	SV2-0062	MM	COMMENT: I’m not sure we can just recommend this without proper authorization and agreement. SUGGESTED CHANGE:		30-Mar-11-TK - Comment was inserted right after 3.3.1.b. Not sure to what “this” refers. 1-Jun-11-TK – Not sure who to go to for proper authorization and agreement. Isn’t that why we are writing this guidance material, to get agreement from those who can authorize this? Close.	C
3.3.1 (b)	SV8-0336	MS	COMMENT: MTSAT omitted (although only examples) SUGGESTED CHANGE: Add MTSAT	E	1-Nov-11-TK – Revised to “b) Insert in item 18, Other information, the text “COM/” followed by the word SATVOICE, followed by further identification of the type of equipment such as INMARSAT, MTSAT or IRIDIUM.” Close.	C
3.3.1.1	SV8-0410	FT	COMMENT: First sentence could be clearer. SUGGESTED CHANGE: Replace 1 st sentence by: ‘An aircraft operator is eligible to use SATCOM voice equipment under exercise of its privileges related to the normal operational approval (e.g. Aircraft Operator Certificate – AOC).	R	14-Feb-12-TK – Added “(e.g. Aircraft Operator Certificate – AOC)” to make clearer. Close.	C
3.3.1.1 Note to par.	SV8-0396	FT	COMMENT: In EASA we are discussing the list of requirements to consider before imposing a “specific approval” to PBN applications. The spirit is very similar to the list in the Note to par. 3.3.1.1. Few weeks ago we realized that receiving AIS (in Particular NOTAMs) is also a safety requirement. SUGGESTED CHANGE: in the list in the Note add one more line:	A	14-Feb-12-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			'j) arrangements are in place for all involved actors to consult aeronautical information and in particular to receive NOTAMs in case of degradation or other relevant changes to SATCOM service'			
3.3.1.1 (formerly 3.2.1.1)	SV5-0160	DR	<p>Statement: If changes to the Minimum Equipment List (MEL) are desired to allow dispatch with one satellite voice communication system and only one HF radio system, the operator should obtain operational authorization from the State of the Operator or State of Registry.</p> <p>COMMENT: If equipment is determined by operational configuration at the gate and the operators desire is to have SV as back up ATC communication for one of the LRCS. Then procedures should be in place that describe what to do in each configuration (i.e.. two HF and one SV, one HF and one SV, one HF and two SV).</p> <p>SUGGESTED CHANGE:</p>	A	<p>24-Aug-11-Web/3 – The MEL does that, but also some airspace requirements may dictate specific technology.</p> <p>Action: Filippo will take an action to draft some words to address issues with differing MEL/MMEL and AIP requirements.</p> <p>15-Sep-11-TK – Filippo input included in V0.7.</p> <p>16-Dec-11-TK – Please resubmit comment with suggested changes, if necessary. Close per above.</p>	C
3.3.1.1 note	SV8-0380	DRM	<p>COMMENT: Change ...should not be necessary to read.....is not required under this guidance.</p> <p>SUGGESTED CHANGE:</p>		14-Feb-12-TK – Accept. Close.	C
3.3.1.1	SV8-0349		<p>COMMENT: Need of operator to ensure SV is available in a particular FIR.</p> <p>SUGGESTED CHANGE: Move Note e) to the main paragraph.</p>		13-Jan-12-TK – Revised last sentence to, “The aircraft operator should also ensure that aircraft equipment has been approved for the intended use and that the SATCOM service is available in the particular FIRs for the flight.” Revised Note e), to, “e) availability and continuity of SATCOM voice is ensured, under responsibility of an ANSP as explained in paragraph 3.2;” Close.	C
3.3.1.1 i)	SV8-0364	LR/CM	<p>COMMENT: item i): should STCs be covered along with TCs? Not sure if that is implied.</p>		16-Jan-12-TK – Revise to: i) <i>provision of information (e.g. MMEL and</i>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE:		<i>training requirements) from holders of type design approvals, e.g., Type Certificates (TC), to aircraft operators, throughout the life cycle of the aircraft is ensured.</i> Close.	
3.3.2 (formerly 3.2.2.3)	SV7-0298	DRM	COMMENT: remove para as it repeats itself SUGGESTED CHANGE:	C	16-Dec-11-TK – See revision 0.8.2. Please resubmit comment with suggested changes, if necessary. Close.	C
3.3.2 (formerly 3.2.2.3)	SV5-0145	TK	COMMENT: It would be nice to insert examples from other continents. (Editor’s note 9 (v0.5)) SUGGESTED CHANGE:	A	23-Jul-11-TK – Delete Ed Note and maintain status using comment matrix. I would propose that all country-specific information be provided in an Appendix to the document. Also, I am concerned that guidance material is including proposals from countries that are still in litigation and would also be better explained in an Apx. Given the schedule to complete Edition 1 in early 2012 and to support current use, I propose the main body of the document support existing policies and future plans be provided in an Appendix. 16-Dec-11-TK – Added note with reference to FAA. Close.	C
3.3.2	SV2-0063	MM	COMMENT: Are these already in place ? SUGGESTED CHANGE:		1-Jun-11-TK – Effective date for Amendment 1 is November 2012. Close.	C
3.3.2.1	SV8-0411	FT	COMMENT: First sentence could be clearer. It is for States, not ATS to approve aircraft equipment. SUGGESTED CHANGE: Replace 1 st sentence by: ‘The State of the Operator or the State of Registry, through the appropriate regional or national aviation authority, establish the minimum’	R	14-Feb-12-TK – Revise to, “The State of the Operator and/or State of Registry establish the minimum number of long range radio equipment to be carried on board.” Close.	C
3.3.2.1 (Note) (formerly 3.2.2.1)	SV7-0297	DRM	COMMENT: Revise para to read SUGGESTED CHANGE: Competent authorities also establish the minimum number of long range radio equipment to be carried on board. For instance, in the	C	16-Dec-11-TK - Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			European Union (EU) the competent regional authority (i.e. EASA) has proposed that, aeroplanes shall be equipped with the radio communication equipment required by the applicable airspace requirements.....			
3.3.2.1	SV8-0381	DRM	<p>COMMENT: Do we really want to put information into the guidance that deals with what we think might happen with EASA on rule making Line 5 of the note</p> <p>SUGGESTED CHANGE: I believe the paragraph needs to be rewritten</p>		14-Feb-12-TK – Revise note to “Note 1.— EASA has proposed rules and means of compliance expected to be effective in 2012 that would allow for one SATCOM voice radio and one HF radio, providing that said services are available for routine communications.” Close.	C
3.3.2.1 Note 2 to	SV8-0412	FT	<p>COMMENT: Align last part of the sentence with official EU semantics</p> <p>SUGGESTED CHANGE: Read the Note: ‘... And is consistent with regulation on air operations used by EASA in the EU.’</p>		14-Feb-12-TK, Revise to, “ <u>Note 2.</u> — The FAA Policy Letter (PL)-106 provides MMEL relief for HF communication systems, if the SATVOICE system is approved as a long range communication system.” Close.	C
3.3.2.2 c) (formerly 3.2.2.2c)	SV7-0253	AH	<p>COMMENT: typo</p> <p>SUGGESTED CHANGE: Change “SATCOM vocie” to “SATCOM voice”.</p>	E	16-Dec-11-TK – Accept. Close.	C
3.3.2.4 (formerly 3.2.2.6)	SV7-0239	A.J.	<p>COMMENT: Need to add, FIR/Route requirements.</p> <p>1.1.1.2 SUGGESTED CHANGE: <u>If changes to the Minimum Equipment List (MEL) are desired to allow dispatch with one satellite voice communication system and only one HF radio system, the operator should obtain operational approval or acceptance from the State of the Operator or State of Registry, as well as insure minimum requirements met for all FIRs transited for intended flight plans.</u></p>	C	16-Dec-11-TK – Added sentence. “However, regardless of MEL, the aircraft operator will need to carry radio equipment required by the applicable airspace requirements as provided in AIP or equivalent.” Close.	C
3.3.2.4	SV8-0365	LR/CM	COMMENT: Note: please clarify the intent. It		16-Jan-12-TK – That’s my take as well. It seems	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>appears the EASA NPA 2011-11 is saying you can fly for up to three days with one HF and a backup SATCOM so it sounds like 2 HFs are still needed for normal operation? The “In other words...” seems to be saying you can fly with one HF and one backup SATCOM even in regions not set up for SATCOM data or voice as primary so you really only have one viable Long Range Comm System when two might be required?</p> <p>SUGGESTED CHANGE:</p>		clear to me, with the phrase, “to ensure that reliance on SATCOM is limited.” Meaning that EASA is accepting the risk by limiting the exposure to three days. I’m not sure how to clarify. Please resubmit the comment and make a suggestion. Close.	
3.3.3 (formerly 3.2.1.6 h)	SV6-0186	GL	<p>COMMENT: New AFM update for Iridium and training of flight crews will be required to accommodate the upgrade to the Iridium system.</p> <p>SUGGESTED CHANGE:</p>	S	<p>4-Sep-11-TK – under what ops authorization will flight crew training be approved?</p> <p>15-Sep-11-TK – Issue “Allocation of guidelines to Operator.”</p> <p>16-Dec-11-TK - See revised text 0.8.2. Please resubmit comment with suggested changes, if necessary. Close.</p>	C
3.3.3 (formerly 3.2.1.6 h) 3.1.5.3 e) 3.2.3.1 b) 3) 4.3.1 5	SV7-0267	GL	<p>COMMENT: Referencing 3.2.1.6 (h) of the SVGM Operators will require updates to the AFM and training material after Iridium completes the update to their system. Operators will be required to train the differences associated with conference calling 3.1.5.3 (e) for Air to Ground communications with the CSP/ANSP. Operators will be required to train the differences associated with checking-in at oceanic FIRs 3.2.3.1 (b) (3) and chapter 5 of the SVGM.</p> <p>SUGGESTED CHANGE:</p>	S	<p>15-Sep-11-TK – Issue “Allocation of guidelines to Operator.”</p> <p>16-Dec-11-TK – See revised text 0.8.2. Please resubmit comment with suggested changes, if necessary. Close.</p>	C
3.3.3.	SV8-0324	MM	<p>COMMENT: Change “ICAO 24-bit address” to “Hex representation of the ICAO 24-bit address”</p>		<p>1-Nov-11-TK – Per ICAO Doc 4444, revise as follows:</p> <p>“3.3.3.3.4 When the necessary information for establishing contact with the aircraft can be derived</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					from the aircraft address, that information should be included in item 18 using the “CODE/” indicator. <i>Note.— Aircraft address is expressed in the form of an alphanumerical code of six hexadecimal characters. Example: “F00001” is the lowest aircraft address contained in the specific block administered by ICAO. See other examples as shown above.”</i> Close.	
3.3.3.1 (formerly 3.2.5.3)	SV5-0166	DR	COMMENT: Satellite System Security SUGGESTED CHANGE: Add: Identify security measures required for call verification (i.e. PIN coding, AC ID...etc.) for connection performance and integrity.	S	23-Aug-11-TK – Section 3.2.5 is “Maintenance and in-service difficulties.” This section is probably not the appropriate place to address security measures. If valid, relocate to appropriate section. I’m not sure who is to verify what and when. See the following paragraphs: 3.2.1.3 3.1.6.1 c) 4.3.1.2 b) 14-Sep-11-IR-SVTF/2 – Clarify comment: intent is to add new paragraph to address maintenance of PIN /AC ID. Security. 15-Sep-11-TK – Issue “Security requirements.” 16-Dec-11-TK – Keep open. 28-Dec-11-TK – Paragraph 3.3.3.1 e) refers to flight crew procedure in chapter 5 concerning security measures for call verification. See paragraph 5.3.1. Also, revised paragraph 5.3.2 to: “5.3.2 The flight crew should act only on ATC instructions from SATCOM calls with priority level 2 / HGH / Q1 or priority level 2 / 1 / EMG / Q15 per Table 2 1, and if in doubt terminate the call and initiate a new call for confirmation.” Close.	C
3.3.3.1 (formerly	SV5-0164	DR	COMMENT: SATCOM voice communications (SELCAL) for the appropriate OCA/FIR’s;	R	24-Aug-11-Web/3 – SELCAL is appropriate only for HF voice. As you transition to FIR. You may need a procedure to cover the working order of the	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.2.3.1)			<p>SUGGESTED CHANGE: Add recommendation for Flight crew responsibilities for establishing and maintaining SATCOM voice communications (SELCAL) with the appropriate OCA/FIR's;</p>		<p>SATCOM voice system and ability for crew and controller to establish communications via this system.</p> <p>ACTION: Brad and Mary Anne to review v0.6 to material and provide changes, as appropriate, to ensure system is in working order to establish communications between controller and flight crew, similar to function of SELCAL for HF voice.</p> <p>16-Dec-11-TK – See revised text 0.8.2. Please resubmit comment with suggested changes, if necessary. Close.</p>	
3.3.3.1 (formerly 3.2.3.1 b) 5)	SV6-0187	GL	<p>COMMENT: More importantly what to do when the other LRCS (HF) fails.</p> <p>SUGGESTED CHANGE:</p>	C	<p>15-Sep-11-TK – Out of scope of this guidance material.</p> <p>16-Dec-11-TK – See revised text 0.8.2. Please resubmit comment with suggested changes, if necessary. Close.</p>	C
3.3.3.1 (formerly 3.2.3.1.a)	SV7-0299	DRM	<p>COMMENT: Change para to read</p> <p>SUGGESTED CHANGE: Air Operators must provide appropriate advisory material to all personnel involved in it operations and ensure that they are aware.....</p>	C	<p>16-Dec-11-TK – See revised text 0.8.2. Please resubmit comment with suggested changes, if necessary. Close.</p>	C
3.3.3.1 d) (formerly 3.2)	SV7-0240	A.J.	<p>COMMENT: Need to identify responsibility and add a statement as suggested</p> <p>SUGGESTED CHANGE: It is the responsibility of the aircraft operator to insure that the association between aircraft tail number, ICAO address and aircraft satcom telephone number is maintained at all times to insure a high degree of reliability in contacting the aircraft via a satellite connection.</p>	C	<p>15-Sep-11-TK – I would suggest avoiding sentences starting with “It is the responsibility of We simply say “The aircraft operator should ensure that ...”</p> <p>21-Sep-11-TK – Reassigned comment to Section 3.2.</p> <p>16-Dec-11-TK – See 3.3.3.1 d). Close.</p>	C
3.3.3.3	SV5-0149	TK	<p>COMMENT: Editor's note 13 (v0.5). — Maybe include some guidance on managing SIM cards during</p>	A	<p>23-Jul-11-TK - Delete Ed Note and maintain status using comment matrix.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
(formerly 3.2.5)			maintenance and other relevant information SUGGESTED CHANGE:		16-Dec-11-TK – See revised 0.8.2 text in 3.3.3.3. Close.	
3.3.3.4	SV8-0382	DRM	COMMENT: Delete all after... and verify.... SUGGESTED CHANGE:		14-Feb-12-TK – Accept. Close.	C
3.3.3.5	SV8-0383	DRM	COMMENT: Are leaving this as optional if in my opinion is does nothing for my operation...need to think about this SUGGESTED CHANGE:		14-Feb-12-TK – Deleted paragraph. Close.	C
3.3.3.5	SV8-0366	LR/CM	COMMENT: Operators should not have to update their software for every new release that comes along if the change does not rectify service issues or add increased functionality that is not associated with SATCOM Voice. For example, if there is only an issue with SBB and the system on the aircraft does not support SBB (and VoIP is not yet viable for SATCOM voice services), there should be no requirement to update software just to have the latest software. SUGGESTED CHANGE:		16-Jan-12-TK – Revise to: 3.3.3.5 From time to time aircraft manufacturers release new software which will often rectify in service issues and may add increased functionality. When new releases become available, the operator should update their software if it improves the performance of their particular equipment capabilities. Close.	C
3.3.4 (formerly 3.2.4)	SV5-0148	TK	COMMENT: Editor's note 12 (v0.5). — Need to remove FAA-specific references. SUGGESTED CHANGE:	R	23-Jul-11-TK – Delete Ed Note and maintain status using comment matrix. Review document to remove State-specific references. 16-Dec-11-TK – No problem with FAA reference here. Close.	C
3.3.4.1	SV8-0415	LP	Any reference to EASA' in addition to FAA 20-150A?	C	16-Feb-12-IRSVTF/3 – There are no EASA references. IRSVTF/2 agreed to use FAA AC 20-150A (or equivalent) as acceptable means of compliance for global application. Close.	C
3.3.4.1 (formerly	SV7-0254	AH	COMMENT: Update edition of AC 20-150 SUGGESTED CHANGE: Change AC 20-150 to AC	C	16-Dec-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.2.4.1)			20-150A			
3.3.4.1	SV8-0367	LR/CM	<p>COMMENT: it should be clear to all, but a single system cannot comply with the full list of specifications all at the same time (e.g. ARINC 741, ARINC 761 and ARINC 781). Maybe add an “as appropriate for the type of system”.</p> <p>SUGGESTED CHANGE:</p>		16-Jan-12-TK – Revise to: 3.3.4.1 The installations should be approved by the State of Registry or State of the Operator in accordance with FAA AC 20-150A (or equivalent), and verified to comply with the following, as appropriate for the type of system installed: Close.	C
3.3.4.5 b)	SV8-0437	GL	<p>COMMENT</p> <p><i>Added “Note” to accommodate aircraft that do not have a SATVOICE system associated with aircraft alerting systems.</i></p> <p>SUGGESTED CHANGE</p> <p><i>Note— If a SATVOICE system does not provide notifications or alerts via aircraft alerting systems (e.g., Master Caution or EICAS) the SATVOICE system should provide a capability to determine system status (e.g., signal strength and “log on” status) when it is used as a LRCS in accordance AIP, Regional Supplements or equivalent.</i></p>		<p>23-Feb-12-TK – Basically accept concept, I think we should address the issue with legacy aircraft and not contradict the guideline to comply with AC 20-150A for new systems. Is the “e.g., ...” really necessary? Also, clarified alerts for system failure and added reference to MEL requirements. Added note to para 3.3.4.1:</p> <p><i>Note 2.— Some aircraft SATVOICE systems do not provide alerts of equipment failures to the flight crew. In such cases, flight crew procedures may provide a means to determine system status, (e.g., review of signal strength and “log on” status), to comply with MMEL/MEL requirements and AIP (or equivalent publication). See paragraph 5.1.3.</i> Close.</p>	C
3.3.4.6.b	SV8-0384	DRM	<p>COMMENT: do we want to say that it has been evaluated as LONG RANG COMMUNICATION SYSTEM???</p> <p>SUGGESTED CHANGE:</p>		14-Feb-12-TK – Text is from AC 20-150A. No change. Close.	C
3.4 (Previously)	SV7-0226	IM	<p>COMMENT: SATCOM voice for ATS will not be available in all FIRs. Need for adequate flight planning to ensure compliance.</p>	S	15-Sep-11-TK – Issue “Intended uses, flight planning”	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
<p>2.1 4.2 (new) or include in 3.3?</p>			<p>SUGGESTED CHANGE:</p> <p>Flight Planning for SATCOM voice Use (or include in 3.3 Flight Planning?)</p> <p>4.2.1 Due to limitations in the way SATCOM voice is handled by various ANSPs, this form of communication cannot be always used for all ATS communications. As a consequence operators and flight crew must ensure that during the flight planning process these limitations are taken into account. Such limitations are explained in the following paragraphs.</p> <p>4.2.2 SATCOM voice provision by ANSP. The operator should ensure by reference to the State AIP in the area of operation the level SATCOM voice use accommodated in the FIR. Some ANSPs allow SATCOM voice to be used for emergency communications only and not for ATS communications as HF MEL relief in controlled airspace. The planned use of SATCOM voice for routine ATS communications in these FIRs is not acceptable.</p> <p>4.2.3 Reduced separation standards. Some separation standards, such as RNP 4, require LRCS standards that SATCOM voice, particularly when provided through “third party” operators, cannot meet. Flights that intend to use these levels of separation standards must carry the required LRCS such as direct voice or CPDLC.</p> <p>(Renumber old sections and include in index)</p>		<p>23-Sep-11-TK – Address in para 2.1. See comment SV4-0125. Close.</p> <p>13-Jan-13-TK – Reopen comment and reassign to paragraph 3.4 in v0.8.3 per comment SV8-0350. See also resolution status to comment SV4-0125 (para 3.4), where this was discussed at IRSVTF/2 and there were concerns regarding the suggested text. In attempt to close the comment once again, revised paragraph 3.4 to add a new 3.4.1,</p> <p>3.4.1 When filing SATVOICE capability in the flight plan, the aircraft operator should ensure that the planned use of SATVOICE for the flight will be in accordance with regulations, policies and procedures applicable in individual countries and/or FIRs for the flight, as published in documents such as regional supplementary (SUPPs) procedures and AIPs (or equivalent). <i>Note. Some ANSPs may allow the flight crew to use SATCOM voice only for certain types of communications, e.g., of an urgent nature, or may place limitations on use of SATVOICE directly to the controller. Other ANSPs may allow its use only as an additional capability to existing radio equipment carriage requirements (Refer to paragraph 2.1 and paragraph 3.2.3).</i></p> <p>The above intends to capture the suggested 4.2.1 and 4.2.2</p> <p>Regarding paragraph 4.2.3, RNP4 is not a separation standard... it is a navigation specification. The separation standard for 30 longitudinal is contained in ICAO Doc 4444. ICAO Doc 4444, paragraph 5.4.2.6.4.3.2, states, “The communication system provided to enable the application of the separation minima in 5.4.2.6.4.3</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>[30 or 50 NM longitudinal] shall allow a controller, within 4 minutes, to intervene and resolve a potential conflict by contacting an aircraft using the normal means of communication. An alternative means shall be available to allow the controller to intervene and resolve the conflict within a total time of 10½ minutes, should the normal means of communication fail.</p> <p>Further, ICAO Doc 4444, paragraph 5.4.2.6.2.2, states, “Direct controller-pilot communications shall be maintained while applying a distance-based separation minima. Direct controller-pilot communications shall be voice or CPDLC. The communication criteria necessary for CPDLC to satisfy the requirement for direct controller-pilot communications shall be established by an appropriate safety assessment.”</p> <p>The only safety assessment that I am aware of is the one in DO-306, which relies on CPDLC for the normal communications. As is true with HF voice, SATVOICE could be used to meet the requirements of the alternative means of communications, required by the separation standard. But this whole argument seems more like an issue with what ANSPs and their respective State will allow for meeting the requirements of the separations standard. The operator and their flight crews should operator in accordance with airspace requirements dictated by Regional SUPPs, ultimately by AIPs (or equivalent). Where am I wrong?</p> <p>Close.</p>	
3.4 (formerly	SV7-0229	IM	Use of SATCOM voice in 2012 Flight Plan Format – is it adequate or is further expansion required?	S	14-Sep-11-IR-SVTF/2 – Assigned to para 3.3. 15-Sep-11-TK – Issue “Flight planning”	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.3)					<p>16-Sep-11-IR-SVTF/2 - Get with Leifur and Flight Standards to discuss open comments If impact on 2012 flight plan format, may result in recommendations to OPLINKP to change the requirements May be limitations on changes to current implementation, but may be a consideration for future changes</p> <p>16-Dec-11-TK – Current guidance calls for aircraft capability, aircraft registration, aircraft address. This information is adequate for all procedures and automation defined in the SVGM. Please resubmit comment with specific changes, if necessary. Close.</p>	
3.4 2.1 (Previously 0_General)	SV4-0125	IM	<p>COMMENT: Some thoughts re the development of the SCV Guidance material.</p> <p>Currently as far as I can see, we don't have an ATS Use section that spells out for ATCs and pilots just when and where SCV can and cannot be used. Any separation standard requires the combination of CNS elements and all most remain in place for the standard to apply. For example, the RNP 4 separation standard requires either CPDLC or direct (VHF) coms and SCV, through a third party, is not acceptable in any circumstances (except of course, emergency). This point seems to have been overlooked or not appreciated in a lot of the comments that I see for the manual. This was one of the major reasons why SCV was rejected by ICAO and the aviation community in the early 1990s as it cannot be used (in its present form) to reduce (oceanic) separation standards below RNP10.</p> <p>The bottom line is that the current intent is to approve SCV as a substitute for a single HF - ie for purposes that HF is currently used (only). It is certainly not a substitute</p>	A	<p>29-Jun-11-IR-SVTF – There may be a misconnection here. We are developing criteria for use of SATCOM voice against performance-based criteria that would be equivalent to HF voice capability based on how it is used in current applications. No intent to use SATCOM voice as a replacement to CPDLC.</p> <p>ACTION: Ian to propose text on intended uses. Group will review any proposed text provided for document.</p> <p>21-Sep-11-TK - Insert text discussed at IR-SVTF/2 regarding “intended uses/limitations” issue. Revised to simplify and for style following the resolution rules for Chapter 2.</p> <p>2.1 General 2.1.1 The guidance material provided in this document is intended for use of SATCOM voice equipment to provide additional ATS communications capability, in accordance with airspace requirements in respective AIP or regional</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>for CPDLC.</p> <p>Without these limitations been documented, we can expect to see the inappropriate use of SCV across the globe - with the significant potential of loss of separation events. We have already seen attempts at such use in the Australian FIR.</p> <p>SUGGESTED CHANGE: Introduce an ATS (Use?) Section</p>		<p>SUPPS and under the following conditions:</p> <ul style="list-style-type: none"> a) the aircraft equipment is approved by the State of the Operator or the State of Registry; b) the flight crew communicates with the appropriate aeronautical station or ATS unit depending on the type of communication and as allowed by airspace requirements; and c) the flight crew operates SELCAL or maintains a listening watch on the assigned HF frequency. <p>2.1.2 SATCOM voice communication initiated due to HF propagation difficulties does not constitute urgency. Dedicated SATCOM voice telephone numbers (short codes) for air-ground radio facilities and air traffic control facilities are published in national AIPs where approved.</p> <p>2.1.3 SATCOM voice is not a replacement for ADS-C, CPDLC or HF voice communications, but rather a means of reducing the risk of communications failure, improving the safety of operations and alleviating HF congestion. SATCOM voice provides an additional discrete communications medium and potential MEL relief as States, approving reduced carriage requirements for HF radio, may allow aircraft to operate with only one serviceable HF radio.</p> <p>2.1.4 It is further noted that while States may allow MEL relief approving reduced carriage requirements for HF radio, airspace requirements will take precedence over any relief. This guidance material may be used to facilitate alignment of airspace requirements with State MEL policies. Close.</p>	
3.4.1	SV8-0350	IM	<p>COMMENT: As previously noted – the operator should ensure, through adequate flight planning, that SV is available over the entire intended route. See SV7-0226. The regional position is that the current material is not strong enough in this area and specific words are</p>		<p>13-Jan-12-TK – Reopened comments SV7-0226 and SV4-0125, and reassigned them to paragraph 3.4. I don't understand the comment as it suggests that specific words are required in the AIP. Section 3.4 deals with flight planning. The AIP is covered</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>required in the AIP to ensure adequate pre-flight preparation for the use of SV and that these should be included in the 3.4 Flight Planning. We are already seeing a significant increase in inappropriate SV use in the region.</p> <p>SUGGESTED CHANGE: Use words proposed in SV7-0226 in 3.4.</p>		<p>in paragraph 3.2.3. Also, the comment SV7-0226 was discussed at IRSVTF/2 in combination with comment SV4-0125 and resolution was provided at that time. The suggested language proposed by SC7-0226 discusses the possibilities of some FIRs, which should conveyed as a note or contained explicitly in Apx C. Also, RNP 4 specifications are navigation specification, whereas communication capability is addressed by RCP specifications.</p> <p>Sent reply with proposal to IM on 13-Jan-12-TK. Will reopen if feedback received. Close.</p>	
4	SV5-0150	TK	<p>COMMENT: Editor's note 14 (V0.5). — Text taken from Kevin Stevens and Radio Operator – Aero radio procedures2 documents. Needs work, some inconsistencies and overlap.</p> <p>SUGGESTED CHANGE:</p>	R	23-Jul-11-TK - Delete Ed Note. Submit specific comments with suggest changes. Close	C
4	SV5-0169	TK	<p>COMMENT: Spell out acronyms in chapter 4, see also diagrams, or eliminate CLI/PIN – is this same as caller ID, is PIN different? Do we need to define? What is Caller ID, what is PIN, if different. ATCC – suggest to delete and refer to ATC clearance ATCR – suggest to delete and refer to ATC request ATCA – suggest to delete and refer to ATC advisory</p> <p>SUGGESTED CHANGE:</p>	E	<p>24-Aug-11-Web/3 – CLI – Caller line identification, also referred to as Caller ID PIN – Personal identification number. ACTION: Mary Anne will review flow charts to determine if ATCC, ATCR and ATCA can be removed from charts and provide updated charts (in jpg format) if necessary.</p> <p>23-Sep-11-TK – CLI and PIN are defined per above. Are ATCC, ATCR, and ATCA ICAO standard? Suggest to revise Figure 4-1, consistent with Figure 4-2, In Figure 4-1, block 12: Revise “ATCC clearance” to “ATC clearance” Revise “ATCR request” to “ATC request” Revise “ATCA advisory” to “ATC advisory.” All other blocks, Replace “ATCC” with “Clearance”</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					Replace "ATCR" with "Request" Replace "ATCA" with "Advisory" 13-Jan-12-TK – See updated figure 4-1. Close.	
4	SV2-0047	AL	COMMENT: Suggested changes to Chapter 4. SUGGESTED CHANGE:	C	30-Mar-11-TK – See attached file beginning with <comment number>. 31-Mar-11-TK – Note paragraph reference may have changed as comment made on v0.2. Defer to Ch 2/Ch4 Group for resolution. 23-Sep-11-TK – Comments written on very old version of SVGM. Assume that Chapter 4 group addressed these comments. AL, please resubmit as new comments on v0.8, if not addressed. Close.	C
4	SV3-0108	MM	COMMENT: Additional material and modifications to chapter 4 provided by the "Chapter 4 Team." SUGGESTED CHANGE: Mark-up of chapter 4 provided.		18-May-11-TK – See attached file beginning with <comment number>. 1-Jun-11-TK – Incorporated additional text and changes per the file provided. Close.	C
4	SV2-0064	MM	COMMENT: Numerous changes from Ch 2/Ch4 Group SUGGESTED CHANGE:		31-Mar-11-TK – Incorporated into v0.3. Close	C
4.1.2	SV7-0246	IM	COMMENT: For direct controller pilot communication normal phraseology (in use with VHF and HF) ensures this. Any extra phraseology for SATCOM use should be avoided. SUGGESTED CHANGE:	C	23-Sep-11-TK – Revise to, 4.1.1 When using SATCOM voice, normal RTF conventions must be followed in accordance with standard ICAO phraseology, as defined in Annex 10, Volume II, Chapter 5, Doc 4444, Chapter 12, Doc 9432 and Doc. 8400. Those communications procedures and examples are listed here to further clarify radio operator and controller procedures. 4.1.2 When establishing a SATCOM voice contact, the radio operator or controller should ensure positive identification of the aircraft. With each communication, the radio operator or controller will address the aircraft by its flight plan-filed Flight ID/Callsign for flight safety reasons. The aircraft, in turn, will re-state the caller's	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					identification, e.g., Gander Radio, as well as repeat the aircraft's Flight ID. Caller ID is not currently available in the aircraft avionics; however, manufacturers will consider this human factors element for ease of use in future design." Close.	
4.1.2	SV8-0414	FR	<p>COMMENT: . Also I am not sure about 4.1.2. today, when a pilot on the ground phones the ACC via regular phone line to get his clearance (happens at remote uncontrolled airport where radio coverage is not all the way to the ground) once the identity of both parties have been determined, there may not be a need to follow Annex 10, Volume II, Chap 5 and the other ICAO docs for every transmissions. Omitting the caller ID or the ID of the station called does no present a risk in some cases. A lot of the procedures in there are necessary because there are multiple users listening on the frequency, which is not the case on a one-on-one SATCOM conversation.</p> <p>SUGGESTED CHANGE:</p>		15-Feb-12-IRSVTF/3 – Procedures now include controller to flight crew direct with conference calling. Further consideration would be needed to assess how you would provide guidance suggesting non-compliance with Annex 10 requirements. A new standard would be needed and may be a consideration for future editions of the guidance material after Annex 10 is revised. Close.	C
4.1.3 4.1.4 & 5.5.1.1 & 5.5.2.1	SV7-0224	LP	<p>COMMENT: alternative may be replaced with word : “other” as SATCOM Voice is the alternate means for CPDLC and HF etc.</p>	E	23-Sep-11-TK – Accept. Search document for “alternative” and “alternate” and replaced with “other” or “other means” where applicable. Close.	C
4.1.3	SV8-0325	MM	<p>COMMENT: Delete this paragraph. When I updated Chapter 4 and reorganized it, I left this redundant paragraph by mistake and it is actually confusing here.</p>		1-Nov-11-TK – Accept. Close.	C
4.1.3	SV6-0196	GL	<p>COMMENT: Revise to, “If unable to contact the aircraft via SATCOM voice for communication other than Level 1 / EMG, then reversion ...”</p> <p>Add new 4.1.4:</p> <p>4.1.4 If a RO or ANSP recognizes that an aircraft is in imminent danger, the RO or ANSP must call the aircraft at the highest priority Level 1 / EMG if possible, and state the threat to the aircraft as part of the initial communication. If unable to contact the aircraft via SATCOM then reversion to any alternative means of</p>		4-Sep-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>communication medium should be followed, including HF, VHF, and data link, to establish positive voice communications for that flight and state the threat to the aircraft as part of the initial communication.</p> <p>Example:</p> <p>Radio operator <Initiates call and line rings in flight deck></p> <p>Flight crew Air France 465 go ahead.</p> <p>Radio operator Air France 465, Gander Radio, For collision avoidance, ATC clears <message></p> <p>Flight crew Gander Radio, Air France 465, <read back message> avoidance</p> <p>Re-number existing 4.1.4 to 4.1.5.</p> <p>SUGGESTED CHANGE:</p>			
4.1.3	SV3-0103	AL	<p>COMMENT: Refer to, “4.1.3 If unable to contact the aircraft via SATCOM voice then reversion to any alternative means of communication medium should be followed, including HF, VHF, and Datalink.”</p> <p>SUGGESTED CHANGE: It’s unlikely that an aircraft will be using SATCOM voice when datalink or VHF is available.</p>		<p>22 Aug 11, MM: Change/expand 4.1.3 text to read, “If unable to contact...should be followed, including HF, VHF or Datalink, <i>in order to establish positive voice communications for that flight.</i></p> <p>23-Aug-11-TK – Incorporated change per above, minus “in order.” Close.</p>	C
4.1.4	SV7-0300	DRM	<p>COMMENT: Remove all Example in this chapter regard radio transmissions</p> <p>SUGGESTED CHANGE:</p>	C	<p>23-Sep-11-TK – See comment SV7-0303. Ask group about examples. I don’t see harm in having them if they are correct. If they are not correct, that seems to justify the need for them, so we get all on the same page and clarify the procedures.</p> <p>14-Feb-12-IRSVTF3-G1 - The task force discussed</p>	C

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					the change and determined there was value in the examples. Comment was rejected. Close.	
4.1.4	SV7-0231	MW	<p>COMMENT: Please note an inconsistency in Para. 4.1.4 of the SVGM version 4 SEP 2011. Nitpicking comment, but somebody will complain. Suggest DELETE work "voice"</p> <p>SUGGESTED CHANGE: If a radio facility or ATS unit recognizes that an aircraft is in imminent danger, the RO or controller must call the aircraft at the highest priority Level 1 / EMG if possible, and state the threat to the aircraft as part of the initial communication. If unable to contact the aircraft via SATCOM then reversion to any alternative means of communication medium should be followed, including HF, VHF, and data link, to establish positive voice communications for that flight and state the threat to the aircraft as part of the initial communication.</p>	C	<p>21-Sep-11-DRM - Tom we discussed this briefly at the meeting but you should also allow for the Dispatcher to have the same capability when necessary to use a high priority. Right now in talking to our dispatch folks here at headquarters...he is not aware that any dispatch facility has higher then low....but it should be discussed as something that needs to be thought through in total.</p> <p>22-Sep-11-TK – Accept comment. Above is a different issue, which was addressed at IR-SVTF/2, and warrants a comment on future revision if still applicable. Close</p>	C
4.1.4 4.3.1.4	SV7-0237	JK	<p>COMMENT: My suggestion for 4.1.4 is as follows. If a Radio facility or an ATS unit recognises that an aircraft is in imminent danger, the R/O or controller must call the Aircraft by the most expeditious means available to him to alert him to the situation.</p> <p>SUGGESTED CHANGE:</p>	C	<p>15-Sep-11-TK – The revision seems out of scope of the document. Isn't this requirement covered in PANS/ATM? This guidance could suggest that SATCOM voice may provide the most expeditious means available.</p> <p>23-Sep-11-TK – Accept concept. See v0.8, "4.3.1.3 If a radio facility or ATS unit recognizes that an aircraft is in imminent danger, an ATC message is urgent or delivery time is critical, the RO or controller should use the most expeditious means of communications. If SATCOM voice is used as the first attempt, the RO or controller should call the aircraft at the highest priority Level 1 / EMG if possible, and state the threat or delivery the ATC message to the aircraft as part of the initial communication. If unable to contact the aircraft via</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					SATCOM, then the RO or controller should revert to any other means of communication, including HF, VHF, or data link, to establish positive communications for that flight and state the threat to the aircraft as part of the initial communication.” Close.	
4.1.4	SV8-0424	DA	COMMENT: Revise to, “The controller may use SATVOICE to establish Direct Controller Pilot Communications (DCPC) with an aircraft depending...” SUGGESTED CHANGE:		15-Feb-12-TK – accept. Close.	C
4.1.5	SV7-0256	JM	COMMENT: Suggest adding clarification as suggested below. SUGGESTED CHANGE: Revise to, “ For flight safety reasons , even if there is an automated identification capability, the radio operator or controller must address the aircraft using its flight plan filed Flight ID/callsign . Additionally, manufacturers must take into account the human factors elements for ease of use when designing systems.”	S	15-Sep-11-TK – Adding “for safety reasons” begs the question, “what is the safety requirement?” Issue “Safety requirements” 23-Sep-11-TK – Revise and moved paragraph. “4.1.2 When establishing a SATCOM voice contact, the radio operator or controller should ensure positive identification of the aircraft. With each communication, the radio operator or controller will address the aircraft by its flight plan-filed Flight ID/Callsign for flight safety reasons. The aircraft, in turn, will re-state the caller’s identification, e.g., Gander Radio, as well as repeat the aircraft’s Flight ID.” Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
4.2	SV1-0012	FR	<p>COMMENT: I can only speak for the Montreal ACC (actually all ACCs in Canada except Gander) which doesn't have radio operators but have procedures in place for controllers to use SATCOM. The controller can, from the control position or the supervisor desk, query the system to determine if the A/C he/she needs to talk to is SATCOM equipped and if the system "finds the A/C it will do the dialling automatically and let the controller talk to the crew directly. I think efforts should be made to develop controller procedures as well, which in my view are not much different than those for the radio operators.</p> <p>SUGGESTED CHANGE:</p>	A	<p>12-Jan-11-TK – See also attached file beginning with <comment number>.</p> <p>31-Mar-11-TK – Note paragraph reference may have changed as comment made on v0.1. Defer to Ch 2/Ch4 Group for resolution.</p> <p>18 May 11 – MM Team – Chapter 4 team agrees with need to develop Controller procedures. We are first focusing on Radio Operators procedure, then we will either integrate the Controller procedures or create a separate set of Controller procedures as appropriate.</p> <p>22 Aug 11, MM: per our 18 May comment, Still awaiting feedback and disposition on RO procedures, before creating Controller procedures.</p> <p>16-Sep-11-IR-SVTF/2 - It is within the scope of the SVGSM to provide guidance on this. Guidelines are missing Develop/review adequate guidance material Chapter 3 – provision – publishing numbers Chapter 5 - Procedures for flight crew Chapter 4 - Procedures for controller Chapter 4 - Procedures for radio operator (??) Action – Joe Kelly will take action to address chapter 4 for controller-</p> <p>14-Feb-12-IRSVTF3-G1 - Resolution: Task Force added Controller procedures. Close.</p>	C
4.2	SV8-0395	DA	<p>COMMENT: Missing controller procedures</p> <p>SUGGESTED CHANGE:</p> <p>4.2 Controller procedures 4.2.1 Outgoing SATVOICE calls – Controller</p>		<p>14-Feb-12-IRSVTF3-G1 - Resolution: Task Force added Controller procedures. Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>initiated (ground to air)</p> <p>4.2.1.1 When initiating a direct controller-to-pilot communications SATVOICE call, the conversations will also maintain a standard of radio telephony procedure to ensure accuracy and clarity. Normally, these messages will be sent at the priority designated as Level 2 / HGH / Q12 per Table 2 1.</p> <p>4.2.1.2 The method of establishing ground initiated calls will be dependent on the technical/operational implementation at each one of the ATSU's. However, some steps should be common to each ATSU station regardless of the technical/operational methodology employed. These are:</p> <ul style="list-style-type: none"> a) Identify the aircraft SATCOM voice capability (i.e., Iridium, Inmarsat, or MTSAT) and correlate the access number (aircraft address represented by an 8-digit octal code) with the aircraft address or aircraft registration in the ATSU flight plan; b) Initiate the dialing sequence ensuring CLI/PIN and security measures to access the ground earth station are in place; c) Use priority levels defined in Table 2 1, as available from avionics manufacturer and satellite service provider; d) Wait for the flight crew to answer the call; e) Confirm the aircraft identification/call sign prior to delivering the clearance or message; f) Initiate the radio telephony conversation; and g) Terminate the call after the dialog is finished. <p>Example:</p> <p>Controller <Initiates call and line rings in flight deck></p> <p>Flight crew United 863.</p> <p>Controller United 863, Oakland Center, <message></p>			

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Flight crew Oakland Center, United 863, <read back message></p> <p>Controller United 863, Oakland Center, readback correct, out</p> <p>4.2.1.3 If an ATS unit recognizes that an aircraft is in imminent danger, an ATC message is urgent or delivery time is critical, the controller should use the most expeditious means of communications. If SATCOM voice is used as the first attempt, the controller should call the aircraft at the highest priority Level 1 / EMG / Q15 per Table 2 1 if possible, and state the threat or delivery the ATC message to the aircraft as part of the initial communication. If unable to contact the aircraft via SATCOM, then controller should revert to any other means of communication, including HF, VHF, or data link, to establish positive communications for that flight and state the threat to the aircraft as part of the initial communication.</p> <p>Example:</p> <p>Controller <Initiates call and line rings in flight deck></p> <p>Flight crew Air France 465.</p> <p>Controller Air France 465, Auckland Center, For Severe Weather avoidance, ATC clears <message></p> <p>Flight crew Auckland Center, Air France 465, <read back message></p> <p>Controller Air France 465, Auckland Center readback correct, out.</p> <p>4.2.1.4 At times it may be necessary for the controller to establish a conference call with more than one aircraft at a time. When this procedure is used the aircraft must be advised that they are on a conference call with more</p>			

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>than one aircraft participating. Example: Controller <Initiates calls and line rings in flight deck> Flight crew Air France 465. Controller Air France 465, Oakland Center, Standby we are initiating a conference call with Delta 123 who is initiating an emergency descent in your vicinity due to severe turbulence. Flight crew Oakland Center, Air France 465, Roger Controller <Initiates second calls and line rings in flight deck> Flight crew Delta 123. Controller Delta 123, Oakland Center, You are on conference call with Air France 465 who is in your vicinity at flight level 320. Say your current position and altitude. Flight crew Oakland Center, Delta 123, Roger, We are 20nm north of JMROY descending out of flight level 340 for 305. Controller Delta 123, Oakland Center, Roger, BREAK Air France 465 say current position. Flight crew Oakland Center, Air France 465, Roger we are currently 5nm south of FROTH. Controller Air France 465, Oakland Center, Roger, BREAK Delta 123 say altitude. Flight crew Oakland Center, Delta 123, Roger, We are maintaining flight level 305.</p>			

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Controller Delta 123, Oakland Center, Roger, Now Clear of traffic, Descend to F300. Report maintaining flight level 300 on CPDLC.</p> <p>Flight crew Oakland Center, Delta 123, Roger, Descend to flight level 305. Report Maintaining.</p> <p>Controller Delta 123, Oakland Center readback correct. BREAK Air France 465 Traffic is no longer a factor. out.</p> <p>Flight crew Oakland Center, Air France 465, Roger.</p> <p>Controller Delta 123, and Air France 465 Oakland Center out.</p> <p>4.2.1.5 Figure 4 1 provides a flow chart for SATCOM voice calls initiated by the Ground to the flight crew. Table 4 1 provides descriptions associated with each number flowchart i</p> <p>4.2.1.6 When receiving a direct controller-to-pilot communications SATVOICE call, the controller should follow radio telephony practices in responding to the call. Since the flight crew called the controller, the call will generally be ATC priority level 2 / HGH / Q12, but it may be an emergency call priority level 1 / EMG / Q15, depending upon flight status (Refer to Table 2 1).</p> <p>4.2.1.7 For SATVOICE calls made to an ANSP, the controller should:</p> <ul style="list-style-type: none"> a) confirm the identification of the calling flight; b) acknowledge message; read back the message or selected contents, as required; and; c) if necessary, provide primary and secondary HF frequencies to help ensure flight establishes HF/VHF and SELCAL check, when required. 			

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Example:</p> <p style="padding-left: 40px;"><line rings at ANSP></p> <p>Flight crew <Initiates call and line rings at ANSP></p> <p>Controller Flight calling New York Center</p> <p>Flight crew New York Center, Speedbird 255, <message></p> <p>Controller Speedbird 255, New York Center <read back message></p> <p>Flight crew New York Center, Speedbird 255, ROGER</p> <p>Controller New York Center OUT</p> <p>4.2.1.8 If the initial call from the flight crew to a controller is made on SATCOM, the controller should:</p> <p>a) receive and read-back the message, if required; and</p> <p>b) if necessary advise the aircraft of the primary and secondary HF frequencies.</p> <p>4.2.1.9 Figure 4 2 provides a flow chart for SATVOICE calls initiated by the flight crew. Table 4 2 provides descriptions associated with each number flowchart item.</p>			
4.2.1.1	SV8-0425	DA	<p>COMMENT: Revise to, “After initiating a DCPC SATVOICE call, the conversations are comparable to VHF and must maintain a standard of radio telephony procedure...”</p> <p>SUGGESTED CHANGE:</p>		<p>15-Feb-12-TK – Revise to 4.2.1.1 When using SATVOICE for DCPC, the controller should use standard radio telephony procedure to ensure accuracy and clarity. ...”</p> <p>Added Note. <i>Note.— After the SATVOICE call has been established, the controller and flight crew can interactively communicate comparable to VHF voice.</i></p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					. Close.	
4.2.1.2	SV8-0426	DA	COMMENT: Item c) Delete, “, as available from avionics manufacturer and satellite service provider” SUGGESTED CHANGE:		15-Feb-12-TK – accept. Close.	C
4.2.1.2 (i) & Table 4-1 4.2.2.2 (c) & Table 4-2 & examples	SV8-0429	MM	COMMENT: Why does this say, “Advise the aircraft as to the <u>required</u> communications media...?” SUGGESTED CHANGE: The air carrier should have the prerogative to choose their communications media. Delete this requirement.	S	16-Feb-12-IRSVTF/3 – Change “required” to “assigned.” Deleted “required” in the examples. Close.	C
4.2.1.5	SV8-0427	DA	COMMENT: Editorial changes SUGGESTED CHANGE:		15-Feb-12-TK – accept. Close.	C
4.2.1.5 and 4.2.2	SV8-0430	MM	COMMENT: Flowchart is missing to match Table 4-1 and Table 4-2. SUGGESTED CHANGE: Create flowcharts to be symmetrical with other sections.	S	16-Feb-12-IRSVTF/3 – Not complex for the controller, so didn’t do it. Not needed, but will look at in the editorial process. Added placeholders for new figures. 20-Feb-12-TK – added figures and revised tables to match. Close.	C
4.3	SV7-0303	DRM	COMMENT: Remove example of Radio Comms in this chapter not required and serves no purpose SUGGESTED CHANGE:	C	23-Sep-11-TK – See also comment SV7-0300. Ask group about examples. I don’t see harm in having them if they are correct. If they are not correct, that seems to justify the need for them, so we get all on the same page and clarify the procedures. 14-Feb-12-IRSVTF3-G1 - Resolution: The Task Force discussed the examples and found that there was value in the examples and they were retained. Close.	C
4.3.1.1 Table 4-1	SV7-0301	DRM	COMMENT: Item 3 Octal code is required but in the flight plan in 3.3 but in the example it places a hexadecimal code in the flight plan remarks section	C	23-Sep-11-TK – This sounds like something to address with the “ access number management issue. ” Action for Brad and Joe.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE: Any one of the three codes will work as most ANSP have a data base cross over from the N number to identify the airplane to the code...just need to be consistent in the use of the code and requirements.		16-Dec-11-TK – See revised 0.8.2 paragraph 2.6 and Chapter 3. Close.	
4.3.1.1 Figure 4-1	SV6-0188	GL	COMMENT: Only one attempt to make a SATCOM call? We need to give it more than one chance prior to using the other LRCS. SUGGESTED CHANGE:	C	23-Sep-11-TK – Figure 4-1 and Table 4-1, Step 6, revised to allow more than one attempt. Close.	C
4.3.1.1 Table 4-1 Step 5	SV6-0197	GL	COMMENT: Add Initiate SatVoice call to flight with appropriate priority level. Ed note: Should be included as part of the auto-dial function. The flow chart above will need to be modified SUGGESTED CHANGE:		4-Sep-11-TK – Accept. Close.	C
4.3.1.1 b)	SV1-0001	AL	COMMENT: Respond to an aircraft that identifies itself as “SATCOM” by restating “SATCOM” in conjunction with the aircraft call sign. Really the same logic that currently applies to aircraft using HF should apply to those on SATCOM. No issue with notifying SATCOM on the initial call regardless of who initiates the call it but it is redundant thereafter. Aircraft answering a SELCAL on HF will typically answer “UAL842 answering SELCAL” – but the ground station never replies or mentions the medium they are using as it is fairly obvious. The flight deck will be able to identify the call is via SATCOM just as ground station will know they are answering a phone call as opposed to a HF call. SUGGESTED CHANGE:		31-Mar-11-TK – Defer to Ch 2/Ch4 Group for resolution. 31-Mar-11-TK – Note paragraph reference may have changed as comment made on v0.1. Defer to Ch 2/Ch4 Group for resolution. 18 May 11 – MM – Chapter 4 team agrees and we have deleted that “SATCOM” identifying text. 1-June-11-TK – Close per above.	C
4.3.1.2	SV8-0431	MM	COMMENT: Need to clarify info to access various Satellite providers. SUGGESTED CHANGE: (a) Change to “Identify the aircraft SATCOM voice capability and associated access	S	16-Feb-12-IRSVTF/3 –Agree to address assurance that access number to switch that can find the aircraft on the correct commercial satellite is different than SATVOICE number for aircraft. Will clean up off-line with MM..	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			number. (b) Change sentence to read "...CLI/PIN and security measures to access the appropriate satellite provider's station." (Delete "are in place" too).		<p>20-Feb-12-TK – Revise document as follows: Added definitions: Access number. The PSTN number used by the ATSU, aeronautical station or aeronautical operational control (AOC) to access the network switch to contact an aircraft via SATVOICE.</p> <p>SATVOICE number. The number used to contact an aircraft or ground facility via SATVOICE. <i>Note.— The SATVOICE number takes different forms:</i></p> <p>a) <i>After the access number has been dialed, the aircraft SATVOICE number is the ICAO aircraft address represented by an 8-digit octal code;</i></p> <p>b) <i>The ATSU or aeronautical station SATVOICE number is a 6-digit short code or a PSTN direct dial number, which are published on aeronautical charts, AIP (or equivalent publication); and</i></p> <p>c) <i>AOC SATVOICE number is a PSTN direct dial number.</i></p> <p>Revised text throughout the document to be consistent with the above definitions. Close.</p>	
4.3.1.2 Example	SV6-0189	GL	<p>COMMENT: Presently the crew will not know who is calling.</p> <p>SUGGESTED CHANGE:</p>	S	<p>15-Sep-11-TK – Issue “non-compliance of current systems.”</p> <p>23-Sep-11-TK – Revised example to remove “caller” from pilot response. Close.</p>	C
4.3.1.2	SV7-0233	ML	<p>COMMENT: With the current version of SATCOM systems, it is not possible to know the origin of an incoming call.</p> <p>As a result, the procedure given as an example in paragraph 4.3.1.2 is not appropriate: “Gander Radio, Air France 465 go ahead”, since the crew cannot know which ground station is calling.</p>	S	<p>15-Sep-11-TK – Issue “non-compliance of current systems.”</p> <p>23-Sep-11-TK – Same as comment SV6-0189. Revised example to remove “caller” from pilot response. Caller ID display will move to appendix as desirable feature as agreed at IR-SVTF/2. Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE: Suppress “Gander Radio” in the procedure given as an example. In the future the display of the number of any incoming call should be encouraged, as it seems technically feasible (to be confirmed with Inmarsat and Iridium).			
4.3.1.2 4.3.2.2 5.2.2	SV7-0236	AL	<p>COMMENT: From what I can determine the phraseology examples that use the words “Go Ahead” in the following sections of the SVGM version 0.7 may non ICAO compliant. The examples are in sections:</p> <ul style="list-style-type: none"> · 4.3.1.2 · 4.3.2.2 · 5.2.2 <p>ICAO suspended the use of the words “Go Ahead” some time ago due to a number of air safety incidents . While these were primarily directed at the aerodrome environment there has been some changes to ICAO documentation as a result. New Zealand’s CAA’s AC (advisory circulars 91-9 and 172-1) prohibit the use of such words.</p> <p>There does not appear to be a word-for-word ICAO requirement however, ICAO Doc 9432 Manual of Radiotelephony on page 2-8 specifies that;</p> <p>Note. the phrase “GO AHEAD” has been deleted, in its place the use of the calling aeronautical station’s call sign followed by the answering aeronautical station’s call sign shall be considered the invitation to proceed with transmission by the station calling.</p> <p>There does not appear to be any RTF phraseologies examples in ICAO 9432 that includes the words “Go Ahead”.</p> <p>In Doc 9432 page 2-10 para 2.8.1 Establishment and continuation of communications it indicates that comms are established by using callsigns.</p>	C	23-Sep-11-TK – Removed “Go Ahead” from examples. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			Doc 4444 does not include any phraseology that includes these words. SUGGESTED CHANGE:			
4.3.1.2 example	SV8-0388	DRM	COMMENT: This not necessary....it is basic com 101 and nobody is going to read it. SUGGESTED CHANGE:		14-Feb-12-IRSVTF3-G1 - Resolution: The Task Force discussed the examples and found that there was value in the examples and they were retained. Close.	C
4.3.1.2 Example	SV3-0104	AL	COMMENT: Refer to: Example: <line rings in flight deck> Radio operator Air France 465, Gander Radio Flight crew Gander Radio, Air France 465 go ahead Radio operator Air France 465, Gander Radio, <message> Flight crew Gander Radio, Air France 465, <read back message> Radio operator Air France 465, Gander Radio, readback correct, out SUGGESTED CHANGE: Revise to: Example: Flight crew <answering line ringing in flight deck>Air France 465 answering Satcom.		1-Jun-11-TK – See v0.4 for revisions. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Radio operator Air France 465, Gander Radio, <message></p> <p>Flight crew Gander Radio, Air France 465, <read back message></p> <p>Radio operator Air France 465, Gander Radio, readback correct, out</p> <p>First row, could be “Air France 465 on SATCOM” Ground crew will answer first.</p> <p>Fourth row, Do we want to add here <message / ATC clearance> ?</p>			
4.3.1.2 a	SV7-0302	DRM	<p>COMMENT: add the following to the para...</p> <p>SUGGESTED CHANGE: of the aircraft from radio operator database and verified on the ICAO Flight Plan</p>	C	<p>23-Sep-11-TK – Action Chapter 4 Group.</p> <p>28-Dec-11-TK – Revise 4.3.1.2 a) to: a) Identify the aircraft SATCOM voice capability (i.e., Iridium, Inmarsat, or MTSAT) and correlate the access number (aircraft address represented by an 8-digit octal code) with the aircraft address or aircraft registration in the flight plan; Close.</p>	C
4.3.1.2 a	SV8-0385	DRM	<p>COMMENT: Do not think we should be that proscriptive...this could change later</p> <p>SUGGESTED CHANGE:</p>		<p>14-Feb-12-IRSVTF3-G1 - Resolution, The Task Force discussed the paragraph content and felt that the details in the paragraph provided a level of safety and elected to retain them. Close.</p>	C
4.3.1.2 a)	SV3-0080	SK/GC	<p>COMMENT: The term “Short Code” is mis-interpreted. A “Short Code” replaces the International Direct Dial (IDD) PSTN format. Ie: an aircraft can enter the 6 Digit Short Code of eg: “123456” as a replacement to the long format IDD number of “00-33-1-55-55-55” for a French number. <u>Short codes are used to “Dial the ground”.</u></p> <p>An “Octal Code” is the 8 digit equivalent of an aircraft’s 24 bit ICAO unique assigned address. <u>Octal codes are used to “Dial an aircraft”.</u></p>	C	<p>1-Jun-11-TK – It would seem that ground initiated calls procedurally should be via call sign or aircraft registration. Octal codes are an implementation means and should be linked to ACID.</p> <p>22-Jul-11-TK – Where does ICAO define the 8-digit ICAO code (octal) of the aircraft? Is that the aircraft address in octal?</p> <p>22 Aug 11, MM: Accept Inmarsat text suggestion: “Identify the 8 digit ICAO code (octal) of the</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Lastly, since this document is supposed to be Satellite operator independent, suggest also, to remove the word "Inmarsat".</p> <p>Ref: SVTF/1 WP/6 Section 2.2.1a) & b) refers to this topic.</p> <p>SUGGESTED CHANGE:</p> <p>4.3.1.2 a) Identify the 8 digit ICAO code (octal) of the aircraft from the radio operator database.</p>		<p>aircraft from the radio operator database.”</p> <p>23-Aug-11-TK – Incorporated change per above. Close.</p>	
4.3.1.2 c)	SV6-0198	GL	<p>COMMENT: Add new c), re-letter the remaining:</p> <p>c) The use of priority levels as indicated in chapter 3 of the SVGM.</p> <p>d) Wait for the flight crew to answer the call;</p> <p>e) confirm the aircraft call sign prior to delivering the clearance or message;</p> <p>f) Initiate the conversation; and</p> <p>g) Terminate the call after the dialog is finished.</p> <p>Ed note: Reference new section in chapter 3.</p> <p>SUGGESTED CHANGE:</p>		<p>4-Sep-11-TK – Revise to:</p> <p>c) Use priority levels defined in Table 3 1;</p> <p>Accept. Close.</p>	C
4.3.1.2.c	SV8-0386	DRM	<p>COMMENT: I do not believe this is a good statement. The priority levels should be determined by this guidance not the Avionics manufacturer and SSP</p> <p>SUGGESTED CHANGE:</p>		<p>14-Feb-12-IRSVTF3-G1 - Task Force discussed and removed the references to providers. . Any issues with the table will be handled in the disposition of Table 2.1. Close.</p>	C
4.3.1.2.e	SV8-0387	DRM	<p>COMMENT: delete clearance</p> <p>SUGGESTED CHANGE:</p>		<p>14-Feb-12-IRSVTF3-G1 - Task Force concurred, Deleted Clearance as proposed in the comment matrix. Closed.</p>	C
4.3.1.3	SV8-0389	DRM	<p>COMMENT: Are we suggesting that SatCom is the first</p>		<p>14-Feb-12-IRSVTF3-G1 - Task Force rejected the comment, there is no suggestion in the paragraph</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			mean here?.....it leads one to believe it. SUGGESTED CHANGE:		that states SV is the first means on Comm. In an emergency. Close.	
4.3.1.3	SV8-0326	MM	COMMENT: 2 nd sent., "...call the aircraft at the highest priority Level 1/EMG..." Add Q15, as we've used elsewhere in Chap. 4.		1-Nov-11-TK – Accept. Close.	C
4.3.1.4	SV8-0432	MM	COMMENT: Document organization is a little confusing here. SUGGESTED CHANGE: Move flowchart, Fig 4-1, after this section, since it was just referenced.	S	16-Feb-12-IRSVTF/3 – Move figure and table to paragraph that refers to them. Close.	C
4.3.1.4 Table 4-3, Ref 2 and 3O	SV8-0428	MM	COMMENT: These entries seem contradictory. Ref 2 presents a complete picture of long range communications and the use of various media and how SATCOM fits into those options. However, Ref 3O says the "other media" are outside the scope of this document. SUGGESTED CHANGE: Re-insert the complementary functions of various media and show how they are integrated in their use and options, as this document does in Ref 2 and other sections of this overall document (e.g., 2.1.3)	S	16-Feb-12-IRSVTF/3 – Revise the phrase indicating out of scope to “), e.g., HF or VHF voice.”	C
4.3.1.4 a)	SV1-0003	AL	COMMENT: – I doubt many ground facilities will have the ability to recall if an aircraft’s initial call was on HF but is now calling on SATCOM. If you are going to have such a procedure then do you need one for the reverse ie initial call on SATCOM but now calling on HF? Provided the identification process is established correctly there should not be an issue. SUGGESTED CHANGE:		31-Mar-11-TK – Note paragraph reference may have changed as comment made on v0.1. Defer to Ch 2/Ch4 Group for resolution. 18 May 11 – MM team – Chapter 4 team agrees; therefore, we had removed the SATCOM identification in version 3. 1-Jun-11-TK – Close per above.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
4.3.1.4 b)	SV1-0004	AL	<p>COMMENT: 4.3.1.4 b)– Same comment as for para 4.3.1.1 b) (Comment SV.1-0001), reiterating the word SATCOM. It’s unnecessary.</p> <p>SUGGESTED CHANGE:</p>		<p>31-Mar-11-TK – Note paragraph reference may have changed as comment made on v0.1. Defer to Ch 2/Ch4 Group for resolution.</p> <p>18 May 11 – MM Team – same answer as above. We agree and have deleted it.</p> <p>1-Jun-11-TK – Close per above.</p>	C
4.3.2	SV1-0005	AL	<p>COMMENT: Outgoing calls – 4.3.2.2 covers the radio operator procedures for delivering a clearance or message but over the page in section 4.3.2.4 In cases where an ATC message contains a clearance or instruction which will change the flight profile, a call back from the aircraft will be required before delivering the clearance. ? Any clearance will change the flight profile of an aircraft so I am not sure how these two sections tie up. Are the procedures here suggesting that no clearance can be issued by a ground initiated SATCOM voice call but the ground station needs to call the aircraft on SATCOM, identify itself and then have the aircraft call it back to pass the clearance?</p> <p>SUGGESTED CHANGE:</p>		<p>31-Mar-11-TK – Note paragraph reference may have changed as comment made on v0.1. Defer to Ch 2/Ch4 Group for resolution.</p> <p>18 May 11 – MM Team – Chapter 4 team does not agree with having the aircraft call back, so we have deleted that text from the Radio Operator (Ground-to-Air) section. However, we do believe that security measures are an important issue, and that is referenced in section 4.3.1.2.</p> <p>1-Jun-11-TK – Close per above.</p>	C
4.3.2.2 Example	SV3-0105	AL	<p>COMMENT: Refer to: Example:</p> <p style="padding-left: 40px;"><line rings at aero radio></p> <p>Flight crew Shanwick Radio, Speedbird 255</p> <p>Radio operator Speedbird 255, Shanwick Radio, GO AHEAD</p> <p>Flight crew Shanwick Radio, Speedbird 255, <message></p> <p>Radio operator Speedbird 255, Shanwick Radio <read back message></p> <p>Flight crew Shanwick Radio, Speedbird 255, ROGER</p>		<p>1-Jun-11-TK – See v0.4 for revisions. Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Radio Shanwick Radio OUT operator</p> <p>SUGGESTED CHANGE: Revise to:</p> <p>Example:</p> <p>Radio operator <answering line ringing at aero radio > “Shanwick Radio”</p> <p>Flight crew Shanwick Radio, Speedbird 255</p> <p>Radio operator Speedbird 255, Shanwick Radio, GO AHEAD</p> <p>Flight crew Shanwick Radio, Speedbird 255, <message></p> <p>Radio operator Speedbird 255, Shanwick Radio <read back message></p> <p>Flight crew Shanwick Radio, Speedbird 255, ROGER</p> <p>Radio operator Shanwick Radio OUT</p> <p>First row - Normal identification of station answering a telephone line</p>			
4.3.2.3	SV5-0151	TK	<p>COMMENT: Editor’s note 16 (v0.5). — (input from Guidance Material for SATCOM Voice Trial in NAT Airspace, May 2007) follows: Editor’s note 17 (v0.5). — TK – This text may be a duplicate of text in Chapter 5 for flight crew procedures.</p> <p>SUGGESTED CHANGE:</p>	R	23-Jul-11-TK - Delete Ed Notes. For Ed Note 16, change to document not needed. For Ed Note 17, See resolution to comment SV3-0078. Close	C
4.3.2.3	SV8-0337	MS	<p>COMMENT: As alluded to in 4.3.2.2 not all regions require SELCAL checks.</p> <p>SUGGESTED CHANGE: Add “where required by the</p>	E	1-Nov-11-TK – Consistent with Doc 4444 language, revised 4.3.2.3 b) to add, “when required by the regulatory appropriate ATS authority.” Revised 4.3.2.2 to same text as above. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			regulatory authority”.			
4.3.2.3 (formerly 4.3.1.2)	SV1-0002	AL	COMMENT: – Suggest removal of this section as it is already covered in 4.3.1.1 SUGGESTED CHANGE:		31-Mar-11-TK – Note paragraph reference may have changed as comment made on v0.1. Defer to Ch 2/Ch4 Group for resolution. 18 May 11 – MM Team – Chapter 4 team has deleted the redundant example, but we have left some of the text in for now. We can review again when version 4 is published. We also reversed the order of the outgoing (Ground-to-Air) and incoming (Air-to-Ground) sections, so 4.3.1.2 is now 4.3.2.3. 1-Jun-11-TK – Reassess in v0.4. 22-Jul-11-TK – Submit another comment if above did not address the issue. Close.	C
4.3.2.3	SV3-0106	AL	COMMENT: This procedure is already covered in c) in paragraph 4.3.2.2. SUGGESTED CHANGE: Delete paragraph and example		1-Jun-11-TK – Same as comment SV1-0002. Close.	C
4.3.2.3 b)	SV6-0190	GL	COMMENT: The crew would not be able to conduct the SELCAL check with the SATCOM RO. Pilots would have to terminate the call and conduct an HF SELCAL check with an HF RO. SUGGESTED CHANGE:	C	23-Sep-11-TK – Action Chapter 4 Group. 13-Jan-12-TK – See resolution status to comment SV8-0338, paragraph 4.3.2.4, Figure 4-2 and table. Close, please review v0.8.3 and resubmit comment with suggested changes, if necessary.	C
4.3.2.4 Figure 4-2	SV8-0433	MM	COMMENT: Flowcharts are significantly different in structure than previous versions. The format change can be ok, but the current version loses some of the overview of integrated long range communications. It particularly drops the ICAO Annex 10, Volume II, Chapter 5 requirements. SUGGESTED CHANGE: Re-insert those required ICAO Annex 10 elements, such as FIR boundary requirements (Annex 10 Vol II, sec 5.2.2.5) and	S	16-Feb-12-IRSVTF/3 – ICAO Annex 10 elements are provided separate to the flow chart in paragraph 4.4, to address global applicability concerns. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SELCAL procedure requirements (Vol II, sec 5.2.4).			
4.3.2.4 Figure 4.2 (6 & 8) and description	SV8-0338	MS	<p>COMMENT: This process is generally only required for non-CPDLC flights. The NAT comm requirements for CPDLC flights are unique to that region.</p> <p>SUGGESTED CHANGE: Edit as appropriate</p>	E	<p>1-Nov-11-TK – ACTION: Mary Ann, please can you resolve this comment?</p> <p>9-Jan-12-TK - Hi Mark, I'm in process of reviewing comments on SVGM and have question on one of yours.</p> <p>Can you please be more specific? Are you referring to:</p> <ul style="list-style-type: none"> a) the "FIR Entry procedure" concerning radio check / SELCAL b) the "FIR Exit procedure" concerning frequency assignment and contact c) both <p>9-Jan-12-MS - Both</p> <p>Only in some regions is a SELCAL check required at FIR entry for CPDLC flights. Likewise in most regions for CPDLC flights freqs are assigned by CPDLC.</p> <p>9-Jan-12-TK - Note I am proposing to reorganize the chart. Attached you will find original (Slide 1) on which you made your comment and current proposed change (Slide 2). I think maybe the new chart will take care of your comment, but not sure. Additional guidance can be provided on the decision blocks 6 and 9 (Slide 2) in the Table 4-2, but I'm wondering if you can tell me what the procedures covered by steps 6-9 (Slide 1 or Slide 2), whether region-specific or not, have to do with radio operator procedures for "flight crew initiated SATVOICE calls."</p> <p>a) Could these procedures just as well be provided</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>in a radio operator initiated call? I don't understand why they are part of the radio operator procedures for "flight crew initiated SATVOICE calls."</p> <p>9-Jan-12-MS - I agree</p> <p>b) On the frequency assignment and CONTACT procedure (Step 8 on Slide 1 or Step 10 on Slide 2), could this be a frequency assignment and MONITOR? Is this your comment? Also, Can CONTACT/MONITOR also be AERO RADIO instead of CENTER, which is what is indicated in the Step 8, slide 1 and Step 10 slide 2?</p> <p>9-Jan-12-MS - CONTACT/MONITOR should be ATC but in NAT regions it is often Aeradio for some odd reason.</p> <p>Can you help?</p> <p>9-Jan-12-MS - Comments in your text [above], unfortunately in this version of webmail I can't color them!</p> <p>Unfortunately this is an example of how much the NAT differs to other regions. For CPDLC flights elsewhere all the communications transfers are completed by ATC not Aeradio. As this is a generic document and SELCAL is not required in some regions I think we need to consider SELCAL check (if required) or probably two charts, one for datalink flights and one for flights reporting by voice.</p> <p>If you sent that chart [say] to Auckland Aeradio, I don't think they would find much in common for datalink flights, voice reporting flights maybe... Could I suggest that maybe via Paul you</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>communicate with Tim Halpin Manager of Auckland Air-Ground.</p> <p>9-Jan-12-TK – Thanks, Mark. I will take you up on that advice. It sounds as though if there is an issue, we should address it under the subject of communication transfers, not flight crew initiated SATVOICE calls. But I'll get with Paul and see how he might help.</p> <p>10-Jan-12-TK - Hi Paul, I was trying to resolve an issue with a comment from Mark on SATVOICE guidance material, but he suggests I contact Tim Haplin through you for help (See email thread below for original query to Mark). Any chance?</p> <p>I've attached the file. I also included slides 3 and 4, which provide the radio operator initiated SATVOICE calls (before and after), mainly for context.</p> <p>12-Jan-12-PR – Hi</p> <p>Finally had that chat with Tim today. He is against including anything other than the sat voice request in the flow chart. See attached.</p> <p>I'm of two minds - but we would need to come up with a way of representing that so that it has global applicability - I can see occasions where if someone has called you on sat voice then it may be sensible to do any associated communications management with the aircraft while you have got them on the line. But it gets messy - if aircraft has called you SATVOICE because they can't make HF comms there is not much point in doing a SELCAL check ;>)</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>13-Jan-12-TK – From above, see revised figure in v0.8.3.</p> <p>Editor’s note 7. — 9-Jan-12-TK – This ed note will be deleted in the next update to the SVG. Figure 4-2 was revised to address the following:</p> <ol style="list-style-type: none"> 1) Reorganized the flow diagram around functions, to show similarity between SATVOICE and other COM and to emphasize SATVOICE; 2) Revised Flight ID to Aircraft ID to be consistent with ICAO definitions; 3) Added reference to paragraph 3.2.4 for radio operator provisions to answer SATVOICE call; 4) Added references to Chapter 5 for flight crew procedures;and 5) Removed procedures for radio check / SELCAL and HF/VHF frequency assignments and placed in a new section 4.4, Using SATVOICE for other voice COM management. <p>Added new section 4.4</p> <p>4.4 Using SATVOICE for other voice COM management</p> <p>4.4.1 Other voice COM radio check – SELCAL</p> <p>4.4.1.1 The radio operator may use SATVOICE to instruct the flight crew to perform a radio check – SELCAL, as required in accordance with established procedures either by initiating a SATVOICE communication or as part of a flight crew initiated communication.</p> <p><i>Note. The radio operator or flight crew may have initiated a SATVOICE call owing to inability to establish communications with the intended party using other voice COM.</i></p> <p>4.4.2 Other voice COM frequency assignments</p> <p>4.4.2.1 The radio operator may use SATVOICE to</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>instruct the flight crew to assign primary and/or secondary frequencies on VHF/HF, as required in accordance with established procedures, either by initiating a SATVOICE communication or as part of a flight crew initiated communication.</p> <p><i>Note. At the FIR exit boundary, the radio operator would communicate with the current and next centers, as appropriate, in accordance with established procedures.</i></p> <p>Please review v0.8.3 and resubmit comment with suggested changes, if necessary. Close</p>	
4.3.2.4	SV8-0352	TK	<p>COMMENT: Figure 4-1 cannot be edited to address comments. Also,</p> <ol style="list-style-type: none"> 1) when ATC sends message to RO, RO must first assess whether or not to use SATVOICE; 2) The details on determining octal code seem too implementation specific and the procedure is missing other items associated with establishing the call, such as access codes, user ID, PIN, priority level, which are discussed in other parts of the SVG. The table and chart should generalize specific implementation and include other aspects discussed elsewhere in the SVG. 3) The SVG specifications refer to “call” to mean the communication that takes place between the RO and flight crew. The flow chart/table is referring to call, to mean “establish communications.” 4) Other comment on flight crew procedures being addressed in Chapter 5. Flight crew procedures should be for reference only in context with RO procedures. 5) Per ICAO 4444, Flight ID refers to a group of numbers, which is usually associated with an ICAO designator for an aircraft operating agency, to identify the aircraft in Item 7 of the flight plan. The proper term here is aircraft identification. <p>SUGGESTED CHANGE: Suggested changes embedded in each point above.</p>		<p>13-Jan-12-TK – Editor’s note 5. — 7-Jan-12-TK – This ed note will be deleted in the next update to the SVG. Figure 4-1 was revised to address the following:</p> <ol style="list-style-type: none"> 1) Reorganized the flow diagram around functions, to show similarity between SATVOICE and other voice COM and to emphasize SATVOICE; 2) Added a decision block for radio operator to choose SATVOICE; 3) Generalized means to derive octal code for aircraft; data base/tools too implementation specific; included other necessary components, e.g., access number, user ID, PIN, priority level, etc., to align with other sections of document. Added reference to paragraph 3.2.4; 4) Refer to communications establishment to clarify that “call” has not been completed (successful) at this stage; 5) Added reference to Chapter 5 for flight crew procedures; and 6) Revised Flight ID to Aircraft ID to be consistent with ICAO definitions. <p>If necessary, please review v0.8.3 and submit new comments with suggested changes. Close.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
4.4 (Page 4.6)	SV3-0078	ML	<p>COMMENT: This paragraph “Flight Crew Procedures” overlaps with paragraph 5. (Flight Crew Procedures) and has to be suppressed (it does not have to be placed in Chapter 4 (Controller and radio operator procedures))</p> <p>SUGGESTED CHANGE: suppress paragraph 4.4</p>	S	<p>1-Jun-11-TK – Accept comment.</p> <p>a) Revise 4.3.2 to “Incoming calls – radio operator receives calls (air to ground)</p> <p>b) Revise 5.3 to “Flight crew receives call”</p> <p>c) 4.4.1 is covered by 5.1.4. Delete 4.4.1</p> <p>d) 4.4.1.1.1 is covered by 5.2.2. Delete 4.4.1.1.1</p> <p>e) 4.4.1.2.1 is covered by 5.3.1. Delete 4.4.1.2.1</p> <p>f) 4.4.1.2.2 is covered by 5.3.2. Delete 4.4.1.2.2</p> <p>g) 4.4.1.3.1 merged with 5.1.3. Delete 4.4.1.3.1.</p> <p>h) 4.4.1.4.1 merged with 5.5.2.1. Delete 4.4.1.4.1.</p> <p>Review in v0.4 and submit new comments, if necessary.</p> <p>Close</p>	C
4.4.1.1	SV8-0434	MM	<p>COMMENT: This paragraph is confusing and incomplete.</p> <p>SUGGESTED CHANGE: Change to “...instruct the flight crew to perform an HF radio check and SELCAL check, as required in accordance with ICAO Annex 10, Volume II, sec 5.2.4.” Delete the remainder.</p>	S	16-Feb-12-IRSVTF/3 – Accept. Close.	C
4.4.1.2.1	SV3-0081	SK/GC	<p>COMMENT: There appears to be references to future Airbus & Boeing appendices. The current appendix A & B assignments are incorrect. Suggest to replace with TBD’s.</p> <p>SUGGESTED CHANGE:</p> <p>4.4.1.2.1: Visually confirm the priority of the incoming call and verify that it is an ATC (safety priority) call, see type specific guidance in Appendix TBD (Airbus) and TBD (Boeing). Reply to calls with the flight identification.</p>	E	<p>1-Jun-11-TK – Deleted text. Flight crew procedures covered in Chapter 5. Airframe specifics for meeting performance-based criteria will be covered by reference to specific aircraft manuals and flight crew training programs assisted by OEMs, beyond scope of this guidance material. See also resolution to comment SV3-0078. Close.</p>	C
4.4.1.3.1	SV3-0101	JK	<p>COMMENT: Wording needs serious change. I suggest the following.</p> <p>SUGGESTED CHANGE:</p>		1-Jun-11-TK – See resolution to comment SV3-0078 and paragraph 5.1.3, slight revision to include HF voice, “On initial contact with a radio station, the flight crew should provide flight identification	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			On initial contact with a radio station flight crews should provide flight identification and request frequency assignment and perform a Selcal check on HF. After a successful Selcal check all subsequent communications with that radio station may be performed via SATCOM Voice based on regulatory requirements and company policies.		and request frequency assignment and perform a SELCAL check on HF. After a successful SELCAL check, all subsequent communications with that radio station may be performed via SATCOM Voice or HF voice based on regulatory requirements and company policies.” Close.	
4.4.2 (Previously 4.5.2)	SV7-0304	DRM	COMMENT: add item e SUGGESTED CHANGE: Comply with ICAO lost comm. procedures	A	23-Sep-11-TK – Revise 4.5.2, now 4.4.2.1 to: 4.4.2.1 In situations where the controller or radio facility loses capabilities, then the radio operator should comply with procedures related to emergencies, communication failure and contingencies provided (Doc 4444, Chapter 15) and use whatever means are available to provide information on the emergency situation and any directives, for example: ... Close.	C
4.4.2.1	SV8-0435	MM	COMMENT: This paragraph is incomplete. SUGGESTED CHANGE: Change to “...in accordance with ICAO Annex 10, Volume II, sec 5.2.2.5.”, replacing “established procedures”.	S	16-Feb-12-IRSVTF/3 – Accept. Close.	C
4.5 5.5.2.b	SV7-0306	DRM	COMMENT: If SatCom is inop... Infor Appropriate RO to advise the host ATSP of the comm degradation. SUGGESTED CHANGE:	C	28-Dec-11-TK – The comment concerns procedures for radio operator in Chapter 4. How is this handled? Does aeronautical station contact ATC? What about downstream ATC? Maybe some guidance in Section 4.4? 6-Jan-12-TK/SK – Reassign comment to 4.5. 14-Feb-12-IRSVTF3-G1 - Task force added a paragraph to resolve this issue. Close.	C
4.5	SV8-0354	TK	COMMENT: Do we need procedural guidance on handling “dropped” calls? If radio operator receives call from flight crew, does RO try to reestablish? Or is it up	A	14-Feb-12-IRSVTF3-G1 - Closed, covered under para 4.5.1.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			to initiating party to determine the need to re-establish the call? SUGGESTED CHANGE: Add guideline to clarify.			
4.5.1 (Previously 4.5.1)	SV7-0312	MM	COMMENT: This is redundant to previous text, but could still be noted here in a separate failures & emergencies section. SUGGESTED CHANGE:	E	23-Sep-11-TK – Do we leave as is or remove redundancy? 28-Dec-11-TK – 4.4.1 seems to cover crew initiated and controller initiated calls. Previous text seems to only address controller initiated calls. Is the intent for only the caller to re-establish communication in the event of lost connection, i.e., the crew for crew initiated calls? 13-Jan-12-TK – Comment editorial with no suggested change. Given revisions to Chapter 4 by other comments, please review v0.8.3 and resubmit with suggested change. Close.	C
4.5.1.1 a)	SV3-0082	SK/GC	COMMENT: If in the odd chance the existing call to the aircraft is disconnected for any reason, one should do what we do on the for our mobile phones and that is to re-dial the aircraft using the exact same method at least one more time, before trying HF/VHF? SUGGESTED CHANGE: Add a step prior to the existing a) with the following: a) Attempt to re-dial the aircraft as was done previously on SATCOM and repeat the message. Failing this further attempt, try the following... 3 Then re-number the other sub-bullets...	S	1-Jun-11-TK – I agree. At least list SATCOM Voice retry as an option and leave it to radio operator/controller discretion, e.g., “the radio operator should: a) attempt to contact the aircraft using any means at their discretion, e.g., SATCOM retry, HF (SELCAL), VHF or relay through another flight.” 22 Aug 11, MM: Agree with TK’s resolution comment. Reword (a) to “...attempt to contact the aircraft using any means at their discretion, e.g, Satcom Voice retry, HF (SELCAL), Datalink, or relay through another aircraft, <i>in order to establish positive voice communications for that flight.</i> ” 23-Aug-11-TK – Incorporated change per above, minus “in order.” Close.	C
4.5.1.1 a)	SV3-0107	AL	COMMENT: Refer to: “a) attempt to contact the aircraft on HF (SELCAL) or VHF;”	C	1-Jun-11-TK – Never know with Corporate or may be inbound into VHF coverage. Does it matter? Could radio operator possibly try again on	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			Unlikely to be on satcom voice when in VHF coverage. SUGGESTED CHANGE:		SATCOM? Item c) seems like it has an odd condition. If SATCOM voice is lost and “if the connection fails???” What does that mean and by what means would they advise to revert to HF voice? Would it be HF voice? Please clarify. 22 Aug 11, MM: Change/expand 4.5.1.1a text to read, “...attempt to contact the aircraft using any means at their discretion, e.g., Satcom Voice retry, HF, Datalink, or relay through another aircraft, <i>in order to establish positive voice communications for that flight.</i> 23-Aug-11-TK – Per above and same as resolution to comment SV3-0082. Close.	
4.5.1.1 c)	SV5-0158	TK	COMMENT: para c, odd condition	C	22 Aug 11, MM: Agree. Delete (c) 23-Aug-11-TK – The resolution status above came from MM file, dated 22-Aug-11, on v0.5. I could not find this comment in the Master, so I added it here as new comment. 23-Aug-11-TK – This came from resolution status to comment sv3-0107. Deleted c). Close.	C
4.5.2.1 c	SV7-0287	JM2	COMMENT: It would not be possible for the radio operator to use Volmet broadcasts. SUGGESTED CHANGE: We should delete this entry as it is confusing	R	23-Sep-11-TK – Per Chapter 4 group, revised to “d) Volmet broadcasts, containing emergency information, where available; and” Close.	C
5	SV6-0207	TP	COMMENT: However, I have now been given a even more urgent task by our CEO so with your permission, I would like to take to talk through the ideas which I intend to discuss with Inmarsat on Friday next week. In brief these ideas revolve around the need for each Satcom equipped aircraft to log-on to the communication centre before departing continental airspace.	A	4-Sep-11-TK – From email, dated 24-Aug-11. 14-Sep-11-IR-SVTF/2 – Currently nothing in guidance material on this issue 3-Jan-12-TK – Check with Steve Kong. 6-Jan-12-TK/SK – Currently, guidance material	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Ideally this check would be achieved while the aircraft is still on the ground and the twin purposes of the check are 1) to allow the comm. centre to reconcile the Satcom number with the flt number and 2) correlate the tail number with the ICAO 24 bit Mode S address.</p> <p>This would perhaps require the same check to be repeated either at, or preferably prior to the boundary of each FIR unless of course, the comm. centres are already able to exchange this data as the flight proceeds through their airspace? So I shall now investigate this aspect through my colleagues in National Air Traffic Services and attempt to have an answer in time for your Seattle meeting.</p> <p>The second proposal which I intend to discuss with Inmarsat is whether they are able to simplify the existing procedures which currently require the comm. centre to use a PIN number to authenticate each ground to air call and whether they have developed a procedure or technique which will enable the aircraft to remain "logged-on" to the satellite service even in the absence of an on-going call to or from the aircrew.</p> <p>Ideally the same principle would be applied to the continued availability of a communications path from the comm. centre to the satellite and I am additionally assuming that if this were provided, the service would naturally support the ability to pre-empt any other calls into the cockpit.</p> <p>So Tom, I hope these proposals sound sensible to you and I wish you well for the Webex session and for the upcoming meeting in Seattle.</p> <p>SUGGESTED CHANGE:</p>		<p>relies on the comm. Center to determine aircraft SATCOM capability (MTSAT, INMARSAT and/or Iridium) and associated SATCOM number based on flight plan information and automation, taking into consideration any data bases provided by third party. There is no guideline for the flight crew to contact the comm. center. IN the longer term, flight plans will include both aircraft registration and the aircraft address (i.e., ICAO 24 bit mode S address).</p> <p>Concerning the second proposal, see resolution to comment SV3-0118 for the second part of the proposal. The use of the PIN currently provides the means to ensure authorized calls to the flight deck. Please, review most current draft and resubmit comment with specific proposed changes, if necessary. Close.</p>	
5	SV7-0235	ML	<p>COMMENT: Should we recommend that, once established, <u>the crew has to maintain a call open with</u></p>	A	6-Jan-12-TK/SK – We don't think you want to keep a call open over long periods of time. If additional	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p><u>ATC until further notice</u>, as with HF (instead of hanging up when a clearance is acknowledged)? This is not really precised in the ground-to-air or in the air-to-ground procedures.</p> <p>SUGGESTED CHANGE:</p>		material is necessary, please review current draft and resubmit comment and make a suggested change, if necessary. Close.	
5.1.1	SV7-0276	JC2	<p>COMMENT: FMC WPR – has this been defined? Not found chapter 1.</p> <p>SUGGESTED CHANGE:</p> <p>Noted there are flight crew procedures in chapter 4. It seems to me that is dedicated to chapter 5.</p>	C	<p>28-Dec-11-TK – Added definitions to Chapter 1: Flight management computer waypoint position reporting (FMC WPR). A data link capability used for position reporting.</p> <p>Note. — See also the GOLD.</p> <p>FMC WPR. The symbol used to designate flight management computer waypoint position reporting.</p> <p>Chapter 4 is intended for controller/radio operator only. Information concerning flight crew actions are for reference to the controller radio operator only and are intended to be consistent with the flight crew procedures in Chapter 5. Please submit specific comments if discrepancies are found. Close.</p>	C
5.1.1	SV8-0351	IM	<p>COMMENT: “The flight crew may use either SATCOM or HF voice at their discretion”. This conflicts with other statements (on communications priority) in the Manual plus may not be correct in some FIRs.</p> <p>SUGGESTED CHANGE: The flight crew may use either HF voice or SATCOM (if approved).</p>		13-Jan-12-TK – Revised sentence in 5.1.1 to, “The flight crew may use either SATCOM or HF voice at their discretion, provided the use is in accordance with airspace requirements established by Regional SUPPs, AIPs (or equivalent) for the flight (Refer to paragraph 2.1 and paragraph 3.2.3).” Close.	C
5.1.1	SV4-0126	BC	<p>COMMENT: Paragraph 5.1.1 does not read well.</p> <p>SUGGESTED CHANGE: Replace with “Operators with data link equipped aircraft (CPDLC, ADS-C, and FMC WPR) operating in airspace where data link services are provided should use data link as their normal means of communications. Some normal ATC</p>		22-Jul-11-TK – Accept. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			communications and most non normal communications will require use of voice communications. Flight crews should use either SATCOM or HF voice at their discretion. Urgency, type of message being communicated, current atmospheric conditions, and company standard operating procedures are all factors in determining which voice system to use.”			
5.1.3	SV8-0339	MS	COMMENT: SELCAL check not required in all regions SUGGESTED CHANGE: Edit to reflect this	E	1-Nov-11-TK – Revise to: “5.1.3 On initial contact with a radio station, the flight crew should provide flight identification and request frequency assignment and perform a successful SELCAL check on HF, when required by the appropriate ATS authority. Subsequent communications with that radio station may then be performed via SATCOM voice or HF voice, in accordance with applicable airworthiness, operating and airspace requirements.” Close.	C
5.1.3	SV2-0065	MM	COMMENT: Revise “should” to “may” SUGGESTED CHANGE: 5.1.3 The flight crew may use either SATCOM voice or HF voice to contact the radio operator as appropriate.	E	31-Mar-11-TK – Incorporated into v0.3. Close	C
5.1.4	SV2-0066	MM	COMMENT: Refer to “. The radio station facilities are interconnected.” This statement needs clarification. How are they interconnected? SUGGESTED CHANGE:	C	31-Mar-11-TK –Defer to Ch 5 Group for resolution. 1-Jun-11-TK – I don’t think the sentence is needed. The guidance follows, revised to, “If communications are lost with the current aero radio station, the flight crew should attempt contact with any other aero radio station to relay.” Close.	C
5.1.5	SV6-0199	GL	COMMENT: Add new paragraph, “Call priority levels should be in accordance with chapter 3 of the SVGM. Priority levels, as indicated to flight crews, must be specifically identified in training material and in SARPS information.”	S	4-Sep-11-TK – What is the guideline for the flight crew. The construct of the guideline should be, “The flight crew should (use priority levels in accordance with Table 3-1?) Is the operator required to train its crews on how to use priority	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>Ed note: Reference new section in chapter 3 for priority information.</p> <p>SUGGESTED CHANGE:</p>		<p>calling, that would be another guideline in Chapter 3. Does the flight crew have this capability?</p> <p>15-Sep-11-TK – Issue “Priority level management”</p> <p>16-Sep-11-TK – Reference comments SV7-0244 (contains resolution status from IR-SVTF/2) see also SV7-0264 SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241</p> <p>20-Sep-11-DR- Priority Level- The satellite voice equipment should configure the cockpit default priority to level 2. The flight crew must have the capability to set the priority level for an individual call.</p> <p>21-Sep-11-DRM – Concur with DR.</p> <p>28-Dec-11-TK – Revise para 5.2.2 5.2.2 When contacting ATC, the flight crew should initiate calls to ATC using the appropriate priority level 2 / HGH / Q12 or priority level 1 / EMG / Q15 in accordance with Table 2 1. Revise para 5.3.2 per resolution to comment SV5-0166, Chapter 3.3.3.1. Close</p>	
5.1.5	SV7-0270	GL	<p>COMMENT: The SATCOM system will not alert the crew when it is not operating correctly on all aircraft. (5.1.5 SVGM) (Par. 7 (b) AC 20-150A)</p>	S	<p>15-Sep-11-TK – Issue “non-compliance of current systems.”</p> <p>16-Sep-11-IR-SVTF/2 - We need to be sensitive</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			SUGGESTED CHANGE:		<p>about the current fleet, but we need to be reasonable about what is needed to standardize and globally harmonize SATCOM voice operations All issues have been resolved. Aircraft that do not alert to flight crew for loss of SATCOM voice capability (aircraft equipment) will need to be updated</p> <p>17-Sep-11-IR-SVTF/2 - For aircraft equipment failure Resolution rules It is in AC 20-150A and this is a valid requirement for approval as a Long Range Communication System. See AC 20-150A, section 8, flight deck annunciation. Aircraft that do not meet this requirement will not be in compliance with the SVGM or the AC 20-150A.</p> <p>Close.</p>	
5.1.5	SV6-0191	GL	<p>COMMENT: Regarding first sentence, We say in 5.1.3 that the crew should make an HF SELCAL check prior to use of SATCOM voice therefore a HF SELCAL will always be required.</p> <p>SUGGESTED CHANGE:</p>	C	28-Dec-11-TK – Revised 5.1.3 to qualify SELCAL check... “when required by the appropriate ATS authority.” Close.	C
5.1.5	SV8-0368	LR/CM	<p>COMMENT: Note following Section 5.1.5 “Note. The flight crew does not need to check the SATCOM voice system, similar to HF SELCAL, because the system will alert the flight crew of equipment failures.” Can the aircraft avionics SATCOM voice equipment indicate a failure on the ground-ground connection or just the air-ground connection? Is it possible to know if a call will be successful from one call to the next due to PSTN issues?</p> <p>SUGGESTED CHANGE:</p>		<p>16-Jan-12-TK – The failure of the ground-ground connection(s) are considered part of the SATCOM voice service availability as it could affect more than one aircraft and is treated as part of the notification of outage covered by other guidelines in the SVGM. Revise note to: <i>Note. The flight crew does not need to check the SATCOM voice system, similar to HF SELCAL, because the system will alert the flight crew of aircraft equipment failures.</i></p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					Close.	
5.1.5	SV8-0327	MM	<p>COMMENT: "...the system will alert the crew if the system is not working properly." Per our SEA mtg discussion, this is not true today, so a Satcom radio check needs to be done. We could also note a future requirement to develop fault notification. Perhaps add this to Appendix D as well?</p>		<p>1-Nov-11-TK - Per SEA we discussed that this was not true for some systems; however, the conclusion was, per slide 24 from the meeting presentation, as follows:</p> <p>For aircraft equipment failure Resolution rules It is in AC 20-150A and this is a valid requirement for approval as a Long Range Communication System. See AC 20-150A, section 8, flight deck annunciation.</p> <p>However, I did make the second sentence of paragraph 5.1.5 a note as there is no action or procedural guidance in the sentence. It explains why a check is not needed. Revised to: "5.1.5 If a HF SELCAL check is required before or after entering a FIR, the flight crew should contact the radio operator and complete a HF SELCAL check. <i>Note. The flight crew does not need to check the SATCOM voice system, similar to HF SELCAL, because the system will alert the flight crew of equipment failures.</i>" Close.</p>	C
5.1.7	SV8-0438	GL	<p>COMMENT</p> <p>When a SATVOICE system is not associated with aircraft alerting systems, a method to determine system status prior to entry into a FIR that requires its use should be used. Please consider modifying the "Note" in 5.1.7 to read:</p> <p>SUGGESTED CHANGE</p> <p><i>Note If a SATVOICE system does not provide</i></p>		<p>23-Feb-12-TK – 5.1.7 guideline is on HF radio check and SELCAL checks. See paragraph 5.1.3 on SATVOICE check. Deleted note under 5.1.7. Revised paragraph 5.1.3 as follows:</p> <p>5.1.3 During pre-flight or prior to entry into airspace that requires use of SATVOICE, the flight crew should ensure the aircraft SATVOICE system is operational and there are no notifications of SATVOICE service outage in that airspace.</p> <p><i>Note.— The flight crew will typically receive an</i></p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p><i>notifications or alerts via aircraft alerting systems (e.g., Master Caution or EICAS), SATVOICE system status (e.g., signal strength and “log on” status) should be verified prior to entering each FIR that requires its use as a LRCS in accordance AIP, Regional Supplements or equivalent.</i></p> <p>:</p>		<p><i>alert for aircraft SATVOICE system failures. For aircraft SATVOICE systems that do not provide alerts of equipment failures, the flight crew verifies system status in accordance with established procedures (e.g., review of signal strength and “log on” status). The aircraft satellite communication system needs to be automatically or manually logged on to a satellite and ground earth station (GES) before SATVOICE call can be made. See paragraph 3.3.4.</i></p> <p>Close.</p>	
5.2	SV7-0305	DRM	<p>COMMENT: Remove examples of radio transmission as they serve no purpose</p> <p>SUGGESTED CHANGE:</p>	C	<p>14-Feb-12-IRSVTF3-BC – Retained examples.</p> <p>Close.</p>	C
5.2.1	SV1-0006	AL	<p>COMMENT: Same comment as previous regarding repetition of the word SATCOM when it has already been established and its fairly obvious to aircrew and a ground station.</p> <p>SUGGESTED CHANGE:</p>		<p>31-Mar-11-TK – Note paragraph reference may have changed as comment made on v0.1. Defer to Ch 5 Group for resolution.</p> <p>1-Jun-11-TK – I believe this was accepted. Resubmit, if necessary. Close.</p>	C
5.2.2	SV7-0269	GL	<p>COMMENT: Compliance with 5.2.2 of the SVGM and AC 20-150A Paragraph 6 (e) will require updates to the “ORT Tables” and “Phone Directories” as not all operators have the default call level set at “Level 2” for all “Flight Safety” Calls.</p> <p>SUGGESTED CHANGE:</p>	S	<p>15-Sep-11-TK – Issue Priority level management and “non-compliance of current systems.”</p> <p>16-Sep-11-TK - Reference comments SV7-0244 (contains resolution status from IR-SVTF/2) see also SV7-0264 SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					SV7-0241 20-Sep-11-DR The GES equipment should be configured to the default priority level 2. The controller /dispatch must have the capability to set the priority level for an individual call. 21-Sep-11-DRM – Concur with DR. 28-Dec-11-TK – Guidance is per above, Level 2 or higher required for ATC. Comment is concerning compliance actions. Close.	
5.2.2	SV7-0225	LP	COMMENT: add or Aeronautical Radio to keep consistent with words in Example.	A	28-Dec-11-TK – Revise to “aeronautical station/ATSU” Close.	C
5.2.3 (formerly 5.2.2)	SV1-0007	AL	COMMENT: Onboard failure prevents use of SATCOM voice, the flight crew should a) not advise SATCOM is unavailable ? This seems a little strange unless the procedure is for Arctic Radio only. Given the procedures are waited to notifying SATCOM in a lot of situations why wouldn't you advise the ground station when SATCOM is unavailable? Notification of such a failure would prevent the ground station attempting to call a aircraft on SATCOM and instead would use HF as the primary means. SUGGESTED CHANGE:		31-Mar-11-TK – Note paragraph reference may have changed as comment made on v0.1. Defer to Ch 5 Group for resolution. 1-Jun-11-TK – Now 5.2.3. Moved intent of 5.2.3 to 5.5.2.1, deleted 5.2.3. Close.	C
5.3.1	SV6-0200	GL	COMMENT: Revise as follows: 5.3.1. Flight crews should visually confirm the priority of any call received on the flight deck. Calls lower than Level 3 / Low should not be routed the flight deck. If an clearance or information that affects the flight path of the aircraft is received, the flight crew should visually confirm the priority of the incoming call and verify that it is a Level 2 / HGH or higher priority call. Call priority is indicated in chapter 3 of the SVGM. Reply to calls utilizing standard	S	4-Sep-11-TK – Again what is the guideline for the flight crew in routing Level 3 calls? Is this a Chapter 3 requirement for the aircraft, i.e., airworthiness? 15-Sep-11-TK – Issue “priority level management.” 16-Sep-11-TK - Reference comments SV7-0244 (contains resolution status from IR-SVTF/2) see also SV7-0264	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>phraseology (see paragraph 5.1.2)</p> <p>Ed note: Reference new section in chapter 3.</p> <p>SUGGESTED CHANGE:</p>		<p>SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241</p> <p>20-Sep-11-DR- Priority Level As per AC 20-150A, section 7.e The satellite voice equipment should configure the cockpit default priority to level 2. The flight crew must have the capability to set the priority level for an individual call.</p> <p>21-Sep-11-DRM – Concur with DR.</p> <p>28-Dec-11-TK – Criteria for satellite voice equipment and routing of calls to flight deck are addressed in Chapter 3. Revise paragraphs as follows: “5.3.1 The flight crew should visually confirm the priority level of the incoming call and verify the appropriate priority level for an ATC call. Reply to an ATC call using standard phraseology (see paragraph 5.1.2) 5.3.2 The flight crew should act only on ATC instructions from SATCOM calls with priority level 2 / HGH / Q12 or priority level 1 / EMG / Q15 per Table 2 1, and if in doubt terminate the call and initiate a new call for confirmation.” Close.</p>	
5.3.2	SV7-0271	GL	<p>COMMENT: Not all manufactures are planning on display of priority codes. To comply with 5.3.2 of the SVGM the crew must be able to view the priority to determine if the call is valid.</p>	S	<p>15-Sep-11-TK – Issue “Priority level management” and “non-compliance of current systems.”</p> <p>16-Sep-11-TK - Reference comments SV7-0244 (contains resolution status from IR-</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			<p>SUGGESTED CHANGE:</p>		<p>SVTF/2) see also SV7-0264 SV5-0162 SV7-0242 SV7-0294 SV6-0199 SV7-0269 SV6-0200 SV7-0271 SV6-0208 SV7-0241</p> <p>20-Sep-11-DR- Priority Level As per AC 20-150A, section 7.e The satellite voice equipment should configure the cockpit default priority to level 2. The flight crew must have the capability to set the priority level for an individual call.</p> <p>21-Sep-11-DRM – Concur with DR.</p> <p>28-Dec-11-TK – I don't think the above, which concerns outgoing calls, solves the comment, which concerns incoming calls. Equipment capability should be addressed in Chapter 3. If priority is not displayed, then crew would have no way to confirm appropriate priority level of call from ATC. I suppose that if the aircraft equipment only allowed priority level 2 and level 1 calls to be routed to the flight deck per paragraph 3.3.4.3, then presumably the flight crew would not need to verify the priority level.</p> <p>6-Jan-12-TK/SK – The guideline is currently agreed and aircraft that do not meet it will need to comply if they want to play under this guidance material. Review current version and resubmit with suggested change, if necessary.</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>13-Jan-12-TK – Brad to action to propose some language change. Apparently, not all flight crews confirm priority either. Some aircraft will route level 4 (PUB) calls to the flight deck, e.g., corporate/GA.</p> <p>13-Jan-12-TK – from email → Brad, can you by chance find some time to look at the SVG, Chapter 5 language on priority level confirmation and Grant's comment.</p> <p>I was thinking a possible solution might be:</p> <ul style="list-style-type: none"> a) When the aircraft restricts calls to the flight deck to Level 3 or higher, then the crew does not need to confirm priority of the call. b) The condition on restricting calls to the flight deck is currently a guideline in Chapter 3 for aircraft equipment, but I understand that this can be changed by the ORT and I'm told some aircraft (e.g., for corporate operations) take public calls in the flight deck. If this is indeed the case, that is a separate issue to deal with separately. c) Note that when the SATVOICE system does meet the condition on restricting calls to the flight deck, I believe that we do not need to worry about AOC (the priority level lower than ATC) masquerading as a CENTER/AERORADIO issuing clearances, and the crew can probably better assess the validity of a clearance by its content and situation, and call back to confirm, than to rely on confirmation of the priority level. If we do, we got bigger problems. We do need to ensure that CSPs issuing access codes and authorizations for level 3 and higher priority SATVOICE calling only to AOC, ATC and the aircraft/flight crew, a Chapter 3 issue, I think is already covered, but we can beef it up. 	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>d) I think it might be prudent to incorporate guidance in Chapter 3 for dispatcher and Chapter 5 for the flight crew that if they want to avoid preemption of an urgent call by ATC, then they should make the call with level 1 priority. ATC can contact the aircraft on HF voice. But there are times (albeit rare) when you would not want the system to preempt a call between flight crew and AOC, and rely on receipt of a MAYDAY or PAN to keep the controller from trying.</p> <p>We can have a requirement to display priority and for crew to confirm priority level of incoming call, but reality (what I'm hearing) tells me we cannot rely on crews generally executing such a procedure. So the above seems to resolve the issue.</p> <p>What do you think?</p> <p>13-Jan-12-BC – from telecom, approach above seems reasonable.</p> <p>14-Jan-12-TK – Revise as follows: 3.3.3.3 Prior to operational use, the aircraft operator should verify that SATCOM voice installations are operating normally and activated by sending and receiving calls to and from the aircraft in accordance with established operating procedures, e.g., using the aircraft address represented in octal code. The operator should ensure the aircraft equipage operates per paragraph 3.3.4 and perform verification tests under the following conditions: ... 3.3.4.3 The satellite voice equipment should configure the flight deck default priority to level 2 / HGH / Q12 for outgoing ATC calls per Table 2 1 and automatically pre-empt cabin communications,</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>if necessary to establish the ATC call. Level 4 / PUB / Q9 incoming and outgoing calls should be restricted to/from the flight deck.</p> <p><i>Note.— The satellite voice equipment may configure the flight deck default priority to level 3 / LOW / Q10 for outgoing AOC calls and accepts incoming AOC calls at level 3 / LOW / Q10 or level 1 / EMG / Q15. Default priority levels and policies on routing calls to the flight deck are typically determined by the satellite data unit’s owners requirement table (SDU ORT).</i></p> <p>...</p> <p>5.2 Flight crew initiated SATVOICE call</p> <p>5.2.1 SATCOM short codes are published in State AIPs and some charts. Short codes may be stored in SATCOM avionics for easy access by the flight crew.</p> <p>5.2.2 When contacting ATC, the flight crew should initiate calls to the aeronautical station/ATSU using the appropriate priority level 2 / HGH / Q12 or priority level 1 / EMG / Q15 in accordance with Table 2 1.</p> <p><i>Note. The flight would normally use 3 / LOW / Q10 to contact AOC. However, under some urgent situations, the flight crew may opt to initiate a level 1 / EMG / Q15 call to AOC to avoid the possible preemption of an incoming call from ATC. See paragraph 3.3.4.3 for priority level default settings and paragraph 3.3.4.4 for flight crew capability to set priority level and preempt calls.</i></p> <p>...</p> <p>5.3 Flight crew receives SATVOICE call</p> <p>5.3.1 The flight crew should respond to an ATC call using standard RTF conventions and phraseology (see paragraph 5.1.2)</p> <p>5.3.2 The flight crew should act only on ATC clearances/instructions from SATCOM calls with priority level 2 / HGH / Q12 or priority level 1 /</p>	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					EMG / Q15 per Table 2 1, and if in doubt terminate the call and initiate a new call for confirmation. <i>Note.— The aircraft SATVOICE system confirms the priority level of the call by restricting level 4 / PUB / Q9 incoming calls to the flight deck (Refer to paragraph 3.3.4.3). If the aircraft SATVOICE system does not restrict incoming calls, the flight crew may use an indication (aural or visual) provided by the SATVOICE system to confirm the call priority level.</i> Close.	
5.3.2	SV2-0067	MM	COMMENT: Add text to clarify SUGGESTED CHANGE: 5.3.2 The flight crew should not act on ATC instructions from SATCOM calls with other than ATC priority calls, and if in doubt terminate the call and perform a downlink call for confirmation.		31-Mar-11-TK –Defer to Ch 5 Group for resolution. 1-Jun-11-TK – Revise to, “The flight crew should not act on ATC instructions from SATCOM calls with other than ATC priority calls, and if in doubt terminate the call and initiate a new call for confirmation.” Close.	C
Apx A (formerly Apx E) (formerly Apx D) (previously 4.3.1)	SV7-0268	GL	COMMENT: Current aircraft systems cannot comply with the requirement to display CLI / PIN information for the pilots to confirm. (4.3.1 SVGM) (Par. 7 (j) AC 20-150A) SUGGESTED CHANGE:	C	15-Sep-11-TK – Issue “non-compliance of current systems.” 23-Sep-11-TK – Revised text to indicate CLI/PIN display to a flight crew is a desirable feature and not required. Move to Apx D as desirable feature. 16-Feb-12-IRSVTF/3 – Moved to Apx A.. 23-Feb-12-TK – Added reference for consideration in future SATVOICE concept of operations. Close.	C
Apx A (formerly Apx E) (formerly Apx D)	SV6-0183	GL	COMMENT: Caller ID and PIN at GES SUGGESTED CHANGE:	C	15-Sep-11-TK – Issue “Safety requirements”, “Security requirements” and “non-compliance of current systems.” 16-Dec-11-TK –Moved to desirable features section. Reassign to Apx A comment to address safety requirement. Keep open.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
3.2.6.1 a) (formerly 3.1.6.1 a)					6-Jan-12-SK/TK – these are for security. Reassign to Apx D. 16-Feb-12-IRSVTF/3 – Moved to Apx A. 23-Feb-12-TK – Added reference for consideration in future SATVOICE concept of operations. Close.	
Apx A (formerly Apx E) (formerly Apx D) 3.3 (formerly 3.2)	SV7-0262	GL	COMMENT: If a new phone numbers are used for contacting ROs, “ORT Tables” and “Phone Directories” will require updates. Some “legacy” systems have limited directory capacity. Adding several new phone numbers may exceed the storage ability of some systems. This will especially affect aircraft with extended range capabilities. (This is an operator issue incurred by the changes required by air-to-ground conference calling). SUGGESTED CHANGE:	C	15-Sep-11-TK – Issue “Access number management” 16-Sep-11-TK - Reference comments: SV7-0263 (closed) SV7-0258, contains resolution status from IR-SVTF/2, see also open related comments SV1-0010 SV3-0093 SV2-0039 SV7-0262 Action Brad and Joe 16-Dec-11-TK – Keep open. 28-Dec-11-TK – Move to Appendix D concerning conference calling. 16-Feb-12-IRSVTF/3 – Moved to Apx A. 23-Feb-12-TK – Added reference for consideration in future SATVOICE concept of operations. Close.	C
Apx A (formerly Apx E) (formerly Apx D)	SV7-0234	ML	COMMENT: Perhaps could we recommend in the SVGM the <u>availability of at least 2 channels</u> per SATCOM system on-board? Benefits would be obvious in terms of redundancy and operational use (with 2 channels, 2 communications can be established at a time, compared to 1 with HF). SUGGESTED CHANGE:	C	14-Sep-11-IR-SVTF/2 – Related to safety requirement. What is the safety requirement? 16-Sep-11-IR-SVTF/2 - Not all meet 2-channel today. Why would it be a requirement? Are their any limitations on use of a single channel installation?, e.g., MEL relief, operational applications. Does this provide a mitigation means	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					<p>to undesirable effects of preemption? Should guidance address planning for new features? Put this in a new “desirable” appendix.</p> <p>23-Sep-11-TK – Make Apx D for now.</p> <p>16-Feb-12-IRSVTF/3 – Moved to Apx A.</p> <p>23-Feb-12-TK – Added reference for consideration in future SATVOICE concept of operations. Close.</p>	
<p>Apx A</p> <p>3.2.6</p> <p>(formerly 3.1.6.1.b)</p>	SV2-0042	BP	<p>COMMENT: This must be reconciled with the “conference” capability described in 3.1.5.3.e), and should be addressed under the same circumstances, separately to this draft guidance.</p> <p>SUGGESTED CHANGE: Remove text.</p>	S	<p>1-Jun-11-TK – SVTF discussion.</p> <p>15-Sep-11-TK – Issue “Safety requirements”</p> <p>16-Dec-11-TK – Moved conference calling to desirable features appendix. Reassign to Appendix A. Keep open.</p> <p>14-Feb-12-TK – conference capability was removed from the document. Close.</p>	C
Apx A	SV5-0167	DR	<p>COMMENT: performance specification- allocations for satellite subnetwork communication performance specification.</p> <p>SUGGESTED CHANGE: Reference to RTCA DO 270 to establish generic subnetwork RCP Minimum Aviation System Performance Standards (MASPS).</p>	C	<p>23-Aug-11-TK – I disagree. DO-270 could be added as a reference in the Foreword and listed in Chapter 3 for compliance, but not sure for whom, i.e., the CSP, SSP, or ATSP. It represents a “declared” performance the sub-network is capable of achieving. The “required” performance (RCP) allocations for the generic sub-network are established (derived) from operational requirements, in this case RCP 400, as provided by Doc 9869.</p> <p>24-Aug-11-Web/3 - Do we want this guidance material to refer to DO-270 as a means of compliance for the sub-network? Not necessary, with the RCP specification.</p> <p>How do we invoke it in the document? It’s mostly a data link document and not necessary.</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					Close.	
Apx A	SV3-0109	SK	<p>COMMENT: Requested to help provide 1st draft of SVG M T V T Definition and apply it to GOLD RCP400/3V Format</p> <p>SUGGESTED CHANGE: Please review attached markup. More discussion required on some key principles and differences between how data and voice operates.</p>	A	<p>26-May-11-TK – See attached file beginning with <comment number>.</p> <p>22-Jul-11-TK – The Apx A team completed proposal, which is incorporated into v0.5, Apx A and Chapter 1, definitions. Close.</p>	C
Apx A, A.1	SV5-0153	TK	<p>COMMENT: Editor’s note 20 (v0.5). — TK – Should revise GOLD term to remove “monitored.” Operational performance whether voice or data should be same defined points from an operational perspective.</p> <p>SUGGESTED CHANGE:</p>	C	23-Jul-11-TK – Delete Ed Note. Change proposal has been submitted against GOLD. This Ed Note is not relevant to this document. Close.	C
Apx A, A.1	SV2-0068	MM	<p>COMMENT: Refer to Figure A-1. This timing scenario was challenged in Paris and still presents issues. G – J is highly exaggerated. The example given is that it can take 7 Mins and 20 Secs for completion of a transaction !</p> <p>In the US, the FAA performance goal is 3 minutes for Clearances and 5 minutes for Requests & Advisories, which ARINC consistently exceeds.</p> <p>We need to discuss this further at our next meeting.</p> <p>SUGGESTED CHANGE:</p>		22-Jul-11-TK – See resolution to comment SV3-0109. Close.	C
Apx A, A.1	SV3-0102	JK	<p>COMMENT: RCP Times were challenged in Paris. This needs serious round table discussion as the times would appear to be excessive.</p> <p>SUGGESTED CHANGE:</p>		22-Jul-11-TK – See resolution to comment SV3-0109. Close.	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
Apx A, A.3.2.1	SV5-0154	TK	<p>COMMENT: Editor’s note 21 (v0.5). — TK - 95% value is based on presentation from ARINC at PARC CWG/19 and reasonable G-G network latency; however for satellite voice, the value is less than value if the communication were performed by data link. All values are proposed and further validation is expected.</p> <p>SUGGESTED CHANGE:</p>	C	<p>23-Jul-11-TK - Delete Ed Note and maintain status using comment matrix. I would propose that 95% value for “operational performance” parameter of RCP 400 specification should be the same, regardless of whether voice or data, i.e., 350 seconds. Refer to A.3 for RCP 400 “top sheet.”</p> <p>3-Jan-12-TK – Background info. No change to document. Close.</p>	C
Apx A, A.3.2.2	SV5-0155	TK	<p>COMMENT: Editor’s note 22 (v0.5). — TK - 95% value of call performance based on ARINC presentation at PARC CWG/19, ARINC has a goal of delivering 94% of all calls answered in 1 minute or less.</p> <p>Editor’s note 23 (v0.5). — TK - 95% value of call performance based on ARINC presentation at PARC CWG/19, ARINC has a goal of delivering 95% of all ATC clearances in 3 minutes or less.</p> <p>SUGGESTED CHANGE:</p>	R	<p>23-Jul-11-TK – Delete Ed Notes. References provided for source of information in specification and require no further changes to SVG. Close.</p>	C
Apx A. 3.2.6 (formerly 3.1.6) (comment suggested 3.1.2.7)	SV3-0118	TP	<p>COMMENT: Insert an additional Functional Requirement</p> <p>SUGGESTED CHANGE: New text to read “The SSP should provide either handshaking or a “keep-alive” signal to retain connectivity between the aircraft and CSP after an initial “log-on” is successfully established.</p>	A	<p>1-Jun-11-TK – See resolution status to comment SV3-0115.</p> <p>23-Sep-11-TK – Reassign comment to Section 3.2.6.</p> <p>3-Jan-12-TK – Check with Steve Kong and Brian Pemberton.</p> <p>6-Jan-12-TK/SK – Not sure we understand the comment. If the aircraft detects the SDU is logged off, the SDU provides an indication to the flight crew. The capability provides reliable and available service, which is part of RCP specification. Reassign comment to Apx A for consideration as availability, continuity and/or integrity requirements.</p>	C
Apx B	SV8-0390	DRM	<p>COMMENT: Need to have backgroup information on</p>	A	<p>23-Feb-12-TK – Added text at the beginning of</p>	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
(Formerly Apx A) RCP 400			RCP 400 and what we are trying to say its utility is in the appendix SUGGESTED CHANGE:		Appendix B: 'The RCP 400 specification, provided by ICAO Doc 9869, provides performance-based criteria based on intervention capabilities that exist today using HF voice communications via a radio operator. As it is difficult to compare the actual performance of different technologies, the RCP 400 specification provides a common basis for assessing SATVOICE capability or any new technology that may emerge, including data link capabilities such as CPDLC.' Close.	
Apx D, D.3 Editors note 10	SV8-0340	MS	COMMENT: Some operators do not enable crews to 'free dial', only programmed numbers may be dialed. If a RO assigned a number that was not programmed in the avionics it could not be dialed. SUGGESTED CHANGE: For info only	A	1-Nov-11-TK – Added info to end of Editor's note 10. Close.	C
Apx X (formerly Apx D) (Formerly Apx C)	SV7-0247	ML	COMMENT: It would be interesting to add in the Guidance Material a world map (or at least a table) detailing the rules that are currently in used in the various Flight Information Regions: <ol style="list-style-type: none"> 1. What is the primary means of communication: voice or datalink. For example: in the NAT region datalink is primary, whereas in China region voice is the primary means of communication. 2. Is it mandatory to bring 1HF or 2 HF to fly in this region/state. SUGGESTED CHANGE: Add such a world map or table that every ANSP could complete. This could appear in Chapter 2.	A	15-Sep-11-IR-SVTF/2 – Could be part of Region/State-specific appendix? 23-Sep-11-TK – TK – I would have concerns with putting dynamically changing material in the main body of the document; however, an Appendix of such information is established here to gather this information. Make Apx C for now. 16-Feb-12-IRSVTF/3 – Deleted Apx. Close.	C
Apx X	SV7-0255	AH	COMMENT: Document has no timeline or cut-off to	A	15-Sep-11-IR-SVTF/2 – Could be part of	C

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
(formerly Apx D) (Formerly Apx C)			<p>define “current” service from “future” services. For example, there is mention of Inmarsat SBB and IridiumNext, but no method to identify those systems in the flight plan, and no specifics on the use of VoIP dialing.. It is not clear if the guidance material would need to be updated to make a change to an underlying technology. This should help with the caller ID issue as well..</p> <p>SUGGESTED CHANGE: Add a timeline to the guidance material that indicates which services are available in the first phase, and which services are “future”.</p>		<p>Regional/State-specific Appendix.</p> <p>23-Sep-11-TK – Make Apx C for now.</p> <p>16-Feb-12-IRSVTF/3 – Deleted Apx. Close.</p>	
Apx X (formerly Apx D) (Formerly Apx C)	SV4-0137	PR	<p>COMMENT: SAT Voice may well be the medium of the future, but it’s very difficult to get access let alone for the controllers to determine who they can call and via what ;>)</p> <p>The global manual should include contact details for those folks controlling access to INMARSAT/MTSAT/MTSAT and whatever SAT that we as ANSP can call to get access.</p> <p>SUGGESTED CHANGE:</p>	A	<p>22-Jul-11-TK – Maybe a new Appendix, equivalent to what we have in GOLD, Appendix E</p> <p>14-Sep-11-IR-SVTF/2 – Maybe will be addressed by the phone number data based (28-day update). See para 3.1.5.2, letter c).</p> <p>23-Sep-11-TK – Make Apx C for now.</p> <p>16-Feb-12-IRSVTF/3 – Deleted Apx. Close..</p>	C