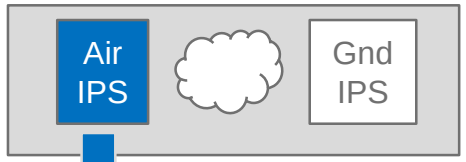
Current PP858 Document Structure

(shorthand section titles)

ARINC PROJECT PAPER 858

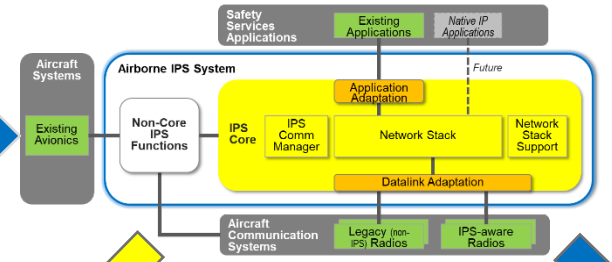
1.0 Introduction

2.0 Overall Architecture



3.0 Airborne IPS System Architecture

3.1 Architecture Overview



5.0 Impl. Options

- 5.1 Overview
- 5.2 Examples
- 5.3 Interfaces
- 5.4 Dual-Stack
- 5.5 Host v. Router

4.0 Security

- 4.1 Intro
- 4.2 Security Architecture
- 4.3 Security Mechanisms
- 4.4 Support Functions
- 4.5 Design/Impl. Guidance

3.2 -3.4 Core Functions

3.5 Non-Core Functions

3.6 System Interfaces

6.0 Application Data Considerations

3.7 Performance Requirements

Attach-1 – Acronyms

Attach-2 – Glossary

Attach-3 – ACARS to IPS DS Convergence Function

Attach-4 – Air-Ground IPS Management Messages

Appx-A – ATNPKT Examples

Appx-B – IPS Protocol Build-up

Appx-C – IPS Ground Architecture

PP858 – Merged Document Assessment @ 3/2

Overall

Section	Title	Status	Comments
1	Introduction		Keeping up-to-date; revisit intro before final
2	ATN/IPS Overall Architecture		Good shape; several reviews/revisions to date
3	Airborne IPS System Architecture		Good progress; some gaps/dependencies
4	Airborne IPS System Security	NEW	Merged, edited, reviewed by author; some gaps
5	ATN/IPS Airborne Implementation Options	NEW	Merged, edited, reviewed by author
6	Airborne Application Data Considerations		Revisit need for this section wrt similar text
Attachment 1	Acronyms		Keeping up-to-date with merged text
Attachment 2	Glossary		A658 terms; updates per ICAO WG-I activity
Attachment 3	ACARS to IPSDS Convergence Function		Good shape; several reviews/revisions to date
Attachment 4	Air-Ground IPS Management Messages		M11 comments to be addressed
Appendix A	ATNPKT Message Format Examples	NEW	Merged, edited, reviewed by author
Appendix B	IPS Protocol Build-up		Good shape; keep in sync with rest of doc
Appendix C	IPS Ground Architecture Considerations	NEW	Merged, some editing

PP858 – Topics for further consideration/discussion

Section	Topic	Issue
General	ATN/IPS vs. IPS (ATN/OSI vs. OSI)	Need consistent terminology
General	References to CL-VDLm2 and Orange	Decisions not yet taken by AEEC DLK; some risk with current text
3 & 4 Att-4	DTLS specification	Doc. 9896 points to IPS Profiles (in progress); IPS Profiles spec RFCs and use of MIC w/o DTLS header; PP858 specifies technical detail for MIC generation.
3.3.4.3	ROHC	M12 recommendation to remove from IPS Profiles and PP858
3.3.6.2	Mobility and Multilink Signaling	Pending ICAO WG-I MSG decisions
3.6	IPS Interfaces	Recommendation: move External Interfaces to Section 5 (impl. guidance) Recommendation: remove Internal Interfaces since impl.-dependent
4.3.1, 4.5.3	DTLS Compression	Consistency among all standards
5.5	IPS Host vs. Router	Placeholder section based on M08 discussion. Still needed??
Appx A, A-4	ACK'ing multiple D-DATA messages	Referenced in PP858, but not currently defined in Doc. 9896
Appx C - Gen	IPS End System vs. IPS Ground System	Need consistent terminology
Appx C, C-8	B1/B2 application compression	Agreement for ACARS compression in 858. B1/B2 not specified in Doc. 9896
Appx C, C-10	IPS Aircraft to IPS End System	End-state scenario requires IPS Gateway – agreed? If yes, then need consistent terminology throughout document (IPS Gateway vs. IPS Transition Gateway)

PP858 – Schedule

Mar 2

- **Pre-M13 Draft to AEEC for circulation prior to meeting**
  - Redline and Clean versions

Mar 5

- **Pre-meeting Comments / Changes to Pre-M13 Draft**
  - Using track changes

Mar 9

- **M13 Draft for meeting**
  - including pre-meeting comments/changes (if any)

Mar 18

- **Post-M13 Draft for AEEC**
  - Edits from meeting / cleanup

Apr XX

- **AEEC PP858 DRAFT1 for broad circulation**