



CSP Perspective

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Communications, Engineering, and Systems Integration



Current Reporting and Monitoring

- ▶ For current ANSP FANS customers ARINC reports monthly:
 - End-to-end operational availability
 - Uplink message success rate
 - Message Assurance Delivery Time for all delivered ATS Uplink Messages
 - ▶ With associated delivery percentile times
- ▶ The ANSPs have the best “system” view for comm performance
 - They see the complete end-to-end performance
- ▶ When concerns arise (primarily no-comms or high latency)
 - We perform ad-hoc analysis of the problem OR
 - We are assigned a PR by the CRA
- ▶ In addition to ACARS audits, we have developed some tools to aid in performance analysis but they are cumbersome and do not distinguish between the segments (CSP, space segment, avionics)

GOLD CSP Allocations

- ▶ CSP Requirements for CPDLC consist of:
 - RCP communication transaction time and continuity criteria
 - RCP availability criteria
 - RCP integrity criteria

- ▶ CSP Requirements for Surveillance consist of:
 - Surveillance data transit time and continuity criteria
 - Surveillance availability criteria
 - Surveillance integrity criteria

- ▶ Again a CSP can monitor/report on its view of the end-to-end picture

- ▶ But doesn't have the visibility into the segments outside of its system
 - Space segment, avionics, etc.

Monitoring and Reporting Next Steps

- ▶ ARINC has been enhancing its systems to continue to meet evolving required communications performance
- ▶ Our understanding is that the new Inmarsat infrastructure will provide additional insight into the satellite network segment performance, e.g. additional message log data
- ▶ Is Iridium developing a similar capability for its new infrastructure?
- ▶ As this performance becomes more critical for enhanced safety and efficiency all stakeholders need to collaborate to ensure compliance



Thank You