



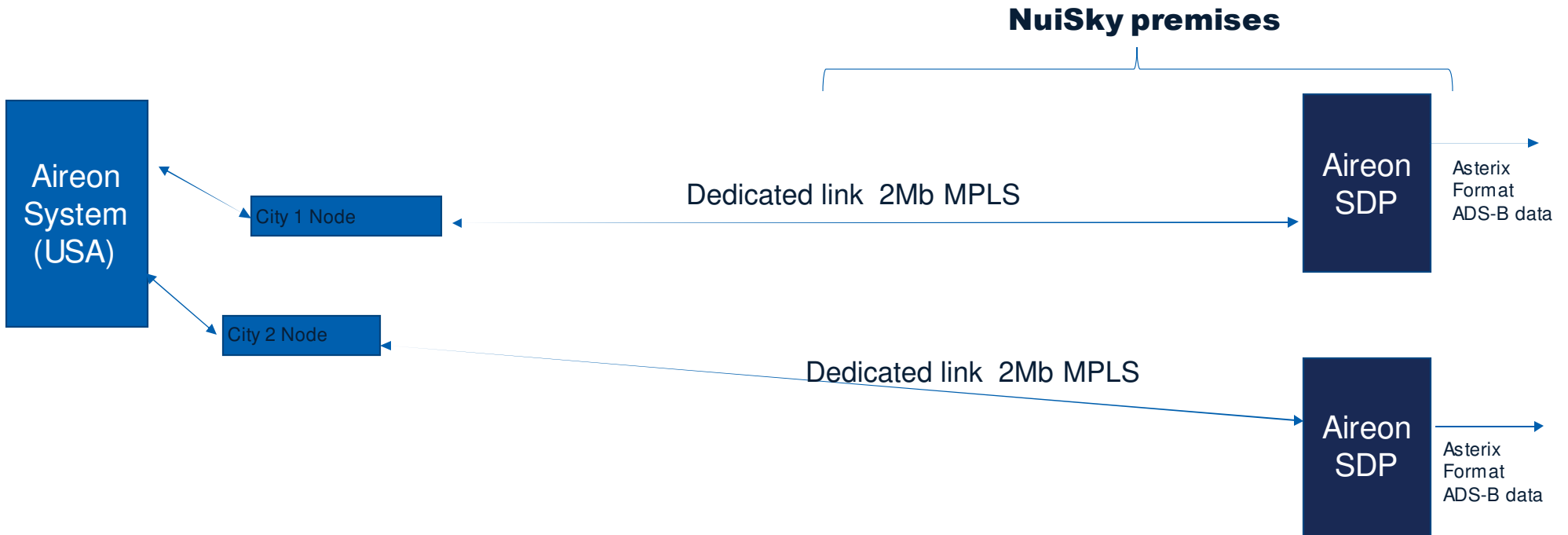
IP 07 – Surveillance data to NuiSky Pacific (PNG) via CRV



Initial NuiSky Pacific Deployment – without CRV



OPERATIONAL some months ago

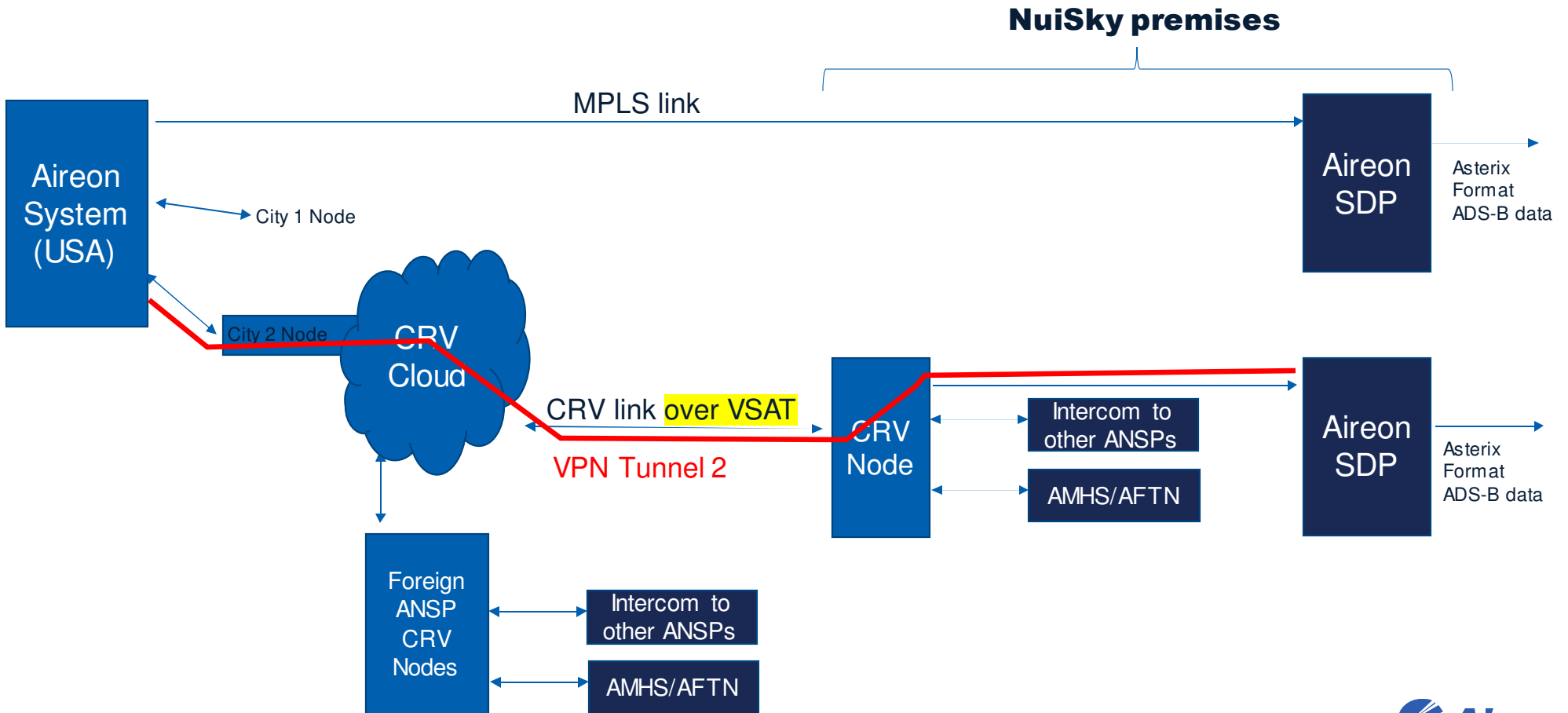


- For reliability and availability

→ Multiple telecom companies provide link service (USA to Nuisky Pacific)

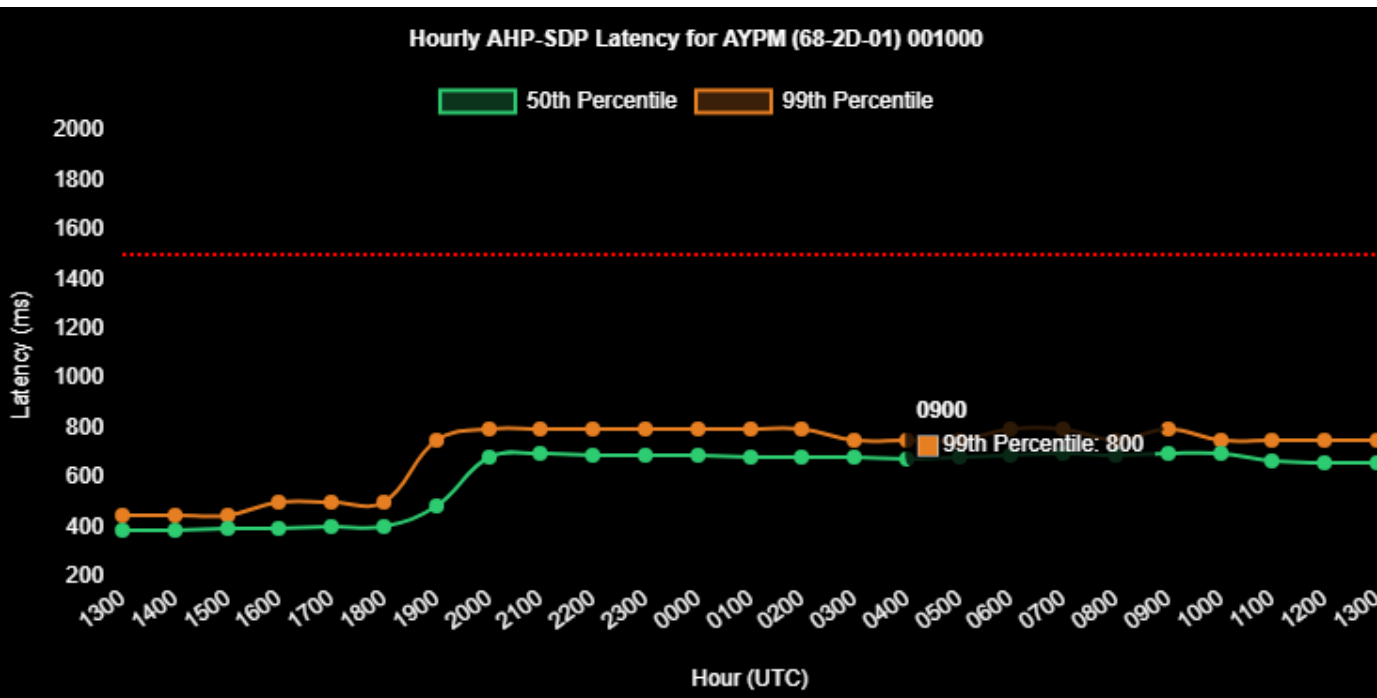
First phase using CRV

NOW OPERATIONAL



Performance (Latency of Space based ADS-B)

- From ADS-B Satellite reception till Customer SDP



99th Percentile Specification



CRV over VSAT ~ 700-800mS



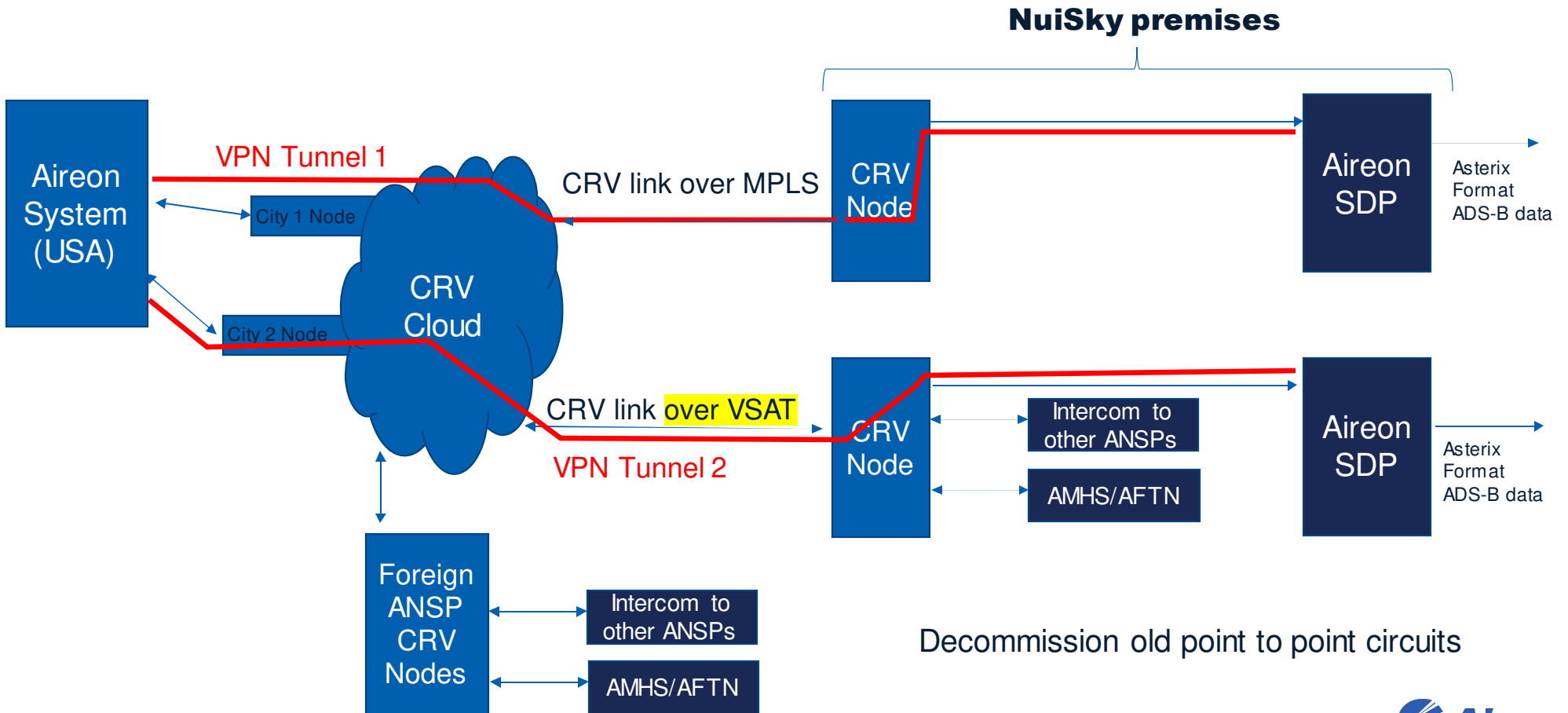
MPLS ~ 400-500mS



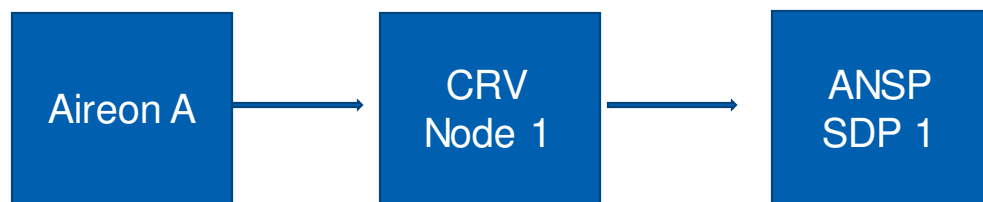
CRV over MPLS ~ TBC

↑
Switchover from MPLS to CRV VSAT

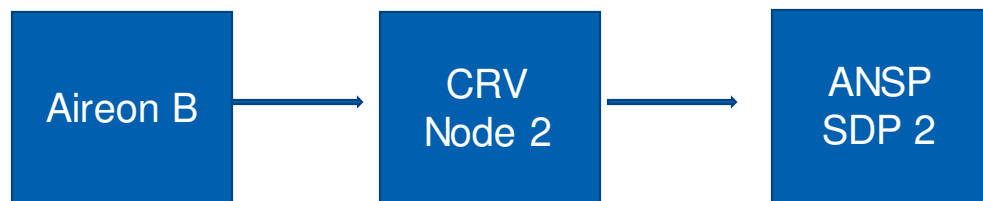
Final phase using CRV



Dual Package C required for Tier 1 surveillance



Data always provided by this path



Data always provided by this path

Hot/Hot configuration

Minimise outage (a 30 second changeover is not acceptable) for Tier 1 surveillance

Minimise any single point of failure



Infrastructure is now in place

- Aireon to CRV link (s)
- Other ANSPs with CRV can receive Space based ADS-B data through establishment of a tunnel (s)
 - Potentially without additional hardware
 - Depends on bandwidth, traffic load and requirements
- This demonstrates feasibility of ANSP to ANSP ADS-B data transmission



Discussion / Questions

The meeting is invited to take note of

a) the implementation of Space-Based ADS-B system in PNG and in particular that Space based ADS-B is now operational – and one path is already using CRV for operational surveillance data.

b) Space based ADS-B is now available on the CRV and can be supplied to other ANSPs without the additional cost of dedicated point to point circuits.

c) When developing a CRV solution for small Pacific Islands and small ANSPs in APAC, members may wish to take note of this capability

4.2 Note the PNG plan to use CRV to allow data sharing between FIRs; and

4.3 Discuss any relevant matter as appropriate.



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