Appendix 2

State and ANSP Profile - Aksia

Geography, Economics and Politics

- Surface area of approximately 70,000 square Km.
- The southern coastline, the western parts of which are below sea level, and liable to regular flooding.
- On extreme occasions, this flooding can affect the Capital City, Lazurite, causing disruption to daily activities, including those at the airport.
- The north of the country is in a seismically active mountain range (Galenean Heights) with irregular tremors/earthquakes capable of causing significant damage to both physical infrastructure and daily activities.
- Economy is primarily tourist based around mountain sports and water/beach activities.

Airspace

- There is one FIR (Lazurite, XAKK).
- Aksian airspace is ICAO compliant and conforms to international standards.
- A study is in progress to examine the feasibility of creating a FAB with Lutan and Valsepa (see map at Appendix 3).
- Aksia airspace is within the CFMU area of responsibility.

Air Traffic

- There is only one international airport, Lazur (XALZ) - the capital.
- The second city, Amara, is served by a regional airport (XAAR).
    - Amara sits in the foothills on the south side of the Galenean Heights mountains - see map at Appendix 3.
- Flight volume is seasonal with two peaks in early summer and late winter
    - Total annual IFR movements is less than 400,000.

Aircraft Operators

- The main customer is the Aksian state airline - Aksian Airways - situated in Lazur airport.
- Other national carriers also operate from Lazur.
- Several low-cost airlines also fly out of Amara.
- The regional airline association and IATA have privately all expressed concern that Aksian Air Navigation Services Authority (AANSA) does not appear to have robust contingency arrangements in place.
- All airlines are wholly reliant on continuous ATC operations and informally they have indicated that they expect seamless transition with the minimum

of delay (within 48hrs) for the introduction of any long-term Service Continuity plans.

CAA- Regulator/NSA

- Aksian State Aviation Authority (ASAA).
- ASAA has also been designated as the National Supervisory Authority (NSA).
- The NSA has stated that "by principle" the **safety and security levels should not be compromised under emergency, degraded modes of operations, service continuity** or any other abnormal situations. The remaining criteria to be considered for contingency are (not exhaustive):
    - Capacity: can be adjustable according to the contingency phase but the Regulator would like to see at least 50% in place within 48hrs of a major disruption.
    - Environment: controls/constraints may be relaxed to permit contingency ops.
    - Efficiency: the ability to re-coup losses as quickly as possible to maintain commercial viability.
    - Reaction time: time required to implement measures.
- The NSA is in regular contact and enjoys cordial relations with neighbouring countries especially Lutan.

ANSP

General

- Aksian Air Navigation Services Authority (AANSA).
- Functionally separated from the ASAA.
    - CEO reports directly to the Minister of Transport.
    - Relationships between AANSA and the ATM Regulator in ASAA are good.
- ASAA certified AANSA in accordance with EC Reg 2096/2005 in December 2008 with the proviso that it had full ANS Contingency Plans in place before the end of 2009.
- AANSA also enjoys good relations with Lutansia Air Navigation Services Agency (LANSA) and neighbouring Valsepa Air Navigation Enterprises and Safe Skies Agency (VANESSA) and is in negotiations with both regarding the creation of a FAB.

Air Navigation Services (ATC)

- Lazur ATCC is situated at the Lazur International Airport (LIA).

  - It provides area/en route services within the Lazur FIR and TMA (approach) services for Lazur and Amara. It also has an FMP WP (CFMU).
- AANSA also provides TWR services for Lazur and Amara airports.
- There is a small training and simulation facility at LIA which could provide standby APP for either airport but no surveillance-based en route services.
- In addition, the former Approach facilities at Amara have been retained on "care and maintenance" basis and could be re-engineered to provide some redundant capability, subject to full economic assessment.

Other Services

- ATFM and AIS services (including international NOTAM office) are provided through the Lazur ATCC.
- AANSA provides services for military traffic. Under the SLA with the State Military Authorities, AANSA is also responsible for providing services during contingency.

CNS

- CNS services are provided by a mixture of In-House and subsidiary of AANSA.
- Surveillance coverage is provided by a combined primary /secondary radar at Lazur.
- Amara also has its own terminal primary/secondary radar which provides some overlap.
- A comprehensive communication (R/T and ground/ground) network and NAV (VOR/ DME, etc.) infrastructure provides multiple layers of coverage and redundant capability.

Contingency Arrangements

- Only very embryonic (Emergency/ De-graded Mode) ANS Contingency Plans are in place,
- Notwithstanding, AANSA achieved Certification in accordance with EC Reg 2096/2005 in late 2008.
  - On the understanding that it would significantly develop and improve its contingency plans which should be submitted to the ASAA NSA by the end of 2009.
- AANSA CEO, Mr B Prepario, has publically stated that AANSA will be ready for every eventuality by 1 Jan 2010. The company is therefore highly motivated to ensure continuous provision of ANS encompassing all aspects of Contingency.
- In the context of the FAB negotiations with Lutan and Valsepa, it is foreseen that future contingency solutions should be mutually beneficial where possible.

ANSP Facilities

- All ATC facilities in the country are supplied by the same manufacturer and are configured with the same type of work stations/consoles
    - Share a common software platform for all applications.

- The small training/simulation facility at LIA could provide 50% APP capability for Lazur and 75% APP for Amara. However, it cannot provide any 'normal' surveillance-based En Route services.

Notes:
1. The spare work stations are not suitable for 'hot swap' scenarios to help 'clear the skies'.
2. There is scope to expand the training/simulation facility, subject to economic assessment.

- The former Approach facilities at Amara have been retained on "care and maintenance" basis and could be re-engineered to provide some redundant capability (75%), subject to full economic assessment.

- The 'Ramp' facility at Lazur could be considered for upgrading to ATC standards.

Air Traffic Disruptions - Simulation Data (**for demonstration /representative purposes only**)

- Simulations undertaken at EUROCONTROL indicate that in the event of disruption of **AANSA services at Lazur**, the overall state impact, **per day**, in terms of cancelled flights, minutes of re-routing and delays relating to 0%, 25%, 50% and 75% capacity restoration (however achieved) would be as follows;

Restored Capacity	**0%**	**25%**	**50%**	**75%**
Flights Cancelled	811	662	410	171
Re-routeing (mins)	714	672	658	323
Delays (mins)	-8434	-8656	-8053	-1430

- Discussions between experts (expert judgement) also provided an indication of the typical difference in the number of days of outage that AANSA could foresee with or without a service continuity recovery strategy in place.

Number of Days of Spent in Recovery Step				
Restored Demand/Capacity	**0%**	**25%**	**50%**	**75%**
Wait and See (no Service Continuity)	30	100	200	770
Training/Simulator (Lazur)		1	5	1094
Restoration of Amara Approach	5	10	1085	

National Infrastructure

- Aksia provides only 30% of its own power (electricity) supplies.
- The remainder is obtained from its neighbour, Lutan, although this supply is occasionally disrupted for periods up to 24 hrs.