

***The Future of Air Traffic
Management:
What Can We Learn from
Each Other?***

***The ATM view: what are the experiences and how can we
address the challenges?***

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TABLE OF CONTENTS

- BRIEF BACKGROUND ABOUT ATNS/AFRICA
- WHAT ARE THE EXPERIENCES:
 - VSAT ATS/DS AND AFTN COMMS NETWORK
 - CENTRALISED AERONAUTICAL DATABASE (CAD)
 - *THE FUTURE* - SATELLITE BASED SURVEILLANCE
- CONCLUDING VIEWS



Africa ... a land of opportunity & challenge



- 54 countries
- 1,000+ languages
- 1 billion people
- 3,000 distinct ethnic groups
- 23 elections in 2013
- \$3,539.75 per capita GDP (\$5,000 to \$16,507)
- Poor transport and logistics
- Inefficient administrative/regulatory control
- Poor access to highly skilled labour
- Poor utilities and energy security
- **5.5 – 6% GDP**



SOME FACTS ABOUT AIR TRANSPORT IN AFRICA

- Air transport supports **6.7 million jobs** and **\$67.8 billion in GDP** in **Africa**.
- According to the Oxford Economic study on the benefits of aviation in Africa, there are:
 - 762,000 flights
 - 371 commercial airports
 - 256 airlines
 - 1,302 aircraft in service
- Worldwide, **Africa represents 12%** of the total **jobs** and **3% of the GDP** generated by the air transport industry.



AVIATION DEVELOPMENT AND CHALLENGES

- **African** air transport has **increased by 6.6%**, making it the most **rapid growth region** after the Middle East.
- However, the absolute traffic figures remain relatively very low because of the small base. For instance in 2015, Africa accounted for only **2% of the global traffic**.
- Africa's GDP is expected to grow at the rate of **4.5%**, compared with the **world average rate of 3.7%**,
- Africa's potential is undeniable, but to realise the full potential there are many challenges:

AVIATION DEVELOPMENT AND CHALLENGES

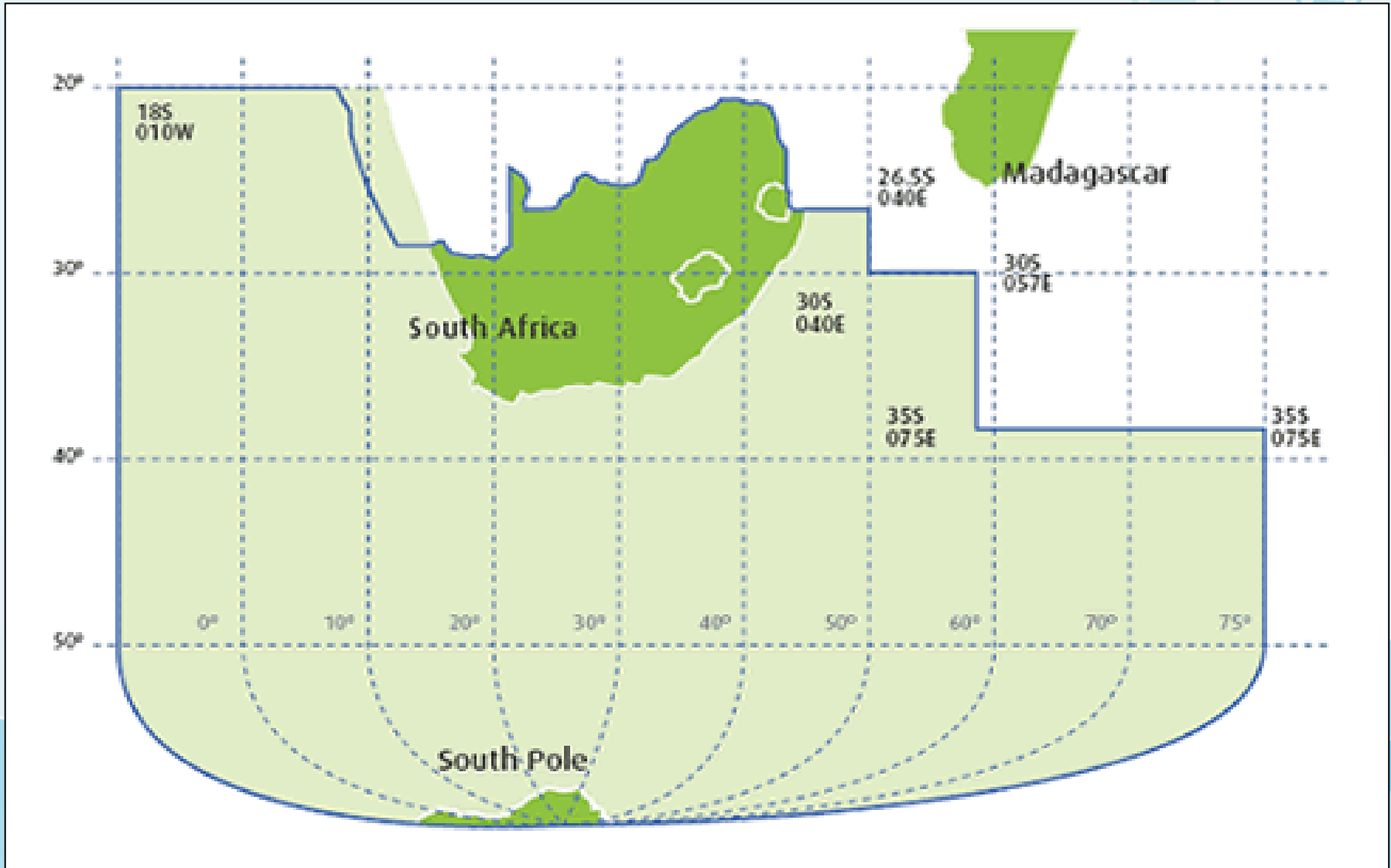
Poor record of
**safety and
security**

Lack of adequate
**resources and
infrastructure**

Distance and
**limited
connectivity**

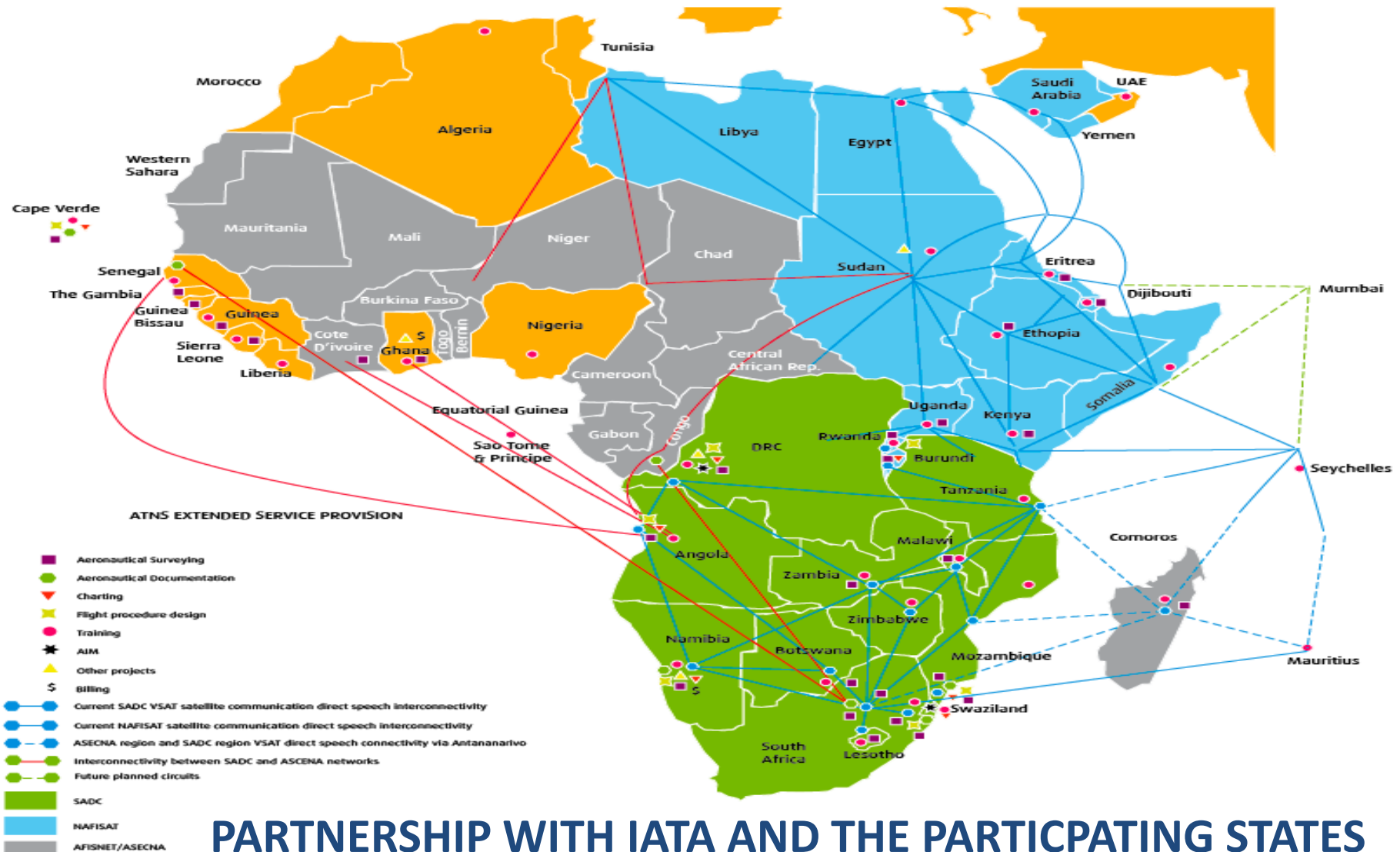
Lack of **regulation
and government
actions**

AREAS OF RESPONSIBILITY



ATNS is responsible for 22 million sq-km, approximately 10% of the world's airspace.

ATNS in AFRICA – VSAT ATS/DS & AFTN

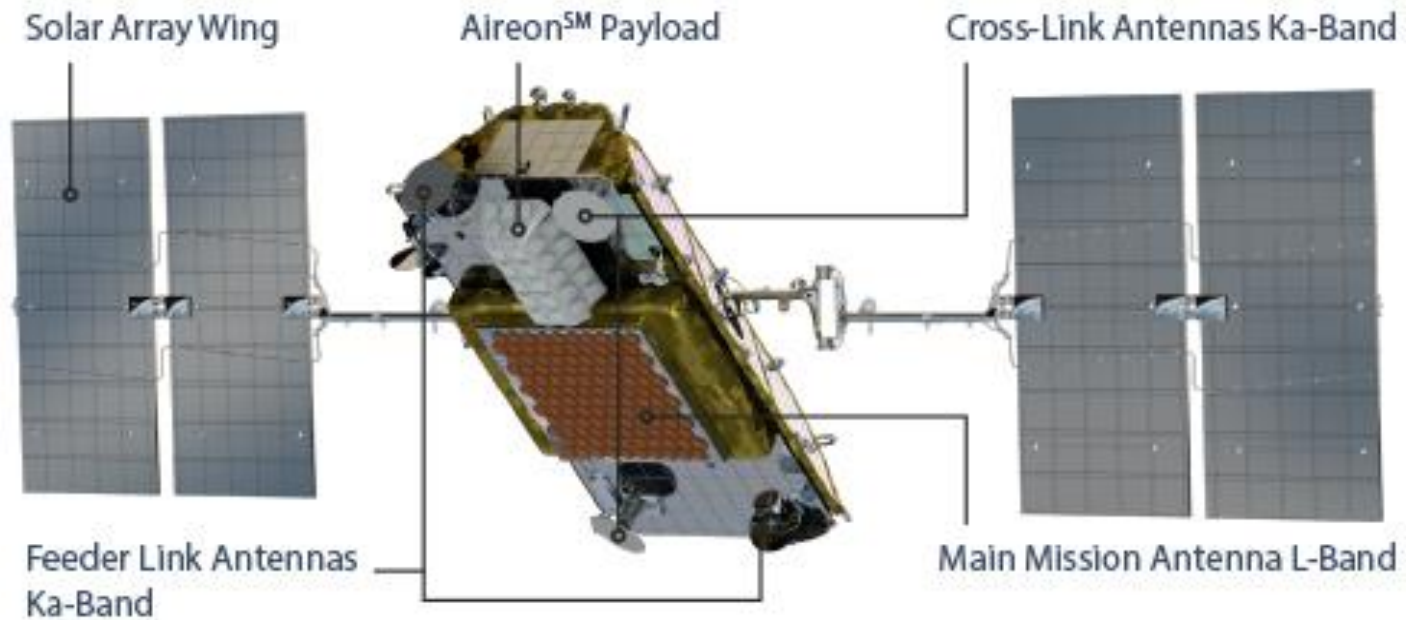


CENTRALISED AERAUNAUTICAL DATABASE (CAD)



CLOUD COMPUTING SOLUTION (COLLABORATION) WITH NAMIBIA

FUTURE OF AVIATION COLLABORATION



Iridium NEXT Satellite Specifications

Deployed Wingspan

9.4m

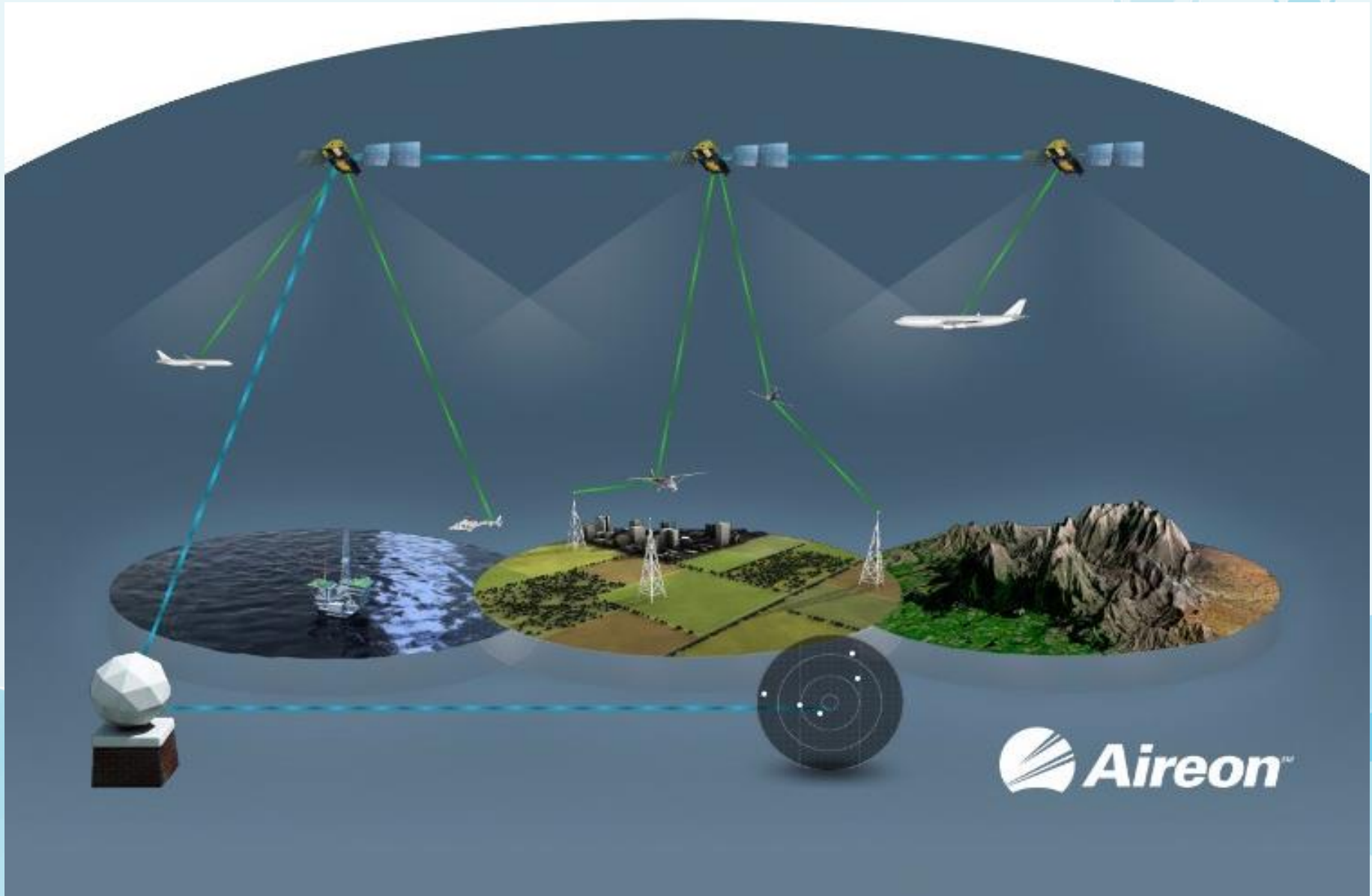
Weight

860 kg (approx.)

Stowed Dimensions

3.1m x 2.4m x 1.5m

FUTURE OF AVIATION COLLABORATION



 **Aireon™**

SADC UACC

- The Upper Airspace Control Centre remains a pivotal project for ATNS and the SADC region
- There is a need for a homogeneous airspace structure, for all airspace users.
- The results are the attainment of African **seamless airspace** and more usage of new **technologies** for better **efficiency** in **communication, navigation & surveillance** as well as Air Traffic Management



CONCLUDING WORDS

- Aviation industry **collaboration** is at the heart of driving **global transformation**
- ATNS has a crucial role to play in Africa. The **key focus** is on **improving cross border cooperation, sharing knowledge**, information as well as **best practice**.
- ATNS can leverage off its existing expertise and knowledge base to **expand** into the **African continent** and concomitantly **transfer skills** to countries that lag in skills and social development.
- ATNS is a **leading ANSP** in the continent and through the CANSO Africa office is working to find solutions to aviation challenges in Africa.
- ATNS' Africa **Collaboration Strategy** – aligned to South Africa's participation in the region. One of the areas of intervention by ATNS is the **Upper Airspace Control Centre (UACC)**



CONCLUDING WORDS

- A close analysis of the civil aviation problems in **Africa** indicates **commonality** in almost all the States
- This leads to the conclusion that **collaboration** and **coordination** among African States would result in the **optimisation of the scarce resources**





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Thank you