ATFM Status Report: South Africa

8th	Cancun, Mexico	Presentation By
• Global ATFM Conference	• 04 - 06 November 2014	• Mr. Sandile Maphanga

Scope

- Profile: ATNS Company
- Profile: Central Airspace Management Unit (CAMU)
- Collaborative Decision Making and Air Traffic Flow Management (CDM/ATFM)
- Questions and Answers

ATNS Profile

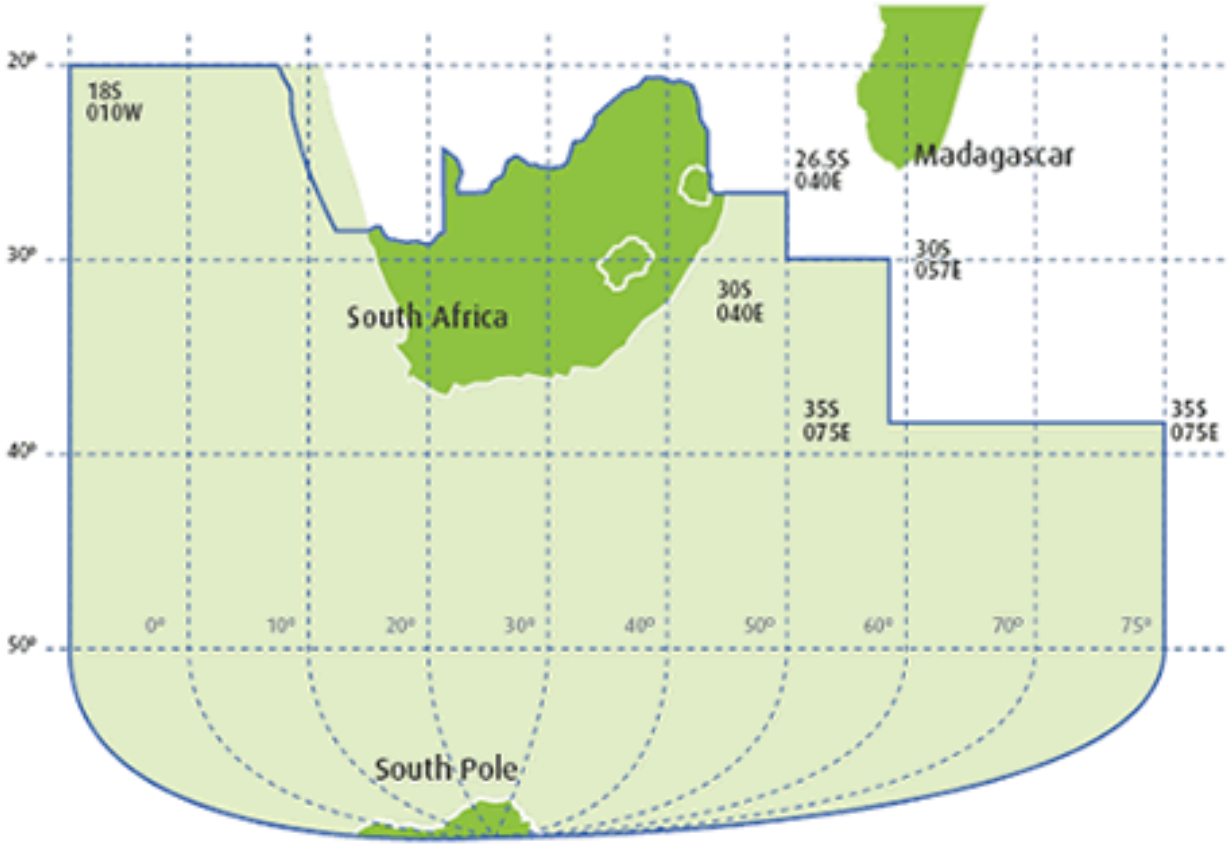
Services Provided

- Air traffic Management,
- Navigation and
- Associated services in South Africa

In addition to its services, ATNS provides aeronautical information, search and rescue coordination activities and maintenance of a reliable navigation infrastructure.

ATNS is responsible for air traffic control in approximately 10% of the world's airspace.

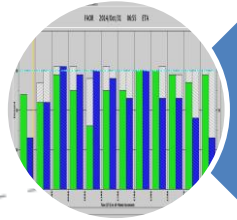
ATNS Area of Responsibility



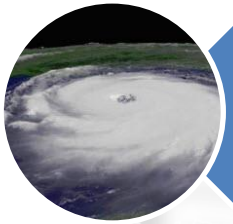
CAMU Profile

CAMU Responsibilities

Air traffic flow and capacity management within South African airspace



Comprehensive management of the airspace capacity, slot allocation program, flexible use of airspace (FUA) and



The re-routing of traffic affected by adverse weather or restricted airspace

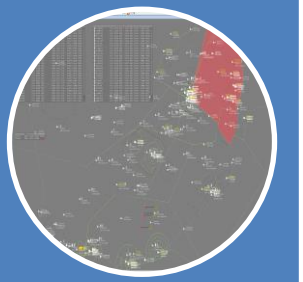
CAMU Profile

Introduction of ATFM/CDM in South Africa

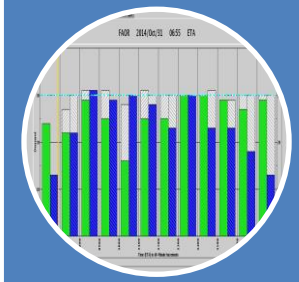
- Air traffic flow and capacity management is a vital part of air traffic management
- Introduction of Airport Management Centres in three major South African airports allows for improved Collaborative Decision Making
- It allows exploiting the full capacity of the air transport system without running the risk of infringing upon safety caused by overload situations
- This has resulted in better adherence to schedule, possibility to express preferences, increased departure and arrival punctuality, more efficient use of stands, gates and terminals.
- ATC is able to have optimised use of airport airside infrastructure, reduced ground congestion, while the CAMU has better adherence to slot, and an optimised use of airspace capacity

CAMU Profile

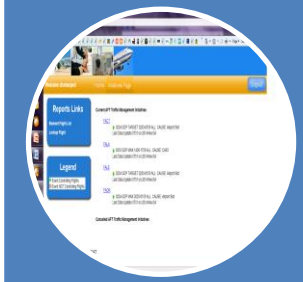
ATFM Systems



Airspace Management Tool (AMT)
Thales FLOWCAT

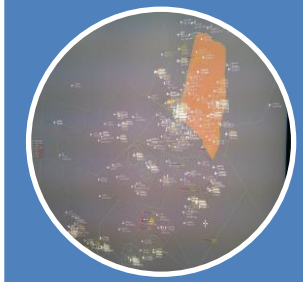


Airport Flow Tool (AFT)
Airspace and Airport Analyzing tool from Metron



CAMUWEB
Web based CDM tool

ANAIS
AIM system



Titan
Advance weather analysis tool

Collaborative Decision Making (CDM)

- Principles of CDM have been implemented in the CAMU day to day operations, planning and developments with active involvements of appropriate members of the aviation community
- Three major airports in South Africa have Airport Management Centers (AMC), which greatly improves CDM processes
- A South African Air force (SAAF) representative is present in the CAMU and facilitates Civil/Military Cooperation through FUA.
- The CAMU successfully hosted its first Annual CDM Conference in Jan 2014, aimed at improving CDM in South Africa and the Region.
- Arrangements for the second CDM conference next year in January are underway and progressing well.

Benefits of CDM – In South African Context

- Improved stakeholder awareness of CDM processes
- Improved airline On-time-Performance
- Increased utilization of CAMU Web system and decreased Estimated departure Clearance time Change Requests (ECR)
- Improved airline compliance on Calculated Take - off - Times (CTOT)
- Improved CDM on tactical level by aerodrome operators and Air Traffic Service Units (ATSU)

Airline On - Time - Performance (OTP)

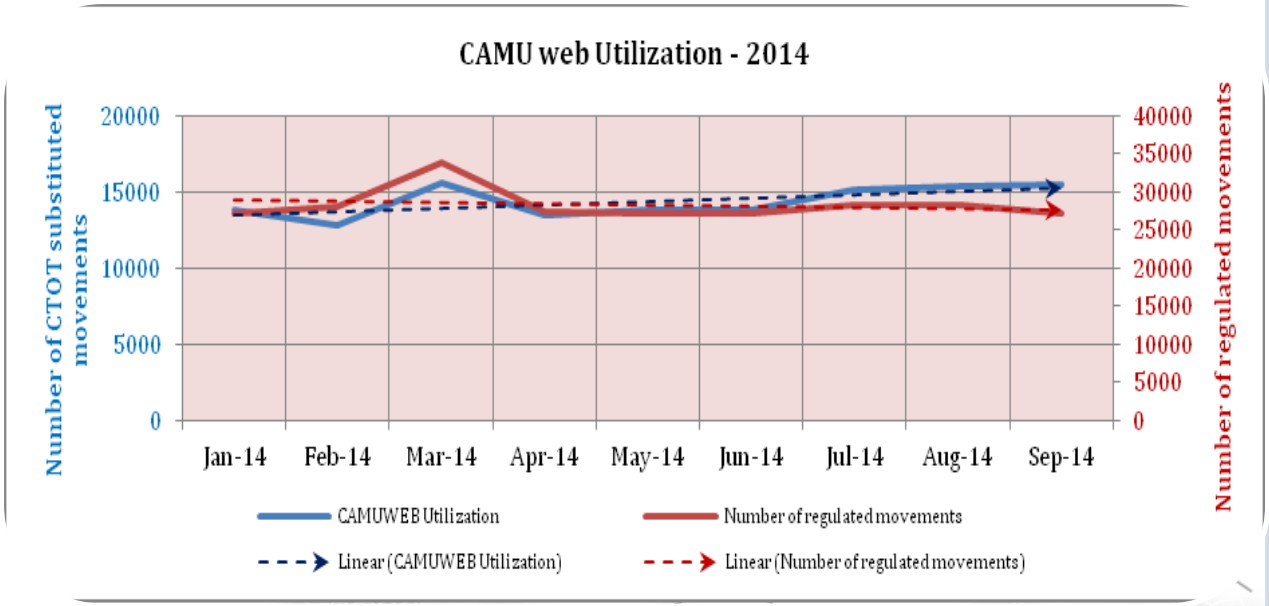
- Airport operational efficiency is measured through different measures, with On-Time Performance being the primary internationally accepted standard.
- On-Time Performance is measured by comparing the actual off-block time (when aircraft pushes back) against the airline schedule time for a departing flight.
- The average OTP for the three busiest airports in South Africa is 99.83% for year to date.
- This is attributable continuous efforts around ATFM and the desire of the aviation community to embrace the different improvements and efficiency initiatives.

Source: acsa.co.za

Flexibility of the CAMU Web System

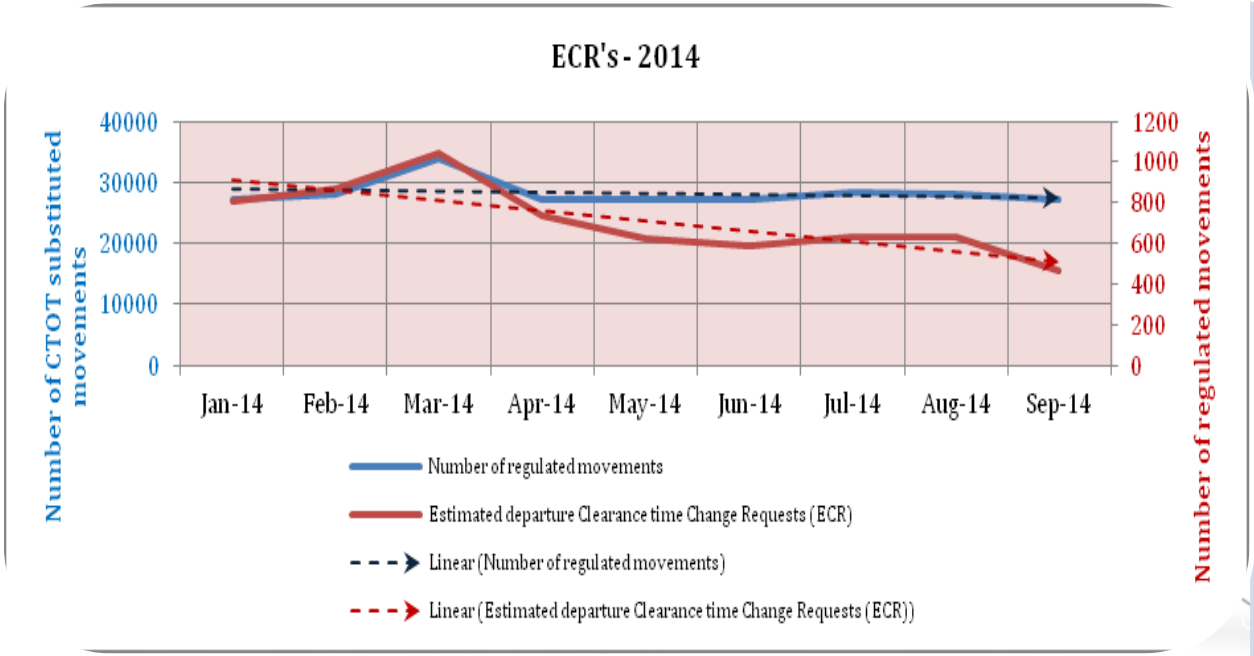
- The CAMUweb system was designed to allow aircraft operators the flexibility of determining their own schedule changes and revisions.
- We have seen an increase in the use of the CAMUweb that tells us that the aircraft operators are finding the system much more useful.
- Reflects the intentions of airspace users to participate in improving the overall performance of the national air traffic flow management systems (ATFMS)
- Reduced the telephonic interaction in the CAMU, leaving the ATFS with more time to focus on airspace management and better traffic management initiatives.

Utilization of CAMU Web System



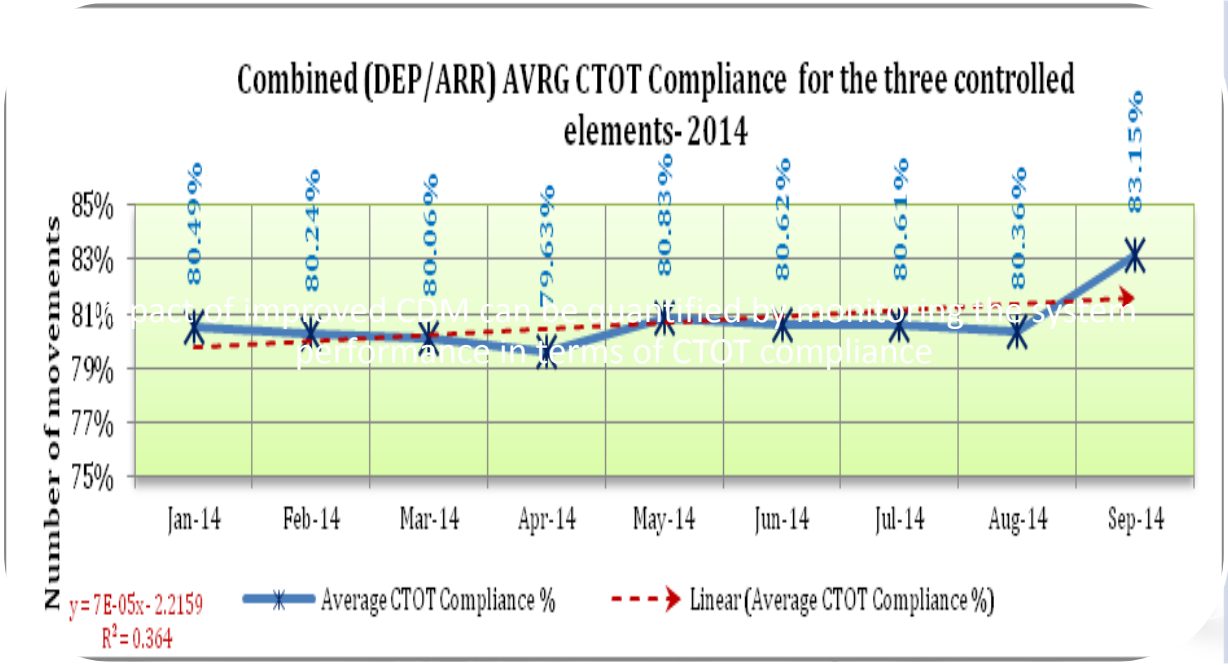
- Positive trend in CAMU web Utilization spotted during 2014.
- The volume of traffic that have had their CTOTs managed tactically increased by around 6% of the total number of regulated traffic

Utilization of CAMU Web System



- CAMU web Utilization is inversely proportional to the level of ECR's carried out by CAMU.
- Graph shows a total decrease of 2% of total traffic that was subject to tactical management of departure times by CAMU through ECR's.

CTOT Compliance



- Impact of improved CDM can be quantified by monitoring the system performance in terms of CTOT compliance
- The average CTOT compliance for year to date is over 80%

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Conclusion

- The South African CDM conference has contributed to increased awareness of CDM with deliverables assigned to different stakeholders
- Improved culture and understanding of CDM
- CAMU will continue to engage stakeholder through visits & meetings in order to help maintain the understanding of CDM
- Committed to continuous bench marking of CAMU operations with the world best practices

THANK YOU!

Questions/Comments