



AVIATION SAFETY
a collaborative approach

4th EAST AFRICAN COMMUNITY
CIVIL AVIATION SAFETY AND SECURITY
OVERSIGHT AGENCY (CASSOA)

SYMPOSIUM REPORT



Held on the 1st to 2nd February
2018, At the Crowne Plaza Hotel,
Nairobi, Kenya.

Content

01	Introduction	4
02	Opening Remarks	6
03	Opening Presentations	11
	Aviation Safety	11
	Collaborative Skies	13
	Sustainable Funding Challenge	14
	Harmonizing of Regulations and Operational Procedures	15
	ICAO Initiatives Enhancing Aviation Safety Culture	16
	Common Safety Oversight	17
	Changing Aviation Safety Culture	18
04	Panel Discussion/ Gala Dinner	18
05	Day 2 Presentations and Panels	21
	Capacity Building for Effective Safety Oversight	21
	Collaborative Training to Enhance Aviation Safety	21
	Digitizing the Regulatory Oversight Process	23
	Recertification Process a Collaborative Approach	24

Content

	Challenges and Opportunities of Managing Drones	24
	Collaboration for Aviation Safety	25
	UAV Operations Approach	26
06	Panel Discussion	26
	Collaboration by Standardization, Harmonization and Cooperation	27
	Expectations of Collaboration in Air Navigation Services	27
	Road to EAC Regional Collaboration	28
	State of Aviation in South Sudan	29
07	Panel Discussion	29
	Resolutions	30
08	Closing of Symposium	31
	Hamza Johari, DG TCAA gave a Vote of Thanks on behalf of the CASSOA Board	31
09	Symposium Sponsors	32



CASSOA Chair & Board, KCAA Chairman & Board, Key Speakers with Guest of Honor Prof. Paul Maringa, Principal Secretary of the Ministry of Transport, Infrastructure, Housing and Urban Development at the Opening of the 4th East African Community Civil Aviation Safety and Security Oversight Agency Symposium.

The 4th East African Community Civil Aviation Safety and Security Oversight Agency (CASSOA) symposium was held in Nairobi, Kenya from 1st to 2nd February 2018 at the Crowne Plaza Hotel under the theme of **‘Aviation Safety: A Collaborative Approach’**. The symposium was held as an initiative to review CASSOA’s safety and harmonization programmes including the assistance to partner states in complying with ICAO Standards and Recommended Practices.

The 3rd CASSOA Symposium was held in Kigali, Rwanda in 2014. The 4th CASSOA Symposium was held as a follow up of the 3rd one, to review the progress made by CASSOA since then. The Symposium was officially opened by Prof. Paul Maringa, Principal Secretary, Ministry of Transport, Infrastructure, Housing and and Urban Development on behalf of the Cabinet Secretary Mr. James Macharia. The symposium was attended by a wide range of professionals and

organizations across the region including CAAs, ICAO, aircraft manufacturers, airlines and air operators, maintenance and training organizations, bringing the total number of delegates in attendance to 310.

Opening remarks were made by various speakers drawn from CASSOA, ICAO, EAC Secretariat, KCAA, and KAA. Further, there were 17 presentations on a wide range of topics including sustainable funding model for CASSOA, Drone operations, Recertification, Collaboration for Aviation Safety and Harmonizing of Regulations among others. There were also several discussion panels that reviewed the presentations and addressed various questions from the plenary. A colorful gala dinner was also held at the end of the opening day, where the sponsors’ representatives from KCAA, KAA and Fly 540 gave speeches. The dinner offered an excellent opportunity for delegates to network with one another.

Introduction

The Symposium was concluded on the 2nd of February 2018, with additional presentations and panel sessions ending up with a presentation of the proposed resolutions of the symposium. Burundi was pronounced as the host for the 5th CASSOA Aviation Symposium, to be held in Bujumbura. Mr. Hamza Johari, Director General, TCAA gave a vote of thanks, and thereafter, the symposium was officially closed by Mr. Charles Ngunjiri on behalf of Honorable Phyllis Kandie, Kenya's Cabinet Secretary Ministry of East African Community, Labor and Social Protection.

A colorful gala dinner was also held at the end of the opening day, where the sponsors' representatives from KCAA, KAA and Fly 540 gave speeches. The dinner offered an excellent opportunity for delegates to network with one another.

2018 - 4th East African Community Civil Aviation Safety and Security Oversight Agency (CASSOA) symposium

ATTENDANCE

310
Delegates 

PROJECTION

103%
Three Percent more than projected attendance

The symposium was attended by a wide range of professionals and organizations across the region including CAAs, ICAO, aircraft manufacturers, airlines and air operators, maintenance and training organizations, bringing the total number of delegates in attendance to 310.

B OPENING REMARKS



Ag. Executive Director, CASSOA Mr. Emile Arao receives the Guest of Honour, Prof. Paul Maringa, Principal Secretary, Ministry of Transport, Infrastructure, Housing and Urban Development.

1

In his Opening remarks at the 4th EAC CASSOA Symposium, the Ag. Executive Director CASSOA, Mr. Emile Arao expressed his appreciation to the Kenyan Government for accepting to host the symposium. He outlined the theme of the conference as “Aviation Safety: A Collaborative Approach”. He also noted that on 22nd March, 2017 during the ICAO Joint Global Forum on Regional Safety Oversight Organizations (RSOO) in Ezulwini, Kingdom of Swaziland, CASSOA was ranked as the second best performing Regional Safety Oversight Organization in the world, coming only second to EU’s EASA.

Mr. Arao emphasized that the regional approach to pooling of resources for mutual benefit spearheaded by CASSOA to assist EAC Partner States in meeting targets under the ICAO Global Aviation Safety Plan was in line with the resolutions made in Ezulwini Joint RSOO forum.

He noted that even though Partner States are at different levels of effective implementation of ICAO SARPs, generally, all Partner States are beneficiaries of enhanced aviation safety. He reiterated that CASSOA was working closely with ICAO under the ‘No Country Left Behind Initiative’ in assisting Partner States build capacity to implement ICAOs standards and policies and to address training needs that would contribute towards skilled human resource.

“In addition, he was pleased to note that CASSOA was ranked as the second best performing Regional Safety Oversight Organization globally, coming only second to the European EASA that has existed for a long time.”

Capt. Gilbert Kibe, Director General, Kenya Civil Aviation Authority, welcomed the delegates to the symposium and appreciated the role of CASSOA in the region. He outlined the governance structure of CASSOA in which all the Directors General of the six Partner States of Kenya, Uganda, United Republic of Tanzania, Rwanda, Burundi and Republic of South Sudan were members of the CASSOA Board. The Board also includes one Aviation Expert from each Partner State to constitute the 12-member Board of CASSOA.

Capt. Kibe indicated that CASSOA is mandated to ensure that Partner States comply with, and implement ICAOs Standards and Recommended Practices (SARPs) by developing and harmonizing Civil Aviation Regula-

tions from the ICAO Annexes. In addition, he was pleased to note that CASSOA was ranked as the second best performing Regional Safety Oversight Organization globally, coming only second to the European EASA that has existed for a long time.

He encouraged delegates to interact freely and share ideas which can be of assistance to the forum, hoping that all the delegates would be willing to learn something new. He also encouraged the foreign delegates to enjoy their stay in Kenya and invited them to visit the various tourist attractions that the country had to offer.



Photo credit: KCAA

Capt. Gilbert Kibe, Director General, Kenya Civil Aviation Authority, (Left) confers with Joseph Nkadayo, Board Chair, Kenya Civil Aviation Authority

3

Mr. Jonny Andersen, Managing Director Kenya Airports Authority, appreciated the role of CASSOA in implementing safety and security standards in the region. He indicated that KAA was actively implementing key initiatives to further improve safety and security in all Kenyan airports. He indicated that such fora provide opportunities for exchanging ideas on emerging trends and to share the industry expectations for enhancing safety and security in Kenyan airports.

Mr. Andersen indicated that KAA is implementing various safety programmes in all the 18 airports and airstrips in the country. In line with Safety Management Systems (SMS) programmes, KAA had developed safety indicators to promote safety at the airports. KAA has also carried out rehabilitation of runway pavements to facilitate safe movement of aircraft, and had embarked on the development of the second runway at JKIA. The new runway will provide an alternative to landing in the event of a runway



Jonny Andersen, Managing Director, Kenya Airports Authority

incursion on the existing runway.

He reiterated that KAA was working closely with KCAA and CASSOA to address safety issues in Kenyan airports and ensuring that ICAOs standards and recommended practices in aerodrome management are implemented.

4



David Kakuba, MD, Uganda CAA/Chairman of CASSOA Board

Dr. David Kakuba, Chairman of CASSOA Board, and MD Uganda CAA welcomed delegates to the symposium and expressed his appreciation to the Government of Kenya and KCAA for hosting the 4th EAC Aviation symposium. He called on delegates to embrace brotherhood and common values while acknowledging all stakeholders for their role in delivering an effective forum.

Dr. Kakuba encouraged all delegates to enjoy the Kenyan hospitality while in Nairobi. He appealed to all stakeholders to support CASSOA in order for it to maintain its ranking as the second best performing RSOO globally. He appreciated all the sponsors including

KCAA, KAA, LPlus, Thales and ALS among others for their financial support to make the event a reality. The CASSOA Board Chair further outlined that CASSOA was working to ensure that the harmonized regulations are adopted and fully implemented in all the Partner States to ensure compliance with ICAOs Standards and Recommended Practices.

The forum was requested to consider and address the challenge of sustainable funding for CASSOA. He noted that a sustainable financing model for CASSOA would ensure that CASSOA's initiatives in the region are effective and sustainable. He informed the delegates that CASSOA was working on a project for automatic validation of personnel licences to ease the mobility of personnel in the region's aviation market. This will ensure that there is faster growth and development in the aviation sector, and enable the region to become competitive globally. He further expressed gratitude to all the CASSOA board members from the six Partner States for their tremendous contribution towards good governance of the Agency and acknowledged the important role they play in guiding CASSOA towards the fulfillment of its key functions and objectives.



Barry Kashambo, ICAO Regional Director for Eastern and Southern Africa, (Centre)

“He further commended CASSOA’s success as the second best performing RSOO as its role in the region is effective”

Mr. Barry Kashambo, ICAO Regional Director for Eastern and Southern Africa, expressed his gratitude to CASSOA for organizing the 4th Aviation Symposium, noting his delight especially as a former Executive Director of CASSOA.

He called for progressive action to ensure regional safety is attained in the Africa-Indian Ocean (AFI) region and under ICAO’s ‘No Country Left Behind initiative’. He indicated that the challenge of lack of qualified personnel required a collaborative approach from all aviation stakeholders. He indicated that ICAO supports the EAC’s harmonization role as performed by CASSOA.

He further commended CASSOA’s success as the second best performing RSOO globally. Mr. Kashambo reiterated that CASSOA’s role in the region was effective as indicated by the fact that there is currently no EAC State with a significant safety concern. He

called upon the region and CASSOA in particular, to support the Republics of South Sudan and Burundi to meet ICAO’s standards. He echoed the other speakers that CASSOA should be funded through a clear sustainable funding mechanism to ensure that the achievements made are upheld. He said that ICAO supports the 2017 Ezulwini Ministerial Declaration on the establishment of sustainable RSOOs in Africa.

Mr. Kashambo informed the delegates that there has been substantial improvement in aviation security and facilitation in the EAC region with the profile expected to improve further, with the upcoming ICAO audits in Rwanda and Burundi in the second quarter of 2018. He commended the EAC region for having the highest visa openness index in Africa. He pledged that ICAO would continue to work with CASSOA to forge a robust aviation safety and security regime with a collaborative approach.

6

Mr. Charles Njoroge, Deputy Secretary General in Charge of Political Federation, EAC Secretariat, indicated that the EAC is the leading regional economic community in Civil Aviation due to CASSOA’s aviation security and safety oversight capacity. He noted that the high levels of effective implementation of ICAO’s standards and recommended practices is attributed to CASSOA’S initiatives and noted that the agency needs to work closely with the states whose effective implementation is below 60%.

He indicated that the EAC has prioritized the establishment of the Unified Upper Flight Information Region (UFIR) over the region and highlighted that the African Union commended the EAC UFIR as a replicable model towards the establishment of the single harmonized African Airspace.

He further noted that the full liberalization of the EAC airspace, the development of the framework of cooperation in aircraft accident and incident investigation,

Cont. from page 9

search and rescue centers and safety management systems will make the region's civil aviation operations safer. He noted that the EAC appreciates CASSOA's role in harmonizing regulations and its initiatives to support the integration of the Republic of South Sudan in civil aviation projects and programmes.

He indicated that the 4th EAC Heads of State retreat on Infrastructure scheduled for 21st – 22nd February, 2018 in Kampala will be receiving a report on the civil aviation projects and programmes aimed at improving safety and security in the region and reiterated that the EAC secretariat will support the implementation of the symposium's recommendations.

7

Prof. Paul Maringa, Principal Secretary Ministry of Transport & Infrastructure, Kenya delivered the speech on behalf of the CS Transport Mr. James Macharia. He appreciated CASSOA for choosing to host the 4th Symposium in Nairobi. He commended CASSOA for developing and harmonizing regulations in the region, noting that aviation acts as a catalyst of economic growth. He reiterated the need to address the challenge of making aviation services more affordable to the citizens across the region.

Prof. Maringa said that the region could benefit under the ICAO's 'No Country Left Behind' initiative by ensuring that CASSOA's collaborative approach assists all Partner States to comply with ICAO's Standards and Recommended Practices. He noted that by the symposium bringing together aircraft manufacturers, regulators and operators their collaboration will lead to meaningful benefits.

He further outlined that the objectives of the 4th Symposium were:

- To promote the safe, secure and efficient use and development of civil aviation within and outside the EAC Partner States

- To provide the partner states with an appropriate forum and structure to discuss, plan and implement common measures required for achieving the safe and orderly development of international civil aviation
- To develop and Implement a Visibility Strategy that clearly demonstrates benefits arising out of CASSOA activities
- To promote a collaborative approach among Aviation Industry Stakeholders in achieving Aviation Safety.

He further highlighted that EAC CASSOA's mandate as per Article 92 of the EAC Treaty included its role in harmonizing civil aviation regulations including implementing regional projects such as a regional aircraft accident and investigation agency, search & rescue coordination centers and the Unified Upper Flight Information Region. He indicated that the harmonization of regulations will lead to the collaboration required in transitioning the region from a fully protected market to liberalized market.

He noted that the EAC region with a population of 158 M and a combined GDP of USD 169.5B is a powerful giant economic block with the potential to transform lives and that the giant should not be allowed to sleep forever. He indicated with gladness that Kenya had recently been certified as Category 1 by the Federal Aviation Administration. This is a great achievement that would allow direct flights from Nairobi to the USA. The direct flights are due to begin in October, 2018. Hopefully, the East African region will benefit a great deal due to this achievement with flight times through Europe being reduced by a big margin.

Prof. Maringa thanked CASSOA and KCAA Board of directors for their role in preparing for the event. He appreciated the support of all the sponsors to make the event a success. He further encouraged the delegates to sample the various tourist attractions that Kenya had to offer by staying in the country for some extra days after the conference. He indicated that the country was open to other African citizens as it has an open visa policy to all African citizens. Prof. Maringa wished the delegates fruitful deliberations and thereafter officially opened the conference.



Aviation Safety

A Case for Shared Resources in the EAC
Mr. Philip Wambugu, EAC Consultant



Mr. Wambugu outlined on

The basis of the frameworks underpinning the resource sharing of the EAC which included provisions of Article 87 of the EAC Treaty on joint financing and mobilization of resources, Article 92 of the EAC Treaty on cooperation in civil aviation and civil air transport, Article 93 on maritime transport, Protocol on CASSOA, the Chicago Convention on ICAO and its Standards and Recommended practices. The aviation safety sharable or joint utilization resources which includes the airspace man-agement, agreements & strategies, equipment, specialized skills, financial resources, information and database with specified capacities.

The case for sharing of aviation safety resources and their joint utilization would lead to economies of scale, pooling of resources during scarcity, harmonization of operations, meeting treaties and recommended practices, ease of monitoring and quality assurance. The Challenges in joint aviation resource sharing and utilization including inadequate resources, weak accounting

frameworks, lengthy negotiations, inadequate sovereignty, uneven aviation capacities between states and low appreciation for aviation safety and security,

The roles on joint utilization of aviation resources was on regional economic communities like the EAC. Sufficient mobilization for regional infrastructure programmes, supporting, passing and implementing laws for regional projects like the EAC Unified Flight Information Region requires Partner States to enhance joint sharing of resources. International partners like ICAO, AFCAC should support such initiatives. Airlines and air operators should also support programmes on safety and security. He concluded that joint sharing on aviation resources is key to improve safety and security, regional safety agencies like CASSOA are key to deepening of cooperation between partner states.

Aviation Safety Collaborative Approach

Prof. Faustin Ondore,
Technical University of Kenya



Prof. Faustin outlined on

Prof. Ondore indicated that the current aviation stakeholders including International bodies like ICAO, regional regulators, airline association, airlines and air operators, MROs, training organizations and the aviation public, face a challenge that there is very little or no collaboration between universities and MROs. There is also little sharing of information

on best practices between airlines. With limited collaboration, local efforts on aviation safety yield less meaningful outcomes and benefits to talk about.

He indicated that on their part, the Technical University of Kenya is currently collaborating with various industry partners including Kenya Airways, General Electric, Boeing, Cranfield University and other local partners with an aim of increasing safety through effective training programmes.

He indicated that Technical University of Kenya currently offers Diploma in Aeronautical Engineering

and Bachelor's degree in Aeronautical Engineering with several of its graduates in employment with various airlines and operators including Kenya Airways, DAC and KCAA.

He called for a collaborative approach from stakeholders with a proposal to set up an aviation safety academy based at the Technical University on Kenya. This would act as a center for research, education and training on aviation safety. This is important since it would also assist in attaining sustainable and remarkable civil aviation safety and security in the region and beyond.

Tick off For Safety

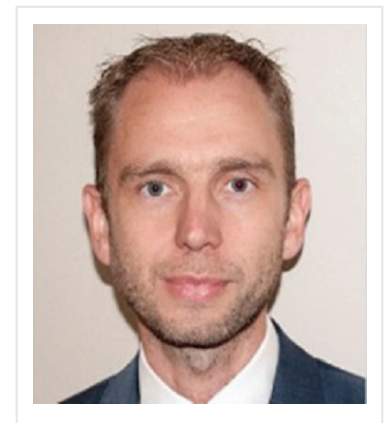
Contribution of e-Examinations

Henrik Luhrs, L PLUS

Mr. Henrik Luhrs outlined on

LPLUS a firm formed in Bremen, Germany in 1985 to offer specialized electronic examinations with high legal and technical requirements. It has over 100 customers including civil aviation authorities, approved training organizations, universities and vocational training institutions. He indicated that the firm's focus is on high stake tests and examinations, from pilot and engineer training, where latest technologies are incorporated, information software to improve examination management and using didactical concepts.

He indicated that from review of aircraft accidents take-off and landing phase are the most critical phases of flight. Therefore, these form the main focus during pilot training. Similarly, pilot error and mechanic issues are also some of the leading causes of aircraft accidents. He indicated the training methods ranging from highlighting, rereading, elaborative interrogation and self-explanation have low and moderate effect on knowledge retention. However, practice testing and distributed practice have



the highest effect in training. He thus, outlined that professional aviation training involved theoretical basis, practice, repetition, test and evaluation. Therefore, professional evaluation is not only on the candidate but also on the test procedure. He indicated that benefits of such testing led to constant arousal, continuous evaluation and improved training standard that leads to high levels of safety. He outlined that the aviation safety puzzle includes the Licensing & Training Standards examination, effective course structure, qualified instructors and practice.

He further indicated that their training system comprises two components namely, the authoring tool and examination management. He outlined examples of different examination venues setup and various examples of graphic layouts for testing various topics and techniques in the industry to facilitate effective training to enhance higher safety levels.

Collaborative Skies

Mr Paulo Stefani, IDS
North America Ltd

Paulo highlighted that his presentation's objective was to stimulate ideas for EAC states to collaboratively adopt common practices that are safe, efficient and profitable to aviation stakeholders. He indicated that Air traffic in Africa will grow by 5.9% annually and that by the year 2036 there will be an increase of 274M passengers in the market which already has 400M passengers. Thus, Africa has to prepare for this situation.

He outlined that ICAO Safety drivers include runway safety, controlled flight into terrain, loss of control in flight, global flight tracking and unmanned aviation. He noted that ICAO Capacity drivers are considered to be airport operations, global interoperable systems and data, optimum capacity & flexible flights and efficient flight paths with the Improvement areas being Aeronautical Information Management, Air Traffic Flow

Management and Unmanned Traffic Management. He indicated that in other regions, collaborative projects included EUs European Aeronautical Information Services (AIS) Database, North America's Air Traffic Situation Display, Caribbean ATFM Data exchange and Asia Air traffic flow management.

His proposed areas of collaboration for the East African region to include centralized aeronautical database, AIM Common services, Collaborative Decision-Making Platform, Regional Airport and Airspace Optimization, Drone Traffic Management and Drone Surveillance Systems.

Panel Discussion

Was moderated by Mr. Ambrose Akandonda and featured Prof. Faustin Ondore, Mr. Philip Wambugu, Mr. Paulo Stefani and Mr. Henrik Luhrs who reviewed the presentations on the case for shared resources, aviation safety by a collaborative approach, contribution of e-examinations on safety and proposals for collaborative approach for the region's safety.

The panel further addressed questions from the plenary on;

- Actual resource sharing as it was identified as the CAA revenue contribution and other joint programmes like implementation of the Unified Upper Airspace as per Article 92 of the EAC Treaty.
- The issue of inclusion of Meteorological (MET) operations was raised and it was clarified that CASSOA was in advanced stage setting developing harmonized MET Regulations for MET operations. MET operations need to be fully integrated as per the recommendations of the taskforce on UFIR to make MET operations autonomous.
- The concern of the relevancy on university training to the industry, was identified as one of the key challenges. More collaboration between the Universities and Industry partners like CASSOA, was proposed as a solution in order to provide graduates who would meet the needs of the industry.

Sustainable Funding Challenge for CASSOA

Emmanuel Habimana,
Director General- Burundi Civil Aviation Authority

Mr. Habimana outlined that since the creation of CASSOA in 2007, there have been several achievements including harmonized regulations, coordinated successful ICAO audits, successful gap analysis for member states, Development of strategic development plans, approval and promulgations of harmonized regulations and technical guidance materials.

He indicated that the main challenges of the agency are insufficient technical resources, lack of sufficient & qualified staff, lack of an effective training system and a sustainable funding mechanism. The current funding mechanism is based on resources mobilized by the EAC secretariat, grants and loans from international bodies, revenue from agency and equal contribution from the CAA's.

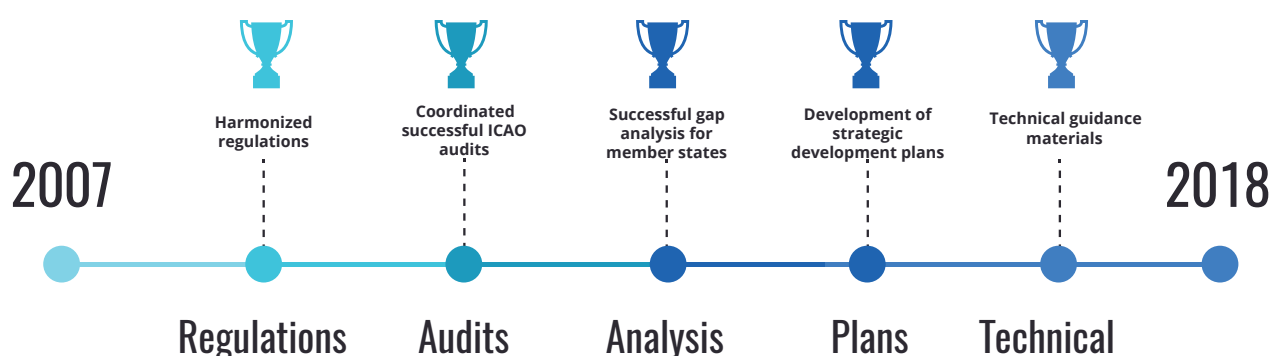
He indicated that the current mechanism places all Partner States in an equal position. However, with the challenge that other Partner States cannot pay due to fluctuations in economic drivers, there is delay in some state's submission of their contributions. This may affect the activities of the agency since the received contributions may not be sufficient. He indicated that a

sustainable funding mechanism should provide for flexibility and avoid overdependence on development partners whose support is limited to specific areas which may not be aligned to the priorities of CASSOA.

He therefore, indicated that funds could be raised from charging non-partner states for the use of CASSOA's expertise and air passenger levy to be charged on embarking passenger to supplement Partner States contribution even though it may result in some partner states demanding more power due to the unequal contribution.

He concluded by outlining that CASSOA's success will depend on the development and implementation of a sustainable funding mechanism and an attraction and retention strategy to support future and current activities. He noted that of all the strategies, the air passenger levy seems to be most sustainable and that for it to be practical Partner States should determine a 5-year strategic plan for determination of the applicable rate.

CASSOA Successful Achievements



Harmonizing of Regulations and Operating Procedures

Challenges and Benefits

Ms. Maria Makalla Memba, Senior Legal Counsel, TCAA



Ms. Maria Makalla Memba

Ms. Memba gave a brief history of CASSOA from the time it started as the East African Civil Aviation Safety Project in 1999 with the aim of delivering an East African Upper Flight Information Region and a Regional Safety Oversight Organization to harmonize regulations and assist states in complying with ICAO SARPs. This was later achieved through Article 92 of the EAC Treaty that required the need to harmonize regulations establishing the Unified Upper Area Control System and establishment of joint services.

She further outlined that the three founder member states- Kenya, Uganda and Tanzania were assisted by the USA under the safe skies for Africa initiative that aimed at making sustainable improvements in African aviation safety and security to foster transport between Africa and USA. The programme provided technical assistance in the implementation of the regional civil aviation safety project. Initially the harmonization teams in September 2004 were composed of experts from the Partner States to review regulations of member States. 500 differences were identified initially in the individual regulations of Partner States. However, with mutual agreement and collaboration, the regulations differences were reduced to zero.

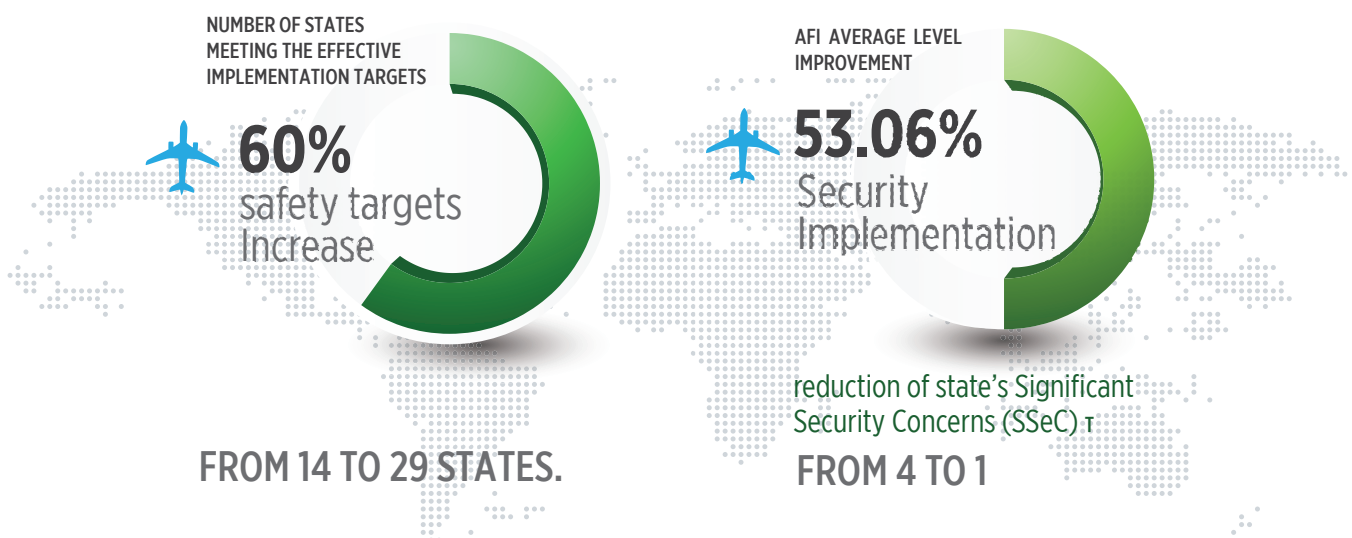
However, there were challenges in some differences since some of the state's regulations had general provisions in their own style, including differences in penalties & offences, validity periods and cabin crew functions. All these led to further harmonization of the regulations, a process that delivered the first set of 26 harmonized civil aviation regulations. EAC-CASSOA came into existence after the protocol was approved and signed on 18th April 2007. It was also established as an autonomous self-accounting institution of the EAC with a mandate of harmonizing and enhancing oversight capability in the region. Harmonization would bring benefits of reducing time to develop and amend regulations, reduce duplication of resources, improve efficiency on CAAs operations, facilitate region's aviation operations and expand regional economy.

However there needs to be action to ensure that the differences in state's legal framework don't result in delays in promulgation of harmonized regulations or change regulatory requirements at customization stage. It is also important to ensure that Partner States adopt and comply with the model of harmonized regulations, provide experts at CASSOA to provide guidance during development of regulations and ensure there is effective and total commitment from partner states governments. Also, CASSOA needs to be legally empowered, equipped and staffed to be relevant when implementing the Common Market Protocol for the region.

EAC-CASSOA came into existence after the protocol was approved and signed on 18th April 2007. It was established as an autonomous self-accounting institution of the EAC with mandate of harmonizing and enhancing oversight capability in the region.

ICAO Initiatives Enhancing Aviation Safety Culture and Security in Africa

Mr. Eyob Estifano and Justus Nyunja,
ICAO Eastern & Southern Africa Regional Office



Mr. Estifano indicated that the AFI regional safety targets were set in 2012 due to the increased number of aircraft accidents in Africa from 1997 to 2006 that were largely due to safety oversight deficiencies. He indicated ever since the safety targets were set, there has been increased assistance provided to States to enhance their oversight capability. He gave a summary review of State Oversight capabilities during ICAO safety audits from 2012 to 2015, where the number of States meeting the Effective Implementation targets of 60% increased from 14 to 29 States. This was largely attributed to capacity building brought by numerous training programmes including establishment of African Aviation Training Organisations (AATO) to coordinate training activities. He indicated that ICAO supports CASSOA's initiatives as it assists States in meeting ICAO's SARPs with various plans in aerodrome certification, search and rescue and SMS implementation.

Mr. Nyunja indicated that the AFI SECFAL Plan (African Aviation Security and Facilitation Plan) was to enhance aviation safety and security facilitation in a sustainable manner. This was facilitated by training on travel documents authentication, trainings on effective risk

management, crisis management and legal trainings. He indicated ICAO has conducted various security trainings in the region. ICAO has also been involved in planning and setting of short to long term security goals which provide technical assistance to States. This has led to the improvement of the AFI average level of effective security implementation to 53.06%. Also, this has led to the reduction of State's Significant Security Concerns (SSeC) from 4 to 1 respectively.

He also indicated that ICAO support's CASSOA's harmonization initiatives and added that there needs to be training of more security personnel with effective distribution of the 72 certified instructors in aviation security across the region. He also called for more improved utilization of the 4 centers of aviation security in the AFI region that are in Nairobi, Johannesburg, Dakar and Rabat. He also called for more collaboration to address emerging threats, more effective data collection and information sharing, increased funding to RSOOs (Regional Safety Oversight Organization) through a sustainable mechanism, obtaining accurate data on non-machine readable travel documents, enhanced awareness of aviation security, capacity building and addressing emerging threats like cyber security.

Common Safety Oversight Management System

by Mr. Jorg Kottenbrink, EMPIC



Mr. Jorg Kottenbrink delivers his presentation

Mr. Kottenbrink introduced EMPIC as an aviation safety oversight management software firm founded in November 2001 in Erlangen, Germany. He indicated the firm's safety management software includes elements of licensing of flight crew, organization approval, type certificates, risk performance and work-flow interfaces. In addition, he reiterated that the firm's software is currently being used by 25 regulators, where the firm conducted meetings to determine common software developments and priorities in developing the roadmap. The software has a comprehensive database covering ICAOs eight critical elements to provide a dashboard for inspectors to make right certification

decisions based on live data in surveillance, aviation security compliance and technical inspections. EMPIC only serves regulators to ensure that there are no cases of conflict of interest.

He further outlined that the system covers critical authority obligations, fully configurable and integrated with vibrant user support. He said aviation safety oversight management software is a future proofed investment that provided sustainability and its built by regulators to assist CAAs deliver effective oversight thus, improving safety levels.

Changing Aviation Safety Culture with Safety Roadshows

Sanjeeth Sewgolam,
Aviation Security Manager, Airbus



Mr. Sanjeeth Sewgolam makes his presentation on changing aviation safety culture

Mr. Sewgolam outlined how the leading helicopter operators including Agusta Westland, Bell Textron, Sikosky and Airbus Helicopters collaborated with a call to action under the international Helicopter Safety Team. He reiterated the need to implement safety management systems, training, use of advanced system and equipment including flight data monitoring, Engine health monitoring systems, mission specific equipment like night vision goggles and strict compliance with Manufacturers Maintenance Programmes.

Mr. Sewgolam further outlined how Airbus Helicopters is conducting various regional roadshows to increase safety awareness and that it was also implementing various safety initiatives that include:

- Safety by Aviation SMS with clients as part of improving safety.
- Safety by training and making significant investment in training facilities that offer realistic mission-based training scenarios.

- Safety by maintenance and reiterating to customers to adhere to proper maintenance practices.
- Safety by design by manufacturer aircraft designs that meet the highest safety standards
- Safety by cooperation and committing to working closely with authorities, safety organizations and proactive approach to listening to customer requirements.

Panel Discussion

Mr. Justin Nyunja, Mr. Sanjeeth Sewgolam, Ms. Maria Makalla Memba, Mr. Emmanuel Habimana, Mr. Jorg Kottenbrink with Capt. Tom Ogenche as Moderator.

The panel reviewed the presentations on Sustainable Funding Challenge for CASSOA, Harmonizing of Regulations and Operational Procedures - Challenges and Benefits, ICAO Initiatives Enhancing Aviation Safety Culture and Security in Africa, Common Safety Oversight Management System and Changing Aviation Safety Culture with Safety Roadshows.

The panel also addressed questions from plenary on the challenge of Civil Aviation Authorities responding to ICAO State Letters and finding a sustainable funding mechanism for CASSOA.



Gala Dinner

Colorful dinner was held at the roof top section of the hotel, in which there were short speeches from the sponsors representatives including Eng. Joseph Nkadayo, KCAA Chairman, Dr. David Kakuba, Chairman CASSOA and Managing Director, Civil Aviation Authority Uganda, and Mr. Nixon Ooko, Director of Flight Operations, Fly 540. In addition, delegates interacted freely while enjoying numerous networking opportunities and socializing during the dinner.



Capacity Building for Effective Safety Oversight

Ms. Margaret Kyarwenda,
Secretary General, African Association of Training Organizations (AATO)

Ms. Kyarwenda outlined that the aviation training needs were focused on the technological change, emerging aviation threats, ageing personnel, ICAO USAOP CMA audit results, regional cooperation within Africa and the single air transport market for Africa. Africa's top 10 training needs were in engineering, pilot training, airport security, cabin crew, aircraft maintenance and air traffic control. She indicated that the opportunities for training in Africa depend on replacing ageing personnel, Abinitio, Basic, Advanced, Specialization, Management, Training inspectors and English proficiency. She identified the challenges being lack of sufficient funds to devote on training, unavailability of reliable data on ATOs and lack of coordination & cooperation between ATOs and States.

She indicated that AATO was established to improve safety, security and efficiency of air transport with the main objective of establishment and maintenance of high standards and harmonization of aviation training in

Africa. She outlined that AATO was promoting cooperation among its members while service as a link between the ATOs and airlines, AMOs, airports and regulators. She highlighted that AATO has developed a framework for establishment of centers of excellence, standardization of training programmes and has published reports on status of aviation training needs and resources.

She further elaborated that AATO membership facilitates access to cost effective training facilities, better visibility for training organization and common acceptance and recognition of training and certificates, pooling of instructors and course materials, access to standardized curriculum and a platform to address training issues. She concluded that financial support was crucial, a means of training experts was necessary and that AATO would continue to work with CASSOA to achieve effective harmonized training in Africa.

Collaborative Training to Enhance Aviation Safety in EA region

Dr. Mugambi N'nchebere,
Director East African School of Aviation

Dr. Mugambi outlined that aviation is a key contributor to world economy that's faced with three challenges of inadequate infrastructure, safety and security concerns and lack of skilled personnel. Two of these challenges can be addressed through effective training.

He further lamented that aviation training is costly due to the high cost of equipment and instructors that's compounded by fragmented training leading to few trainees per ATO. This is way below break-even level that results in poor quality training and may

Day 2 presentations and panels

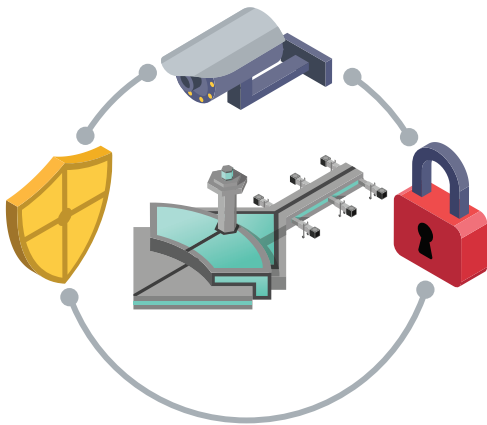
compromise aviation safety. He therefore, outlined the dilemma of delivering a high-quality standard of training at a reasonable cost which could be achieved by cross subsidy from parent organization, ICAO support, collaboration and competition.

He indicated that collaboration is where key instructors and equipment are shared with joint course development while competition refers to cooperation but with competition on value proposition with cooperation on

competencies. He outlined areas of collaboration like AATO partnership, ICAO TRAINAIR, site training, equipment and instructor sharing etc. He concluded that a common regional approach to training should be embraced by Kenya's East African School of Aviation (EASA), Uganda's East African Civil Aviation Academy (EACAA) and Tanzania's Civil Aviation Training Centre (TCATC). The three EAC institutions should collaborate so as to develop and implement focused training that enhances aviation safety in the region.

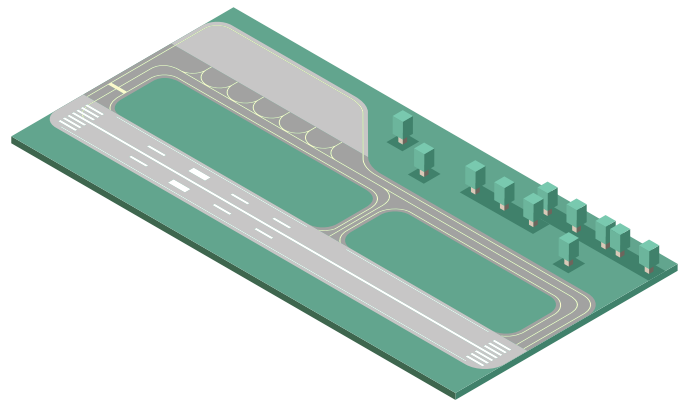
1 SECURITY

safety and security concerns
Challenges



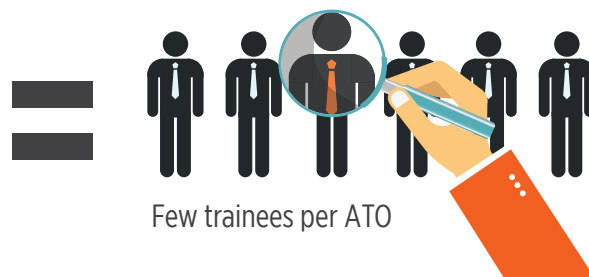
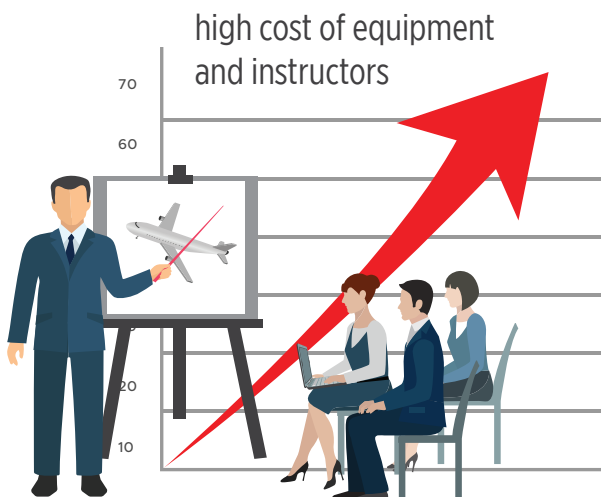
2 INFRASTRUCTURE

Inadequate infrastructure
Challenges



3 SKILLED PERSONNEL

lack of skilled personnel
Challenges



Digitizing the Regulatory Oversight Process

Mr. Luc Beaudoin,
Seabury Solutions

Mr. Beaudoin introduced Seabury Solutions as a global aviation and aerospace company which serves over 100 clients with products for airlines management, CAAs oversight tools, MRO software and contract management.

He outlined how the process of digitization uses digital technologies to create a digital culture. He indicated that the process of digitization should include the assessment of the customer to be served, technology to be used, regulatory requirement and the economic need. These should be followed by a review of the area to be digitized, review of the process of change management, review of licensing and assessment of the opportunities for full integration with the process while considering

the team to be used and sequence of events. He indicated that the process ranges from the simple, moderate to complete fully integrated paperless systems noting that not all processes have to be digitized. He highlighted that the key pillars of project success are leadership to use the system, solutions to meet business needs, prioritization of data and system accuracy, balancing the IT infrastructure with continuing performance and execution of a comprehensive change strategy.

He concluded that the success of a digitized system is backed up by the full 24hr support from the vendor to make it be fully sustainable and noted that Seabury Solutions has office support in America- New York, Europe- Amsterdam, Asia- Manila and Africa- Nairobi.

Panel Discussion

Mr. Luc Beaudoin, Ms. Margaret Kyarwenda, Mr. Juma Mumo, Dr. Mugambi N'nche-bere with Mr. Redemptus Bugomola as Moderator,

Reviewed presentations on capacity building for effective oversight, collaborative training to enhance aviation safety in the East African region and digitizing the regulatory oversight process.

The panel also addressed questions from plenary on concerns of loss of qualified personnel by investing in more training, lack of standardized training syllabus that can be solved by improved capacitation of AATO to harmonize syllabus, handling unqualified ATOs by more decisive action by CAA, lack on statistics on training personnel that can be addressed by effective facilitation to AATOs initiatives and gender balance in industry that can be addressed by implementation of more affirmative policies by States.

Recertification process a collaborative approach

Mr. Fred Opot

Vice Chair of Kenya Association of Air Operators

Mr. Opot outlined the regulatory framework in Kenya as the Civil Aviation Amendment Act 2002 that created KCAA and later the subsidiary legislation with requirement for organizations previously approved, which includes a 5-phase process including pre-application, formal application, document evaluation, demonstration & inspection and certification. He indicated that since 2007 the recertification stopped after discovery that the recommended process in certification was not followed to the letter. This led to the repeat of the recertification process. This challenge was compounded by the large number of new operators, maintenance and training organizations requiring to be certificated. He indicated since the civil aviation industry is highly regulated, to achieve high standards the regulated entities must have a quality system with the regulator having a mandate to maintain surveillance of the industry. He observed that the regulated entity must set out procedures for various processes that require approval and which should be relevant to the organization's activities. He noted that the capacity of an organization

to perform prescribed tasks is dependent on the human capacity, initial and recurrent training and previous experience. He noted that collaboration between regulator and regulated entity is required for safety since an antagonistic stance creates no winners. Regulators need requisite tools that include training and guidance materials. Regulated entities should be conversant with the regulations. He outlined that from 2002-2007 the industry lagged on domesticating and implementing the ICAO SARPs. This was attributed to a weak regulatory regime, the number one cause for Africa's poor safety record.

Mr. Opot noted that a flight safety performance report indicated that even though 2017 was the safest year for airline passengers, Sub Saharan Africa has an accident rate that is 44% higher than global average, thus even if African safety has improved there is a gap to close, which can be closed by devotion to meeting high standards of airworthiness and collaboration with regulators.

Challenges and Opportunities of Managing Drones, Case of Rwanda

Mr. Bongayi Kizito,

Head of ATC Management, RCAA

Mr. Kizito introduced the case of drones by highlighting that disruptive innovation always wins, where it will initially face resistance. However, as technology delivers performance and efficiency to the users, with time it gains more acceptance. He outlined that operating a drone presented a navigation challenge of loss of separation, airspace violation, lack of coordination and emergency procedures.

Mr. Kizito indicated that Rwanda provided a legal framework that incorporates innovation and addresses security concerns. He outlined the two routes of regulating drones, i.e. for basic operations, and risk assessment for specific or complex operations. He indicated how the country overcame the challenge of lack of technological and operational standards to develop advisory



Drones creating serious risk of collision

circulars and procedure manuals. He indicated that Rwanda facilitated collaboration from national security, cyber security experts and drone manufacturers. He noted that they had developed predetermined routes for safe navigation of drones and mapped out the country with areas where drone operations were prohibited like in airports and restricted in game parks. He outlines how their airspace is segregated with maximum altitude for drone operations.

He indicated that from an oversight perspective Rwanda established drone inspectorate office, established a

drone technical team, conducted safety assessment, established voluntary and instant reporting framework and a single platform for Unmanned Aerial Systems (UAS) registration and permit request approvals. He outlined that Unmanned Aerial Vehicles (UAV) operations had performance benefits as UAVs don't require a pilot, can be used in manmade operations with a commercial benefit of transporting cargo. He concluded that a performance-based approach is required for commercial drone regulation.

Collaboration for Aviation Safety

Mr. Maury Seck,
Airbus Regional Safety Director

Mr. Seck indicated that collaboration was key to delivering aviation safety. He noted that safety is not a destination but it's a process, adding that the fact that 2017 recorded the highest safety record for global passenger transport, maintaining this status would require more support and collaboration from all stakeholders.

He noted that aviation traffic doubles every 15 years, the higher growth will mean increased safety initiatives. He concluded that closer collaboration and partnership from manufacturers, Government authorities and operators is required to maintain high safety levels.

UAV Operations approach

Mr. Geoffrey Nyaga,
Chief Operations Officer Astral Aerial Solutions.

Mr. Nyaga introduced Astral aerial solutions as a drone operator. They are in the process of setting up drone operations to offer cargo transport, oil and gas mining services, e-commerce deliveries, environmental and wildlife conservations and agricultural services. He indicated that drone industry will have a major impact by empowering youth through job creation and Astral was establishing the foundation in an evolving industry. He indicated that the company has partnered with a South African ATO to set up a training school, which aims at getting standardized Remotely Piloted Aircraft Systems (RPAS) training procedures, licenses valid across countries and delivering an empowered local workforce.

He indicated that the firm was working to deliver a UAV Traffic Management (UTM) platform specifically for low-altitude airspace operations in which the UAV will operate to enable safe operations by providing pilots with info on altitude separation, restricted airspace, weather conditions and to integrate UAV operations into the national airspace. He outlined that the UTM solution objective is to effectively manage UAV operations and ensure that there is no collision. It would also set common standards for UAV operations and provide a regulatory system to monitor drone movements. Mr. Nyaga also noted that the company has won the IATA Air Cargo Innovation Award 2017.

Panel Discussion

Mr. Fred Opot, Mr. Bongayi Kizito, Mr. Maury Seck and Mr. Geoffrey Nyaga moderated by Mr. Francis Rusenyanteko, CASSOA Board Member

The panel reviewed presentations on recertification process as a collaborative approach, the challenge and opportunities of managing drones as the case in Rwanda and the need for collaboration for aviation safety and on UAV operation approach.

The panel addressed questions from the plenary concerning drone regulation, training on drone operations and proposed Unified Traffic Management operation.

Collaboration by standardization, harmonization and Cooperation

Ms. Suzette Nieuwoudt

Ag, Executive Director Interim SADC Aviation Safety Organization (iSASO)

Ms. Suzette outlined that collaboration is possible by standardization from ICAOs SARPs, international best practices. It also includes harmonization of regulations and technical guidance materials and cooperation with other RSOOs by entering into agreements. Standardization was agreed from the Ezulwini ministerial forum which agreed on the improvement and strengthening of RSOOs with a view of developing a Global Safety Over-sight System. She indicated that the RSOOs were formed from regional safety projects. She outlined how SASO was created from the SADC Secretariat with a MOU from 15-member States to the SASO charters from the Ministers of transport. Ms. Suzette said that SASO functions through regional CAAs by providing support in areas that include advisory, certification, continuing surveillance, safety management and training.

She indicated that Harmonization was derived from toolkits in terms of training and technical assistance to member states. Its functions are based on surveillance, personnel licensing and operational specialized training. She noted that Cooperation was achieved from cooperative agreements with RSOOs and AFCAC. By pooling resources and avoiding duplication the participation in regional projects Collaboration based on coordination with other international safety partners including EASA, AFCAC, FAA and manufacturer's like Airbus will increase efficiency and safety in the region.

Expectations of Collaboration in Air Navigation Services

Eng. Shadrack Wesechere,

Director of Air Navigation, Kenya Civil Aviation Authority

Eng. Wesechere introduced air navigation services as services provided to air traffic in all phases of operations including air traffic managements, communication navigation and surveillance including AIC services. He noted that the ANS evolution involves collaboration in enhancement of capacities and air traffic management operation concept that is interoperable global air traffic management system for all users in all phases of flight.

He outlined how the Aviation Safety Block Upgrades (ASBU) was a priority in the region, where national plans are based on air traffic with collaboration in developing the regional and national plans where

stakeholder approval was critical. He noted that the Global Air Navigation Plan (GANP) 2019 is based on global performance parameters with improvement on safety, security, capacity, efficiency and interoperability. He further outlined that at the executive level key enablers were systems with a global business view, while at planning level information maintained in database with its basic building block based in ICAO recommendations ensures harmonization.

Eng. Wesechere outlined examples of collaboration like ICAOs ASBU implementation, regional initiative and GANP development.

He explained that industry expectation was for a global interoperable air navigation system, performance-based collaboration with a predictive risk management. He noted that air traffic should never exceed capacity, performance-based navigation should be dynamic, separation limits should be reduced, increased surveillance assurance, stakeholders should fully participate to deliver a win-win situation with satisfied regulators, service providers, operators and users.

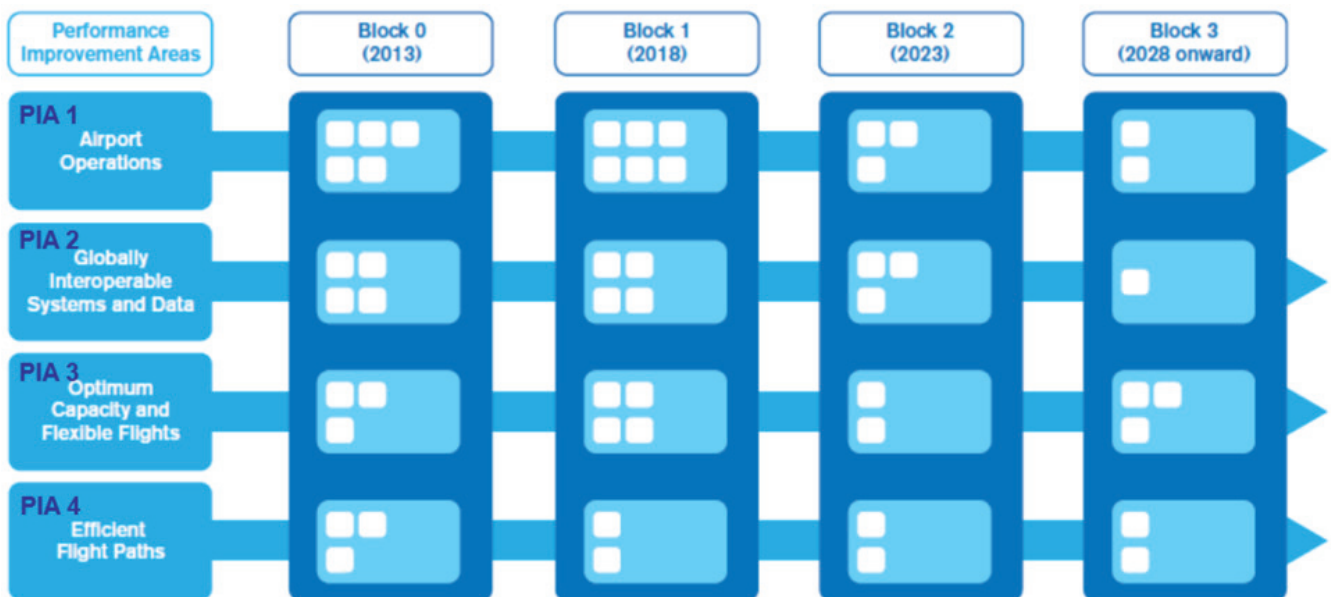
Road to EAC Regional Collaboration

Mr. Francois-Xavier Richard,
Thales.

Mr. Xavier introduced Thales and said it has presence in 24 countries in Africa providing various air navigation equipment. He noted that the African Air Traffic Context had challenges in capacity, safety, environment and costs with constraints due to air traffic growth. This was coupled with international standard requirements and an Air Traffic Management (ATM) revolution. Further, it includes interoperability targeting the single African sky with the introduction of Aviation System Block Upgrades (ASBU) blocks.

He further indicated that Thales has delivered a regional air navigation cooperation model with ASECNA that

incorporates 17 Civil Aviation Authorities (CAAs) and COOPANs that has 5 ANSPs and therefore recommended a joint regional airspace navigation plan for 6 EAC states with 6 FIRs. He indicated that the collaboration model would bring economies of scale, reduce project implementation effort and risks and bring consistent and efficient programme management. He noted that benefits from implementation of such a regional air navigation plan would be harmonization through the joint roadmap, compliance for single African sky, innovation by smooth and regular evolutions, saving through more efficient air traffic management and commitment to improving safety.



State of aviation in South Sudan

Capt. David Subek,
CEO, South Sudan Civil Aviation Authority (SSCAA)

Capt. Subek outlined that South Sudan as a new nation was actively developing its aviation systems and called for more collaboration to assist the country meet ICAOs standards. He indicated that the country had three main airports in Juba, Wau and Malakal. Juba International Airport has recently gone through improvements and rehabilitation of the aprons and control tower. He noted that the SSCAA was formed in 2012 through an Act of Parliament and now the main challenges that the country aviation industry is facing are the political instability, lack of funds for SSCAA, lack of a robust legal framework, inadequate airport infrastructure and security.

He therefore called for more closer collaboration with the region, especially through CASSOA, in order for SSCAA to overcome the challenges. This collaboration is also necessary to build capacity for its civil aviation regulation and administration to ensure compliance with ICAOs SARPs. This is crucial for the Republic of South Sudan to successfully go through the forthcoming ICAO audit in July 2019.

Panel Discussion

Featuring Ms. Suzette Nieuwoudt, Eng. Shadrack Wesechere, Mr. Francois -Xavier Richard and Mr. Tebogo Maketlo moderated by Mr. Alex Avedi

Reviewed presentations on collaboration by standardization, harmonization and cooperation, expectations of collaboration in air navigation services and road to EAC Regional Collaboration. The panel addressed questions from plenary on regional airspace management, litigation and standards in navigation equipment purchase.

E RESOLUTIONS

CASSOA Board Member, Eng. Chris Njenga reviewed the closing day's proceedings, he proposed the following resolutions to be adopted by the plenary and considered for approval by the CASSOA Board, as the Resolutions of the 4th CASSOA Symposium which are:

1.	Partner States to delegate regulatory functions to CASSOA in the following areas: - <ul style="list-style-type: none"> i) Personnel licensing ii) Accident Investigation
2.	Harmonized EAC Model regulations should be domesticated by all individual Partner States without any differences.
3.	EAC CASSOA should be resourced with sustainable funding and therefore all Partner States should accept for immediate implementation the passenger embarkation charge. This reinforces the Resolution made at the 3rd Aviation Symposium held in Kigali, Rwanda
4.	There is need for EAC Partner States to have high level political commitment in support of an autonomous self-accounting EAC-CASSOA entity.
5.	Harmonize Partner States ATO's as Centers of Excellence to avoid duplication of services in the existing Centers of EASA (K), CATC (T) and EA Academy, Soroti (U).
6.	Fund and fast track the implementation of the Unified Upper Air Space system
7.	CASSOA to deal with the operational issues identified as follows: - <ul style="list-style-type: none"> i) Integrate the South Sudan Civil Aviation Authority and its systems to the EAC CASSOA operations. ii) Partner States to respond to ICAO State Letters in a timely and regular manner. iii) CASSOA to carry out road shows to all the Partner States to highlight the benefits of its existence and its achievements. iv) AVMET Services in Partners states to be Autonomous under CASSOA Over sight v) Speedy implementation of East Africa Search and Rescue project. vi) EAC CASSOA Center for Aviation Medicine (CAM) in Nairobi. vii) Development of the Regional Airspace Management System. viii) Review the viability of establishing an East African Aviation Safety Academy focus on research on aviation issues. ix) Develop a dispute resolution mechanism for service providers. x) Review the sufficiency of the EAC competition rules and ensure that they are relevant and applicable to the above.

The resolutions were unanimously adopted by the plenary and thereafter signed by the Deputy Secretary General EAC, all the Civil Aviation DG's/MD of Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda.

Closing of Symposium

Republic of Kenya's Cabinet Secretary
East African Community, Labor and Social Protection Labor and Social Protection

Mr. Charles Ngunjiri, on behalf of Honorable Phyllis Kandie, Kenya's Cabinet Secretary for East African Community, Labor and Social Protection, thanked CASSOA for hosting the symposium in Kenya. In the speech that was read on her behalf, she reiterated on the need to support collaboration to reduce on the cost of aviation safety oversight, training, handling emerging threats like drone operations and capacity building to address the challenge on development of human resource.

She appreciated the role CASSOA plays as per Article 92 of the EAC Treaty and pledged to support the agency in delivering regional projects like the search and rescue center, regional aircraft accident investigation agency and unified upper flight information region.

She further reminded delegates that the direct flights from Kenya to the USA will commence in October 2018, thus, the East African region is set to benefit and further highlighted to delegates that Kenya has an open visa policy for all Africans. Africans were free to live, invest and do business in the country. She further noted that Kenya has attractive tourist destinations that the delegates should feel free to indulge afterwards. She concluded by thanking all the participants, conference organizers and sponsors for delivering a successful meeting and officially closed the symposium.

Vote of Thanks

Mr. Hamza Johari, DG TCAA gave a Vote of Thanks on behalf of the CASSOA Board

Where he appreciated all the sponsors for their financial support towards delivering a successful symposium and announced that the next 5th EAC CASSOA Symposium will be held in Bujumbura, Burundi.

No.	NAME OF ORGANIZATION	ADDRESS
1.	Thales	Parc, Tertaire SILIC,3 Avenue Charles Lindbergh 94628 BP 20351 Rungis Cedex France.
2.	Blue Quadrant	Mayfair Suites, 1st Floor, Parkland Road P.O BOX 8776-00300 Nairobi, Kenya.
3.	Ingeneria Dei Sistemi (IDS)	Eastgate Office Park Block C, South Boulevard Bruma, Johannesburg, South Africa.
4.	Civil Aviation Authority Uganda.	Aviation House Kampala - Entebbe Road, Entebbe 5536, Uganda.
5.	Fly 540	Baycourt Upper Floor, Suite 3 & 4, The Watermark Business Park Ndege Rd, Karen. P.O. Box 10293 – 00100 Nairobi, Kenya.
6.	Civil Aviation Authority Tanzania	Aviation House, 1st Floor, Nyerere/ Kitunda Road Junction, Banana Ukonga Area, P.O. Box 2819 Dar Es Salaam, Tanzania.
7.	Airbus	07 BP 275, Abidjan, Ivory Coast
8.	Kenya Airports Authority	Head Office, Off Airport North Road. P.O Box 19001 (00501) Nairobi Kenya.

Symposium Sponsors

No.	NAME OF ORGANIZATION	ADDRESS
9.	EMPIC	Güterbahnhofstrasse 5 91052 Erlangen Germany
10.	LPLUS	LPLUS GmbH Hillmannstraße 2A 28195 Bremen
11.	ALS	Wilson Airport P.O. Box 41937 - 00100 Nairobi, KENYA
12.	Rwanda Civil Aviation Authority	Kigali International Airport P.O. Box 1122, Kigali RWANDA
13.	Seabury	Seabury Solutions Building 4000 Westpark Business Campus, Shannon, Ireland
14.	Jet Ways	Titan Hangar Wilson Airport P.O BOX 3101 - 00506 GPO. Nairobi, Kenya.
15.	Blue Sky	Wilson Airport, Aero Club of East Africa, Nairobi, Kenya P.OBOX 18518 - 00500 Nairobi, Kenya.
16.	Blue Bird	Hangar no.23, Wilson Airport, Langata Road P.O.BOX 52382-00200 Nairobi ,Kenya

Symposium Sponsors

No.	NAME OF ORGANIZATION	ADDRESS
17.	Kenya Tourist Board	P.O. Box 30630-00100, Nairobi, Kenya 7th floor Kenya Re Towers ragati rd, Upper hill.
18.	Kenya Civil Aviation Authority	Aviation House P.O. Box 30163-00100, Nairobi, Kenya



www.cassoa.org