

# Implementation of the ICAO ACT-CORSIA Initiative in the Southern African Development Community (SADC) Region

## Experience of the Republic of South Africa with Buddy Partnerships

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### BACKGROUND

The Republic of South Africa (RSA) is a country at the most southern part of the African continent. The country has modern and well-developed transport infrastructure, with its rail and air networks being the largest on the African continent<sup>1</sup>. The Department of Transport (DoT) is responsible for the regulation of transportation, which covers: public transport, rail transportation, civil aviation, shipping, freight and motor vehicles. The DoT's motto is: **'Transport is the heartbeat of South Africa's economic growth and social development'**

### SOUTH AFRICA'S APPROACH TO REDUCING CARBON DIOXIDE (CO<sub>2</sub>) EMISSIONS

South Africa is one of 193 ICAO Member States and fully supports the environmental work being done by ICAO. The country is devoted to providing an excellent transport system that reduces the quantity of Greenhouse Gases (GHGs) and other pollutants emitted by the sector<sup>2</sup>. Emissions from the transport sector are responsible for 10.8% of the country's total GHG emissions. Of this, aviation contributes only 5% of the transport sector's GHG emissions<sup>3</sup>. The National Development Plan (NDP) (Vision 2030), produced by the Department of the Presidency<sup>4</sup>, provides an overall guideline on the strategic approach for the country's response to climate change. The NDP proposes the movement towards a low carbon economy. Different spheres of government have various roles to play to fulfil this vision. The DoT's objective in supporting the

1 South African Government, Department of Transport: *Transport Infrastructure Report*, 2017. <[http://www.transport.gov.za/documents/11623/39906/6\\_TransportInfrastructure2017compressed.pdf/5f92a2ff-748a-4f7b-9d09-16a877a768e1](http://www.transport.gov.za/documents/11623/39906/6_TransportInfrastructure2017compressed.pdf/5f92a2ff-748a-4f7b-9d09-16a877a768e1)>

2 South African Government, Department of Transport: *Green Transport Strategy for South Africa (2018-2050)*, 2018. [http://www.transport.gov.za/documents/11623/89294/Green\\_Transport\\_Strategy\\_2018\\_2050\\_onlineversion.pdf/71e19f1d-259e-4c55-9b27-30db418f105a](http://www.transport.gov.za/documents/11623/89294/Green_Transport_Strategy_2018_2050_onlineversion.pdf/71e19f1d-259e-4c55-9b27-30db418f105a)

3 South African Government, Department of Environmental Affairs: *GHG Mitigation Report*, 2014.

4 South African Government, Department of the Presidency: *National Development Plan: Vision 2030*.

transition to a low carbon economy is to, 'increase the contribution of transport to environmental protection'. Accordingly, in 2018 the DoT adopted measures to address the significant contribution of all modes of transport to national GHG emissions by developing, a Green Transport Strategy (GTS) that intends to minimize the adverse impact of transport on the environment.

The implementation of the GTS will be the responsibility of the various DoT parastatal organizations. The South African Civil Aviation Authority (SACAA) is one of the agencies of the DoT and it is governed by the Civil Aviation Act of 2009. Its mandate is to control, promote, regulate, support, develop, enforce, and continuously improve, the safety and security levels throughout the civil aviation industry. The SACAA plays a major role in ICAO's work on the environment by its contribution as a Member of the ICAO Council as well as the Committee on Aviation Environmental Protection (CAEP). Accordingly, South Africa participates in aviation environmental protection decisions presented at the highest levels in ICAO. Furthermore, for several years the country has been the only African ICAO Member State that belongs to the CAEP.

## REDUCING THE ENVIRONMENTAL FOOTPRINT OF THE SECTOR - SOUTH AFRICA'S PARTICIPATION IN ACT-CORSIA

The SACAA assists other regional States in numerous aviation disciplines such as aviation medicine and aerodrome certification. Under the umbrella of the ICAO Assistance, Capacity building and Training for CORSIA (ACT-CORSIA) Programme, the SACAA volunteered to assist some States within the Southern African Development Community (SADC)<sup>5</sup> region to implement CORSIA. Thus, the ACT-CORSIA initiative paved the way for South Africa, through the SACAA, to also provide assistance with aviation environmental protection. GHG emissions and their impact on climate change are not localized within States. Their consequences go beyond borders and therefore regional and global collaboration is required to produce positive climate change adaptation

FIGURE 1: SADC Member States (SADC).



and mitigation outcomes. The SADC region recently bore the consequences of Cyclone Idai, one of the worst tropical cyclones to ever affect the African continent. Two of the States receiving assistance from South Africa, Malawi and Zimbabwe, suffered from the disastrous destruction caused by this intense cyclone. Moreover, in previous years, bad weather has resulted in some flights in South Africa to be diverted from airports like Oliver Reginald (OR) Tambo and Cape Town International. It was no surprise therefore, that in response to the ICAO's State Letter, South Africa volunteered to participate in ICAO's initiative to reduce carbon dioxide emissions by assisting some of the States within the SADC region. South Africa provides assistance to six of the sixteen SADC Member States.

These six States are Botswana, Lesotho, Malawi, Namibia, Zambia, and Zimbabwe. These particular States were selected because of their proximity to South Africa, along with their official language of communication, being the same as that of South Africa. Through the ACT-CORSIA initiative, South Africa is honored to contribute to ICAO's No Country Left Behind (NCLB) campaign by assisting the Recipient States in implementing the Annex 16, Volume IV Standards and Recommend Practices (SARPs). This will greatly contribute to the improvement of aviation environmental performance by aeroplane operators in the SADC region and might, in the long run, contribute to more participation in ICAO's work on the environment by the SADC geographical region.

5 Southern African Development Community (SADC), Overview <<https://www.sadc.int/about-sadc/overview/>>

ACT-CORSIA Buddy Partnerships were established with these States, and under this initiative, South Africa (as the Donor State) provided the technical expert to work together with the CORSIA Focal Point (CFP) of each Recipient State. To ensure consistency, ICAO provided training to South Africa’s technical expert and an ICAO Environmental Officer was assigned to work with, and provide guidance to this technical expert.

### **ASSISTANCE PROVIDED - IMPLEMENTATION OF THE ACT-CORSIA BUDDY PARTNERSHIPS**

The implementation of the ACT-CORSIA Buddy Partnerships involved the following three steps:

#### **Step #1: Training Session(s)**

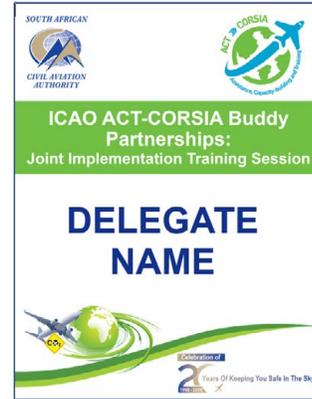
In September 2018, the Recipient States were invited to a three-day training session, which was named ‘Joint Implementation Training Session’.



The focus of the training was on the development of Emissions Monitoring Plans (EMPs) and the establishment of CORSIA regulatory frameworks. Three sessions (covering the same content) were conducted and were comprised of two classroom sessions and one teleconference session. The 1<sup>st</sup> session was in South Africa and the 2<sup>nd</sup> session was in Zambia. These venues were chosen as the central points to reduce the travel costs for the CFPs and their delegates. States were advised to select the venue that was most convenient for them.

**TABLE 1:** Details of the training sessions.

Session	Venue	Dates	Attendees
1	Emperors Palace, Johannesburg, South Africa,	26-28 September 2018	Botswana, Namibia and Zimbabwe
2	Protea Towers Hotel, Lusaka, Zambia	02-04 October 2018	Zambia
3	Remote (Teleconference)	06 November 2018	Malawi



The representatives in the first session were all from the Civil Aviation Authorities (CAAs) in their respective countries. The second session was attended by the Zambian CAA, an aircraft operator (Proflight Zambia), as well the Zambian Airports Corporation Limited (ZACL). Malawi was unable to attend the two sessions that were scheduled for Johannesburg and Lusaka therefore; teleconference training was conducted for them on 6 November 2018. The presentations used in the classroom sessions were sent to Malawi prior to the teleconference. These were then clarified by the expert from South Africa to the Malawian Department of Civil Aviation (DCA) on the day of the teleconference. Concerning Lesotho, it was understood by both South Africa and ICAO, that Lesotho currently has no requirements under CORSIA. Nevertheless, assistance was offered by South Africa through information provision and the offer of invitations to future workshops.

#### **Step #2: Remote Follow-up**

Subsequent to the Joint Implementation Training Sessions, South Africa conducted remote follow-ups in the form of emails and teleconferences. Each Recipient State developed an Activity Plan showing the steps they would take to ensure that their aircraft operators developed the EMPs within the CORSIA timelines, and how the CAAs

**FIGURE 2:** Session 1 Delegates at Emperors Palace, Johannesburg, South Africa [from left: Mr. Filemon Ngwedha (Namibia), Mr. Thabo Mogale (Botswana), Mr. Judah Dube (Zimbabwe), Mr. Kabelo Kgosimore (Botswana), and Mrs. Chinga Mazhetese (South Africa)]. [Photo Credit: SACAA]



**FIGURE 3:** Session 2 Delegates- Protea Towers, Lusaka, Zambia. [from left: Mr. Jackson Chirwa (ZACL Zambia), Mrs. Chinga Mazhetese (South Africa), Mr. Cuthbert Lungu (Zambia CAA), Ms. Audrey Sichula (Proflight Zambia), Mr Coster Malambo (ZACL Zambia), and Captain Phil Lemba (Proflight Zambia)]. [Photo Credit: SACAA]



**FIGURE 4:** Template of the Activity Plan

STEP	ACTIVITY	PROPOSED START DATE	STATUS QUO	PROGRESS NOTES	ACTUAL COMPLETION DATE
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

would ensure that regulatory frameworks were established in their respective States. The Activity Plans were sent to the Donor State via email.

Teleconferences between the Donor, Recipients, and ICAO were conducted between November 2018 and March 2019. The objective was to check the progress in implementing the Activity Plans and to render any assistance the States may have required.

- 14 and 16 November 2018 (Zambia, Botswana and Zimbabwe)
- 14 and 22 January 2019 (Malawi and Namibia)
- 6 February 2019 (Malawi)
- 5 March 2019 (All Recipient States – experiences gained)

**Step #3: Final In-State Training**

South Africa provided further assistance to some of the States, like Botswana, which requested that the Joint Implementation Training be extended to their regulation developers as well as their aeroplane operators. On-site training was conducted at the Botswana CAA in Gaborone from 20 - 30 November 2018. Three aeroplane operators attended the training: (Air Botswana, Kalahari Air Services, and Major Blue). Further on-site training is similarly

scheduled for the Malawian DCA in Lilongwe from 29 - 30 May 2019. The attendees will be the Malawian DCA and some of the aeroplane operators in Malawi.

**ASSOCIATED QUANTITATIVE/ QUALITATIVE BENEFITS - EXPERIENCE GAINED AND THE FUTURE OF BUDDY PARTNERSHIPS**

South Africa is honored to have participated in the first phase of the ACT-CORSIA Buddy Partnerships. Both quantitative and qualitative benefits were realized by the donor and recipient States:

- South Africa as the Donor State contributed to ICAO’s work on environmental protection and played a role in the ICAO No Country Left Behind initiative.
- The support rendered resulted in an improved understanding of the CORSIA in the region.
- The States had different levels of understanding and implementing the CORSIA. Through the deliberations under the ACT-CORSIA Buddy Partnerships, States that were new to the CORSIA managed to engage and share information with other States that were a step ahead.

- Collaboration is now taking place within the Buddy Partnership on efforts to achieve and enhance responsibility for the CORSIA. Each of the six States is now in a position to engage other States in the Buddy Partnership.
- Most of the Recipient States' aircraft operators managed to develop EMPs.
- Some regional aircraft operators benefited by receiving the training that was offered by ICAO through the Donor State and managed to develop their EMPs.
- The ACT-CORSIA Buddy Partnership campaign served as an information source. State authorities received information on the CORSIA SARPs and model regulations to assist them with regulation development.
- The training was offered free of charge thus catered for the different economic challenges faced by the recipients. In addition, it was provided in the region hence the recipients did not have to incur costs for international travel, accommodation etc.

Despite the very positive experiences highlighted above, there was, however, very little time for the development of regulatory frameworks by 1 January 2019. Different States have very diverse steps to establish regulations. The CORSIA's applicability date of 1 January 2019 made it a challenge for each of the States to develop and establish and implement regulatory frameworks. Nevertheless, each State initiated the framework for the regulation development and work is continuing towards getting the regulations promulgated.

## THE FUTURE OF THE BUDDY PARTNERSHIP

South Africa intends to continue providing assistance to the six Recipient States under the ACT-CORSIA initiative throughout the CORSIA compliance cycles. Therefore, South Africa will follow ICAO's directives regarding the next steps in the Buddy Partnership activities. The upcoming support may involve assistance with verification requirements, plus the development of Emissions Reports.



| ICAO

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## CHAPTER SEVEN

# Climate Change Adaptation

