Going with the flow

Cooperation between the Argentine and Brazilian ANSPs is setting the standard for regional harmonisation.

They may be the fiercest of rivals in sport, but Argentina and Brazil are approaching air traffic management strategy as teammates.

Argentine ANSP, EANA, is relatively new having commenced work as a Transport Ministry company in February 2016. When it was setting up its airspace design division, it searched for expert assistance. Brazilian ANSP, DECEA – a 10-year veteran in this field – was happy to help.

DECEA has been working with EANA on airspace design for almost a year now, easing matters considerably for the Argentine team. They are both using the same design tool, which better facilitates the transfer of know-how between the two entities. DECEA’s collaboration with EANA spans areas such as the production of instrument flight procedures (IFP), best practices, construction methods and the drafting of internal processes.

The collaboration in effect starts from the moment the first landmarks and obstacles are considered, to the point where the dossier relating to a new instrument flight procedure goes to the regulatory body for approval and subsequent release.

EANA accepts that DECEA’s design experience has helped Argentina avert many a crisis where EANA would have had to backtrack with its design work and start again. DECEA’s learning curve put it well ahead of EANA and that knowledge has been passed on and readily incorporated in EANA’s work.

With DECEA help, the EANA design team now boasts the capabilities needed to produce not only new instrument charts but also concepts of operation. The Argentine ANSP estimates savings to the tune of US$10 million, having originally envisaged a US$15 million cost for the design work to be outsourced.

“Ever since we first met at the last ICAO Assembly, DECEA has been fully supportive of our plans,” says Agustín Rodríguez Grellot, EANA President and CEO. “We shared the same vision about collaboration and we began to move in that direction together.

“A few months later, a Brazilian design team landed in Buenos Aires and set about working alongside the EANA design team. Through collaboration we were able to produce a host of new IFPs for eight Argentine airports. We achieved the desired results faster and at a fraction of the cost of hiring a private design company. We are very proud of the professional skills of our combined design teams.”

Holistic approach

The neighbours have collaborated in many other fields, including performance-based navigation (PBN) and air traffic flow management (ATFM).

Brazil’s air traffic flow management department – much like its design team – is well established. It is helping EANA to gauge
airspace capacity and train Argentine technicians on the drafting of all design processes. This has led to EANA setting up its own ATFM centre.

DECEA’s involvement also gives EANA a different, outside perspective and allows the Argentine ANSP to design in a holistic manner. This has proved to be a win-win solution as it also assists the Brazilian team by triggering questions and answers that ultimately benefit both parties. DECEA’s staff have effectively translated their experiences in Buenos Aires to help improve processes back home in Rio de Janeiro.

Argentine’s use of ATFM additionally benefits Brazil through the merging of the region’s airspace so there is a larger, single operating environment. Achieving common standards of service quality within this single airspace will ultimately produce a seamless flow of air traffic between the two countries and beyond.

“Air traffic between Brazil and Argentina is one of the largest international flows in the region,” says Brigadier Luiz Ricardo de Souza Nascimento, Operations Department Director at DECEA.

“Therefore, a common standard for these operations may increase capacity, using ATFM tools, and provide greater access to Argentine airports involved in PBN projects, where Brazilian and Argentine companies operate.”

Regional outlook

EANA is now capable of entering into collaborative agreements with ANSPs from such other neighbouring countries as Paraguay and Uruguay, each of which possesses different strengths from Argentina’s.

In the north of Argentina, in Misiones Province, for example, EANA is redesigning the terminal area around Posadas airport to implement PBN technology. The redesigned terminal area will include IFPs for Encarnación airport, situated across the border in Paraguay.

Sooner or later, Brazil and Argentina could move towards the joint operation of a regional ATFM centre. Some 420 flights cross Argentina’s borders with Bolivia, Brazil, Chile, Uruguay and Paraguay on a daily basis. Streamlining processes as well as the airspace itself so that it becomes a single operating environment will be in everyone’s interest.

EANA is contributing design and construction software, as well as work by its design team and Paraguay will install a new VHF omni-directional range (VOR) at Encarnación.

EANA is also planning to involve Uruguay’s DINACIA (Dirección Nacional de Aviación Civil e Infraestructura Aeronáutica) in the redesign of the BAIRES (Buenos Aires) terminal manoeuvring area (TMA), which borders Uruguayan airspace to a large extent.

This collaborative process is still at a preliminary stage and could require outside consultancy support as BAIRES is, by far, Argentina’s most important TMA. It includes the country’s top airports (Ezeiza – Ministro Pistarini International and Aeroparque Jorge Newbery Metropolitan) in terms of passenger volume and aircraft movements.

Lessons learned

Both EANA and DECEA have learned how to make the collaborative process more efficient. Culturally and operationally, both parties are aware of the stumbling blocks, why they appear and how to overcome them.

Taking those lessons onboard means that, sooner or later, Brazil and Argentina could move towards the joint operation of a regional ATFM centre. Some 420 flights cross Argentina’s borders with Bolivia, Brazil, Chile, Uruguay and Paraguay on a daily basis. Streamlining processes as well as the airspace itself so that it becomes a single operating environment will be in everyone’s interest.

In fact, the idea of a regional ATFM centre was suggested at the 1st Regional ANSP Meeting, held in Puerto Iguazú in April 2017. The meeting brought together ANSPs from Argentina, Brazil, Paraguay and Uruguay. The 2nd Regional ANSP Meeting – which attracted the presence of more ANSP leaders from the region – was held within the framework of the ALTA (Latin American Air Transport Association) Leaders’ Forum, which opened in Buenos Aires in November 2016.

“Brazil has always been and will continue to be open to cooperation at any level within DECEA capabilities,” concludes Nascimento. “We have participated in all ICAO or CANSO regional projects, and have signed agreements with several countries in the region and in other continents.

“We consider international cooperation an excellent tool to further evolve the ATM system to meet the needs of our society today and in the future.”

Credit: EANA