

PREPARING FOR THE FUTURE

Manuel Teixeira Rolo, president of Nav Portugal discusses dealing with Covid-19 and why the pandemic won't stop its plans for future improvements

Ben Sampson



What makes NAV Portugal different from other ANSPs?

Our staff is composed of highly specialised employees. Besides that, our geographical location places us in the confluence of different ICAO regions, which allows us to bridge Europe, Africa, the Caribbean and North and South America and their different operational concepts.

The quality of service and safety levels practiced in both FIR are recognized by our customers through satisfaction surveys and our productivity levels are associated with a cost below the European average in the provision of our air navigation services. NAV Portugal also has a strong innovative side that results in the implementation of several projects, standing out with our projects in improving environmental efficiency.

What would you say are the recent achievements of NAV Portugal?

Last year marked the beginning of a cycle of technological modernisation that will shape NAV Portugal services as increasingly more efficient and effective. The catalyst was the decision, taken in 2018 to join COOPANS, an international partnership between the ANSPs of Austria, Croatia, Denmark, Ireland and Sweden within which the Company actively participates in the developments that have been carried out jointly with our partners.

We've started the process of changing the ATM infrastructure of the Lisbon FIR, with the development of the TOPLIS-ATC project that when completed will enhance the capacity of the system with the best technology available on the market.

Also, with the signing of an agreement with the Portuguese Air Force recently, the first steps have been taken to restructure national airspace, under which it will be possible for civil air traffic to use part of the airspace under military responsibility. With this agreement, it will be possible to provide point merge procedures to Lisbon. In addition, in Santa Maria FIR, integrated with NAT Region work has begun to provide an ADS-B satellite surveillance system.

Can you describe the effect of Covid-19 on NAV Portugal?

The aviation sector is facing its biggest challenge ever. With routes suspended and significant reductions in the number of scheduled flights, the fears for the viability of companies and jobs are huge. NAV Portugal implemented several measures to ensure the continuity of service during this crisis, giving priority to the safety of our employees and

pragmatic solutions for the company's financial sustainability, without sacrificing the capacity to respond to several different recovery scenarios.

The main challenge is to plan and execute the strategy during these uncertain times. We still don't know what the full impact of the pandemic will be, let alone its duration. That is why we must exercise flexibility and responsiveness. We had to adapt overnight to a new scenario. Even with intense changes in operational business and the way we operate, the biggest challenge is our workforce – keeping employees fully protected and safe, but also engaged and productive. Protecting their health and then the financial health of the organization will be challenging during the coming years.

It is fundamental to obey security criteria, guide teams, isolate risk groups and seek alternatives such as home offices for those who can work that way. We did all that. It is time to take care of the human side and exercise empathy and assume that the situation is not easy for anyone.

How can ANSPs address the deep fall in revenues from airlines?

Most airlines have lost financial capacity to pay air navigation fees since February 2020 for a unforeseen period. Several airlines have significantly reduced their operations and recovery is expected to take months.

Unlike airlines, ANSPs cannot close operations. We have to ensure that the capacity to provide services is maintained, safeguarding transport of persons and goods, which is particularly important during the critical context of a pandemic.

So far during the first half of the year, controlled traffic in our two FIR is down by more than 50% compared to the same period in 2019. There will be a drastic reduction in revenues resulting from the drop in air traffic volume, in addition to the non-compliance of customers concerning billing payments, as route and terminal control fees are our only source of revenue. This put us, like all ANSPs, in a weak financial situation. It may prevent ANSPs from being able to guarantee their commitments over the coming months if appropriate measures are not taken in time.

NAV has put in practice extraordinary cost-containing measures that include a reduction and containment of HR expenditure, external supplies and services, postponement of investments and deferral of some payments related to personnel charges, to relieve the financial pressure and ensure stability. We have also a loan approved from

the Government, which is the immediate solution for this extraordinary situation.

What are NAV Portugal's projections for traffic evolution?

We are planning our operations in line with Eurocontrol's most recent forecast, so we expect to be on the 30% threshold in July (compared to 2019) and 40% in August. We are already seeing these expectations becoming a reality, as July's first days are in line with the 30% target. On a mid-term basis, by December we expect to reach 70% of last year's traffic, with a slower recovery from there on, remaining around 75% of 2019 traffic on the first quarter of 2021.

What air traffic management system does NAV Portugal use and how is it developing?

The ATM systems used in our two FIR are different and have different development processes. In Santa Maria OACC, the system has been operating for 19 years and was developed by ADACEL. For the Lisbon FIR, the company opted for in-house development, developing our ATM system, the LISATM.

Since 2001 this system has ensured all the required functionalities, both from SES and local, with performance within high standards of security and configuration flexibility. However, LISATM now requires deep reformulations, which is why we have joined the COOPANS Alliance and will adopt the ATM system used by all of its members, designated by TopSky. This system will come into operation in 2022.

What is NAV Portugal's approach to technology innovation?

On the 2020-2024 horizon, the company's investment program covers strategic investments in Lisbon FIR, including the replacement of the current ATM system in 2022, and of the control towers serving Lisbon FIR airports, as well as the corresponding part to the infrastructures related to Montijo Airport, which is projected to start operating in 2023. Investments will also be made in the Humberto Delgado Airport to expand the current capacity, with the construction of a new control tower being noteworthy. In addition, investments in the operational systems of NAV Portugal will contribute to the international harmonisation plans of the different ICAO regions where NAV Portugal operates, EUR and NAT.

What technology do you think will be important in the future?

The coming years will see the arrival of new

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technologies, which will involve the whole spectrum of aviation and consequently our sector. NAV Portugal will closely follow these developments, to be part of the change. Specifically, the introduction of Artificial Intelligence in ATM systems, which will translate into tools that can support ATCOs in their daily routines and enable the reduction of their workload and for them to direct their attention to the most critical functions.

Do you have an update on the project to increase Lisbon airspace's capacity?

The project had to be suspended because of the Covid-19 pandemic, as we were unable to finish the planned ATCO training. In fact, in mid-March we were halfway through ATCO final training but, due to the necessary measures, the process was suspended. The availability of resources is now being reassessed before we reschedule the project.

What are NAV Portugal's aims for the future?

In the short-term, we are aiming for a swift recovery, to improve competitiveness and innovation, while maintaining safety, which is always our paramount goal.

We have always played an important role in the aviation community. Our airspace embraces a continental and an oceanic FIR that borders the North Atlantic and neighbouring countries such as the UK, USA and Canada. We have worked closely with ANSPs for many years.

The present times are challenging with unprecedented hurdles to overcome, but we need to focus on the main goals, such as increasing the efficiency of the management and organization of the air space, more effective civil and military coordination and improvements in management procedures, flows and capacities. We have to continue the technological update of the ATM and support systems with new features, through

NAV Portugal is part of the COOPANS Alliance and plans to transfer to the TopSky system in 2022

digitalization projects while progressively decommissioning the conventional navigation infrastructure and replacing it with new systems based on the use of satellite signals (GNSS) as a primary means of navigation in all phases of flight and in PBN navigation support.

Can you describe an example of where you have worked with other ANSPs?

The challenges that are systematically placed on ANSPs require alliances and synergies across multiple geographies. We held the first Technical Days of the Atlantic, with the ANSP from Brazil, Angola, Cape Verde and São Tomé and Príncipe in 2017, in recognition of the growing importance of the Atlantic as a strategic axis. The initiative identified a set of opportunities for collaboration between NAV and its Portuguese-speaking peers.

NAV Portugal has also teamed up with the AEFMP group constituted by six western Mediterranean Civil Aviation Authorities and ANSPs which, in the context of European ATM evolution, have chosen to work together on their core activities. Also, we have a long-lasting participation in the SWFAB, one of the main requisites from the Single European Sky, which has allowed NAV Portugal and Spain's ENAIRE to develop and strengthen synergies and deploy several joint-initiatives.

Finally, the integration in the COOPANS Alliance and the implementation of the new ATM system has allowed NAV Portugal to take a decisive step into the future.

What is your background?

I served more than 40 years as a military pilot and was Chief of Staff of the Portuguese Air Force between 2016 and 2019.

For this management position, I capitalize on the training, experience, organisational and aeronautical knowledge from being a pilot and an operational commander. One of the most demanding and relevant issues during my time as Chief of Staff of the Portuguese Air Force was when I participated in the discussion for the ongoing process related to the future new airport of Lisbon at Montijo and the expansion of the capacity of Humberto Delgado airport in Lisbon – a demanding and complex negotiation process with several interlocutors.

What do you think is the most important thing to consider when managing an ANSP such as NAV Portugal?

You have to be focused and consistent with NAV Mission, including the environmental commitments of aviation. Above all, you have to maintain excellent relations with all of your partners and interlocutors at national and international level to achieve the goals of an optimised management of national airspace, capable of achieving and even surpassing international and national requirements and regulations.

What is the most challenging part of your job?

Making sure that NAV Portugal keeps providing services in a safe, efficient and environmentally responsible manner, whilst maintaining a balanced financial position. To keep the focus on identifying and implementing opportunities and on the need to closely monitor emerging trends. ❖

NAV PORTUGAL

NAV Portugal is responsible for the management, operation and development of air navigation systems, including air traffic management services, in the two Flight Information Regions (FIR) controlled by the Portuguese Government, Lisbon and Santa Maria, 5.8 million km² of airspace.

The ANSP has two control centres and 10 TWR (air traffic control towers) with an eleventh planned to be built at Montijo Airport by 2023. It employs almost 1000 people, including 351 ATCOs and managed a record number of flights in 2019, with 855,994 movements (IFR+VFR). It has operated Free Route Airspace within the Lisbon FIR since 2009 and has been a COOPANS Alliance member since September 2018.

The ANSP states its goals are to provide first-rate safety conditions, optimising usage and efficiency levels and fostering environmental sustainability.