PENS INTER-CENTRE CO-ORDINATION IN EUROPE

It was announced from Brussels on 5\textsuperscript{th} March that the Pan European Network Service (PENS) is now the operational network for the exchange of co-ordination messages between the Air Traffic Control (ATC) Centres of NATS in Swanwick (UK) and the Maastricht Upper Area Centre (MUAC) in The Netherlands. PENS allows ATC Centres to exchange flight information data securely and efficiently by using IP (Internet Protocol) Version 6 (IPv6) as required by the Flight Message Transfer Protocol (FMTP) Implementing Rule\textsuperscript{1}.

Information exchanges between flight data processing systems are established between air traffic control units for the notification, co-ordination and transfer of flights as well as for civil-military co-ordination\textsuperscript{2}.

These information exchanges need appropriate and harmonised communication protocols to secure their interoperability – and PENS provides this service.

PENS is a joint air navigation service provider (ANSP)/EUROCONTROL-led initiative which aims at providing a common IP based network service across the European region for both voice and data air traffic management (ATM) communications.

PENS has been operational for EUROCONTROL services since the end of 2009, providing high-availability IP services to the EUROCONTROL European AIS Database (EAD) and the Network Manager’s network for Flow Management Position (FMP) data exchange.

PENS supports SESAR validation over the SESAR Virtual Private Network (VPN) and so is paving the way to becoming the System Wide Information Management (SWIM) Backbone.

“This achievement is the result of a great deal of hard work from people from both sets of ANSPs, the PENS Management Unit (PMU) at EUROCONTROL and our Network Service Provider: I would like to pass on my personal thanks to everyone who has contributed to the achievement of this significant milestone,” said Mustafa Gunsaya, Head of Network Team of NATS and Chairman of the PENS User Group (PUG).

Added Manuel Garcia, Head of the Ground/Ground Communications Team at AENA and Chairman of the PENS Steering Group (PSSG), “PENS is demonstrating that it is able to meet the very demanding communication requirements of ATM applications across Europe - and does so in compliance
with the European Regulation associated with the implementation of the Single European Sky concept.”

“For over 40 years, MUAC has been a frontrunner in deploying advanced solutions. This realisation of the first-ever FMTP implementation over IPv6 on PENS supports our vision to drive the future of European ATM, whilst improving our safety, quality and cost-efficiency. One of the keys to this success is the European collaboration and engagement of all people in the diverse organisations involved in this project,” observed Yves Kemps, team leader of the Network Communications team at EUROCONTROL’s Maastricht Upper Area Control Centre.


2 As required by the Commission Regulation No 1032/2006.