HungaroControl



Magyar Légiforgalmi Szolgálat Zrt.

PRESS RELEASE

Budapest, April 3, 2013

HungaroControl's latest innovation is a likely success

HungaroControl's MergeStrip process will be beneficial to air traffic controllers, airlines and the public alike

The Hungarian air navigation service provider is currently finalizing the development of MergeStrip, a unique process to help air traffic control become more efficient, make the operation of aircraft more economical and less polluting, and reduce noise in the vicinity of airports. The air navigation industry in Europe is already showing significant interest in the new process.

As a result of more than two years of cooperation between HungaroControl's operations and operations planning teams, a new air traffic planning concept named MergeStrip and its supporting software has been developed by ATM system designer Richárd Madácsi, a HungaroControl professional. The new methodology will enable the continuous descent of the aircraft approaching the runway. The aircraft approaching with a continuous descent consume less fuel and therefore can be operated more efficiently, have a lower carbon dioxide emission and they are also "less noisy": as the aircraft do not have to use additional energy from time to time to make progress, the optimum utilization of the accumulated positional energy leads to lower engine output, i.e. the noise load of the citizens living near airports can be reduced.

Software and systems to assist the scheduling of approach of aircraft preparing to land have existed before, as several air navigation service providers have made substantial investments to make the management of the approaching traffic more efficient. At the same time, these systems have failed to meet the expectations in several cases and have been the subject of intense criticism by the air traffic controllers. One of the main problems was that the landing schedule and the routes calculated by the computer often fail to provide the required outcomes and the air traffic controllers are forced to make frequent interventions. It is important to note that the cost of developing and commissioning HungaroControl's new process is a fraction of the costs of other, currently used systems.

The development process at HungaroControl started by the Hungarian professionals analysing the data of the aircraft with pilots spontaneously choosing continuous descent, collecting their common features, and then creating a software to help air traffic controllers process the information required to support continuous descent. The system allocates the aircraft preparing to land at a specific airport to a "number line" by considering their actual position and speed. Based upon the calculations performed by the program, air traffic controllers can easily and quickly identify the preliminary interventions required to carry out the landing operation continuously and in the right schedule; however, no decision is made for the controllers. The new procedure assists air traffic controllers in the efficient planning, so their work flow becomes more predictable.



HungaroControl



Magyar Légiforgalmi Szolgálat Zrt.

The new process fits HungaroControl's knowledge-based development strategy: The Merge Strip program was installed first in HungaroControl's own Centre of Research, Development and Simulation, (CRDS). MergeStrip was in continuous testing after obtaining necessary approvals internationally and in Hungary. On March 18-19 it was presented at EUROCONTROL's headquarters in Brussels, where the air navigation community showed significant interest in the new process, which, following further improvements, is likely to be adopted across the continent.

end -

About HungaroControl

Owing to its world standard technology, cutting-edge development projects and services, HungaroControl Pte. Ltd. Co. is one of the most precise, most efficient and most reliable service providers of the international air navigation, an active regional initiator and cooperating partner of the EU integration process conducted in the framework of the Single European Sky (SES).

in accordance with EUROCONTROL statistics and forecasts almost 10 million flights are performed over Europe each year, however, this number can even be doubled over the next ten years. HungaroControl has launched over the past few years a number of major projects, which aim at the development of its air navigation services, guarantee the safe management of the growing air traffic and at the same time promote the success of the forthcoming EU integration.

In addition to the further development of its traditional air traffic management services and technical-technological background, HungaroControl's strategic objectives include the establishment in the next two to three years, together with its partners, a regional, Central European air navigation knowledge centre. The commissioning into service of the new ATM centre allows HungaroControl to move to a single location - the building becoming now available - all of its innovation operations. The foundations for setting up this knowledge centre are resting on the growing international demands for R and D, simulation and training in support of air navigation, a process exactly generated, to an extent, by the European integration and the establishment of the functional airspace blocks.

With all of its development projects HungaroControl aims at enabling the Functional Airspace Block Central Europe (FAB CE), the regional cooperation amalgamating the 7 countries of Central Europe, to provide excellent services and operate at the highest technical-technological standards.

For further information, please, contact:

Katalin Szőke, HungaroControl Zrt. Head of Communications Email: katalin.j.szoke@hungarocontrol.hu Telephone: +36-1-293-4034

