

A COLLABORATIVE APPROACH TO IMPROVING AIRSIDE CLEARANCE COMPLIANCE

by Davy van Hyfte

Problem Definition

During 2015, Brussels Airport recorded cases of aircraft:

- lining up on the wrong runway from taxiways W41 and W42 (25R instead 19 or vice versa)
- mistaking taxiway C6 for taxiways INN or Z

Safety Reports were also filed by pilots about misleading or absent taxiway signage which they felt had – or could have – contributed to failure to taxi as cleared:

- at the junction of taxiways R4, S, M and INN
- as a result of mistaking taxiway C6 for taxiways INN or Z

The absence of specific ICAO-compliant signage to indicate the TORA for intersection take offs from 07R at taxiway C6, from 25L at taxiway C1, from 07L at taxiway B9 and from 25R at taxiway B5 was also noted.

Starting with this knowledge on the risk of aircraft not following the taxi clearances given to them, the Brussels Airport operator organised a formal consultation through members of the Local Runway Safety Team (LRST). To complete the picture, a LRST 'walk round' was held with the aim of identifying any other potentially hazardous or confusing elements of the existing taxiway network that could also lead to misrouting or even runway incursions. An additional perspective was added through the holding of a brainstorming session involving the workers responsible for maintaining the taxiway infrastructure – people who operate on the manoeuvring area on a daily basis. The question for the session was “predict your next involvement in a hazardous situation or incursion”. This collaborative effort led to proposals for modest changes to the design of taxiway infrastructure, signs or markings, which were implemented..

Action Taken

- Modification of Mandatory Instruction signs on W41 and W42 by phasing out the runway 19 sign at height of the runway holding position CAT I/II/III (Platform 3)



- Addition of an Information Sign to Taxiway Z to the existing signs at the southern end of taxiways INNER and OUTER 10

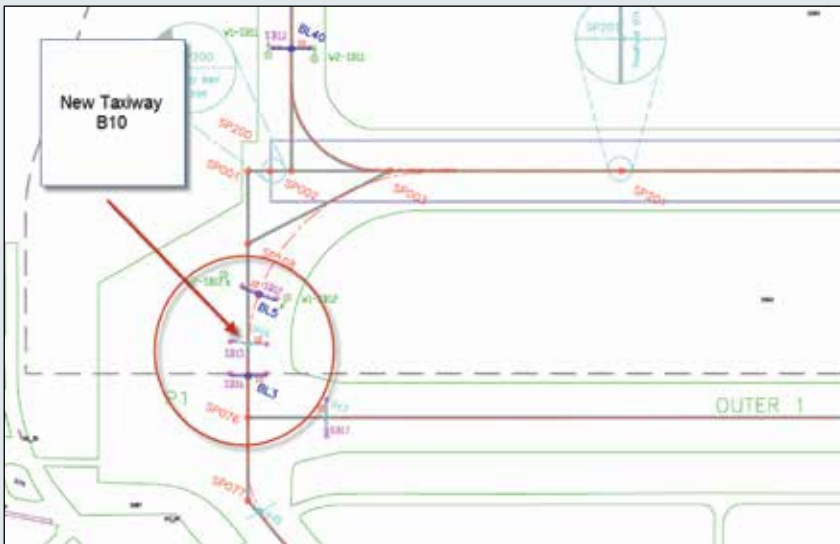




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started his aviation career as a military air traffic controller. He gained experience as a Tower, Approach and Area controller and participated in overseas missions too. For the past six years, he has been Safety Development Manager at the Brussels Airport Safety Management Unit and is involved in auditing, incident investigation and human factors.

- Creating a new TWY named B10 together with corresponding signage, markings and lighting



- Changing the Information signage from taxiway INNER 8 to taxiways S, R4 & M



- Adding TORA indicator signs at taxiways B5, B9, C1 and C6

All of these changes were subject to a full 'Change Case' and Belgian CAA approval under the provisions of aerodrome certification. This included reference to the effect on the following stakeholders:

- The Airport Operating Company
- Aircraft operators
- Ground handling Service Providers performing aircraft towing
- The ANSP

Working groups were used to deal with specific topics – Aeronautical Information Publication, Airside Works and Airside Operations – through the LRST.

Both the financial and human resources required for the successful implementation of these changes required a full report to the Airport Safety Board which in turn reports performance and actions to the Airport's Accountable Manager and Board of Shareholders.

It is considered that the implementation of proposals derived from the comprehensive collaborative process described will lead to a higher level of taxiway and runway safety at Brussels. 