Safer Network

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Dear Reader,

I was reading with interest the articles for this issue of HindSight magazine and the 'virtual' discussion about what is the relationship between safety and cost of our operations. I see good points made on the dynamic nature of the balance between these two important properties of aviation system. This dynamic could be interpreted that sometimes safety and cost are in opposition to each other. The task is how to maintain the sometimes delicate balance between the two. We have to make difficult decisions on how much more the society is willing to pay for adding yet another safety barrier.

There are levels of safety that we should never compromise. Also, at the extreme of the safety-cost relationship we can even halt the aviation operations but preserve the flying public from unacceptable risks. You will remember the situation in Europe after the eruption of the volcano-with-the-difficult-name (for the record Eyjafjallajöekull) in April 2010 and the following Grimsvötn eruption in 2011. The aviation industry worked together during these contingencies and although from a commercial perspective was reluctant to do so, was ready to pay the huge price of grounding aircraft so as not to expose flight operations (and the flying public) to unacceptable or unknown risks.

I want also to give another perspective on cost and safety relationship, based on what we are doing in the Directorate of Network Management (DNM) of EUROCONTROL. I suspect that many controllers and pilots reading this magazine will have at sometime or another been involved in a case of call sign similarity. If you're lucky, the worst that happened was distraction and a temporary (but unwelcome) increase in your workload; however, if things conspired against you then situation may have escalated to a point where confusion reigned on the air waves resulting in a pilot acting on a clearance or instruction meant for another aircraft with all the attendant potential for level bust, runway incursion etc. Of course controllers are also fallible and it may be them and not the pilot who is confused and takes/makes an erroneous action.

Moreover, controllers may also have to contend with the added distraction of similar looking call signs on radar labels, flight strips etc. Whilst ICAO PANS ATM provides a short-term, palliative solution – you can ask pilots to adopt a different call sign for a specified period until the threat has

for less

passed - how realistic is this on a busy Approach frequency when you barely have time to get the normal flow of words out?

The EUROCONTROL DNM response to this long standing issue is the EUROCONTROL Call Sign Similarity Project. This aims to provide pan-European solutions at a more systematic level through the development and implementation a Call Sign Similarity Tool (CSST). The intent is to use the CSST to help Aircraft Operators (AO) to identify and resolve potentially conflicting call signs before the start of an IATA season.

Currently 15 AOs have used the CSST to partially or fully de-conflict their 2013 summer schedules. A further 35 have signed up for the use of a Network Manager Token to access the Tool and we hope that many of these will use it to de-conflict their 2103/14 winter schedules.

A Safety Performance Monitoring regime is in place to assess the effectiveness of the CSST in operations. Twelve ANSPs are currently sending us their call sign similarity and confusion data on a regular basis. The evidence shows that the number of internal (single) AO similarities is significantly reduced (if there are any at all) in those airlines that are using the Tool compared with those that are not. However, to be sure we need more data, so if you have a similarity or confusion event please report it through your SMS chain and check to see if it is being sent to us here in EUROCONTROL (via the EUROCONTROL Voluntary ATM Incidenrt Reporting (EVAIR) regime). As part of the safety performance monitoring, if asked, we can contact the airline(s) involved in CSS/C incidents and ask them to make ad hoc, mid-season changes if it is known that there could be a repeat of the event during the remainder of the season. Feedback is provided, so that as the reporter you can see what actions have been taken.

Our CSST is a perfect example of a positive relationship between cost and safety. Indeed, the safety benefits are obvious. Studies in the past showed that 1 flight out of 10 is a potential source of call sign confusion without any intervention at the flight scheduling stage to identify and resolve similar call signs. Moreover, air-ground communication safety events are one of the biggest ATM safety priorities and call sign similarity/confusion is one of the greatest single contributors to all ATC safety reports.

Reducing the safety risks in this case means also better business and less overall cost. CSST offers AOs the potential for significant savings in time and effort to de-conflict their flight schedules – typically this is reduced to a matter of hours rather than days. Imagine also the savings and the alternative use of resources that currently go in incident reporting, analysis and investigation of events (to some accounts up to 5% of all ATM reports) associated with similar call signs.

To conclude, I would invite you as a HindSight reader to make the most of the magazine, think how what you read applies to your work, discuss the content with your colleagues and by this help us to turn our cost for producing HindSight into safety benefits albeit intangible.