

Iain Stewart MP
Chair, Transport Select Committee
House of Commons
London
SW1A 0AA

NATS
4000 Parkway
Whiteley
Fareham
Hants PO15 7FL

3rd May 2024

Dear Mr Stewart,

Thank you for inviting Kathryn Leahy and me to give evidence to the Transport Select Committee on Tuesday 23 April.

We appreciated the opportunity to share our ongoing work to address the challenges that arose on 28 August 2023, and would be happy to provide further information or clarification to support the Committee's enquiries. To that end, I would like to draw your attention to the following information that I committed to providing during the session:

- The engineers that support our technical operation
- Customer communications
- International scenario planning

1. The engineers that support our technical operation

We *always* have teams of engineers on-site – 24 hours a day, 365 days a year, including bank holidays. We have four levels of engineering support at NATS, with the Level 1 rostered on-site teams supported by two levels of on-call experts with specialised design knowledge of individual systems, as well as the system manufacturers if required. These experts can also often access some systems remotely to further enhance our speed of response. This system works extremely well, ensuring we always have access to high levels of expertise at any time of day or night throughout the year. Whenever we have an issue with our systems we learn from the experience and ensure that we further enhance our Level 1 training, our procedures and our knowledge for the future to ensure the fastest possible service restoration.

NATS has 823 engineers in total – almost a quarter of our entire workforce. Of those, we have 519 Level 1-3 engineers in support of the technical operation day-to-day.

In the eight years from 2016 to 2023, 54,040 technical incidents occurred. Of these, only 10 caused any engineering delay, meaning 99.98% of technical issues were fixed by our engineering teams without causing any disruption to the public.

Our track record shows how rare disruption of this scale is. We haven't seen disruption like this for 10 years and, in that time, we have handled millions of flights safely, carrying over 2 billion passengers in UK airspace.

Engineering response to the incident

Our onsite engineering team were alerted to the incident through the technology that directly monitors operational systems as well as through direct feedback from operational teams. The initial response followed standard recovery processes to restart the sub-system. Following multiple attempts to restore the service, which were unsuccessful, the on-call system experts, technical design team, and system manufacturer were mobilised to provide support to the on-site engineers remotely via video link. The process deliberately utilises remote support technology to ensure that issues can be investigated without time lost to travel by support

engineers and international support in the case of overseas manufacturers. This remote access combined with the on-site team ensures the appropriate level of expertise can be applied at any time as the situation demands.

Following necessary problem analysis and collection of fault logs by the onsite engineering team, the manufacturer was able to offer further expertise which led to identification of the likely flight plan that had caused the software issue. By understanding which flight plan had caused the incident the manufacturer was able to provide the precise sequence of actions necessary to recover the system in a controlled and safe manner.

As indicated in our preliminary report, permanent fixes to ensure the same event cannot happen again were identified and implemented in the days following the incident.

2. Customer communications

As we indicated in our preliminary report, the events of 28 August held lessons for us in the effectiveness of our communications with stakeholders, especially airlines, airports and other air navigation service providers. In particular, we recognise the issues caused by the crisis coordination communications platform used on the day and, as discussed in the session, we have already made changes to this rather than waiting for the CAA's independent review to conclude.

As detailed in our letter of 25 October 2023, on 28 August we conducted several customer calls to explain the issue using the conference-call system that we have had in place for some time. Although regularly tested with smaller numbers of participants, regrettably, we discovered during the incident that the service we received from the provider of that system had degraded over the pandemic period, resulting in inadequate bandwidth to support the volume of participants we experienced on 28 August. This lack of bandwidth led to quality issues during the calls and made it difficult for participants to ask questions.

Three calls took place on 28 August:

Call 1 – 156 dial-ins

Call 2 – 186 dial-ins

Call 3 – 305 dial-ins

Each dial-in represents 1 connected phone line having joined. Where speakerphones are used to join, multiple people can join the call from a single dial-in.

Prior to the incident, work was already underway to replace the conference calling system. The challenges experienced on 28 August expedited this process, and we have now implemented a new system using Microsoft Teams to ensure that we don't face similar issues and can disseminate information to all those that need it without limitations.

The new system has been tested extensively and is already in use operationally, including for our new 'daily lookahead' calls and seasonal storm incidents with the aviation community. These calls have also been introduced post-incident to enhance preparedness for daily operations across the entire community. Both the new system and the calls have been well received in discussions with airlines and airports.

3. International scenario planning

During the session, a question was raised about multi-agency exercises and whether these take place internationally. We have since conferred with Eurocontrol. The only one we are aware of is an annual desk-top event they coordinate for the European Aviation Crisis Coordination Cell. While we take an active part in these alongside other stakeholders, its purpose is to look at specific but very broad scenarios with national implications across Europe, for example an ash cloud. While helpful for scenarios of this kind, it does not cover the sudden and immediate disruption associated with a technical issue as seen on the 28th August.

Eurocontrol have confirmed, as have the ANSPs we approached, that no other country appears to run full multi-agency simulation exercises of the type referred to in the CAA independent review's interim report and that we have now initiated on behalf of the UK, as mentioned during our evidence. Indeed, following our inquiry, Eurocontrol have requested to be included in this exercise that we are planning for the autumn.

We will continue to support the CAA in their independent review as required and implement further improvements wherever possible. In the meantime, thank you again for your time and consideration, and we remain at your disposal for any further requests.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'M Rolfe', with a stylized, cursive script.

Martin Rolfe
Chief Executive Officer