

NSS WORKING GROUP Mtg 40 (16 APRIL 2021) – KEY MESSAGES

Membership Proposal

- Request was made to include an Emerging Technologies Group (ETG) of industry stakeholders to join the NSSWG
- It was decided that due to the formative nature of the ETG that full membership was not appropriate at this stage
- However, individuals from the ETG may be invited to participate regularly in NSSWG meetings

NSS Transition Plan

- The NSS Programme team will stand down on 30 June 2021, but the Programme will continue until 2023.
- The NSS Transition Plan is being implemented and will deliver drafts of its three key deliverables in the next month.
- These are a Programme Handover to ensure outstanding projects and tasks are completed, a Programme Review to capture lessons learnt, and a Benefits Evaluation to report on benefits realized and how to report on them out to 2033

UAV / Drone Integration

- MOT “Enabling Drone Integration” Consultation is open until 21 May
- Submissions can be made by completing this [online survey](#)
- The soonest changes proposed include Basic Pilot Qualification, Registration, and Rules Updates
- Later proposed changes include Remote ID, Geo-awareness and Unmanned Aircraft Traffic Management

PBNRF NPRM

- Formal PBNRF Consultation has closed, however those who submitted to the NPRM process will be given the opportunity to engage further before the final proposals are put forward to the Minister

Environmental Benefits

- Increasing carbon regulation will require the aviation industry to adapt or face rising costs and ‘social license’ issues
- Air New Zealand is committed to Net Zero carbon emissions by 2050. Electric, Hydrogen and Sustainable Aviation Fuel technologies all have a role to play in achieving this target
- Lead-times for new technologies are long - time is of the essence to develop low carbon passenger transport
- A permissive and flexible operating framework will be required in concert with innovative aircraft technology

Space Weather

- Professor Rodger from Otago University explained the science of Space Weather’s potential implications for aviation
- All radio signals, including GNSS, are potentially susceptible to electromagnetic interference from space weather events
- In severe cases satellites themselves can be disabled or even permanently damaged
- Solar flares can occur with little or no warning and can result in short-term disruption to GNSS and HF communications
- Longer-term disruption from Coronal Mass Ejection events can have 8-15 hours warning and last several days
- Loss of GNSS affects the primary means of Navigation and Surveillance (loss of PBN and ADS-B)

SBAS Sub-Group

- The SBAS Sub-Group has met to brainstorm timeframes, workflows, and interdependencies. Some workflows need to kick off as early as next year to be ready for 2025.
- With the NSS team standing down, the SBAS Sub-Group needs a new Chair. Contact the NSSWG Chair if interested

System Assessment

- This is a project assessing system extraction and recovery of aircraft in the event of a widespread GNSS failure, utilising the Airways simulator. The project has reached the half-way point and is progressing well.
- NSS is impressed with the level of stakeholder participation and engagement.

ADS-B Uptake Rates, Grant Scheme

- ADS-B uptake remained low in February (36 new installations detected), however there was a considerable improvement in March (50). The total number of aircraft equipped with ADS-B now stands at 1429.
- As a further reporting metric, the team is now monitoring the status of aircraft that have been detected transmitting with a Mode S address. Of the 1852 Mode S codes detected, 1427 have transmitted ADS-B data (77%).
- As of 19 April 2021 there have been 1204 applications to enter the ADS-B Grant Scheme, and 876 claims submitted. By the end of March 2021 815 claims have been approved, totaling almost \$2.5M.
- The ADS-B Grant Scheme celebrated its 1 year anniversary on 23 March. The criteria to enter the Grant Scheme is being reviewed to determine if any amendments need to be made.