MINUTES OF CAP1616: AIRSPACE CHANGE ASSESSMENT MEETING HELD ON MICROSOFT TEAMS ON 22/04/21.

22 Apr 21



Present	Appointment	Representing	
	Case Officer/Technical Regulator	Civil Aviation Authority	
	Principal Airspace Regulator	Civil Aviation Authority	
	Regulator (Consultation/Engagement)	Civil Aviation Authority	
	UAS Sector Team	Civil Aviation Authority	
		Network Rail	
		Network Rail	
		Network Rail	
		Sentinel Unmanned	

CAA Assessment Meeting Opening Statement

CAA noted that the Network Rail TDA Proposal Document plus Statement of Need were received in advance of the Assessment Meeting and confirmed that the documents would be published together with minutes of the meeting on the CAA website. CAA explained the purpose of the meeting and confirmed that the meeting was an Assessment Meeting and not a Gateway. The CAA reinforced that the sponsor was required to provide a broad description of their proposed approach to meeting the CAA's CAP 1616 requirements but the CAA was not deciding whether the proposed approach met the detailed requirements of the CAA's process at this stage. The purpose of the Assessment Meeting (set out in detail in CAP 1616) was broadly:

- for the Sponsor to present and discuss their Statement of Need,
- to enable the CAA to consider whether the proposal concerned falls within the scope of the formal airspace change process,
- to enable the CAA to consider the appropriate provisional Level to assign to the change proposal.

Additionally, the sponsor was required to provide information on how it intended to proceed to fulfil the requirements of the airspace change process and to provide information on timescales. Lastly, the sponsor was required to provide information on how it intended to meet the engagement requirements of the various stage of the airspace change process.

	ACTION
Item 1 – Introduction	
The Assessment Meeting Opening Statement for Temporary Change. The CAA has received the Statement of Need and the assessment meeting agenda in advance of this assessment meeting and can confirm the documents are required to be published together with the minutes of this meeting on the Air Space Change Portal.	
The purpose of the assessment meeting as set out in CAP1616 is for the change sponsor to present and discuss their Statement of Need, provide information on	

how it intends to fulfil the requirements of the Air Space Change process and present the provisional timescales.

Lastly, the sponsor was required to provide information on how it intended to meet the engagement requirements of the various stage of the airspace change process.

Item 2 – Statement of Need (discussion and review)

- The Statement of Need submitted by Network Rail's Air Operations team explains the need for a TDA to complete a proof of concept BVLOS flight.
- NR currently have VLOS capabilities and it is apparent that BVLOS flights are believed to be an essential future tool to increase safety within the organisation reducing significant risk to employees when completing inspections on track.
- Within NR, red working zones have been implemented which prevent employees operating within these areas, evidently there is a significant demand within the organisation to expand existing capabilities to aid with inspections.
- It is common knowledge that NR infrastructure can be difficult to access due to lack of entry points and landowner permissions. BVLOS capabilities would ensure track could be surveyed at ease.
- Although there are significant benefits surveying the infrastructure by helicopter, with such a vast distance of track to capture it is evident that completing inspections on a more localised level with UAS would be invaluable.
- The NR helicopter will be flying alongside the fixed wing aircraft to document the flight and act as a detect and avoid mechanism. This proof of concept flight will demonstrate that manned and unmanned aviation can work alongside one another.
- Upon completion of the BVLOS flight Air Operations are hopeful that this will educate NR colleagues and external parties about the future capabilities of UAS and encourage others to conform.

Item 3 – Issues or opportunities arising from proposed change

- Despite considering the use of existing danger areas across the UK in particular in Scotland since many of the BVLOS team are within close distance to the site this location seemed to be the most favourable and accessible to complete test flights.
- NR are a safety critical company and chose the location based on the level of risk, this was purposely done to show the flight can be carried out safely with the necessary procedures in place.

- When approaching the community strongly advised NR to ensure they clearly state the type of trial that will be completed, the reasons for the trial and why they have selected their preferred location.
- For NR it is not clear how this will progress, this is significantly dependent upon the success of the flight and how colleagues within the business wish for capabilities to advance. At this stage a possible future favourable option could be to expand a network of TDAs across the country. Evidently, the determining factor behind progression is safety.
- advised that a TDA lasts for a maximum of 90 days and this should not be used as a permanent solution.
- stated that there is ongoing debate surrounding which technology is needed to allow UAS to operate within unsegregated airspace and advised NR to speak to the policy team. The industry is looking to possible integration with manned aviation supported by using transponders which are currently undergoing research and trials. It was recognised the proof of concept BVLOS flight could be useful for gathering data as the NR helicopter will be used as a DAA system. advised NR to engage with the innovation team as they will be able to advise NR on the type of DAA systems that are undergoing trials and which systems are available.
- asked what procedures are needed in order to undertake the proof of concept BVLOS flight safely without putting the airspace at risk. It was agreed this question would be answered separately.

to forward contact email address to

for airworthiness expert within the policy team

to contact

Item 4 – Process requirements

- When submitting a TDA it is a requirement to complete targeted engagement surrounding safety and operational viability with relevant aviation stakeholders - airspace users, ANSPs and airports.
- To supplement the change sponsor's own identification of stakeholders, it is recommended that the NATMAC list of organisations is considered, and relevant stakeholders chosen from the list and in particular to include the General Airspace Alliance and Airspace for All as well as MOD DAATM.
- The scaled period of engagement activity is six weeks, if NR wish to choose a period less than this, reasoning for this decision would have to be submitted.
- Within the proposal an engagement summary report is needed to include the identification process of stakeholders and why certain stakeholders were identified. Furthermore, an engagement methodology and the materials used would need to be included. A full analysis of stakeholder feedback would be required as well as the impact feedback has had upon final proposal. Raw data must be submitted to support the engagement process for example minutes of meetings, slide packs and email correspondence with stakeholders.
- In the event the proposal is agreed, the change sponsor is required to undertake regular engagement with stakeholders and to collate, monitor and report to the CAA on the level and contents of complaints. It may be that NR already has a system in place to manage complaints that could be utilised. advised NR could receive advice and assistance on anything that is submitted prior to the engagement process, in particular questions or a draft document.

to provide NATMAC list and contact of Flight Ops colleague who can assist with identification of stakeholders.

to share copy of engagement strategy template.

Item 5 - Provisional timescales CM can supply target dates to NR for submission, submission to AIS Portal and implementation. When NR build the timeline, it is important to ensure the to supply 28-day decision making period is factored in. target dates. If the TDA is likely to be accepted the reference number can be extracted to stipulate this in the Operational Authorisation and OSC. It is advised that when engaging with the community it is useful to understand the dimensions required for the structure. If an AIC is published, the relevant parties will be notified that the structure is active, the structure will not be active until the OSC is approved. When submitting the report, it is necessary to include the context, and mitigations that will be in place and the ways in which the structure will be operated and managed. Although it is recognised that an air traffic control unit to manage the airspace and DACS would be important tools, the decision is made on a case-by-case basis. can grant NR an extension to allow for the consultation process for the findings report. For the extension to be granted a request via email would be discuss this required. It is clear a reference number won't be issued until the airspace separately. structure has been approved. requested an intended timeline from operating, how long and over what period, the correspondence will be to Item 6 – Next steps [Post meeting note] When able, NR should submit a proposed timeline to CAA. This will then be considered against current work and approved prior to progression past stage 1. Item 7 – AOB When speaking to stakeholders it is important to clearly address what would like to be achieved, aeronautical charts and diagrams greatly assist with can understanding the proposal. provide with examples of It would be expected of NR to upload the assessment meeting minutes, an understanding the timescale for submission and the document going live. approved TDAs to view It is recognised that the amount of oversight reports needed will depend on the response to questions from NR. The findings report will not hold up the engagement OSC. materials There is a possibility that a general description of the TDA could be issued uploaded. instead of a number, this would act as a solution when gaining approval

for the OSC and TDA.

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Subject	Name	Action	Deadline
Item 3		To forward contact email address to NR for airworthiness expect within the policy team. To contact regarding the procedures needed to conduct BVLOS flight safely.	
Item 4		To provide NATMAC list and contact of Flight Ops colleague who can assist with identification of stakeholders to NR. To share a copy of engagement strategy template with NR.	
Item 5		To supply target dates for submission.	
Item 7		To provide NR with examples of approved TDAs to view the engagement materials uploaded	

Network Rail **ACP Sponsor**