

Data request to facilitate Post Implementation Review (PIR) of:

ACP-2011-02 GREATER WASH AND HUMBER GATEWAY TRANSPONDER MANDATORY ZONES (TMZ)V2

NATS Comment:

The review period for request of data is given as 2nd May 2013 to 31st April 2015. The answer given below take account of delays in implementation of the TMZs and are adjusted accordingly. Implementation dates are given as part of the response below.

Conditions attached to the CAA's decision to approve the change.

It was a condition of the decision that approval was granted to Anglia Radar to provide an SSR-only service within the TMZs prior to implementation of the TMZs and that such approval included the provision for the blanking out of the primary returns within the TMZs to eliminate clutter generated by the wind turbines. Please confirm when this approval was granted.

- *The two ATC instructions written to update the Aberdeen MATS Part 2 (SI 010.14 and SI 022.16) both stated that the service provision within the TMZ must be SSR-only. Both SIs were made available to SARG for review with the required 30 days notice, and no objections were raised by SARG. Therefore approval to provide an SSR-only service was assumed.*

It was a condition of the decision LATCC (Mil) ATC were approved to provide radar services within the TMZ(s) using SSR alone. Please confirm the dates when this approval was granted.

- *Response required from Swanwick RAF(U).*

Relevant events since change (if any)

Please confirm whether, since implementation, there has been a significant increase or decrease in aircraft movements and/or a change in the type of aircraft overflying these areas, or some other relevant event, this should be set out here as background context during the period of the review (2nd May 2013 and 31st April 2015).

No significant changes or events.

Data to be collected from Change Sponsor for the purpose of the PIR.

Please confirm the implementation dates for:

- a) The Humber Gateway TMZ = 01/05/14
- b) The Greater wash TMZ. = 13/10/16

Please explain if the actual implementation date(s) was not as identified in the Decision Letter.

- *Date in Decision Letter was 02/05/13*

If there was a significant delay between the planned and actual implementation date, please provide an explanation.

- *Delays in Windfarm Construction. TMZs not required until PSR blanking applied, and this was only implemented immediately prior to turbines first turning.*

Other than normal promulgation activity (e.g. NOTAM, AIC etc.) request please identify what steps were undertaken to notify stakeholders that the airspace change was about to be implemented.

- *North Sea Helicopter operators were briefed at Southern North Sea safety meetings and by e-mail. NOTAM and AICs considered sufficient for other airspace users. As TMZs were subject to an LOA with LATCC Mil, it was assumed that they would brief military airspace users.*

Please report whether there have been any unforeseen or unintended operational impacts of the proposal during the period of the review (2nd May 2013 and 31st April 2015).

- *No unexpected impacts.*

Objective(s)

The objective of this ACP was to negate the impact of increasing levels of wind turbine-generated primary surveillance radar (PSR) clutter, specifically that caused by the Greater Wash and Humber Gateway developments. In support of the ACP, NATS provided evidence indicating that proposed Greater Wash and Humber Gateway turbines will create PSR clutter on NATS En Route PLC (NERL) Claxby and Cromer PSRs. It was assessed that, when operational, the wind farms within each of the two complexes would collectively create a level of radar clutter that, without mitigation, would:

- Create significant difficulties associated with the ability of *Anglia Radar's* controllers to maintain aircraft track identity, both in respect of known and unknown traffic.
- Limit *Anglia Radar* controllers' ability to provide the full gamut of ATSOCAS.
- Require routeing of traffic away and clear of radar clutter, thus involving a significant increase in track mileage.
- Reduce the volume of airspace available for use by *Anglia Radar* controllers to vector CAT off shore oil and gas support helicopters particularly in protecting traffic operating within Class G airspace (whilst under the control of *Anglia Radar* or *Swanwick Mil* (LATCC(Mil))) from unknown traffic operating in the same volume / classification of airspace.
- Generically precipitate a "less safe" operating environment than is currently the case. Please confirm whether this objective has been met.

- *These objectives have been met by the implemented change.*

Operational Assessment

Safety

Please provide comparison data concerning AIRPROX/MOR for 12 months before the date of implementation and for the period of 24 months after date of implementation.

As the timing of implementation coincided with the introduction of the hazard, there was no hazard prior to implementation, so there is no safety data relating to the hazard before the date of implementation.

- *Post implementation, there have been 3 infringements by non-transponding aircraft of the Humber Gateway TMZ and none of the Greater Wash TMZ. No other MORs relating to the TMZs have been filed.*

Operational feedback

Please report whether there have been any unforeseen or unintended operational impacts of the proposal during the period of the review (2nd May 2013 and 31st April 2015).

- *No unforeseen operational impacts*

Air Navigation Service Provision

Please confirm whether additional resources were recruited and trained to support the revised operation during the period of the review (2nd May 2013 and 31st April 2015).

- *No additional resources required*

Utilisation and Track Keeping

Please provide data relating to the number of:

- transits of the TMZs,
- occasions where aircraft have necessarily had to avoid such airspace,

and

- TMZ infringements

during intervals of 6 months post the implementation of each TMZ for a period of two years, i.e during the period of the review (2nd May 2013 and 31st April 2015).

- *No recorded occasions where Anglia Radar has approved transit of the TMZ by a non-transponder equipped aircraft.*
- *No recorded occasions of an aircraft having to avoid the TMZ due to lack of a serviceable transponder.*
- *Three recorded infringements:*
 - 07/05/14 – Believed to be an [REDACTED]. Infringement could not be confirmed (ie aircraft not traced, and no Mode C so could have been above the TMZ) but entered the lateral confines of the TMZ twice. Helicopter given Avoiding Action twice to maintain required Deconfliction Minima.*
 - 05/08/14 – Slow moving. Not traced at the time. Later believed to be a home-built microlight known to have routed from Belgium to EGPC (Wick).*
 - 04/09/14 – [REDACTED], one of a group of three light a/c routing from EGNW to EGSH. Pilot aware of TMZ. No longer in formation with leading two, but forgot to turn transponder back on.*

Letters of Agreement

If applicable, please confirm whether any new or revisions to Letters of Agreement were required prior to implementation and whether any revisions were required during the period of the review (2nd May 2013 and 31st April 2015).

- *New LOA with LATCC Mil, originally effective 01/05/14.
This was reviewed prior to implementation of Greater Wash TMZ, and LATCC Mil name was changed to RAF(U) Swanwick. No other changes required.
Effective 13/10/16.*

Interests of other parties

Please confirm whether NATS has received any adverse comments from any person (other than an owner or operator of an aircraft) in relation to the use of any particular airspace or the use or the use of airspace generally in the area of the TMZs during the period of the review (2nd May 2013 and 31st April 2015).

No adverse comments received

Environmental Assessment

Please confirm the environmental impacts were as anticipated in the proposal and/or CAA Decision.

- *Environmental impacts were as anticipated and described in the ACP.*

Ministry of Defence Operations

Please provide analysis of Ministry of Defence feedback received during the period of the review (2nd May 2013 and 31st April 2015).

- *No MOD feedback was received by Anglia Radar.*

Any other impacts

Please confirm whether any other issues of significance have occurred during the period of the review (2nd May 2013 and 31st April 2015).

- *No significant issues noted*