Safety & Airspace Regulation Group





INTRODUCTION OF CONDITIONAL ROUTE Q63 - POST IMPLEMENTATION REVIEW

1. Introduction

- 1.1 Approval was given by the Safety & Regulation Group (SARG) for NATS (NERL) to proceed with the establishment of Q63, a contingency westbound only conditional route (CDR) in the London FIR. The change was introduced in September 2016. The purpose of this document is to provide the outcome of a Post Implementation Review (PIR) in accordance with Stage 7 of the Airspace Change Process (ACP) as described in document CAP 725.
- 1.2 The stakeholders affected by the introduction of Q63 were alerted of the review. They were invited to comment on how the change has been perceived since implementation. In addition to the submission and comments from NATS and the IAA, responses were received from the MoD (Defence Airspace and Air Traffic Management (DAATM)), who included comments from QinetiQ and No. 41 Squadron.

2. Background

- 2.1 Since 2009, EG D201A had rarely been activated above FL145. This enabled near unrestricted access to ATS routes (U)M17, UN14 (CDR), UN24 (CDR), UN30 (CDR) and UN546 (CDR) for Commercial Air Transport (CAT). QinetiQ notified NATS that they intended to activate EG D201A above FL145 more regularly starting in 2016.
- 2.2 NATS analysis indicated that reinvigorating high level activity within EG D201A would force westbound traffic from the London TMA to Dublin through STU creating a choke point; it was highlighted that this was likely to result in the application of flow restrictions resulting in pre-departure and en-route delay.
- 2.3 Prior to the establishment of CDR Q63, EG D201A was subdivided to split EG D201A into EG D201A, F and G. This enabled the safety trace for the new activity to be contained within the revised (smaller) EG D201A. The ACP represented the second phase of a plan to reduce the impact of the notified activity to CAT by replacing a flight plannable DCT introduced to mitigate the immediate impact of the activity (during phase one); thereby enabling CAT to exploit the airspace available when the revised EG D201A is active above FL145 and EG D201F and G are not active above FL145.

3. Key Objectives

3.1 The Key objective of the proposal was to allow the continuation of Dublin-TMA-bound traffic via VATRY and to minimise the impact to overflying transatlantic traffic during periods of activation of the revised EG D201A above FL145. The purpose of this PIR is to ensure that this is being achieved in the best and most efficient manner.

4. Air Traffic Management Requirements

4.1 Training

4.1.1 The introduction of Q63 was accompanied by a NATS Supplementary Instruction (SI) to amend the MATS Part 2 following the completion of an ATC Procedures Safety Analysis (APSA) using NATS SP406. Following assessment by a number of qualified ATCOs, it was agreed that simulator training was not required; however briefings were conducted to supplement the SI.

4.2 Workload

4.2.1 **Comment from NATS:** Whilst workload on the sector does increase during D201A activation it has been manageable by use of careful monitoring of traffic volumes and occasional regulation. The regulation applied is MV-10%¹, dependent on the time of year the impact has varied between nothing and 978 minutes delay.

4.3 Liaison

4.3.1 Comment from NATS: The complementary procedure between LAC and NATS Aberporth to tactically release the airspace to LAC for civil use even when booked has been extremely successful and has helped mitigate the impact on civil operations. Tactical access has been utilized on every occasion when the revised EG D201A was activated. In accordance with Collaborative Decision Making (CDM) process the UK AMC has engaged with QinetiQ to reduce the length of bookings to only that which is required rather than block booking system used in the past.

4.4 **Documentation**

4.4.1 The CDR Q63 was published in the UK AIP and on VFR charts.

5. Military Air Traffic Management Requirements

5.1 The DAATM reported that there was no impact to military ATM as a result of this ACP.

6. Areas of Contention

- 6.1 **Comment from the DAATM:** No areas of contention were identified due to effective negotiation and flexibility.
- 6.2 **Comment from NATS:** In the very early days after implementation there was one issue with Ryanair aircraft FMS not being updated with the correct information in relation to the new CDR as reported by the NATS flight planning team below:

"I have just received feedback from RYR which confirms that, although the flight plans for RYR33RT & RYR6CN were filed correctly on the route via LANPI, the NAV database on the aircraft had not been updated to reflect the new waypoint LANPI.

RYR apologise for this and the RYR operations department are liaising with their data provider to ensure that this is rectified as soon as possible and in the interim they have issued an instruction to their crews."

¹ Monitor Value – 10%

There have been no ATC safety reports in relation to this development with the exception of the above mentioned Ryanair occurrence, which was resolved by the operator before the next activation took place.

6.3 **CAA Comment:** The introduction of CDR Q63 used the standard airspace change promulgation process. The fact the Ryanair FMS was not updated to include the new waypoint LANPI should not be attributed to the airspace change itself.

7. Environmental Effects

7.1 There were no discernible environmental effects reported as a result of this airspace change.

8. Effectiveness of Change

8.1 In the 12 months following the establishment of Q63, there were a total of 4 booking requests for the revised EG D201A segment of Aberporth Range. On completion of the AMC CDM process, the airspace requests were refined to those shown in Table 1. For Each EG D201A activation above FL145, CDR M17 was made unavailable for flight planning between PEMOB and VATRY and CDR Q63 was made available for flight planning between LANPI and VATRY. This enabled traffic inbound to Dublin from the London TMA to route via UN14 and thereby avoiding STU which was consistent with the key objective of the ACP. There have been no reported requests to activate EG 201F or EG D201G above FL145 since the change was implemented.

Danger		Flight		Booked Airspace		
Area	Date	Level	Time (Z)	(Hours)	Used	Released
EGD201A	30/08/2016	660	0800-1630	8.5	7.5	1
EGD201A	31/08/2016	660	0800-1630	8.5	6	2.5
EGD201A	01/09/2016	660	0800-1630	8.5	5.75	2.75
EGD201A	02/09/2016	660	0930-1630	8	1	7
EGD201A	24/04/2017	660	1400-1700	3	0.5	2.5
EGD201A	25/04/2017	660	1400-1700	3	0.5	2.5
EGD201A	27/04/2017	660	1300-1700	4	2	2
			0930-1130/1330-			
EGD201A	02/05/2017	660	1500	3	1.5	1.5
EGD201A	04/07/2017	660	0915-1700	7.75	3	4.75
EGD201A	05/07/2017	660	1315-1700	3.75	3.25	0.5
EGD201A	06/07/2017	660	09-15-1700	7.75	6.25	1.5
EGD201A	07/07/2017	660	09-15-1700	7.75	2.25	5.5
				73.5	39.5	34

Table 1

8.2 General Comments on the Effectiveness of the Change

8.2.1 Comment from the DAATM: The MOD now needs to negotiate and plan well ahead to try not to effect civil traffic. However, the change allows greater use of a previously underutilised area.

- 8.2.2 **Comment from NATS:** Since its inception the revised EG D201A has been booked 4 times in blocks of either one or two weeks at a time; all bookings have resulted in the closure of M17 and the activation of Q63 in line with the planned process. Generally the airspace has been handed back at D-1 when the activity is known not to be taking place, however on occasion it has not been handed back until the day of booking.
- 8.2.3 **CAA Comment:** The availability of the CDRs has worked as expected in relation to the configuration of the EG D201 Danger Area complex. The booking data and feedback received demonstrates that the Airspace Management process has worked satisfactorily in both the tactical and pre-tactical phases² which accommodates the release of segregated airspace on the day of booking. This has enabled both the MoD and NATS to utilize the airspace effectively.

9. Other Benefits

9.1 No additional benefits were reported as a result of this airspace change.

10. Operational Impact

- 10.1 **Comment from the DAATM:** The subdivision of EG D201A enables a greater number of Danger Area configurations which provides greater flexibility for future trials and operations.
- 10.2 **Comment from NATS:** As traffic is presented to Dublin ACC on track to the same reporting point as normal they report that there has been no impact on their operation. There has been no impact on the interaction with Shannon ACC.

11. Airspace Change Process Issues

11.1 Aside from the operational problem identified at 6.2, there were no reported issues raised in relation to the Airspace Change Process. The causal factor that necessitated the change required the MOD and NATS to work in close cooperation to devise the solution. The CAA recognizes the contribution of both stakeholders in reaching an amicable and timely resolution to the problem.

12. Conclusions & Recommendations

12.1 **Comment from NATS:** Whilst ATCOs who control on Sector 8 would prefer that this Danger Area was never active, and the use of the STU RCA was the norm, it is accepted that the solution was the best option available, given the military requirements to deploy a different type of ordnance in the complex [EG D201].

12.3 **Regulatory Conclusions**

12.3.1 The CAA is satisfied that the introduction of CDR Q63 has been beneficial in that it has achieved the key objective; establishing a flight plannable CDR for CAT transiting from the London TMA to Dublin around the revised EG D201A Danger Area, without routing via STU. The MoD has been able to utilize EG D201A to achieve their training objectives and the internal subdivision of the EG D201 complex has provided greater flexibility by increasing the number of segregated airspace configurations available to the MoD. While

² As defined in UK Airspace Management Policy, CAP 740.

the increased use of EG D201A has resulted in some delay and the additional complexity of the airspace occasionally resulted in a small increase in workload for NATS controllers, these effects are considered minor in relation to the projected impact and delay of the 'do nothing' option. Similarly, the MoD has had to increase their planning horizon to consider the impact of military activity within the EG D201 complex on CAT. SARG (Airspace Regulation) acknowledges the proactive and collaborative approach from the MoD and NATS to devise a solution to the issue.

- 12.3.2 There have been no reported safety incidents as a result of this change.
- 12.3.3 There were no discernible environmental impacts as a result of this change.
- 12.3.4 Overall the change has worked well, enabling both the MoD and NATS to utilize the airspace to meet their needs; therefore the airspace design and procedures should remain.

Case Officer:

Airspace Regulator SARG

Signed off by

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