NATS

SAIP AD3
Jersey Interface Change
Stage 1 Assessment Meeting

Friday 2nd February 2018

3x NATS presenters



Agenda



- Revised Statement of need
- Background
- Issues and benefits arising from proposed change
- How to address identified issues
- Provisional indication of the appropriate scaling level and notes re Process Requirements
- Draft Timescales and First Three Planned Gateway Assessments
- Next steps

Original Statement of Need



We understand that Jersey Port Authority and DSNA/DGAC have agreed new SIDs and STARs out of and into Jersey Airport to existing waypoint ORIST and from existing waypoint LELNA on the FIR boundary. Their agreed target implementation date is 8/11/18. Therefore in support of this change NATS is proposing a re-alignment of ATS Routes within existing CAS in the London FIR over the English Channel.

We would like to request a FWB as early in January as possible where we will also present SAIP AD5 - which will be the subject of another DAP1916

Revised Statement of Need



Current situation

Jersey Port Authority are the ANSP for the Channel Islands Control Zone (CICZ) managing all traffic in that region on behalf of France's DSNA (Brest).

The UK, via NATS, feeds traffic to and receives traffic from the CICZ via Jersey ATC.

Issue or opportunity to be addressed, and the cause

Jersey ATC have requested an extension to CICZ to facilitate new SIDs and STARs serving Jersey and Guernsey Airports. They have set a target implementation date of 08/11/18.

This will change the way traffic flows through existing waypoints ORIST and LELNA.

The ATS route structure and utilisation on UK side of the FIR does not currently align with the requirements of the Jersey side.

Desired outcome

Efficient alignment & connectivity of UK routes with Jersey ATC's planned routes, in time for their planned implementation date.

Specific challenges

Any solution must be agreed between all three ANSPs.

Limited time is available to align implementation dates.

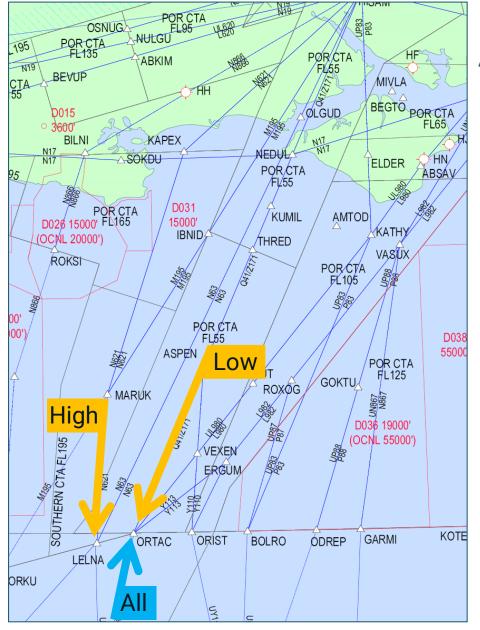
Background



- Original concept to "dualise" the ORTAC interface was discussed during development of LAMP Phase 1b as an enabler for a higher Transition Altitude (TA).
- Without raised TA, proposal still offers operational benefits to Jersey ATC and to LAC Swanwick (Sector 21)
- Development incorporated into SAIP project
- Provisional agreement reached between DSNA Direction Des Operations, Brest ACC and Jersey ATC to extend Jersey AOR in November 2018 to facilitate new SIDs and STARs serving EGJJ and EGJB

Baseline (do nothing): Today's traffic flows to/from **Channel Islands** (LAC Sector 21)

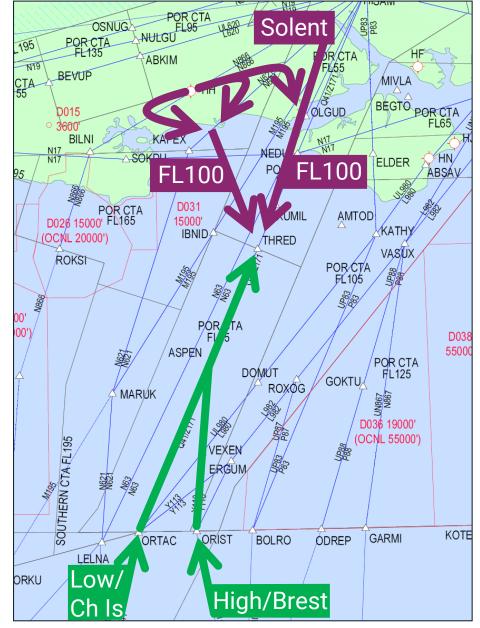
- All traffic departing Ch Is into UK airspace uses eastbound (odd) levels
 - All via ORTAC
 - Must be level
 - Maximum FL190
- These rules apply unless coordination is effected with Brest ACC
- Traffic from UK airspace arriving at Ch Is uses westbound (even) levels
 - Via ORTAC if RFL180-
 - Via LELNA at FL200 if RFL200+





Baseline (do nothing): Today's traffic flows to/from **Solent Group** (LAC Sector 21)

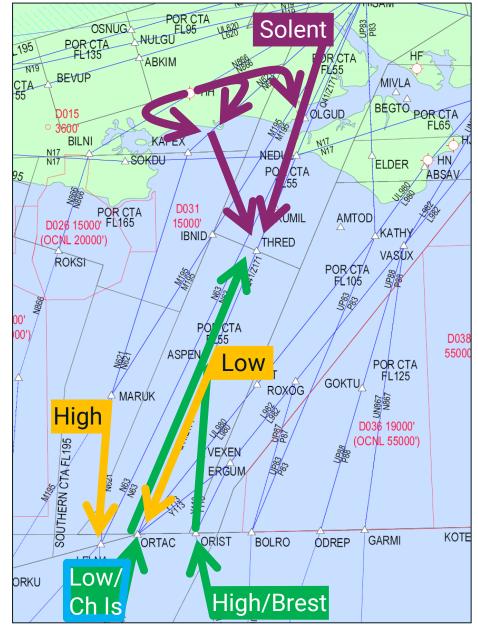
- All traffic departing Solent Group southbound
 - On track THRED FL100
 - No SIDs for Solent Group airports
 - EGHI rwy 02 normally left turn out
 - EGHH some traffic leaves then rejoins CAS
- Traffic from south arriving at Solent Group uses eastbound (odd) levels
 - Via ORTAC if RFL190- (includes Ch Is deps arriving at Solent Group)
 - Via ORIST at FL220 (ODL) if RFL220+
 - FL200, FL210 not used northbound
 - Uses NEDUL STAR





Baseline (do nothing): Today's traffic flows Combined Pic (LAC Sector 21)

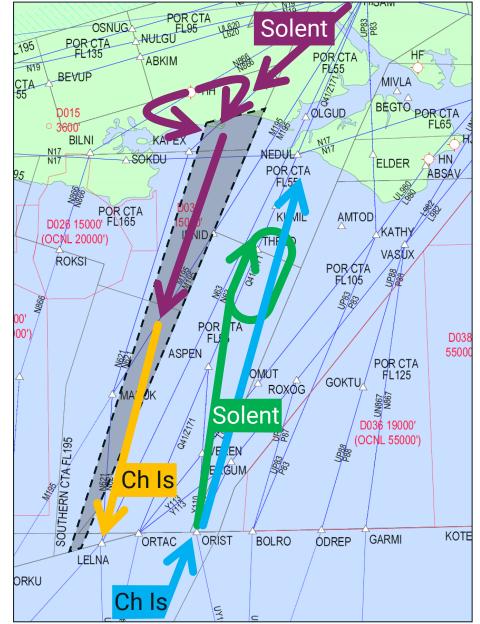
- Issues and opportunities
 - Current system has built-in conflictions (especially ORTAC)
 - Climbs/descents stepped, highly manual, tactical vectoring etc.
 - Jersey is making changes with DSNA Brest on board, NATS must adapt UK connectivity





Concept Option 1: Major Sector 21 restructuring

- All traffic departing from the Solent Group southbound
 - Use new route, new low-level CAS to west
 - EGHI deps go further west initially
 - EGHH deps all remain inside CAS
 - Traffic continues climbing south (not shown) except Ch Is arrivals (see below)
- Traffic from south arriving at Solent Group
 - All via ORIST then new STAR ending near today's THRED (NEDUL STAR deleted)
- All traffic departing Ch Is into UK airspace
 - All via ORIST
 - Traffic continues climbing north except Solent Group arrivals (see above)
- Traffic from UK airspace arriving at Ch Is
 - All via LELNA





Benefits

- Fits with Jersey/DSNA requirements
- Near-full systemisation
- Modernised PBN routes (RNAV1)
- Significant confliction reduction, leading to...
 - Reduction in S21 complexity

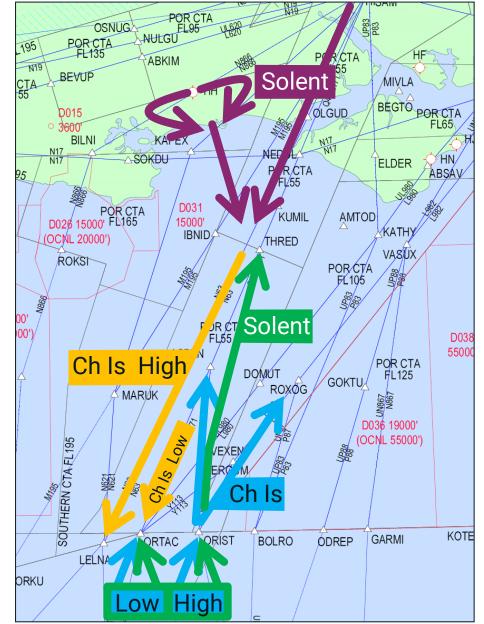
Issues



- No predicted delay reduction of significance, as a consequence of systemisation
- No predicted fuel/CO₂ benefit of significance, as a consequence of systemisation
- Needs additional low-level CAS, leading to...
 - Probable impact on other airspace users (GA)
- Likely to change low-level flightpaths for Solent departures, leading to...
 - Probable Level 1 change
- Qualitatively, the cost would be high for a consultation which would need support from two airports, given the relative lack of benefit beyond the fact of systemisation

Concept Option 2: Minimal S21 change

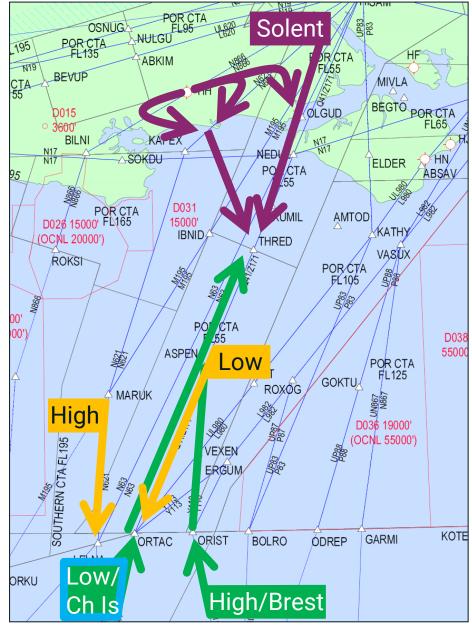
- All traffic departing from the Solent Group southbound uses N63
 - New waypt abeam THRED
 - Traffic continues climbing south (not shown) except Ch Is arrivals (see below)
- Traffic from south arriving at Solent Group uses existing NEDUL STAR
 - FL110- via ORTAC, FL120+ via ORIST
- All traffic departing Ch Is into UK airspace
 - FL110- via ORTAC, FL120+ via ORIST
 - Traffic continues climbing north except Solent Group arrivals (see above)
- Traffic from UK airspace arriving at Ch Is
 - FL110- via ORTAC, FL120+ via LELNA





Concept Option 2: Minimal S21 change

Baseline (do nothing) chart repeated for comparison





Benefits

- Fits with Jersey/DSNA requirements
- No change to low-level flightpaths over land
 - Level 2 change (by design)
 - Fewer stakeholders
 - Lower cost consultation
- Fewer changes to existing airspace structures
- No new CAS
 - Minimal impact on other airspace users
- Some confliction reduction, leading to...
 - Reduction in S21 complexity

Issues



- No change to ATS routes but Ch Is High arrivals must be RNAV1 due to...
- CAS containment at LELNA is slightly less than 2nm (actual 1.94nm) – this should be acceptable subject to analysis and logical argument
- Systemisation is only partial

Summary



- Change is required to facilitate airspace development in adjacent airspace under French jurisdiction
- Significant reduction in head on conflictions at ORTAC interface
- Preferred Option 2 concept mainly uses existing routes and waypoints, just in a different way
- All changes are over the sea and within existing CAS partially systemising today's tactical behaviour
- Expectation of Level 2A change
- Minimal airline impact, no predicted MoD or GA impact
- Process notes:
 - Planned consultation directly with major customers in order to reduce timescales
 - Multi-ANSP agreement & coordination is required, may reduce ability to fully comply with all items in CAP1616, guidance will be sought as appropriate

Draft SAIP AD3 Gateway Timescale



Assessment meeting	02/02/18	Doc Deadline
Stage 1 – Define	23/02/18	09/02/18
Stage 2 – Develop	23/03/18	09/03/18
Stage 3 – Consult	27/04/18	13/04/18
Stage 4 – Update and Submit	TBC	
Stage 5 – Decide	TBC	French and Jersey proposing AIRAC 12/2018
Stage 6 - Implement	TBC	AIP Deadline is 10/08/18
		NATS NAS build plan is Sep & Dec 2018 AIRAC 12 changes would need to be loaded in Sep

NATS Unclassified

Engagement, and Next Steps



- Airlines briefed on SAIP AD 3 at FEP and Lead Carrier Panel Nov. and Dec. 2017
 - Included plan to develop Option 1 concept to work on low impact solution to support Jersey changes, i.e.
 Option 2 concept
- Preferred proposal is to develop AD3 using existing airspace structures, i.e. Option 2 concept
- FlyBE is the biggest customer for Solent and Ch Is
 - Engaged at meeting on 28/11/17
- MoD will be engaged, no impact expected
- Draft plan is to directly consult FlyBE as the major customer, others TBC, in order to reduce Stage 3 timescales from typical 12 weeks
- Analytics work continues in order to engage effectively with airlines
- Plan of work to pass CAP1616 Stage 1 Gateway Assessment on 23rd Feb with minimal time between this
 meeting (2nd Feb) and the document deadline (9th Feb)



