

CAA CAP 1616 Options Appraisal Assessment (Initial)

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|--|-------------------------------|--------------------------------|-------------------------------|
| Title of airspace change proposal | | St Athan ILS | |
| Change sponsor | | Welsh Government | |
| Project no. | | ACP-2018-35 | |
| SARG project leader | | [REDACTED] | |
| <i>Case study commencement date</i> | Click or tap to enter a date. | <i>Case study report as at</i> | Click or tap to enter a date. |

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|-----------------|---------|------------------|----------|-----------|--------------|-----|----------------|
| Account Manager | [Green] | Engage & Consult | [Red] | IFP | [Orange] | OGC | [Dark Green] |
| Tech Regulator | [Blue] | Environmental | [Purple] | Economist | [Light Blue] | ATM | [Light Orange] |

Instructions: In providing a response for each question, please ensure that the ‘status’ column is completed using one of the following options:

- yes
- no
- partially
- n/a

To aid the SARG project leader’s efficient project management, please highlight the “status” cell for each question using one of the four colours to illustrate if it is:


Resolved - GREEN
Not Resolved – AMBER
Not Compliant – RED
Not Applicable - GREY


Guidance

*The broad principle of economic impact analysis is **proportionality**; is the level of analysis involved proportionate to the likely impact from that ACP? There are three broad levels of economic analysis; qualitative discussion, quantified through metrics, and monetised in £ terms. The more significant the impact, the greater should be the effort by sponsors to quantify and monetise the impact.*

1. Background – Identifying the Do Nothing (DN) /Do Minimum (DM) and Do Something (DS) scenarios

| | | | | | |
|---|---|--|------------------------|------------|---------------|
| 1.1 | Are the outcomes of DN/DM and DS scenarios clearly outlined in the proposal? | | | | |
| 1.1.1 | Has the change sponsor produced an Options Appraisal (Phase I - Initial) which sets out how they have moved from the Statement of Need to the airspace change design options? [E12] | The change sponsor provided an argument that there was only one option or a do nothing. A qualitative assessment comparing this was provided. | | | Yes |
| 1.1.2 | Does the list of options include a description of the change proposal | | | | Yes |
| 1.1.3 | Has the sponsor stated on what criteria the longlist of options has been assessed? | | | | Yes |
| 1.1.4 | Where options have been discounted, does the change sponsor clearly set out why? | | | | Yes |
| 1.1.5 | Has the change sponsor indicated their preferred option in the Options Appraisal (Phase I - Initial)? [E12] | | | | Yes |
| 1.1.6 | Does the Initial Options Appraisal (Phase I - Initial) detail what evidence the change sponsor will collect, and how, to fill in any evidence gaps and how this will be used to develop the Options Appraisal (Phase II - Full)? Does the plan for evidence gathering cover all reasonable impacts of the change? [E12] | The sponsor has though been requested to do a quantitative assessment between the Do Nothing and Preferred options with regard to fuel burn for Stage 3. | | | N/A |
| Direct impact on air traffic control | | | | | Status |
| 2.1 | Are there direct cost impacts on air traffic control / management systems? If so, please provide below details of the factors considered and the level in which this has been analysed. | | | | |
| 2.1.1 | <i>Examples of costs considered (please add costs that have been discussed, and any reasonable costs that the tech reg feels have NOT been addressed)</i> | Not applicable | Qualitative Assessment | Quantified | Monetised |
| 2.1.2 | Infrastructure changes | X | | | |
| 2.1.3 | Deployment | X | | | |
| 2.1.4 | Day-to-day operational costs / workload / risks | N/A | X | N/A | N/A |
| 2.1.5 | Other (provide details) | X | | | |

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|-------|---|----------------|------------------------|------------|---|
| 2.1.6 | <p>Comments</p> <p>The Initial Options Appraisal submitted by the change sponsor states Option 1, which permanently withdraws St Athan ILS procedures, was expected to increase ATCO workload at NATS Cardiff, but according to the sponsor it would be unlikely to result in additional ATCO costs.</p> <p>According to the change sponsor's Initial Options Appraisal, fuel burn is predicted to be marginally greater and less predictable for Option 1 in which St Athan ILS procedures would be permanently withdrawn. It is further explained by the sponsor that without the ILS procedure, aircraft would be flying VFR with potential tactical ATC intervention.</p> | | | | |
| 2.2 | <p>Are there direct beneficial impacts on air traffic control / management systems?</p> <p>If so, please provide details and how they have been addressed:</p> <p>The change sponsor illustrated the negative impact of the current baseline option which is the permanent withdrawal of ILS from St Athan as the SoN identifies that no change is being proposed to the track, heights or slope of the ILS procedures previously published in the Mil AIP, nor to airspace structures or classification, nor to operational procedures. The sole aim of the sponsor with this airspace change is to enable the publication of the extant CAA-approved St Athan ILS procedures in the UK AIP and therefore no benefits is projected for the proposed option in terms of air traffic control / management systems. In summary, the benefit of the proposed option would be to avoid the disbenefits of the baseline scenario which are mentioned in 2.1.6.</p> | | | |  |
| 2.2.1 | <i>Examples of benefits considered</i> | Not applicable | Qualitative Assessment | Quantified | Monetised |
| 2.2.2 | Reduced work-load | N/A | N/A | N/A | N/A |
| 2.2.3 | Reduced complexity / risk | N/A | N/A | N/A | N/A |
| 2.2.4 | Other (provide details) | N/A | N/A | N/A | N/A |
| 2.2.5 | Details N/A | | | | |
| 2.3 | <p>Where monetised, what is the net monetised impact on air traffic control (in net present value) over the project period?</p> N/A | | | | |

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| 2.4 | Are the direct impacts on air traffic management analysed accurately and proportionately? Please see the answer to Question 3.4. |  |
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| 3. Changes in air traffic movements / projections | | | | | Status |
|--|---|-------------------------------|------------------------|------------|---------------|
| 3.1 | What is the impact of the ACP on the following and has it been addressed in the ACP proposal? | | | | |
| | | Not impacted / not applicable | Qualitative Assessment | Quantified | Monetised |
| 3.1.1 | Number of aircraft movements | X | N/A | N/A | N/A |
| 3.1.2 | Type of aircraft movement | X | N/A | N/A | N/A |
| 3.1.3 | Distance travelled | X | N/A | N/A | N/A |
| 3.1.4 | Area flown over / affected | X | N/A | N/A | N/A |
| 3.1.5 | Other impacts | X | N/A | N/A | N/A |
| 3.1.6 | Details N/A | | | | |
| 3.2 | Has the forecasting of traffic done reasonably using best available guidance (e.g. DfT WebTAG, the Green Book, Academic sources...etc?) Yes, please see the answer to Question 3.4. | | | | |
| 3.3. | What is the impact of the above changes on the following factors? | | | | |
| | | Not impacted / not applicable | Qualitative Assessment | Quantified | Monetised |
| 3.3.1 | Noise | | X | | |
| 3.3.2 | Fuel Burn | X | N/A | N/A | N/A |
| 3.3.3 | CO2 Emissions | | X | | |

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|-------|---|---|-----|-----|-----|
| 3.3.4 | Operational complexities for users of air space | X | N/A | N/A | N/A |
| 3.3.5 | Number of air passengers / cargo | X | N/A | N/A | N/A |
| 3.3.6 | Flight time savings / Delays | X | N/A | N/A | N/A |
| 3.3.7 | Other impacts | X | N/A | N/A | N/A |
| 3.4 | <p>Are the traffic forecast and the associate impact analysed proportionately and accurately according to available guidelines (e.g. WebTAG or the Green Book?)</p> <p>The sponsor only provided the traffic movement figures over the 5-year period 2014-2018 because aircraft movements at St Athan are not planned to increase. Taking into account the sponsor is proposing the airspace change to maintain the stability in movements and predominant revenue stream for the airport, it can be concluded that the sponsor adopted a proportionate approach in terms of the impacts of the two options and complied with CAP1616 and The Green Book.</p> | | | | |
| 3.5 | <p>What is the total monetised impact of 3.3? (Provide details)</p> <p>N/A</p> | | | | |

| 4. Benefits of ACP | | | | | Status |
|--------------------|---|----------------------------------|---------------------------|------------|-----------|
| 4.1 | Does the ACP impact refer to the following groups and how they are impacted by the ACP? | | | | |
| | | Not impacted / Not applicable | Qualitative Assessment | Quantified | Monetised |
| 4.1.1 | Air Passengers | X | X | N/A | N/A |
| 4.1.2 | Air Cargo Users | X | X | N/A | N/A |
| 4.1.3 | General aviation users | X | X | N/A | N/A |
| 4.1.4 | Airlines | X | X | N/A | N/A |
| 4.1.5 | Airports | X | X | N/A | N/A |
| 4.1.6 | Local communities | X | X | N/A | N/A |
| 4.1.7 | Wider Public / Economy | X | X | N/A | N/A |

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|-------|--|-------------------------------|------------------------|------------|-----------|
| 4.1.8 | <p>Details</p> <p>The change sponsor did carry out the qualitative assessment for the baseline option in which St Athan ILS procedures are permanently withdrawn. However, this option is already discounted but they followed this process in order to reflect the sort of costs that St Athan would be bound to in case they are obliged to permanently withdraw St Athan ILS procedures.</p> <p>The qualitative assessment for the proposed option (Options 2) indicates that effective capacity and economic viability of the airport is maintained for the life of MRO operations at St Athan. It is also stated by the sponsor that Option 2 may lead to training and deployment costs due to minimal routine training for pilots, to ensure awareness of the new published procedures and costs associated with producing CAP1616 deliverables.</p> | | | | |
| 4.2 | How are the above groups impacted by the ACP, especially (but not exclusively) looking at the following factors: | | | | |
| | | Not impacted / not applicable | Qualitative Assessment | Quantified | Monetised |
| 4.2.1 | Improved journey time for customers of air travel | X | | | |
| 4.2.2 | Increase choice of frequency and destinations from airport | X | | | |
| 4.2.3 | Reduced price due to additional competition because of new capacity | X | | | |
| 4.2.4 | Wider economic benefits | | X | N/A | N/A |
| 4.2.5 | Other impacts | X | | | |
| 4.2.6 | <p>Details</p> <p>The change sponsor specifically mentioned economic impact from increased effective capacity for the proposed option in terms of MRO operations at St Athan. It is stated that the significance of the economic benefits of St Athan in the area of South Wales should not be underestimated due to the current employment of 200 personnel on salaries well in excess of the local average for MRO organisations at St Athan.</p> | | | | |
| 4.3 | What is the overall monetised impacts associated with 4.1 and 4.2 the above? N/A | | | | N/A |
| 4.4 | <p>What are the non-monetised but quantified impacts of the above? (Insert details of description)</p> <p>The change sponsor provided the traffic movements for the last 5-year period in Step 1B Design Principles Issue 1 document where they explained that approximately 50% of St Athan aircraft movements are by UWAS and 25% by GA and the remainder by Military aircraft. The MRO movements comprise on average approximately 1% of total movements.</p> | | | | |

However, the sponsor underlined that all aircraft utilising St Athan’s MRO facilities fly an ILS procedure on arrival. It is further added that while the relative number if ILS movements may be low, the importance of the ILS to MRO operations and, in turn, the importance of MRO operations to the airport, is disproportionately high.

The sponsor’s table provided for the stability of the movements is as follows:

| Year | UWAS | MRO | GA | Military | Heli | TOTAL |
|-----------|-------|------|-------|----------|-------|--------|
| 2014 | 5,106 | 93 | 1,573 | 1,025 | 3,280 | 11,077 |
| | 46.1% | 0.8% | 14.2% | 9.3% | 29.6% | 100% |
| 2015 | 4,852 | 118 | 1,815 | 791 | 571 | 8,147 |
| | 59.6% | 1.4% | 22.3% | 9.7% | 7.0% | 100% |
| 2016 | 7,302 | 110 | 4,621 | 750 | 2,532 | 15,315 |
| | 47.7% | 0.7% | 30.2% | 4.9% | 16.5% | 100% |
| 2017 | 7,464 | 41 | 4,670 | 659 | 2,200 | 15,034 |
| | 49.6% | 0.3% | 31.1% | 4.4% | 14.6% | 100% |
| 2018 | 7,385 | 117 | 3,651 | 201 | 1,830 | 13,184 |
| | | | | | | |
| Year | UWAS | MRO | GA | Military | Heli | TOTAL |
| | 56.0% | 0.9% | 27.7% | 1.5% | 13.9% | 100% |
| Average | 6,422 | 96 | 3,266 | 685 | 2,083 | 12,551 |
| Average % | 51.8% | 0.8% | 25.1% | 6.0% | 16.3% | 100% |

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| 4.5 | What are the qualitative / strategic impacts described above? Please see the answers in Question 4.1.8 and 4.4. | |
| 4.6 | What is the overall monetised benefits-costs ratio (BCR) of the policy? Is it more than 1? N/A | |
| 4.7 | Have the sponsors provided reasonable justification for the proportionality of analysis above? Please see the answer in Question 3.4. | |
| 4.8 | If the BCR is less than 1, are the quantitative and qualitative strategic impacts proportional to the costs of the ACP? N/A | |

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| 5 Other aspects | | |
| 5.1 | N/A | |

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| 6 Summary of Assessment of Economic Impacts & Conclusions | | |
| 6.1 | Please see the answer in Question 2.2, 4.5. | |
| Outstanding issues? | | |
| Serial | Issue | Action required |
| 1 | | |

| CAA Options Appraisal Completed by | Name | Signature | Date |
|------------------------------------|------------|------------|------------|
| Airspace Regulator | [REDACTED] | [REDACTED] | 12/07/2019 |
| Economist | [REDACTED] | [REDACTED] | 12/07/2019 |
| Environmentalist | [REDACTED] | [REDACTED] | 17/07/2019 |