

SHORT (& MEDIUM) TERM MEASURES - EXECUTIVE SUMMARY

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| MEASURE SET | Airspace operations | |
| MEASURE TITLE | Airspace restructuring | |
| MEASURE SUMMARY | This measure covers the planned and on-going airspace structure and air traffic management improvements that will arise from established programmes, including the Single European Sky ATM Research Programme (SESAR), the Future Airspace Strategy (FAS) and the London Airspace Management Programme (LAMP). In addition, it covers some more focussed and specific improvements relating to airspace organisation and management. | |
| MEASURE INVOLVES | <div><div><input checked="" type="checkbox"/> Behavioural Change</div><div><input checked="" type="checkbox"/> Infrastructure Change</div><div><input checked="" type="checkbox"/> Operational Change</div><div><input checked="" type="checkbox"/> Regulatory Change</div><div><input checked="" type="checkbox"/> Technical Change</div><div><input type="checkbox"/> Policy Change</div></div> | |
| WHAT DOES THIS ADDRESS? | | |
| <p>This measure includes the on-going SESAR, FAS and LAMP programmes in general terms. These programmes are funded, agreed and underway, irrespective of the deliberations of the Airports Commission. The programmes are likely to deliver mostly in the medium term although specific actions and projects within them will deliver in the short-term – these specific actions, such as enhanced queue management, are noted in the appropriate measure summaries.</p> <p>Concerning the latter two more specific proposals, currently airspace is structured such that military authorities have control of some areas where, for example, operational flying training and weapons testing occurs from time-to-time. Under current arrangements within the Flexible Use of Airspace (FUA) this airspace is released for civil use when it is not required by the military. The decision to release the airspace is taken by the military authorities based on military priorities. In addition, although small aircraft are required to carry radar transponders to make them identifiable to air traffic control if they operate in certain classes of airspace, they do not need to carry transponders and are not identifiable. This becomes an issue if they accidentally stray into busy airspace where they would be required to carry a transponder.</p> | | |
| WHAT WOULD BE DONE? | | |
| <p>The SES/SESAR, FAS and LAMP programmes will continue and deliver their strategic benefits as well as more specific benefits in the short-term. Under the specific proposals, there would be a limit imposed on military operations that impinge on civil traffic, especially in the south-east, effectively releasing the airspace for more civil use. The second proposal would require the mandatory carriage of transponders by all aircraft so that all air vehicles would be visible and identifiable to ATC all of the time.</p> | | |
| WHAT IS THE IMPACT? | | |
| <p>The impacts of the specific proposals would be to:</p> <ul style="list-style-type: none">• provide additional airspace to cater for increased runway utilisation• create a known surveillance environment in which airspace infringements would be minimised, be more recoverable and identifiable. | | |

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| MEASURE SET: | Airspace operations | Short Term | <input checked="" type="checkbox"/> |
| MEASURE TITLE: | Airspace restructuring | Medium Term | <input checked="" type="checkbox"/> |

MEASURE SUMMARY

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| Proposed by: | ABTA (005), Gatwick Airport (019), NATS (053) | | |
| Proposal: AsOP-ASR-1 AsOP-ASR-2 AsOP-ASR-3 | <p>A number of measures are proposed relating to improved airspace operations. These are::</p> <ul style="list-style-type: none"> • implementation of major programmes, including SES/SESAR, FAS, LAMP and the more specific airspace changes that underpin them • civil/military airspace optimisation • creation of a known-surveillance environment | | |
| Approach | <p>The approach for each of the measures is as follows:</p> <ul style="list-style-type: none"> • SES/SESAR, FAS and LAMP will deliver major changes to the operation of UK airspace, such as airspace structures, communications, (performance-based) navigation, surveillance and more flexible air traffic management to deliver benefits in terms of safety, capacity and environmental impact. These programmes are likely to deliver in the medium-term; however, there are initiatives being undertaken under their frameworks, such as proposals to redesign LHR departure routes, that might deliver in the short-term • civil/military airspace optimisation is about reprioritising access to airspace to the benefit of civil operations • creation of a known-surveillance environment will define volumes of airspace within which all aircraft must carry transponders to mitigate against and provide further information to assist with the management of infringements and unknown tracks that can disrupt operations at major airports. | <p>Stated Capital Cost: Not stated</p> <p>Capacity (mppa): Not stated</p> <p>Capacity (atm): Not stated</p> | |
| Benefits | <p>The principal benefits are those of the major programmes, namely, improved safety, capacity and reduced environmental impact. The majority of these will be delivered in the medium-term but specific projects might be delivered in the short-term. Optimisation of the sharing of military airspace would create additional airspace capacity to cater for increased runway utilisation (and additional runways in the longer term). Creation of a known-surveillance environment will deliver a safety benefit through discouraging and minimising airspace infringements.</p> | | |
| Issues & Risks | <p>The principal risks (SESAR, FAS and LAMP excluded) are associated with institutional impediments to re-prioritisation of military airspace to civil operations as well as user-resistance to the mandatory carriage of transponders by small aircraft and other vehicles, such as gliders. Airspace change programmes are subject to aviation policy (e.g. FAS) and public consultation (air quality & noise disturbance) and as such carry risk in terms of the acceptability of any proposed change. The mandated carriage of SSR transponders would require CAA action and can be expected to meet resistance from General Aviation due to costs of equipage and on-going certification.</p> | | |
| Mitigations | None needed. | | |
| Dependencies | Rule changes on airspace usage and transponder carriage. NATS will be required to undertake a full Airspace Consultation to support the LAMP project. | | |

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ASSESSMENT SUMMARY

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| Strategic Fit | The overarching programmes will define the structural, operational and technological environment in which the medium- and long-term options must be framed and against which their technical and operational characteristics must be assessed. |
| Economy | The potential positive economic impacts are large in the medium-term arising from the major programmes. In the shorter-term redesign of Heathrow departure routes would be expected to reduce delays on the routes with the highest demand. |
| Surface Transport | There would be little or no impact on surface transport. |
| Environment | <p>The environmental impacts of the specific proposals are likely to be minimal. For the SESAR, FAS/LAMP proposals, the potential positive environmental impacts are large in the medium-term. These would include:</p> <ul style="list-style-type: none"> • reduced noise impact, through continuous climb and descent procedures • reduced GHG emissions due to more direct routing and optimal flight profiles. |
| People | As above for environment, SESAR, FAS and LAMP would likely reduce noise impact in the medium-term. They would also improve the efficiency of air traffic operations by reducing delays, improving punctuality and reducing flight times, thereby delivering economic benefits and improved experience to the passenger. |
| Cost | Not yet known. There would likely be costs involved in retrofitting transponders into air vehicles if the carriage of transponders was mandated in all airspace. |
| Operational Viability | The two specific proposals are operationally viable but will require rule changes. |
| Delivery | Delivery of the two specific proposals are dependent on regulatory changes for delivery: (i) to re-prioritise the use of reserved airspace from the military to civil operations; and (to mandate the carriage of transponders by all air vehicles in all airspace. Both might be expected to counter some resistance. |