

Advanced Air Mobility Webinar for Local Authorities: What Every Council Needs to Know about AAM?

A Local Authority Perspective

Michael Thornton
Lead Advisor, HSPG Secretariat

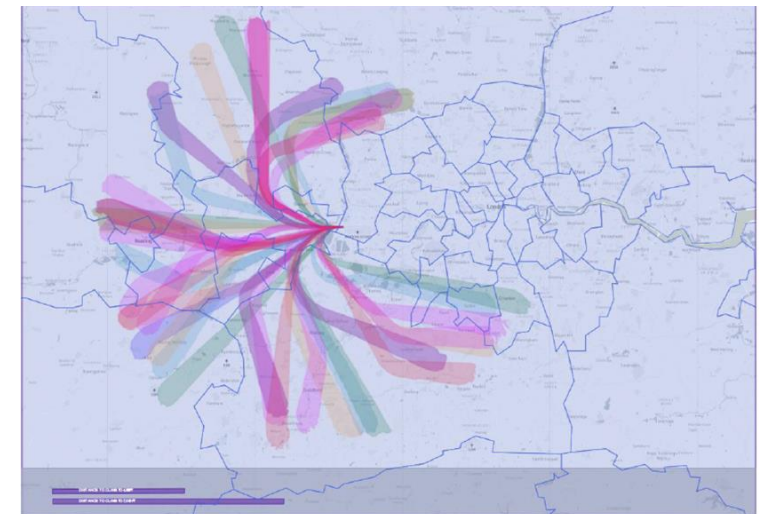
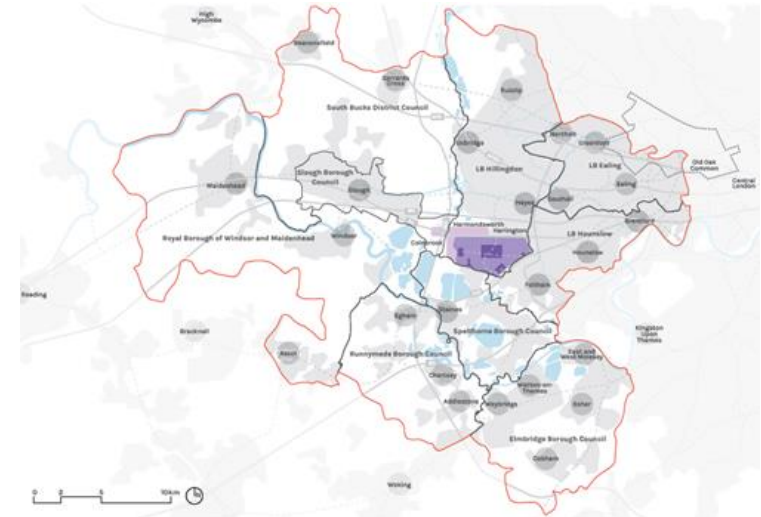
AAM - What every council needs to know?

- LA spatial planning for 40yrs; strategic, plan making, DM, strategic transport projects. Independent consultant 14yrs
- Independent lead advisor to HSPG –most of the LAs around Heathrow. All aspects of aviation and airport impacts on a range of LA functions



- Also, a qualified private pilot – SEP, VFR at lower altitudes – familiar with where can / cannot fly, avoidance procedures etc

An introduction – to pose some questions and issues that you might want to explore with presenters today?



What is AAM?

- **Toys** (<250gm), **small drones** (<400ft) to within 2m for surveys, photography etc
- **Remotely Piloted Aircraft Systems** (RPAS) and **Autonomous**, flying beyond visual line of sight (BVLOS) – upto the size of a van or more for cargos. Irregular PtP and regular routes to onward distribution points?
- **eVTOL aerial taxi** for 2 to 5 pax. Range and price point – limo or an Uber?
- **Licenced and unlicensed ‘vertiports’** for – landing & recharging sites
- **eS/VTOL for Regional Air Mobility** – passenger service, 20 – 80pax?, reduced impacts and operating costs to small airfields – ‘disrupter’
- And beyond electric-battery power....

- What are the classes of AAM around which *functionally* useful distinctions might be drawn?
- Where might demand arise, for how many, to do what, when?
- ‘Use cases’ - when does flying make sense? What’s of use to LAs?



Consultation: Unmanned Aircraft operations within an Atypical Air Environment

CAP 2968 | First Edition

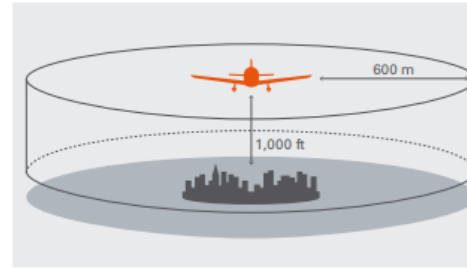


Pipistrel



Fly and land where?

- Unrestricted airspace – **fly anywhere** except:
 - If to land....
 - Or on published routes / with ATC clearance in restricted airspace
 - Smaller drones allowed much closer to people
 - Notification of operations
- **Land anywhere** - 28days rule. (Monitoring and Enforcement?)
- An 'aerodrome' requires **TCPA planning permission** – only conditions 'relevant to planning' Strong voice to LAs. Excludes flight path routes (even use of the runway – Heathrow 09L).
- **Regular notified use of airspace regulated by CAA** (CAP 1616) – LAs seen as a community representation – is this adequate in terms of LA functions?
- **Gaining new landing sites could be fraught?!** Lack of integration, frustration
- Expect **new interest in established small airfields?** Affects almost every LA? Process for granting 'Licenced vertiport' within a small unlicensed airfield (Licence necessary for commercial pax!)



- Where are small 'aircraft' allowed to fly? How low?
- Where are 'small' aircraft allowed to land?
- What are the consenting regimes and what voice do LAs have?
- What are the consenting regimes and what voice do LAs have?
- Will growth in AAM affect my LA? Which roles and functions? (It's about more that representation of local communities!)

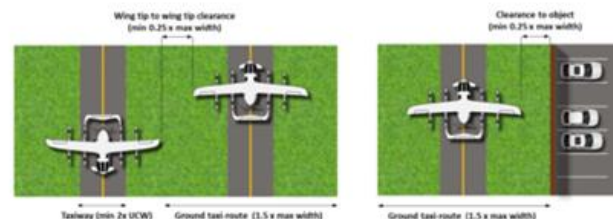


Figure 3.3 - Vertiport ground taxiway and taxi-route clearance distances (Illustrati

CASA

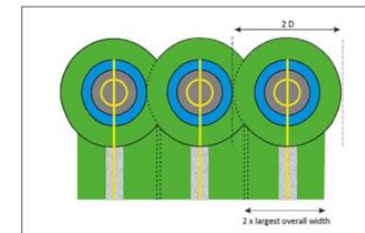


Figure 3.7 - Vertiport stands designed for hover turns with air taxi-routes/taxiways — non-simultaneous operations.

Assessing impacts, trade-offs & decision making

- Importance of the 'use case' to gaining social tolerance & acceptance
- Technically difficult - 'quieter' but new 'types' of noise, hovering etc. new metrics required
- Non-acoustic factors contributing annoyance (impact on health and wellbeing)
- Would National Development Management Policies in this sphere be helpful?
- Likelihood of regular low altitude routes in metropolitan areas – where best? LOCAL concerns and trade-offs – an LA role
- Societal acceptance of AAM – many long nights at planning committee!?
- How to assess new types of aircraft noise and annoyance?
- Should LAs have some say on the design of the regular low level flight paths? Destinations to serve or areas to avoid?

Opportunities for integration

- UK law – regimes should not overlap. Danger of ‘**silos**’, ‘**gaps**’ and a lack of understanding of the other
- **Desirable to integrate AAM with** surface transport infrastructure, transport and spatial land use strategies.
- Local Plans or emerging new forms of sub-regional spatial strategies?
- **Network Vs individual** landing site planning
- Is a **further dimension** to spatial strategies required? Spatial plans – surface location, infrastructure, the means, temporal *plus* low-level airspace?
- Additional burden for LAs? – but can Local Authorities afford not to be effectively represented from the outset?
- How could we improve and better integrate land use and airspace planning processes?
- How can we to incorporate AAM into integrated surface transport strategies?
- A case for four-dimensional Local Plans, sub-regional strategic planning?
- What will LAs need to engage in this? An additional burden on LA?

Questions? Challenges? Opportunities?

- What are the classes of AAM around which *functionally* useful distinctions might be drawn?
- Where might demand arise, for how many, to do what, when?
- ‘Use cases’ - when does flying make sense? What’s of use to LAs?
- Where are small ‘aircraft’ allowed to fly? How low?
- Where are ‘small’ aircraft allowed to land?
- What are the consenting regimes and what voice do LAs have?
- Will growth in AAM affect my LA? Which roles and functions? (It’s about more than representation of local communities!)
- Societal acceptance of AAM – many long nights at planning committee!?
- How to assess new types of aircraft noise and annoyance?
- Should LAs have some say on the design of the regular low level flight paths? Destinations to serve or areas to avoid?
- How could we improve and better integrate land use and airspace planning processes?
- How can we incorporate AAM into integrated surface transport strategies? A case for four-dimensional Local Plans, sub-regional strategic planning?
- What will LAs need to engage in this? An additional burden on LA?