Tools and Resources

Checklists for Corridors

Drone corridors significantly enhance air safety and operational efficiency. They are categorized into two main types:

- **Corridors for Testing and Training:** Dedicated spaces for developing and refining drone capabilities.
- **Corridors for Standard Operations:** Established routes for routine drone deliveries and services.

These corridors can be further classified as either permanent *(e.g., for ongoing delivery of medical supplies between hospitals or for established testing and training centers)* or temporary *(e.g., for seasonal agricultural activities or specific testing conditions).*

Identifying suitable locations for drone corridors
Deciding on the establishment of drone corridors requires careful consideration of multiple factors. The selection process involves analyzing various elements, which can be sourced from authoritative bodies such as Civil Aviation Authorities (CAA), surveying departments, and meteorological offices, or from online resources. Integrating these data layers into a Geographical Information System (GIS) enables a comprehensive analysis, combining results to identify optimal corridor locations.

This provides a checklist to guide the identification of suitable areas for drone corridors.

Checklist for corridors
The following checklist is for all types of corridors. The points listed below cover three key aims:

- Safety,
- Attractiveness to use the test areas, and
- Acceptance.

Topic	Aim	Purpose	Information source	Relevance
No violation of no-fly zones	Safety	Minimising the risk of a crash with crewed aeroplanes	CAA of the country	very relevant
Sufficient distance to airports	Safety	Minimising the risk of a drone getting out of control	maps (GIS-buffer)	very relevant
No settlements	Safety	Minimising the risk of damage in case of a crash	maps (GIS - buffer)	very relevant
Few roads	Safety	Minimising the risk of damage in case of a crash	maps (GIS)	relevant
No obstacles	Safety	Avoidance of potential obstacles e.g. tele-communication poles, wind turbines	maps and field visit	relevant
Suitable topography	Safety	Limited number of hills *(line of sight operations)* to reduce the risk of a crash	maps, digital elevation model	relevant

Weather

Topic	Aim	Purpose	Information source	Relevance
Rain statistics	Safety Acceptance	To assess potential impact of rains that would prevent operations	CAA of the country	very relevant
Visibility statistics	Safety Acceptance	To assess visibility for tests and operations that require it	maps (GIS-buffer)	very relevant
Wind conditions	Safety Acceptance	To assess wind to see if it would be too windy to be a suitable side as some operations can not be done in heavy winds	maps (GIS - buffer)	very relevant
Temperature statistics	Safety Acceptance	Tests are more comfortable if the temperature is agreeable for the operators. In addition very high temperature can cause failures for drones *(it is important to respect the manufacturer specifications)*	maps (GIS)	relevant

Connectivity

Topic	Aim	Purpose	Information source	Relevance
GSM connection	Safety Acceptance	Generally, good GSM is required for telecommunication	maps of GSM net provider	relevant

Consider the following for permanent corridors, especially for testing

Topic	Aim	Purpose	Information source	Relevance
Accessibility for user	Acceptance	Where appropriate ensure easy-to-reach access from airports or larger cities so operators do not lose much time	maps	good to have
Facilities	Acceptance	Facilities like washrooms, storage sheds, workshops, meeting rooms	field investigations	nice to have
Wind conditions	Acceptance	Important to charge the batteries and computers	power supply companies	good to have