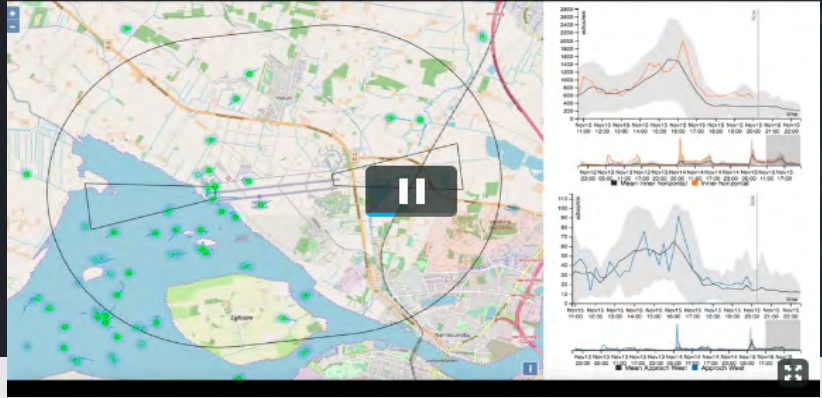


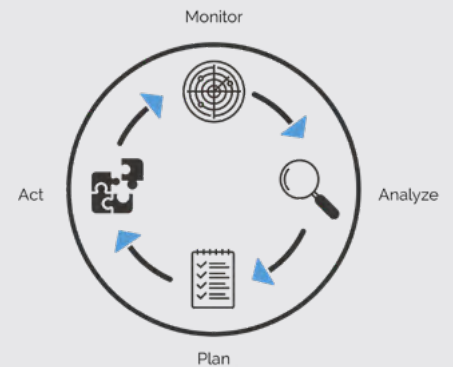
# Avian Radar



## RADAR DETECTION OF BIRDS

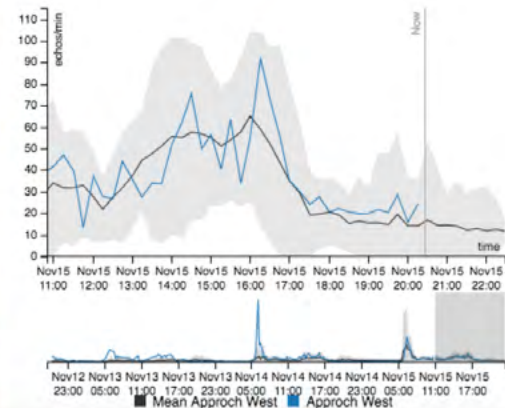
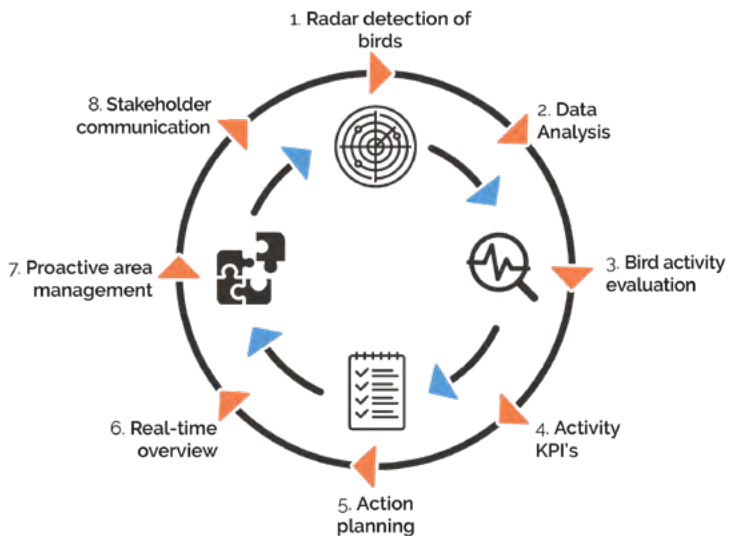
Imagine being able to predict bird activity as well as having an overview of your airport area, real-time guidance for bird control staff, automated reports and KPIs that can be used in your wildlife risk management program.

- **Bird hot-spot identification**
- **24/7 Radar detection of birds**
- **Real-time bird control guidance**
- **Bird activity forecast**



## PROCESS

1. **Radar detection of birds:** using AscendXYZ end-to-end solution.
2. **Data analysis:** using sophisticated algorithms.
3. **Bird activity evaluation:** use-case specific.
4. **Activity KPI's:** based on continuous measurements.
5. **Action planning:** risk-based wildlife control.
6. **Real-time overview:** guidance for the bird control staff.
7. **Proactive area management:** based on historical analysis.
8. **Stakeholder communication:** risk mitigation.



FOR MORE INFORMATION -  
VISIT OUR WEBSITE:

# Detailed process description

## 1. RADAR DETECTION OF BIRDS

The AscendXYZ radar system is an end-to-end service, delivered as a mobile trailer solution. Only external power and internet connection should be supplied by the airport operator. The radar system covers up to 150 km<sup>2</sup>.

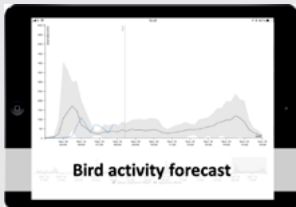
## 2. DATA ANALYSIS

The radar data is processed by sophisticated algorithms to enable the segmentation and identification of birds. The processing is performed on-site, the result is presented in the AscendXYZ web-portal to the users at your airport.

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## 3. BIRD ACTIVITY EVALUATION

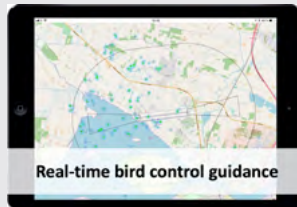
With the continuous identification and measurement of bird activity we can enable:



With the bird activity forecast pilots can mitigate high-risk periods by:

- Climbing before accelerating;
- Using full runway;
- Reducing speed on approach;
- Including bird activity in their briefings.

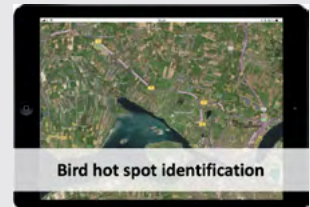
Please note that departures and arrivals can continue uninterrupted. We are solely suggesting to adapt operations to mitigate the risk. Therefore the solution works well both for civil and military traffic.



Bird activity on the airport area is evaluated and relayed to the bird control units in real-time. This enables the bird controllers to analyse where and when birds enter the operations area and disperse the birds making the airport area unattractive for birds to feed.



The solution provides an overview of bird activity in the airport operations area in combination with runway crossing and near-miss analysis. This overview enables a consistent evaluation of the airport area management plan. For example, if you change the height of the grass from 10 to 30 cm, you will be able to measure potential changes in bird activity, thereby identifying the best possible solution for your airport.



By analysing the historical radar data, bird activity hot-spots and local migration routes can be identified, documented, or included in the risk assessment. Based on this information you can initiate a data-driven dialogue with local landowners, restaurants or city government.

## 4. ACTIVITY KPI'S

When bird activity data is gathered, AscendXYZ will support the development of bird activity KPI's for your airport. Bird activity KPI's help you to continuously measure and evaluate the activity in the operations area, departure and approach sector, in addition to the airport surroundings.





# Detailed process description



## 5. ACTION PLANNING

Based on real-time measurements and historical analysis you can define your response implementing a risk-based wildlife control and reduction.

### REAL-TIME

If bird activity on the operations area is increased to X above mean – additional bird control staff are dispatched to the airport area and “bird activity high is broadcasted on the ATIS”

### AREA MANAGEMENT

If an increase to X above mean in bird activity on the airport area is identified – the area management plan and airport surroundings will be analyzed in collaboration with wildlife specialist (to identify and treat the main cause).

### HOT SPOTS

As hotspots are identified, the risk is evaluated by performing on-site visits and evaluating the areas using the [AscendXYZ 13 km satellite survey](#). If risk can be mitigated – stakeholder communication is initiated.

## 6. REAL-TIME OVERVIEW

Bird control staff views real-time radar feed guiding them to the areas of the airport with the highest activity, thereby making the airport area unattractive as a feeding ground. The data is also used to indicate the threat level and implement the planned response.

## 7. PROACTIVE AREA MANAGEMENT

Based on the historical analysis, the area management plan is adapted and implemented in accordance with the planned response. By doing so you will be minimizing future risk at your airport and securing safe uninterrupted aircraft operations.

## 8. STAKEHOLDER COMMUNICATION

Based on the historical analysis, stakeholders are engaged and results of the radar measurements can be used to document and prepare for potential consequences. In many cases local farmers and other land owners will have an interest in limiting the bird activity in collaboration with the airport. On-site species identification can be done using [AscendXYZ registration solution](#).

# GET STARTED WITH RADAR

It is easy! Tell us which service level you need. Then we will help you identify the best location for the radar. The system will be delivered and installed by AscendXYZ, and the actionable results will be made available to you. Since the system is delivered “as a service” you don’t have to think about maintenance or insurance – you only have to focus on the result.

Radar detection of birds is now available as a plug and play service with prices starting from €1200 a month.