

FOUR COLUMN ARCHITECTURE FOR BIRDSTRIKE RISK MITIGATION

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In Airport Services Manual DOC 9137 Part 3 Wildlife Control and Reduction, Chapter 3.3, ICAO says that "each airport operator has the responsibility to develop, implement and demonstrate an effective bird/wildlife strike and wildlife control programme at the airport,…"

The programme should be "tailored to local conditions, …"

The programme must be individually adapted and is not a cook book suitable for all airports.



The programm will differ depending on:

- Legal foundations
- Ecological conditions
- Risk species
- Flight operations
- Social conditions
- Airport organisation
- Other facts.



Example:

DAVVL comprises 28 airports

Germany is a federal country



legal foundations differ from state to state

- Climate differs from the sea in the north to the mountains in the south, from maritime climate in the west to a continental climate in the east
- Bird species and bird numbers differ
- many other factors differ, too



We have to consider this when working out wildlife hazard mitigation programmes for airports.



Bird strike prevention can abstractly be seen as a building with:

- a foundation
- a roof
- carried by columns.



Biological flight safety

Active bird dispersal

Habitat management

Bird strike forecast

Bird strike statistics

Local conditions



A roof gives shelter.

If you are interested in very good shelter you need a big and strong roof.

The bigger and stronger the roof the bigger and stronger the columns have to be.

The stronger the columns the bigger the foundation has to be.

The columns are not necessarily equal. But it is important that, together, they are able to carry the roof safely.



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GERMAN PROGRAMME



If one or more of the columns are removed, the building becomes more and more unstable.

My advice:
Develop a four column architecture to run a safe and modern programme.





THANK YOU VERY MUCH FOR YOUR ATTENTION!