Ladies and gentlemen,

When a big airliner and a flock of birds are on collision course, I have been told that there are only three options left:

Divert, deter and -or- pray...

However, diverting a big bird flock, provided it is seen in time by the pilot, is almost no option. Slip second escape actions with a massive Boeing 747 will certainly cause enormous panic on board and the remedy may be worse than the cause.

Deterring the birds out of the flight path by means of a system of automatic sensors and signalling devices does not yet exist (as far as I was informed). And instead of losing time by praying I would advise: be prepared, watch your instruments and follow the emergency rules. But, can we do more than leaving all responsibility with the pilot? Could Air Traffic Control be convinced to undertake Bird Traffic Control? And could choosing a strategic approach compensate the limited possibilities of tactical solutions?

My name is John Nederstigt and I'm alderman of Haarlemmermeer. I have been asked to speak to you and I like to do that because of several reasons.

First of all is the name Amsterdam Airport somewhat deceptive. It lies in within the municipality of Haarlemmermeer. Originally, Schiphol was founded in a bumpy meadow for military purposes in 1916. Nowadays, Schiphol is an important international airport and an economic powerhouse for the Metropolitan region of Amsterdam and the Netherlands as a whole. For years, the societal debate concerning Schiphol is dominated by the tension between ecological hindrance versus economic growth. It concerns topics such as the license to operate and future growth, living in the proximity of the airport and noise hindrance. But it also concerns geese and the threat to flight safety.

Secondly, I am the alderman for sustainably economic development in the municipality of Haarlemmermeer. Although I am not responsible for airport affairs, you can imagine what it means to have an international airport within your administrative boundaries. The presence of an international airport has consequences for our ambition to become a circular society: a society where the loops of production and consumption are closed. In this society there is room for both a blooming economy and a healthy ecological system.

## Ladies and gentlemen,

Let me take you to Haarlemmermeer. Haarlemmermeer is striving for a circular society and we are getting there. The presence of the airport makes the road to the circular society exciting and challenging. It is a location offering its visitors and locally based international businesses all the services they require on a 24/7 basis. All those activities influence the environment and the region. And all those activities serve the same goal and the core business of the airport: their license to operate.

We are striving to be the most sustainable airport region of Europe. Therefore we have to shift our focus from nuisance, joys and burdens to opportunities for development, innovation and sustainability.

Within the close proximity of the airport, we are developing the Circular Valley. This area will function as a national ánd international display for the transition to the circular economy. We see ourselves as the ultimate living laboratory for a circular society. Everyone who has the courage to experiment is more than welcome to create examples for the world. Examples showing that an economy that is restorative and regenerative by design is possible. Examples that helps us to accelerate the transition to a circular society. For instance: we are going to experiment with circular and noise adaptive building; starting at the spotter's site near the Polder runway.

The rerouting of the A9 highway offers opportunities for temporarily redesigning and experimenting with noise adaption, green solutions concerning ultrafine particle matter and inundation.

Back to the airport, back to the geese. I already said so: a circular society provides space for both the economy and ecology. But we must facilitate entrepeneurs and pioneers foster innovations, harvest knowledge and create new coalitions.

We can remain our focus on noise nuisance and short term solutions, like the mass culling of the geese, but we can also shift our focus towards long term opportunities and possibilities, provided by circular and sustainable chains of thought.

Opportunities and possibilities that cater to the economy, flight safety and ecology.

Nowadays radar technology to monitor birds in the air is advancing fast. The ROBIN system at Schiphol airport will be further extended after positive trials. It will shed a different light on bird traffic control, simply because aviation will run the risk of becoming liable in case of not using proven technology. Instead of waiting for a big accident, the most advisable strategy is taking the lead in research, of course.

Obviously this is an example of a technical innovation. But let me tell you about another example. An example of an unexpected partnership. And moreover: an example that already is a proven fact: Miscanthus or eliphant grass.

Miscanthus is a fast growing, high crop, with a high energetic value and strong fibres. It absorbs fine dust, carbon dioxide ánd noise. Moreover: geese don't like miscanthus. In fact: they are really afraid of it. This very tall multy-yearly grass is unattractive and extremely impenetrable for big birds like geese. Moreover, strips of Elephant grass may also hide foxes waiting to attack unaware geese, feeding of adjoining fields with attractive grains.

5-1

Therefore: a very good crop to keep these birds away from the runways. But also a great resource for concrete, plastics and paper.

To use for - amongst other things – the production of noise barriers, concrete for trainstation platforms, street furniture (you'll find them in our community and on the airport) and the plastic bags of See Buy Fly. So spatial planning is also an important tool

Ladies and gentlemen,

A brief view into the future. It is 2076, 50 years from now. Aviation made giant steps concerning sustainability. Airplanes and airports are equipped with the most advanced radar systems. Around the runways miscanthus and other bird repressing crops are cultivated on a large scale.

These crops are all deployed for multifunctional purposes, such as producing materials for infrastructure and houses but also to absorb carbon dioxide, particle matter and noise.

But above all it serves flight safety. Based on the knowledge of nature and ecology -bird behaviour and knowledge of crops- and with the help of technical innovations we can provide space for both birds that contribute to the biological diversity of our airport region as well as the iron birds that serve our economy.

Ladies and gentlemen, I thank you for your attention!

## Notes

