



Think Different !

“Innovative technology for assessing

wildlife collisions with wind turbines”

- >> Development partners
- >> ID-Stat, description, test
- >> Applications





Developed and patented

In collaboration with

Eneria

CAT

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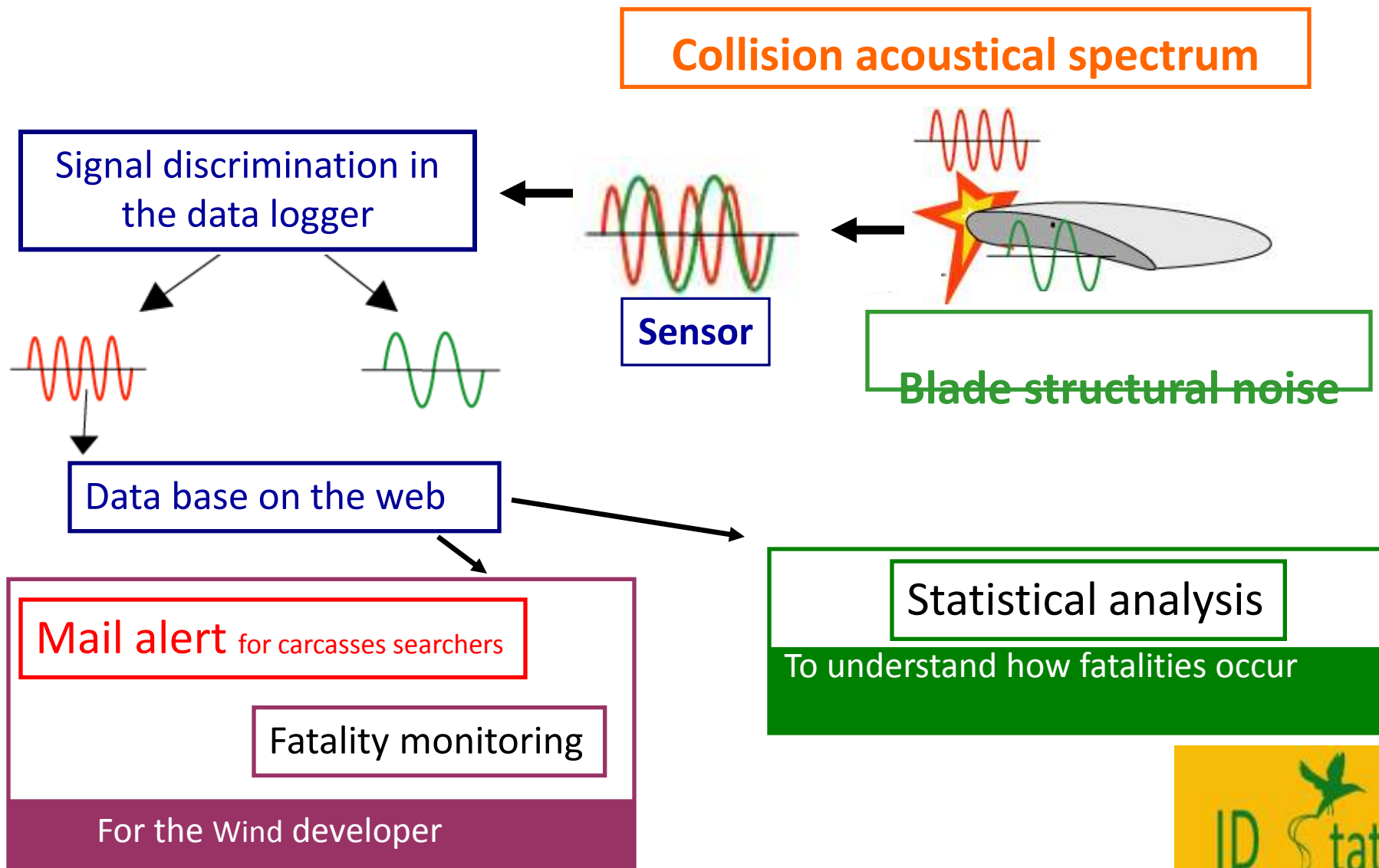
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91 311 Montlhéry

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>> ID-Stat, automatic and standard collision detector



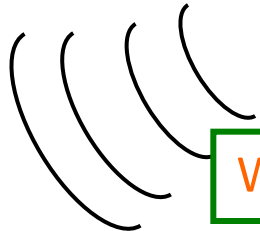
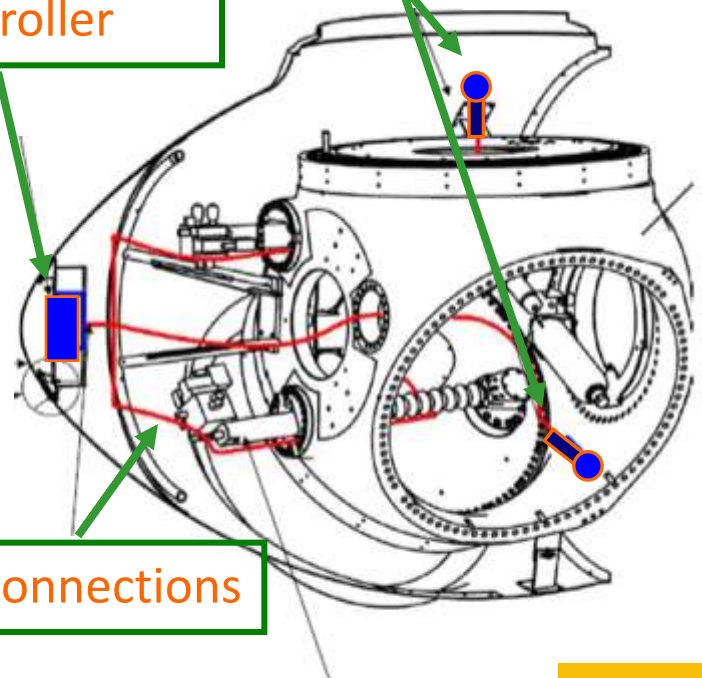
>> ID-Stat, non-invasive vibro-acoustic collision detector



Three microphones
NON-INVASIVE ATTACHMENT



Data logger connected
in hub controller



Wire connections

GSM technology
for data collection ...



>> Test issues

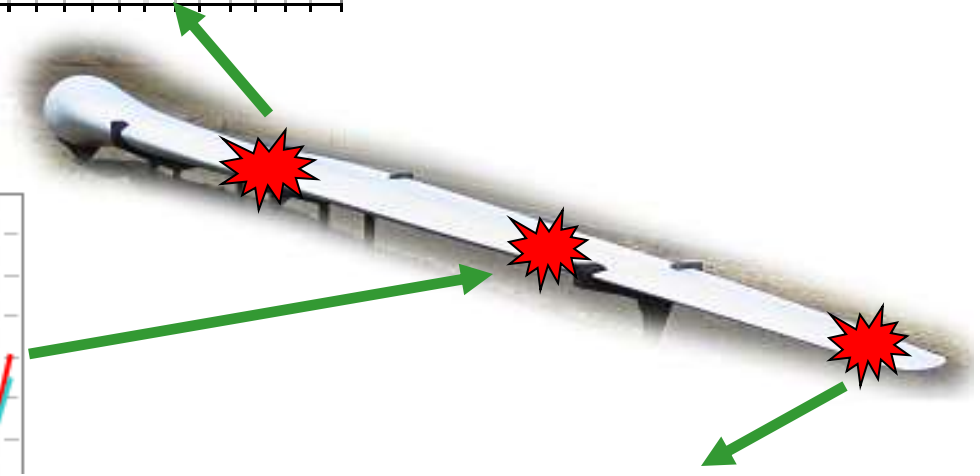
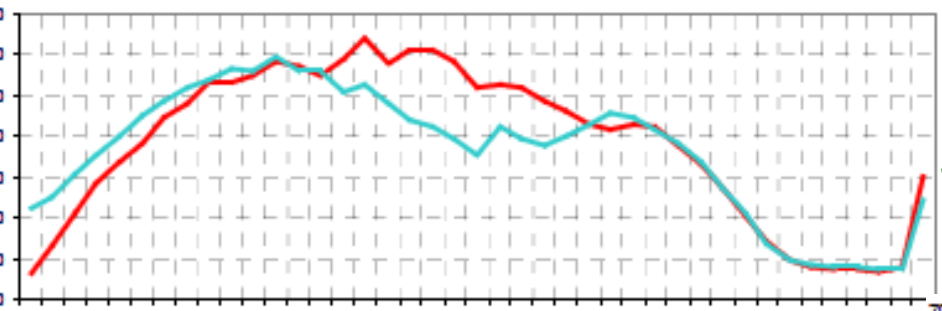
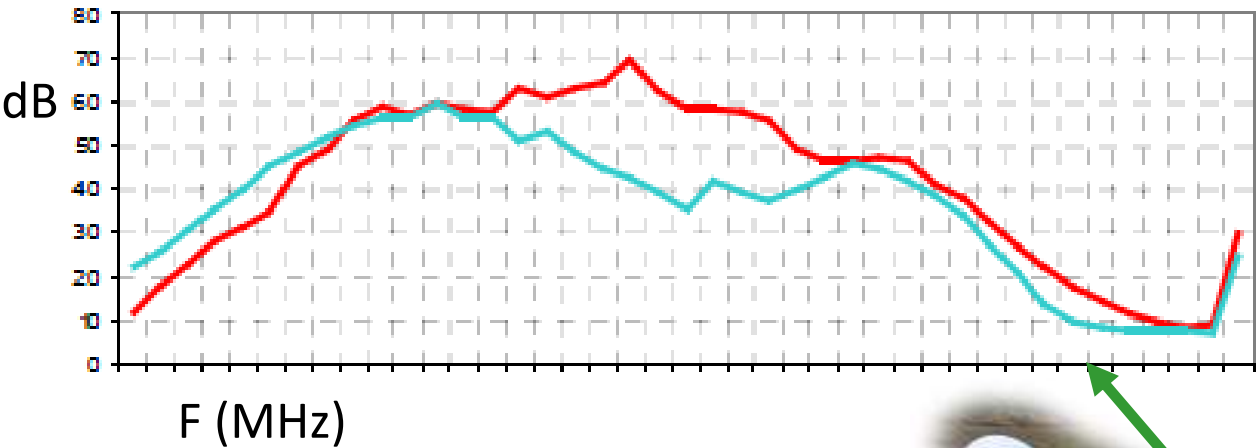
⇒ acoustical detection validation

⇒ acoustical detection level

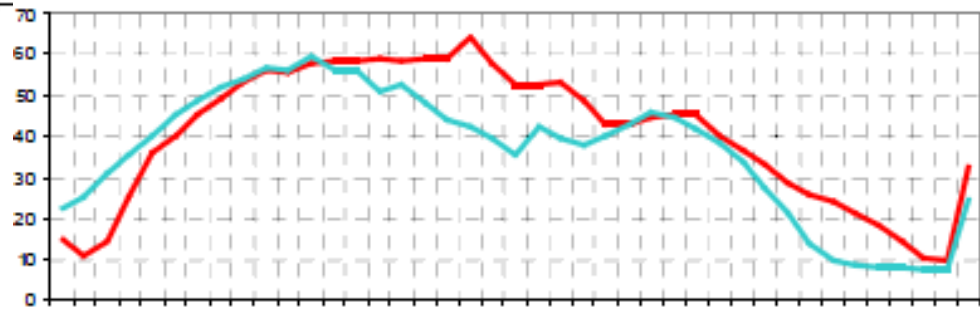
⇒ ID-Stat validation for industrial applications

>> Blade acoustical properties ...

Acoustical spectrum constant from base to tip



Red is the collision + laboratory structural noise
Blue is the structural noise



>> First test results

=> Collision detection

-> with flying chicks 30g

-> with “artificial bird” 2,5g *customised chicken gun* ®

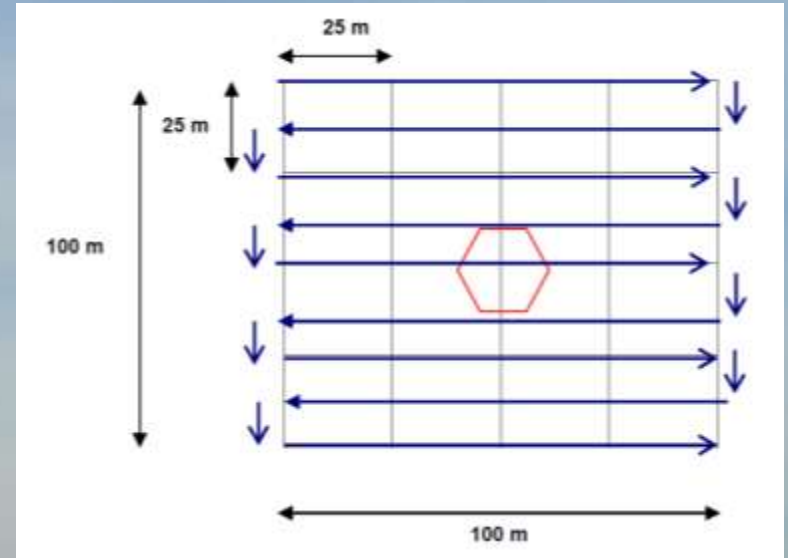


2,5 g artificial bird



run

>> First long term test



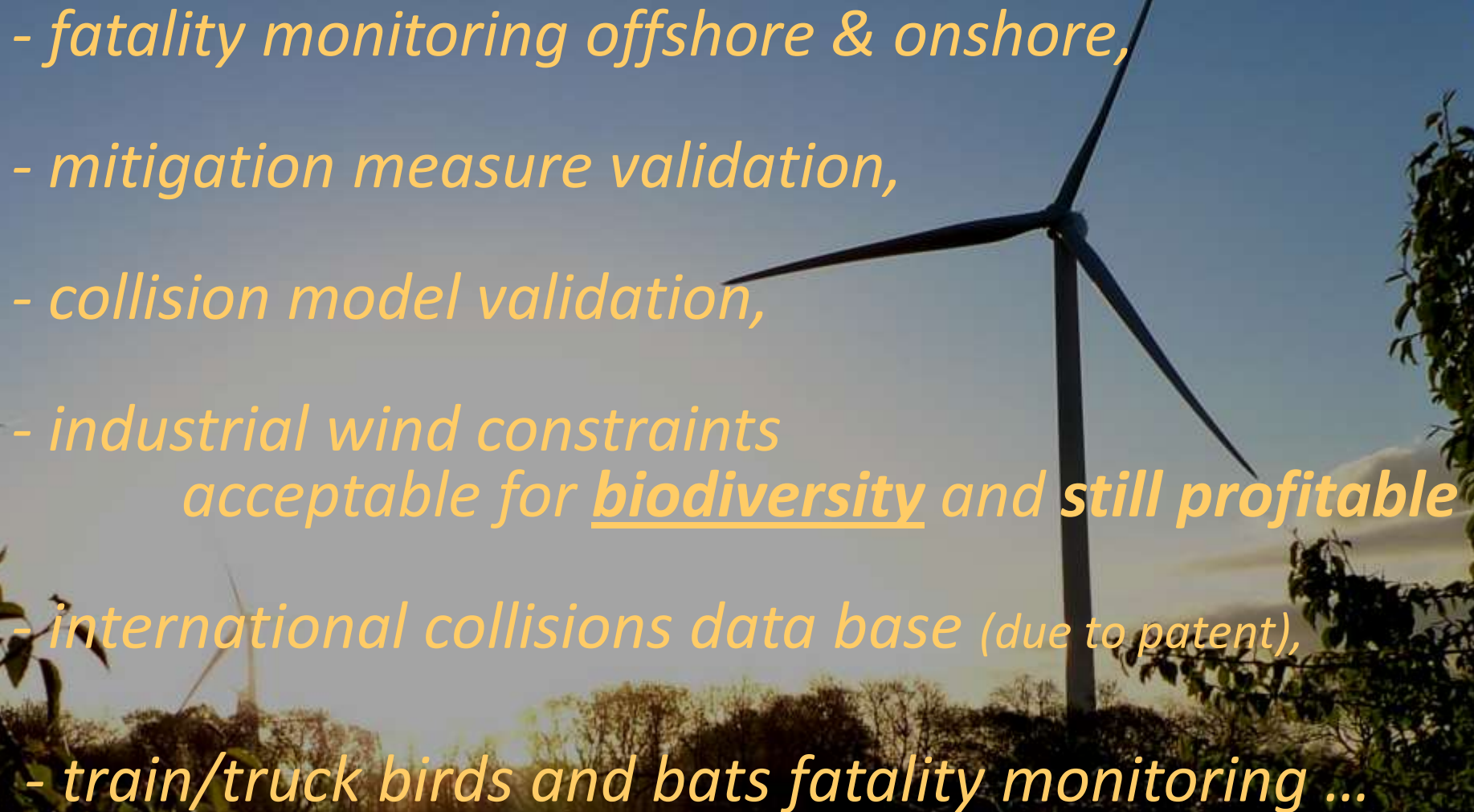
Ground fatality research methodology

=> 1 windturbine (western France)

=> 1 ID-Stat collecting 24/7 since May, 3^d 2011

=> daily ground fatality searches

>> ID-Stat applications

- *fatality monitoring offshore & onshore,*
 - *mitigation measure validation,*
 - *collision model validation,*
 - *industrial wind constraints
acceptable for biodiversity and **still profitable***
 - *international collisions data base (due to patent),*
 - *train/truck birds and bats fatality monitoring ...*
- 
- A large wind turbine stands in a field with trees in the foreground and a clear sky in the background. The turbine is the central focus, with its three blades extending outwards. The foreground is filled with green foliage, and the background shows a line of trees under a bright, clear sky.

Thank's, Multumesc, Danke, Grazie,

Obligado, Gracias, Takk ...

for your attention 😊



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