Wake Energy Retrieval
Inspiration from nature
What is Wake Energy Retrieval?
## The fello’fly demonstrator

<table>
<thead>
<tr>
<th>Technical</th>
<th>2020</th>
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<tbody>
<tr>
<td>Pilot assistance for safely finding and following the wake</td>
<td>Technical feasibility flight tests</td>
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<th>Operational</th>
<th>2021</th>
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<tr>
<td>Concepts for planning and executing fello’fly missions</td>
<td>Operational feasibility flight trials with airlines &amp; ATC</td>
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<th>Commercial</th>
<th>Around 2025</th>
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<td>Ensuring value-chain has benefits for stakeholders</td>
<td>Controlled Entry-Into-Service for oceanic operations</td>
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On-board technology

• Flight testing in July 2020

• Two A350 aircraft

• First automatic tracking

• Preparation of further feasibility testing ongoing
Industry collaboration

• Aircraft technology could be available around 2025
  □ Need to assess rulemaking & ATM impacts and timeline

• Working actively with Airline & ANSP partners

• Potential collaboration for continental concept of operations in SESAR3

• Can only bring this to the skies by working together!
2021 Atlantic live trial

Demonstration of:

• Prototype aircraft technology
• Air Traffic procedures
• Fuel savings
Conclusion

- Wake Energy Retrieval demonstrator
- Inspired by the behaviour of migrating birds
- Using air upwash to lift a follower aircraft

- 5 to 10% trip fuel savings on long-haul flights
- Helps towards reaching industry emissions targets
- Collaboration with airlines, ATC and regulators