



Interreg 
EUROPEAN UNION
North-West Europe
MegaAWE
European Regional Development Fund

MegaAWE Newsletter
May 2021



Comhairle Contae Mhaigh Eo
Mayo County Council

Airborne Wind Europe 



RWE

Content

- MegaAWE Headlines
- News from the Work Packages
- People in MegaAWE
- MegaAWE project background

Top News

Airborne Wind Europe discusses Feed-In Tariffs with German parliamentarians

- AWEurope has discussed support schemes with German policy makers (from BMWi – Ministry of Economy and Energy – as well as parliamentarians).
- The main focus was to identify ways on how to achieve a special FiT for AWE, potentially around 25 ct€/kWh

Ampyx AP3 on its way to test runs and first flight

- Two AP3's have been built. They are currently undergoing structural and system tests to demonstrate integrity and functionality.
- After performing test runs on Breda Airport in The Netherlands, AP3 will fly in Spain until the site in Ireland is ready.

RWE has been successful with its planning application and has been granted with a final building consent for the AWE Test Hub

- RWE is currently tendering for construction works with the aim to award a contractor soon

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T1: On Field Pilot Demonstration and T2: In Lab Demonstration

Lead: Ampyx Power

Update on activities:

- Established contact with various new supply chain candidates
- Parkburn & Ampyx progressed on the development of the launch and land systems for the demonstration: deceleration system (slider), rotating platform and deck, catapult, tether handling system (expeller/swivel).
- Progressed on (i) material and manufacturing process selection, (ii) wing concept design, and (iii) material testing campaign procurement: SABCA, Ampyx, Siemens, Stellar, InfraCore, Kiteswarms, with support of Gent University
- Hydraulic drivetrain simulation activities awarded



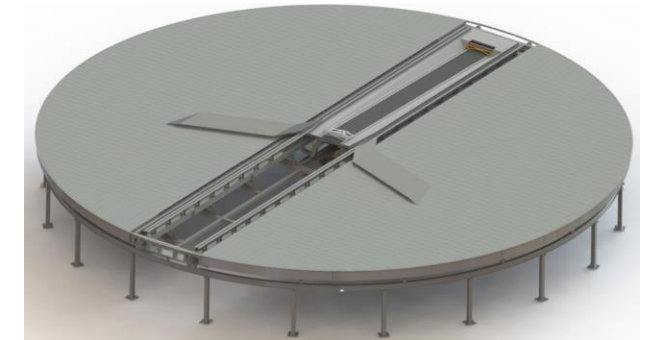
Patented slider system for automatic landing



MW-TETHER tests will be done on full scale using this machine



Power Generation Apparatus (PGA)



Design of the rotating launch & land platform

T3: Validated Execution Plan

Lead: Airborne Wind Europe

New IEA Wind Task on AWE approved

- Task proposal officially submitted in February
- New Task approved by large majority of ExCo votes in May 2021



MegaAWE Platform – meetings and outreach

- Calls with all partners in September / October 2020
- Platform Meeting organised on November 18, 2020
- Several follow-up calls, e.g. with Aerospace Valley in France



AWEC 2021 postponed to 2022 due to Corona

- The 9th International Airborne Wind Energy Conference will be held on **15-17 June 2022** at the Politecnico Milano, Milan.



LT: Long-term

Lead: Airborne Wind Europe

Life-Cycle Assessment

- Scope: 5 MW AWES vs. 5 MW Horizontal Axis Wind Turbine
- Product-tree, assumptions and all data collected
- Final analysis and elaboration on-going

Policy Outreach

- Two webinars held for German parliamentarians on AWE in January 2021. Focus on Feed-in Tariffs for AWE, potentially around 25 ct€/kWh.
- Reached out to Irish policy makers beginning of 2021.
- AWEurope presented the sector at the SET-Plan Steering Committee and provided input to the Work Programme of the new Horizon Europe programme.

Business case development (Ampyx)

- Established contact new potential partners, including two new user partners with demonstration opportunities
- Elaborated the Megawatt AWES development roadmap and matured the business plan and roll-out plan,
- Performed scalability analysis for roll-out

EASA

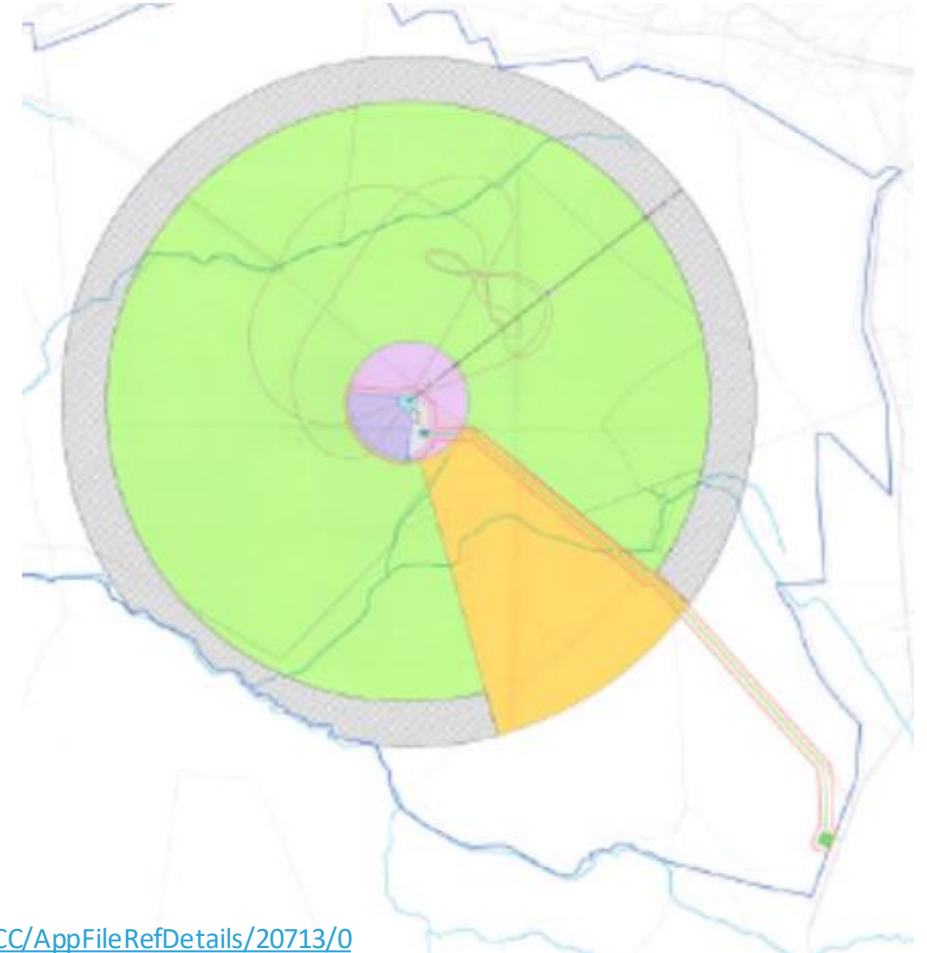
- Workshop organised in November 2020 to understand requirements and European legislation/regulation related to AWE, including concepts like SORA and U-Space.
- Input to German parliamentarians on Implementing Regulation (EU) 2019/947 on Unmanned Aerial Systems



The site in Mayo County



<http://www.eplanning.ie/MayoCC/AppFileRefDetails/20713/0>



I1: Test Hub Development

Lead: RWE

Update on activities:

- Final building consent for AWE Test Hub has been granted to RWE, no appeals were raised
- Local public and politicians have been informed by RWE about these positive news - an RWE press release was issued
- Tender specifications for civil and electrical works for the test hub construction have been prepared over the last months and were issued to potential candidates with the aim to award a contractor soon

C: Communication

Lead: Mayo County Council

Update on activities:

- A Draft Project Communication Plan has been developed by Mayo County Council for the project, this plan will be the cornerstone of all activities, outcomes, deliverables and results.
- A webpage is active on the Interreg Platform <https://www.nweurope.eu/megaAWE>
- Social media accounts are active on Twitter [@mega_awe](#) and LinkedIn [@MegaAWE Interreg NWE](#)
- In line with publicity requirements Mayo County Council has integrated the project logo into all social media, website and promotional material.

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Featuring: John Begley, EMEC



Name: John Begley

Company: European Marine Energy Centre (EMEC)

Job Title: Project Manager, MegaAWE

Tell us about yourself

I have just recently joined EMEC in January and taken on the role of Project Manager for MegaAWE on behalf of the lead partner, Mayo County Council.

I am based just outside Belfast in Northern Ireland. I have a background in engineering and I have run my own businesses for over ten years. I enjoy rock climbing and hiking in my free time.

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What do I like about Airborne Wind Energy?

- I like the idea of combining several novel technologies to increase the energy collected and reduce the mass compared to fixed wind turbines.

What would I like to achieve in MegaAWE?

- I hope that despite Covid we will be able to develop the test site this year and see AP-3 flying by the end of 2021.
- I hope that we can prove the technology is scalable to MW and beyond!

Featuring: Michiel Kruijff



Michiel Kruijff

Ampyx Power

Chief Technology Officer

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Responsibility in MegaAWE

- Performing T3 & LT activities (commercial system kick-off “AP4”, business plan)
- T2.2 (MW-TETHER) & T2.3 (MW-GENERATOR) preparation

What do I like about Airborne Wind Energy?

- AWE uses the laws of nature in a most elegant way to extract energy from the wind.
- It is a bit like windsurfing

What would I like to achieve in MegaAWE?

- Demonstrate automatic 24/7 AWES operations
- Make a detailed & mature plan to develop and demonstrate a MW commercial AWES, with low residual risk

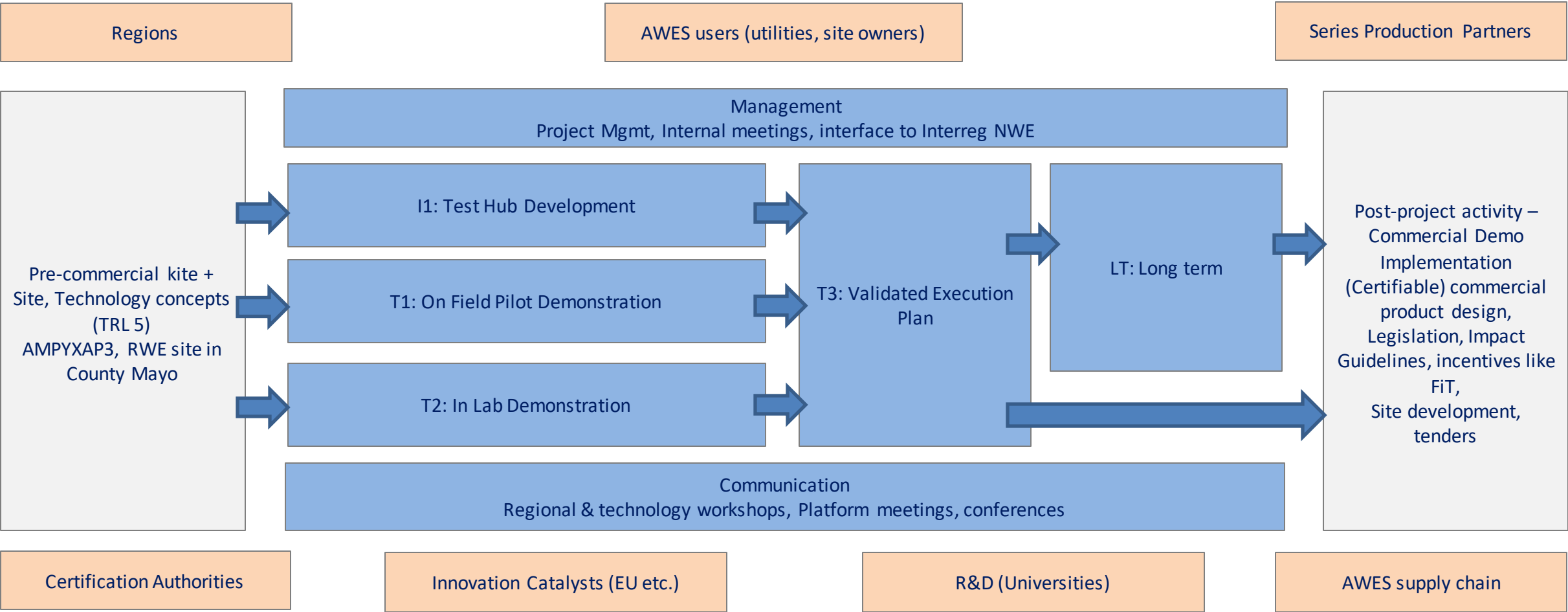
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Project structure and partners



MegaAWE Work Packages and stakeholders



Partners

Regions



Innovation Catalysts



Comms/ dissemination



AWES users (utilities, site owners)



Technology Providers (OEMs)



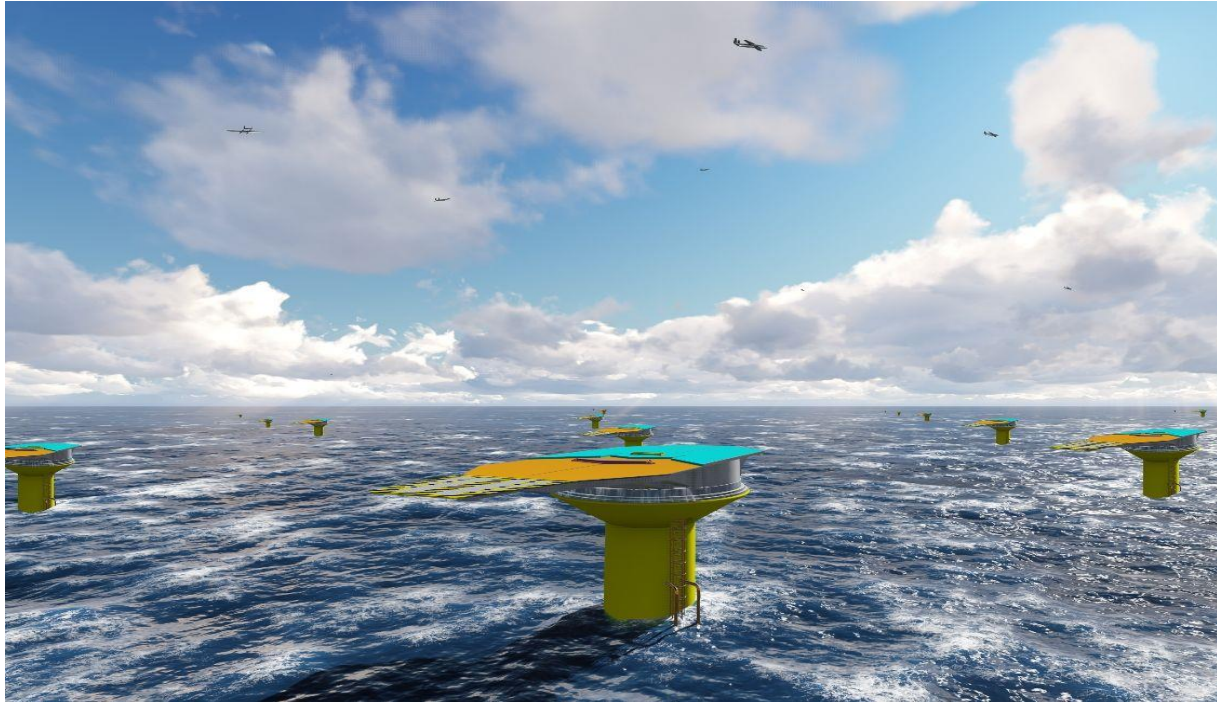
Series Production Partners



AWES supply chain



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