**From:** [redacted]
**To:** DigitalConnectivity
**Cc:** [redacted]
**Subject:** Consultation on Digital Connectivity Strategy - Green Rebel"s Submission
**Date:** Thursday 31 March 2022 14:43:25
**Attachments:** image001.png
20220331_GR_DECC_DigitalConnectivityStrategy.pdf
**Importance:** High



[redacted],

Please find attached Green Rebel's responses on the Digital Connectivity Strategy Consultation. Green Rebel is EIH2's sister company, therefore the link between the companies and policy and advocacy efforts.

Could you please confirm that you have received this email?

Thanks in advance.

Kind regards,

[redacted].

[redacted]
*Funding and Policy Manager*
EI-H2
[redacted]
[redacted]
https://ei-h2.ie/

GREEN REBEL

greenrebel.ie

Green Rebel welcomes the opportunity to respond to the Department of the Environment, Climate and Communications on its Consultation on the Digital Connectivity Strategy.

Green Rebel specialises in offshore site investigations for offshore wind developments. Before offshore wind developments can start, developers need to acquire data to inform site selection, engineering, investments, environmental impact reports and more. Green Rebel is an Irish company, headquartered in Cork, consisting of a team of over 75 scientists, surveyors, engineers, ecologists and consultants, coupled with their own built-for-purpose assets and leading technology to provide the most productive, innovative and complete projects.

Green Rebel's purpose provides developers with the insights and intelligence they need to progress developments in a way that:

- Makes optimal use of our natural resources while protecting Ireland's marine biodiversity and supporting the achievement of Ireland's 2030 targets.
- Ensures that Ireland enjoys the economic benefit of the largest infrastructure projects in the history of the state.

Green Rebel consists of three primary divisions:

**Aerial** – Green Rebel has acquired a fleet of aircraft and personnel to complete the required set of ecological surveys (birds and mammals) on each offshore development site and has also developed a proprietary AI engine to accurately analyse all data.

**Marine** – Green Rebel has acquired a fleet of built-for-purpose vessels (including one of Europe's best known survey vessels), equipped with best-in-class survey equipment, coupled with an expert team of geoscientists.

**MetOcean** – Green Rebel has developed an innovative new floating LiDAR platform, considered to be global-leading, which offers offshore developers precise data on the wind speeds and profiles at their site, with accuracy of up to 300m above sea level

## Responses

Considering the Digital Connectivity Strategy principles on investment in energy efficient solutions and support on innovation in emerging technologies, our following responses focus on questions 1, 3 and 4 as opportunities to incorporate the digital transformation of Ireland's Sustainable Energy Supply Chain.

### Response to Question 1

**Is the ambition level set out in the State's Digital Connectivity Strategy appropriate?**

While the National Marine Planning Framework (2021) and the Maritime Area Planning Act are stated as part of the Digital Connectivity Strategy scope, it should be taken into full and specific consideration that as wind power projects continue to increase their turbine size and move further offshore, the importance of industrial-grade private wireless connectivity only increases. A constant, reliable network enables workers to operate safely and in new ways during surveying, construction and operation as they remotely plan, monitor, inspect and optimize windfarm projects and wind turbine performance in real time. Additionally, this connectivity allows for the movement of large amounts of data for digital workflows, implementation of IoT based predictive maintenance and improved voice and video communications. Ultimately, pervasive and seamless broadband connectivity go a long way to improving the overall functionality and productivity of the entire wind farm.

Moreover, 5G networks are increasingly important to the utilities sector given the offshore data consumption and speed requirements. Companies such as Green Rebel that are involved in the servicing of offshore wind farm developments will have to accommodate more than 10TBs of data transfer per month, per vessel, and speeds of several hundreds of Mbps, unless they are willing to compromise with lower quality service toward clients and their staff[1].

## Response to Question 3

**Are the strategic enablers set out in the State's Digital Connectivity Strategy appropriate? Do these strategic enablers need to be amended? Are further strategic enablers, initiatives or measures needed?**

The "support of future investment in high-speed submarine telecommunications infrastructure" stated in the consultation paper is welcome and encouraged to be further strengthened.
Ireland's ambitious goals, including the development of 5GW of offshore wind energy up to 2030 mean that new developments by nature must include additional subsea cables (array and export power cables) while also growing concurrently with the global telecom network.
This would enable and facilitate the supply chain that supports maritime and offshore applications where Autonomous Underwater Vehicles (AUVs) are essential, in particular those involving long and costly data-gathering operations such as hydrographic surveys.
Moreover, the promotion of research and innovation in new and emerging technologies that support the connectivity of submarine communications networks are encouraged.

If there are any questions, you can contact the Green Rebel team by email [redacted]

[redacted]