

14 Herbert Street
Dublin 2
office@belmont-dc.com

Commission for Regulation of Utilities,
P.O. Box 11934,
Dublin 24

CRU proposed Direction to the System Operators related to Data Centre grid connection

Introduction

Belmont Data Centres is making this submission to the CRU Consultation Paper on a proposed Direction to the System Operators related to Data Centre grid connection.

The key infrastructure required for data centres includes uninterrupted power supplies, ventilation, data centre cooling systems, and network connectivity, which leads to specific requirements around stable energy supplies, high-speed communication networks and access to natural resources for cooling.

Ireland's positioning for attracting data centres in the face of international competition is largely focused on the key requirements of the sector namely: skilled workforce; climate; advanced infrastructure and crucially renewable energy sources. What Ireland provides meets many of the industry's requirements.

The availability of a secure, reliable and sustainable source of energy is a key factor for data centres. Bearing this in mind however, we acknowledge that the proliferation of data centres in areas of the country where electricity demand is already constrained, and their energy usage and connection poses a challenge to CRU, EirGrid and ESBN. At a time when Ireland is seeking to reshape its energy mix and develop the associated infrastructure to ensure a cleaner more efficient, reliable and secure electricity supply, decisions will need to be made and projects prioritised.

In this regard we welcome this initial opportunity to contribute to what will be an ongoing process to secure Ireland's electricity future.

Belmont DC Position

It is our proposal that data centre connection policy should be refined to prioritise their development and connection only in locations where power infrastructure already exists such as existing transmission lines or substation, and access to fiber infrastructure. As such, Belmont Data Centres supports the CRU's consideration that Option 3, Connection Measures, within the Consultation Paper, is the most appropriate and proportionate course of action within the context of significant security of supply issues the electricity network is facing. Such a move would allow for the delivery of infrastructural services in a sustainable manner, a key objective of the CRU and Government.

Given that Ireland already performs well in the data centre sector and with the increasing demand for data centre applications coming down the line, there are several regional opportunities away from the Dublin network where demand is at its highest, which are suitable for further high-technology economic development. Indeed, any areas that benefit from superior access to the common infrastructure requirements for this type of



development, namely high voltage electricity lines, high-powered fibre optic cables, good site security and accessibility, should be prioritised for development and subsequently, connection.

The principles outlined in this submission have been assessed in accordance with the policies of the *National Planning Framework-Project Ireland 2040 (2018)* and the *Regional Spatial Economic Strategy for the Eastern and Midland Region (2019)*. In addition, this submission demonstrates that the proposed policy will have a tangible economic benefit for wider regional development in Ireland. This is outlined in greater detail below.

Positive Economic Impacts of Data Centre Investment in Ireland

The positive economic impacts of data centre development and investment in Ireland are already well known. The *Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy* outlines the direct and indirect jobs that can be created from the development of data centres with an estimated 1,800 no. people employed directly on an ongoing annual basis through the operation of data centres and a further 1,900 no. people employed annually in construction jobs.

In support of this, we refer to a Report prepared by Grant Thornton entitled *A Study of the Economic Benefits of Data Centre Investment in Ireland*. The Report states that since 2010, €2.96 billion has been directly accrued as a result of the construction of data centres with a further €1.59 billion generated through operation expenditure.

In relation to employment, data centre investment in Ireland creates and supports an estimated 5,700 no. full time equivalent roles on an average annual basis over the study period since 2010. Furthermore, the Report states that;

"A large number of ancillary services and roles not directly related to data centre operation have been attracted following initial data centre investments. These include finance, operations, sales, customer support and software engineers. Survey responses strongly confirmed that many Irish based data centre operators see the physical location of their data centre operations as closely strategically linked to their overall activity and operations in Ireland i.e., the presence of data centres opens up the opportunity, and in some instances necessity, to locate other ancillary services in Ireland".

According to the study, there are also wide-ranging economic benefits to be accrued from data centres. These include enhancement of the digital infrastructure, attraction for related industries to locate in Ireland in order to service and interact with data centres and clustering of interconnected entities such as business suppliers and associated organisations such as educational institutions.

The report also identifies key spill over effects of data centres with benefits for local suppliers' skills, productivity and competitiveness;

"Enterprise Ireland confirmed that when a global data centre operator was looking to set up operations in Ireland the company was keen to meet with local suppliers ranging from construction and engineering to food and drink and training providers.

The use of local suppliers provides a direct benefit financially to the economy but also allows those suppliers to develop experience, innovate, become more productive and grow."



Bearing the above in mind, a key focus must be to put in place a framework that promotes and provides high-quality infrastructure to allow development to progress in a sustainable manner. We submit that by promoting lands outside of the Dublin network for data centre development, where power infrastructure already exists such as existing transmission lines or substation, and access to fiber infrastructure, it would highlight the country's commitment to responsible, plan-led development of data centres, ensuring the regional locations outside of major economic areas can benefit from the significant economic and employment benefits that data centre development brings.

Policy Assessment

The *National Planning Framework* (NPF) is the Government's high-level strategic plan for shaping the future growth and development of Ireland to the year 2040, released in tandem with the *National Development Plan* which sets out the budget for national infrastructure investment for the next 10 years. The NPF emphasises shared goals for the country, including:

- *Compact Growth;*
- *Enhanced Regional Stability;*
- *Strengthened Rural and Economic Communities;*
- *High-Quality International Connectivity;*
- *Sustainable Mobility;*
- *Strong Economy, supported by Enterprise, Innovation and Skills;*
- *Enhanced Amenities and Heritage;*
- *Transition to a Low Carbon and Climate Resilient Society;*
- *Sustainable Management of Water, Waste and other Environmental Resources and*
- *Access to Quality Childcare, Education and Health Services.*

The Government has made it clear that a more balanced and sustainable pattern of development, with a greater focus on addressing employment creation, local infrastructure needs and addressing the legacy of rapid growth must be prioritised equally around the country.

The ICT and software sector is clearly recognised as an innovative and competitive sector which should be supported and expanded within the national economy as a means to achieving the above objectives.

However, the availability of suitable sites capable of responding to global demand for data centre facilities is critical to enable Ireland to maintain its competitive position in attracting global players. As such, appropriate data centre connection policy prioritising lands outside of the Dublin network, where the electricity network is constrained, would support the shared aims of the NPF by contributing to the regional development through employment diversification and related infrastructure enhancements.

Data Centre Demand

As above, we note that information provided by EirGrid shows that data centres are the largest demand driver out of all the demand connected customer groups on the electricity grid in Ireland. As per EirGrid's forecasts, this demand is expected to grow significantly over the next ten years.



While the continued growth of these data centres is expected to continue, future investment which is critical for Ireland's future economic development, is dependent on access to secure power and a fibre network. What must be stressed therefore, is that an opportunity exists to continue to attract this investment, while at the same time protecting the security of Ireland's energy supply. So, in order to avoid a scenario where data centre investment is curtailed, Belmont Data Centres is calling for the future development of data centres in Ireland to be prioritised in areas where the necessary power infrastructure is already in place, along with access to fiber infrastructure. Therein lies the opportunity for regional development outside the Dublin network.

Undertaking this sustainable approach to economic development will ensure the most effective and efficient use of land and services in Ireland, which are finite resources. The NPF together with the RSES for the region place a strong emphasis on this type of smart and sustainable economic growth.

In addition, we note the recent *Government Statement on Data Centres*¹, which states;

"A plan-led approach will develop a range of measures to promote regional options for data centre investment, minimising the need for additional grid infrastructure. A balance will be maintained between the distributional impacts of higher energy costs on the economy and the longer term economic impacts of utility intensive enterprise investment."

Conclusion

Due to the known positive economic impact that data centre developments can enable, as outlined above, policy which promotes the development and connection of data centres in regions outside the Dublin network where demand is at its highest, should be adopted.

As such, Belmont Data Centres supports the CRU's consideration that Option 3, Connection Measures, within the Consultation Paper, is the most appropriate and proportionate course of action within the context of significant security of supply issues the electricity network is facing.

Reflecting this policy would highlight Ireland's commitment to responsible, plan-led development of data centres in Ireland, thus ensuring the country can benefit from the significant economic and employment benefits that data centre development brings.

For more information, please contact:

Michael Moore, Belmont Data Centres

T: +353 (01) 660 0190

E: michael.moore@belmont-dc.com

¹ <https://www.enterprise.gov.ie/en/Publications/Publication-files/Government-Statement-Data-Centres-Enterprise-Strategy.pdf>

