

11.0 MATERIALS ASSETS

11.1 INTRODUCTION

The term 'Material Assets' can relate to both finite and renewable resources, which can be of a natural or anthropogenic origin. Some of these resources, such as minerals, stone, soil, water, air, traffic & transportation, land use, human health and amenity resources are discussed in other chapters of the EIAR (Chapter 5: Population & Human Health; Chapter 8: Land, Soils & Geology; Chapter 9: Hydrology & Hydrogeology; Chapter 14: Air Quality & Climate; and Chapter 16: Traffic & Transportation). Electromagnetism is discussed from a human health perspective in Chapter 5 (Population & Human Health). This chapter of the EIAR deals with Aviation and Telecommunications in addition to electricity and water infrastructure, and waste services.

11.1.1 Proposed Project

The proposed project will comprise a 19 no. turbine wind farm and all associated infrastructure, as described in Chapter 2 of this EIAR (Description of the Proposed Project). There is no discernible difference to the assessment or outcome of this Material Assets chapter from the turbine range considered as part of the proposed project, as the development components and construction process remain the same throughout. It includes the proposed grid connection as well as the proposed works associated with the delivery of oversize components to the wind farm.

11.1.2 Statement of Authority

This assessment has been carried out by TOBIN Consulting Engineers with input from the following specialist sub-consultant, **Aeronautical Services and Procedures (ASAP) s.r.o.**, who were responsible for carrying out an Aviation Impact Assessment for the proposed project, particularly in relation to Donegal Airport.

ASAP s.r.o. are an established company with extensive experience in aviation consultancy. The ASAP s.r.o. input was carried out by Ian Whitworth and Gabriella Laki. Ian Whitworth MRAeS, has over 42 years of professional aviation experience. He is a fully qualified Air Traffic Controller (tower, Approach and Area control), Procedure Specialist, private pilot and instructor. Mr. Whitworth first spent time as an Air Traffic Controller in New Zealand, and Air Traffic Control expert and instructor in Swisscontrol. He progressed to head of the procedures design section in Bern (Switzerland) and then became IFR Procedures expert for the entire Zurich FIR. Within this role he liaised with various aviation authorities, Civil and Military, throughout Europe. Mr. Whitworth has 28 years of active procedures design experience and as a qualified instructor has provided computer aided procedure design courses to over 35 international aviation authorities. After leaving Swisscontrol Mr. Whitworth founded ASAP s.r.o. (Aeronautical Services And Procedures) in Slovakia which has successfully completed projects in 13 countries. He has personally designed, documented, checked and approved over 1000 instrument procedures for various countries worldwide. Mr. Whitworth is also a United Arab Emirates, Slovak, Air Safety Support International, United Kingdom, Irish and a New Zealand certified instrument flight procedure and airspace designer. Gabriella has a degree and masters in Air Transport and Engineering, and has worked on projects around the world, including Ireland. She has carried out numerous studies on Dublin, Shannon, Cork, Sligo and Weston airports and has seven years of experience with ASAP s.r.o..

This chapter has been drafted (using the input of the above-mentioned specialist sub-consultant) by Dr John Staunton, Senior Project Manager and Environmental Scientist in TOBIN. John has more than 14 years' postgraduate experience in both environmental research and consultancy. John holds a BSc and PhD in Environmental Science and has considerable experience in project managing and carrying out wind energy development assessments including the preparation of Material Asset impact assessment EIAR sections. He has co-ordinated scoping exercises with aviation authorities and telecommunication providers in numerous wind farm developments.

11.2 METHODOLOGY

This EIAR chapter and the assessment contained within has been carried out in accordance with the appropriate guidance documentation as outlined in Chapter 1 (Introduction), including the Guidelines on the information to be contained in Environmental Impact Assessment Reports (2022).

11.2.1 Aviation

The construction of large wind turbines near airports may have the potential to pose a physical hazard for frequently used flight paths, as well as pose an issue for nearby airport operations in relation to Obstacle Limitation Surfaces (OLS), Instrument Flight Procedures (IFPs) and Instrument Landing System (ILS) Calibration. Consultation is seen as the primary method of assessing the potential for impacts on aviation. In order to determine any potential impacts that the proposed project might have on aviation, the nearest airfields/airports were determined using an airfield catalogue¹, and a consultation exercise was carried out with key stakeholders. These included:

- Irish Aviation Authority;
- Department of Defence;
- Donegal Airport (closest airport to the project)

Following this, a specialist assessment and report was commissioned from ASAP s.r.o.. This report looked at the potential for impact upon aviation activity associated with Donegal Airport. Further details on this can be found in Appendix 11-1 (Special Aeronautical Study).

11.2.2 Telecommunications

In order to assess if there would be any potential impacts on the existing telecommunications networks, a consultation exercise was carried out where a list of providers and stakeholders were sent information about the proposed project and were asked to inform the project team of any communication links or infrastructure that they have in the area, or if they had any other comments/concerns relating to the proposed project. This consultation exercise was carried out with the following extensive list of telecommunications stakeholders:

- Airwave Internet
- Beacon Broadband
- Bluebox Broadband
- Broadcasting Authority of Ireland
- Cedel Communications
- Cellnex Telecom
- ComReg
- Dense Air

¹ http://woodair.net/UK_Airfield_Catalogue/Airfields_Ireland.htm

- Digiweb
- EIR
- Eircom
- OpenEir
- Enet Telecommunications Networks Ltd. (formerly Airspeed)
- EOBO Ltd.
- ESB Telecom Services
- Eircom
- Fastcom Broadband Limited
- Hibernian Towers
- Host Ireland
- Imagine Networks Services
- Irish Aviation Authority
- Irish Rail
- Irish Water
- Ivertec Ltd.
- JFK Communications Ltd.
- JS Whizzy Internet Limited
- Magnet Networks
- Meteor Mobile Communications Limited
- Net1 Broadband
- Northwest Broadband
- Pure Telecom
- RTE
- 2RN
- Rural Wifi
- Tetra Ireland
- Three Ireland Hutchison Ltd.
- Towercom
- Viatel Ireland Limited
- Virgin Media
- Vodafone Ireland Ltd.
- Western Broadband Network
- Highland Radio
- Ocean FM
- I-Radio

Once feedback was received from the above, it was compiled into a datasheet. Further information was supplied where requested. Any transmission links or sites were noted and constrained out of the site layout with appropriate buffers to ensure there is no potential for impacts. Further information on telecommunication responses can be found in Appendix 11-2.

11.2.3 Other Material Assets

In order to assess the potential for impacts to electricity and water infrastructure and waste services, a scoping exercise was carried out to a number of key consultees, including ESB, Irish Water and Donegal County Council. Full details of the scoping exercise that was carried out is provided in Chapter 1 of this EIAR (Introduction).

11.3 EXISTING ENVIRONMENT

11.3.1 Aviation

The nearest significant airport to the proposed project is Donegal Airport, located approximately 18 kilometres north of the proposed wind farm site. There are no small airfields or air strips within 30 kilometres of the proposed wind farm, a study area based on the proposed wind farm site elevation, scale and location in relation to nearby airports (Donegal) in relation to the proposed wind farm site. The consultation responses relating to the aviation consultees are detailed in Section 1.8 of Chapter 1 of this EIAR (Introduction).

Donegal Airport responded to the consultation to request an assessment of any impact the proposed wind farm might have on the current and future Flight Instrument Procedures at the airport. Following further consultation, it was confirmed that the airport was in the process of updating its Required Navigation Performance (RNP) and Conventional Instrument Flight Procedures (IFPs), and a copy of these were sent for the assessment. These were still in draft format (as of end September 2022) but the airport confirmed these were unlikely to change significantly. These were produced by ASAP s.r.o. for Donegal Airport who are IAA approved IFP designers. Further information on this can be found in Appendix 11-1 (Special Aeronautical Study, Cloghercor Wind Farm, Co. Donegal, Ireland). These documents were sent to Donegal Airport for comment on 17th November 2022, and on the 18th November 2022 Donegal Airport replied that as the specialist report indicated there would be no impact to the airport they would have no further comment.

The Irish Aviation Authority responded to the consultation advising that the Applicant engage with Donegal Airport and to carry out an assessment of impacts on the airport. They also requested that in the event of permission being granted, they be notified of the aeronautical warning light scheme and position of the constructed turbines.

The Irish Defence Forces provided a response to the consultation to say that they would not provide any observations or advice in the pre-planning process. They just provided a number of aviation lighting requirements to be considered.

Further details of these scoping responses can be seen in Appendix 1-4 of this EIAR.

11.3.2 Telecommunications

As described in Section 11.2 above, a comprehensive list of telecommunication operators were consulted to identify for any potential impacts to existing telecommunication links in the area. Table 11-1 provides information on all the responses received during this exercise, and any actions taken by the project design team resulting from these responses. Telecommunication scoping responses can be seen in Appendix 11-2.

Table 11-1: Telecommunication Providers Consultation information

Telecommunication Provider/Stakeholder	Consultee Response	Project Team Response to Comments Received
Airwave Internet	Reply received indicating no impact anticipated	n/a
Beacon Broadband	Reply received indicating no impact anticipated	n/a

Telecommunication Provider/Stakeholder	Consultee Response	Project Team Response to Comments Received
Bluebox Broadband	No reply to date	n/a
Broadcasting Authority of Ireland	They are not aware of any issues with existing wind farms and FM networks. They also have no existing or planned FM transmission sites in the area.	n/a
Cedel Communications	No reply to date	n/a
Cellnex Telecom	No reply to date	n/a
ComReg	Provided a list of operators who may be affected by the proposed project.	All operators were consulted
Dense Air	No reply to date	n/a
Digiweb	No reply to date	n/a
EIR	Provided details of a transmission link near the proposed project.	The location of this link was considered in the design of the proposed project to avoid any potential impacts.
Eurona	No reply to date	n/a
OpenEir	Reply received indicating no impact anticipated	n/a
Enet Telecommunications Networks Ltd. (formerly Airspeed)	Scoping request acknowledged, but no reply to date	n/a
EOBO Ltd.	No reply to date	n/a
ESB Telecom Services	Reply received indicating no impact anticipated	n/a
Eurona	No reply to date	n/a
Fastcom Broadband Limited	No reply to date	n/a
Hibernian Towers	No reply to date	n/a
Host Ireland	No reply to date	n/a
Imagine Networks Services	Reply received indicating no impact anticipated	n/a
Irish Aviation Authority	Reply with no concerns raised about telecommunications.	n/a
Irish Rail	Reply received indicating no impact anticipated	n/a
Irish Water	No reply to date	n/a
Ivertec Ltd.	Reply received indicating no impact anticipated	n/a
JFK Communications Ltd.	No reply to date	n/a
JS Whizzy Internet Limited	No reply to date	n/a

Telecommunication Provider/Stakeholder	Consultee Response	Project Team Response to Comments Received
Magnet Networks	No reply to date	n/a
Meteor Mobile Communications Limited	No reply to date	n/a
Net1 Broadband	No reply to date	n/a
Northwest Broadband	No reply to date	n/a
Pure Telecom	No reply to date	n/a
RTE/2RN	No Microwave links in the area. There may be a risk of interference with Digital Terrestrial Television signal but this would be for very remote and sparsely populated areas. Request for Applicant to sign protocol agreement prior to construction to protect their customers in the event of any problems to their service.	Applicant has signed a protocol agreement to ensure that all customers are protected. See Appendix 11-2.
Rural Wifi	No reply to date	n/a
Tetra Ireland	No reply to date	n/a
Three Ireland Hutchison Ltd.	Provided details of a transmission link near the proposed project. Later confirmed no impact.	n/a
Towercom	No reply to date	n/a
Viatal Ireland Limited	No reply to date	n/a
Virgin Media	Reply received indicating no impact anticipated	n/a
Vodafone Ireland Ltd.	Reply received indicating no impact anticipated	n/a
Western Broadband Network	No reply to date	n/a
Highland Radio	Reply received indicating no impact anticipated	n/a
Ocean FM	No reply to date	n/a
I-Radio	Scoping request acknowledged, but no reply to date	n/a

Following receipt of the above telecom scoping responses, the design of the proposed project was reviewed and revised, as necessary, to minimise any potential for impacting on telecommunications networks. This was carried out by inputting all the constraint data that was received into GIS mapping software and ensuring that the proposed turbine locations would not be located within the appropriate buffers. These constraints, along with others gathered as part of the EIAR (such as ecological, hydrological and proximity to sensitive receptors, etc.) were used when refining the site layout. Previous design iterations are discussed in Chapter 3 (Reasonable Alternatives).

11.3.3 Other Material Assets

No response was received from Donegal County Council relating to Material Assets. Irish Water and ESB responded but did not specify any site-specific concerns relating to existing electricity supply networks or water supply networks. Some general EIAR considerations were

included for consideration. Further details of the scoping responses that were received are provided in Chapter 1 of this EIAR (Introduction).

While there are some overhead electricity lines within the EIAR study area (Figure 1-1 of this EIAR), it is also possible that there might be some underground electricity cables discovered during the proposed works, particularly near public roads and houses or farmyards. Damaging an underground electricity cable may have the potential to cause serious harm or death. All proposed works being carried out on overhead or underground electricity cables will be done in consultation with ESBN/EirGrid, as required. While none have been identified by any service providers it is assumed as a worst-case scenario that there are likely to be underground water pipes along public roads as well as occasionally within agricultural land. Severing a water pipe, particularly a public supply pipe has the potential to interrupt local water supply in the area.

The EPA and Donegal County Council were contacted regarding waste services and assets in the county. A desk study of available information from the EPA did not identify any waste facilities, illegal waste activities, chemical monitoring points or industrial EPA licensed facilities within a 10km radius of the wind farm site. The nearest waste facilities to the proposed wind farm site are near Donegal Town and Letterkenny.

11.4 POTENTIAL EFFECTS, MITIGATION AND RESIDUAL EFFECTS

11.4.1 Do-Nothing Scenario

Should the proposed project not be constructed, there will be no potential for impact on aviation or telecommunications services, or other Material Assets.

11.4.2 Construction Phase

11.4.2.1 Aviation

Pre-mitigation Impact

Taking into account the works proposed as part of the proposed project, there are no significant impacts likely to arise during the majority of the construction phase in relation to aviation. The potential for impacts will only begin with the erection of turbines. This short period (until the wind farm is fully commissioned and the project enters the operational phase) will have the same potential impacts as the operational phase, as described in Section 11.4.3.

Mitigation

There are no potential impacts on aviation anticipated for the majority of the proposed construction phase, and so there are no mitigation measures required. Towards the end of the construction phase, prior to the erection of turbines, the mitigation measures described in Section 11.4.3 will be implemented.

Residual Effect

It is anticipated that there will be no residual aviation effect during the construction phase following the implementation of the mitigation measures described in Section 11.4.3.

11.4.2.2 Telecommunications

Pre-mitigation Impact

Should there be any underground telecommunication services located within the proposed works areas, including along the route of the proposed grid connection, or at the locations of the proposed temporary road works to accommodate oversized load deliveries, there may be a potential to damage these, and therefore interrupt the local service provision. This would have a potential temporary slight negative effect.

The wind farm layout has been designed to avoid any impacts to the telecommunications links in the area, and there will be no potential for impacts during the construction phase.

Mitigation

There are no telecommunication impacts anticipated for the construction phase of the proposed project, so there are no mitigation measures required.

Residual Effect

It is anticipated that there will be residual effect on telecommunications during the construction phase.

11.4.2.3 Other Material Assets

Pre-mitigation Impact

It is not anticipated that there would be any significant underground utilities encountered during the construction of the proposed project, with the exception of the locations within the public road corridors. In the unlikely event that any unknown services are discovered, there is the potential to impact on local network supplies, causing a potential brief slight negative effect.

The construction phase will have the potential to produce municipal waste (site office, canteen), wastewater (site welfare facility) and construction waste (wood, packaging, metal, etc.) which will need to be processed at local waste processing facilities. Details on construction materials required and any subsequent waste for the proposed project, are provided and assessed as part of Chapter 8 (Land, Soils and Geology).

Based on the EPA Waste National Statistics – Summary Report for 2020, the average annual municipal waste generated per person in Ireland was 645kg². As the municipal waste average accounts for household waste collections, an assumption of 50% of this average has been taken for an employee onsite during construction. Based on a 2-year construction period and an average of 100 construction staff (Chapter 2, Section 2.9.1 references 96-139 staff during peak construction) each year, the maximum municipal waste generated for the proposed project is expected to be in region of 64,500kg. This is a worse-case assessment for the site based on national statistics for the average person. Of this total, according to the national statistics total, 41% will be recycled, 43% thermally treated and 16% send to landfill, equating to the following over the construction period for the proposed project:

- 26,445kg recycled,
- 27,735kg treated, and
- 10,320kg send to landfill.

Waste will be collected by a licenced commercial waste management contractor on a regular basis (as required) over the course of the 2year construction period.

Wastewater from the staff welfare facilities will be managed by means of a sealed storage tank, with all wastewater being tankered off-site occasionally (as required) by a permitted waste collector to a wastewater treatment plant. They would also top up the clean water storage tanks. The proposed wastewater storage tank will be fitted with an automated alarm system that will provide sufficient notice that the tank requires emptying. The average flow rate for design (per person/day) is approximately 60l for an open construction site³ based on the Irish Water 2020 Code of Practice. The maximum total wastewater required for the site, based on this and on construction staff being onsite 48weeks of a year and an average of 100 construction staff, would be 1.4 million litres, however it is proposed to use low volume flush toilets (such as those in commonly used port-a loos) and low volume sink faucets to significantly reduce the volume of waste water produced. In addition, the number of staff on site is likely to fluctuate rather than being constantly at 100 people per day, Thereby reducing the volume of wastewater produced. Potable water would be supplied in large bottles for the site.

The quantities of waste and wastewater are not anticipated to be large, and so there would be a potential short-term imperceptible negative effect on local waste services.

Mitigation

As with any excavations, particularly in the public road network, there is a potential to disrupt local underground services. A confirmatory survey of all existing services will be carried out prior to construction to verify the assumptions in this report and identify the precise locations of any services. The Applicant will liaise with the service provider where such services are identified. Digging around existing services, if present, will be carried out by hand to minimise the potential for accidental damage. Segregation of waste will be carried out on site to maximise the potential for waste recycling and minimise any potential for impacts on waste services. A licensed commercial waste collector will be used to remove any waste that does

² National Waste Statistics – Summary report for 2020, EPA. [Accessed December 2022 [EPA National Waste Stats Summary Report 2020.pdf](#)]

³ Code of Practice for Wastewater Infrastructure, Irish Water, July 2020 (Revision 2). [Accessed December 2020 [Wastewater-Code-of-Practice.pdf](#)].

occur on site to a local waste processing facilities within Donegal, as noted in 11.3.3 the nearest waste facilities to the proposed wind farm site are near Donegal Town and Letterkenny.

There are no other impacts likely to arise during the construction phase, and therefore no other mitigation measures are required.

Residual Effect

Should there be any underground services located along the route of the proposed grid connection, or at the locations of the proposed temporary road works to accommodate oversized load deliveries, the above-mentioned mitigation measures will be used to reduce any potential for effects to being unlikely brief slight negative. There will be an imperceptible short-term negative effect on waste services.

11.4.3 Operational Phase

11.4.3.1 Aviation

Pre-mitigation Impact

As raised during the consultation exercise, there was one main operational phase concern assessed for the proposed project in relation to aviation. Further details of the scoping responses that were received are provided in Chapter 1 of this EIAR (Introduction).

Donegal Airport raised a concern that the proposed project might cause an issue with the operation of airport activity, particularly in relation to Required Navigation Performance (RNP) and Conventional Instrument Flight Procedures (IFPs). Following consultation with the Airport management, an Aviation Impact Assessment was commissioned by independent specialist consultants ASAP s.r.o. to assess the potential impacts that the proposed project might have on operations associated with Donegal Airport. The Aviation Impact Assessment Report found that the proposed Cloghercor Wind Farm will not affect the flight procedures or operations at Donegal Airport. The Standard Instrument Departures are not affected from the airport, and the proposed wind farm is located outside the Donegal controlled airspace (all approach procedures are designed to be contained within the Donegal controlled airspace). Visual manoeuvring is not affected at Donegal Airport, and the proposed wind farm is outside the straight obstacle protection areas for departures at Donegal Airport. The ICAO Annex 14 surfaces (areas of airspace that should be kept free of obstacles to minimise the danger presented to an aircraft departing or arriving at an airport) are not penetrated by the proposed Cloghercor Wind Farm, and it will not affect ATC VHF transmissions.

The Irish Aviation Authority requested that the project team contact Donegal Airport and to assess any impacts on the airport operation. They also asked that appropriate lighting be used for the turbines.

Mitigation

The proposed project will require certain lighting requirements for tall structures. This was described in a consultation response from the Department of Defence (Air Corps) in November 2022 (see Appendix 1-4). This response provided details of the lighting requirements including the type of light, the intensity and placement. The Applicant will comply with the aviation lighting requirements as determined by the IAA and the Department of Defence. This will increase the visibility of the proposed project to any local aircraft. The final locations and dimensions of each turbine will be mapped and provided to Donegal County Council and

stakeholders (such as the Irish Aviation Authority and, Donegal Airport) prior to erection to ensure that maps and databases are up-to-date for flight navigation.

Residual Effect

The implementation of the above mitigation measures, mean that the proposed project will have no residual effects.

11.4.3.2 Telecommunications

Pre-mitigation Impact

In relation to telecommunications, turbines can interfere with microwave communications link systems, as they can cause electro-magnetic interference and/or reflect and physically block microwave link signals. The most effective way to research the presence of telecommunication links in the area is through consultation with the providers and ComReg, as described above. Based on this consultation exercise, and the fact that the proposed layout has been designed to avoid any impacts to the links which were determined to be in the area, it is therefore not anticipated that the proposed project will have any impact on telecommunication links in the area.

In addition to major telecommunication links, wind turbines have the potential to impact on delivery of telecommunication signals to the end users, for example by preventing the radio or television signal going to a house from a transmitter through electro-magnetic interference or physically blocking the signal. This would be an unlikely slight long-term negative effect in the absence of any mitigation.

Mitigation

The proposed project is not anticipated to have any impact on any telecommunication links in the region due to the distance between the existing links and the proposed turbine locations. The applicant will sign an agreement with 2RN to commit to restoring service to any end users that may have their service disrupted as a result of the proposed project. This is standard industry practice and will eliminate any potential impacts in this regard.

Residual Effect

It is anticipated that there will be no impact to telecommunications during the operational phase due to the distance between the proposed turbine locations and the existing links in the area, and the requirement to not cause any impact to end users of telecommunication services by way of restoring the service.

11.4.3.3 Other Material Assets

Pre-mitigation Impact

There are no significant excavations or works proposed during the operational phase, therefore there are no impacts anticipated on the local underground utility networks including water and electricity.

The operational phase is anticipated to have an extremely low rate of production of municipal waste (compound office, canteen) and wastewater (site welfare facility) which will need to be processed at local waste processing facilities. The quantities of these wastes are anticipated to be significantly smaller than the construction phase, on the basis that once operational, it is

estimated that the wind farm will support 2-3 full-time long term, high quality technical jobs on site in operation and maintenance.

The maximum municipal waste generated each year for the proposed project is expected to be in the region of 968kg. This is a worse-case assessment for the site based on national statistics for the average person. Of this total, according to the national statistics total, 41% will be recycled, 43% thermally treated and 16% send to landfill, equating to the following over the construction period for the proposed project:

- 397kg recycled,
- 416kg treated, and
- 155kg send to landfill.

Based on the Irish Water 2020 Code of Practice average flow rate of 50l (per person/per day), wastewater from 3 full-time staff welfare facilities, is estimated to be 36,000l/ year, however as low-flow toilet cisterns and sink faucets would be used, it is anticipated that this volume will be lower on the proposed wind farm. Wastewater would be removed as required by a permitted waste collector.

There would be a potential long-term imperceptible neutral effect on local waste services.

Mitigation

Segregation of waste will be carried on site to maximise the potential for waste recycling and minimise any potential for impacts on waste services. A licensed waste collector will be used to remove any waste that does occur on site. A low-flush cistern will be fitted to reduce the volume of wastewater produced and a rainwater harvesting system as the source of water for this and hand-washing basin, with all potable water being brought onsite in bottles.

Residual Effect

There will be a potential long-term imperceptible neutral effect on local waste services.

11.4.4 Decommissioning Phase

There are no impacts likely to arise during the decommissioning phase of the proposed project in relation to aviation, telecommunications or other Utilities (Water and electricity supply networks). The tall structures will be removed and work involved in this phase will not involve significant excavations.

The decommissioning phase will have the potential to produce municipal waste (site office, canteen), wastewater (site welfare facility) and demolition waste (wood, packaging, metal, etc.) which will need to be processed at local waste processing facilities. The quantities of these wastes are anticipated to be larger than other phases (considering the removal of turbines, met mast and other structures), however these are largely composed of metal and other recyclable materials which will be brought to specialised facilities for processing/recycling such items. Turbine blades (fibreglass based) currently have limited scope for recycling, however technology is expected to advance in the coming years and through current and ongoing research it is expected that the turbine blades will be able to be recycled at their end of life. Any other wastes (such as oils) will be collected by an appropriately licensed waste collector. There would be a potential short-term moderate negative effect on local waste services.

Mitigation

Segregation of waste will be carried out on site to maximise the potential for waste recycling and minimise any potential for impacts on waste services. Appropriately licensed waste collectors will be used to remove any municipal waste, wastewater or general demolition waste that does occur on site. The majority of wastes from decommissioned infrastructure will be recyclable, and the large items (turbines, met mast) will be collected and processed by appropriately licensed specialist companies with the capability to process these items correctly.

Residual Effect

There will be a potential short-term slight negative effect on local waste services.

11.4.5 Cumulative Effects

A cumulative assessment was carried out for the proposed project, to include the consideration of projects discussed in Section 4.6 of this EIAR. This included other wind farms in the region. Smaller scale development such as one-off dwellings and agricultural developments were also considered.

Telecommunication links, overhead services (telecommunication and electricity lines), underground services (telecommunications, water and electricity) and aviation constraints are typically based on fixed infrastructure or well defined areas (i.e. these do not move) and any individual project either has a potential impact which it is required to mitigate, or it does not. As described above, a comprehensive list of consultees were contacted to ascertain the potential impact that the proposed project could have. The responses from these consultees was used to ensure that the proposed project will not have any significant effect on these services. In the unlikely event that any unforeseen impact does occur, it will be the responsibility of the Applicant to mitigate that impact (i.e. restoring telecommunication /television /water/electricity services). In the same manner, it is the responsibility of each Applicant for all projects considered in Section 4.6 of this EIAR to ensure that their project does not impact these services. Therefore, there were no potential cumulative effects identified.

Other projects considered (from Section 4.6 of this EIAR) have the potential to create varying volumes of waste from a number of waste categories, depending on the project. Waste volumes from the proposed project are anticipated to be generally low, with the exception of the decommissioning phase (primarily in relation to turbines and met mast). The majority of wastes from decommissioned infrastructure will be recyclable, and the large items (turbines, met mast) will be collected and processed by appropriately licensed specialist companies. Overall, there will be no significant cumulative effect on waste services.

The forestry replanting sites were also considered cumulatively, but due to the remote proximity to the proposed project, and the nature of the works at the replanting sites, there was no potential for cumulative effects in relation to Material Assets.

11.5 CONCLUSION

Following consultation with aviation and telecommunication stakeholders, a number of potential areas of impacts were identified. From this, a specialist assessment was carried out by ASAP s.r.o.. This report found that the proposed project will not cause any significant issues in relation to aviation.

Based on the above assessment, there will be no significant effects on aviation, telecommunications or other material assets (Water and electricity supply, waste services) at any stage of the proposed project.

References:

Department of the Environment, Community and Local Government (2013). Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. DoEHLG, Dublin.

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