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1. Introduction

a. **Objective of the proposed works (for example, as part of construction of a national road, repair of roofing, undertaking surveys etc.):** The objective of the proposed works is to undertake potential roost assessments, and bat activity surveys.

b. **Name, qualifications and relevant experience of scientific staff, including trainees, (e.g. ecologist) involved in the preparation of the application and those responsible for carrying out the proposed activity:** Leona McSharry, First class honours degree in Zoology.

c. **If this application is for the carrying out of surveys that may cause disturbance, qualifications of all involved must be provided and trainees must be clearly identified**.: Leona is a consultant Ecologist with Arup since July 2026 and plays a lead role within the bat team in Ireland and the UK. She obtained her undergraduate degree in Zoology from the National University of Ireland Galway in 2022 where she graduated with a first class honours. Leona has extensive training in bat acoustic analysis having attended several of Wildlife Acoustics virtual training courses for advanced levels, and cluster analysis techniques, as well as attending and conducting in house training courses in Woodrow Apem Group. Leona was trained in bat handling while living in Australia and volunteering in Kanyana Wildlife Rehabilitation centre.

Further details on Leonas experience is included below:

- During her time in her undergraduate, Leona had the opportunity to accompany Elaine O'Riordan on some bat surveys through NUIG. This included the use of AudioMoth monitors for static and dynamic bat monitoring. This also included a beginner level training on bat acoustic analysis and identification of species (2021-22).

- Trained in bat trapping, handling and release, with additional involvement in the rehabilitation of injured bats. Undertook regular bat handling and restraint to assist qualified wildlife rehabilitators during health assessments, treatment and medication administration. This provided practical experience in the safe handling of bats in both survey and rehabilitation settings. (2023-24)

- While working in Woodrow Apem Group, Leona was fortunate to work with a very experienced bat team. Some training included, regular in house presentation and training days on bat survey guidance in accordance with the most up to date guidance available at the time (most recently Spring 2026) (Collins, 2023; Bat Conservation Ireland, 2026; Marnell et al., 2022) conducted by Jason Guile. Training covered survey methodologies, survey effort and frequency requirements, survey design for different development types (including wind farms, solar farms and other infrastructure projects), and approaches for different habitat types and roost features, including buildings, trees, caves, open habitats and linear features. The training also covered actions required where roosts are identified, PRAs, endoscope surveys, vantage point surveys, transect surveys, roost emergence and re-entry surveys, and static detector deployment surveys.

- In house and online Bat acoustic analysis training on Kaleidoscope and Bat explorer. Several in house online training courses (2024), and various Wildlife Acoustics online training courses from beginner to advanced levels, and cluster analysis techniques (2024-26). In addition, Leona conducted several training courses to train ecologists on bat acoustic analysis (2026).
- Since 2024, Leona has undertaken bat acoustic analysis for a wide range of development projects, including onshore and offshore wind farms, solar farms, residential developments, infrastructure projects and commercial developments, these have been projects based in Ireland, the UK and America. This work has involved the analysis and interpretation of large datasets from static detector and activity surveys, incorporating species identification, activity assessment and the evaluation of how bats are utilising the habitat. Alongside survey and analysis work, Leona has been heavily involved in the preparation of bat technical reports and EIARs, including contributing to a standalone bat chapter, evaluating effects on bat populations, roosts and commuting routes, and developing appropriate mitigation and monitoring measures.

2. Background to proposed activity

Background to proposed activity including location, ownership, type of and need for the proposed activity, planning history, policy context, zoning in relevant Development plan (or equivalent), etc.

The background to the proposed activity (ecological surveys comprising of inspection of potential roosts, and the usage of endoscopes) is that they are, in certain contexts, necessary to inform impact assessments for development projects where other survey methods that would not require a Regulation 54 Derogation are not reliable for identification to species level and/or precisely locating roosts in the same context.

3. Details of proposed activity

Full details of proposed activity to be covered by the derogation (including a site plan). The site may be inspected by an NPWS representative, so the details given should clearly reflect the extent of the project. This information will be used to compare site conditions with the Method Statement

As mentioned above, the full details of the proposed activity are to undertake ecological surveys comprising roost inspections and endoscope usage. The geographic context in this case covers the whole of the Republic of Ireland, as Arup expects over the year to be engaged in projects requiring this types of survey works across the country. Arup will provide specific information on individual projects, including location, for inspection by an NPWS representative upon request. This can be arranged with Leona McSharry through the contact details provided in this application.

Projects typically include ecological surveys to inform impact assessments for the development of:

- Linear infrastructure e.g. roads and railways
- Residential development e.g. apartment blocks
- Renewable energy development e.g. solar farms
- Industry development e.g. data centres

In each of the above cases, the sites selected for development may contain potential roost features for bats in the form of suitable trees, ruined buildings, houses, sheds etc. and as such in order to ensure a properly informed impact assessment is written with suitable mitigation we will need to undertake roost inspection surveys where a roost is suspected and we will need to use endoscopes to inspect potential roost features in trees and structures.

Roost inspection surveys and endoscope usage will be undertaken in alignment with the methodologies outlined in Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition) (Collins 2023). The methodologies described in the above document are evidence-based and are contemporary to the Bat Mitigation Guidelines for Ireland (Marnell, et al., 2022; BCI 2026).

4. ~~Ecological Survey and site assessment~~ (Not required for applications to carry out surveys)

5. Evidence to support the Derogation Tests

a. Test 1 - Reason for Derogation: "…other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment"

This reason has been selected as it is considered to be the appropriate option for ecological surveys requiring derogation as part of a development project. The bat surveys that are to be carried out under this derogation are necessary to inform impact assessments. Other survey methods that would not require a Regulation 54 Derogation are not reliable for identification to species level and/or precisely locating roosts in the same context. This, in turn, supports the conservation interests of strictly protected bat species, as the surveys undertaken under this derogation will provide the information necessary to develop and implement appropriate mitigation measures, where required.

Arup expects this year to be engaged in development projects across the country where roost inspections and endoscope usage will be required to confirm the presence of bat roosts and to ensure that we acquire a sufficient understanding of the nature of the roost (e.g. if the roost is in a basement, an inspection may be required to ascertain to what extent the bats are using the basement i.e. are they in each room or are they restricted to one room; are they using one room in the summer as a maternity roost and another in the winter to hibernate in; are there visible access points that were not visible from outside etc.). This information is invaluable for the development of an appropriate mitigation strategy and we believe that there are no alternative solutions that would provide the level of detail required.

b. Test 2 - Absence of Alternative Solutions

Alternative Solution	Reasons for "Unsatisfactory"
Do-Nothing	The not conduct bat surveys would result in insufficient information on which to develop an appropriate mitigation strategy. This could lead to adverse effects on local bat populations within the project area, including the risk of accidental disturbance or destruction of roosts, as well as injury, mortality, or displacement of bats arising from unsuitable mitigation measures. At sites that are particularly important for lesser horseshoe bats, there is also the potential for impacts at a national scale. This option is therefore considered unsuitable.
Non-derogation Surveys	Conducting surveys that do not require Regulation 54 Derogation may not provide sufficient data to support panning and in turn to determine appropriate mitigation. This has potential negative impacts at a local level for local bat populations within project boundaries as there is a risk of inadvertent disturbance and/or destruction to bat roosts and death and/or displacement of bats due to inappropriate mitigation methods. Where particularly sensitive sites exist for lesser horseshoe bats, this may also result in negative impacts at a national level. This option therefore is also unsatisfactory.

c. Test 3 - Impact of a derogation on Conservation Status

The appropriate geographic scale for this regulation 54 derogation application for bat populations is at the national level, as Arup expects to be engaged by clients to undertake surveys for developmental projects across the country in 2027. The survey methodologies utilised under derogation for roost inspections and endoscope usage are based on the methodologies documented in Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition) (Collins 2023), which are evidence based and are contemporary to the Bat Mitigation Guidelines for Ireland -V2 (Marnell, et al., 2022). Furthermore, Leona will dynamically assess for any risk of impact throughout each survey and adjust accordingly where necessary. Discrete photography of roost features, where required, would be carried out for scientific, and identification purposes only. By using best-practice, evidence-based methodologies in which Leona has been trained, there will be no impacts on the conservation status of any bat species. As there will be no impacts, no mitigation is required. In addition, Leona will liaise with local and/or regional NPWS staff as and when required.

6. Monitoring the Impact of derogations

Leona, through her training in these evidence-based survey methods, will be able to ensure that the survey work undertaken through this derogation is being implemented correctly and that these surveys are achieving their objective as it will be Leona herself undertaking these surveys. Corrective measures will not be required as there will be no situations arising from

this survey work that requires this – however, Leona will dynamically assess for any risk of impact throughout each survey and adjust accordingly where necessary.

Leona will submit a derogation license return at the end of the year detailing the species, number of individuals, breeding places and/or resting places that were affected by surveys undertaken under derogation.