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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 the undertaking of ecological 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:** Scott Bastow (B.A. Zoology) ACIEEM prepared this application and is responsible for carrying out the proposed surveys as a supervisor/lead surveyor.

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:** Scott is a Consultant Ecologist with Arup Ireland Ltd. since August 2025 and plays a lead role in the Irish team's bat work and supports the UK team with their bat work. He obtained his undergraduate degree in Zoology from Trinity College Dublin. Scott is an experienced bat ecologist and acoustics analyst, with bat acoustics analyst technician (Grade B) and auditor certifications from BatAbility UK. Scott has previously undergone in-house training on 13th November 2024 with Scott Cawley on inspection of bat roosts comprising:

- A presentation in relation to the practical aspects of bat roost inspection survey and ground level tree assessment, covering the health, safety and welfare considerations, theory in relation to bat ecology and general approach and limitations associated with surveys. The presentation also instilled the need to avoid and reduce any

potential disturbance effects on bats and referred the attendee to the *BCT Guidelines*.

- Demonstration on how to complete a preliminary roost assessment and roost inspection survey at a known *Pipistrellus pygmaeus* roost in the attic of a building at Bohernabreena Reservoir Park, Rathfarnham, Co. Dublin under the supervision of Colm Clarke with DER/BAT 2024-53
- Demonstration on how to use an endoscope device and completion of ground level tree assessment and roost inspection of trees at Marlay Park, including 3 no. *Fagus sylvatica* trees known to host *Nyctalus leisleri* and *Pipistrellus* sp. (no bats encountered) using a RIGID CA-350 endoscope under the supervision of Colm Clarke with DER/BAT 2024-53.

His previous experience consists of ecological survey work with MKO Ireland and Scott Cawley Ltd. as well academic research with Dublin Zoo. During his time at Dublin Zoo Scott lead the Conservation and Research team in conducting invertebrate surveys and was involved with several research projects and coauthored an academic paper on the influence of environmental management practices on the foot health of flamingos which was published in the journal *Animals* in 2023. At MKO Ireland Scott undertook a range of ornithological surveys for several proposed and active wind farm sites, including species-specific surveys such as hen harrier roost surveys. While in this role Scott also played a key part in his team's management and standardisation of field data. While at Scott Cawley Ltd., Scott carried out a wide range of ecological surveys including for bats including hibernation roost inspection, internal and external roost inspections, roost emergence surveys, bat activity transects, ground-level tree surveys, potential roost assessments and static detector deployment/retrieval and analysis. Scott has also undergone two training sessions on bat handling.

2. 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 internal roost inspection surveys and the usage of endoscopes) is that they are, in certain contexts where roosts have been identified within a site, 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. 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 these types of survey work 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 Scott Bastow 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 will frequently 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 or confirmed and we will need to use endoscopes to inspect potential/confirmed 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 -V2 (Marnell, et al., 2022).

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

5. Evidence to support the Derogation Test

5.1 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 and 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 bat species under strict protection as these surveys under derogation allow appropriate mitigation strategies to be developed and implemented (if 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 the boiler 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.

5.2 Test 2 – Absence of Alternative Solutions

As mentioned above, there are no satisfactory alternative solutions that would allow us to obtain the required information to inform assessments for development projects and that any proposed alternative would result in an unsatisfactory level of information that would result in an inappropriate mitigation strategy which may result in the disturbance and/or destruction of bat roosts and the death and/or displacement of bats. Undertaking roost inspection surveys and endoscope usage under a regulation 54 derogation avoids these risks. These derogation surveys themselves also have no risk of negative impact when carried out properly through the proscribed guidance as outlined below in section 5.3

Table 1 Absence of Alternative Solutions

Alternative Solution	Reasons for "Unsatisfactory"
Do-Nothing	To do no bat surveys would provide insufficient data upon which an appropriate mitigation strategy can be built. 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 is therefore unsatisfactory.
Do non-derogation surveys	To use only bat survey methods that do not require a Regulation 54 Derogation may provide insufficient data upon which an appropriate mitigation strategy can be built. 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.

5.3 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 this year. 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, Scott will dynamically assess for any risk of impact throughout each survey and adjust accordingly if necessary. Discrete photography of roost features, where required, would be carried out for scientific purposes only. By using best-practice, evidence-based methodologies in which Scott has been trained, there will be no impacts on the conservation status of any of the nine Irish bat species. As there will be no impacts, no mitigation is required.

In addition, Scott will liaise with local and/or regional NPWS staff as and when required.

6. Monitoring the impacts of the derogations

a) Scott, through his 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 Scott himself undertaking these surveys. Corrective measures will not be required as there will be no situations arising from this survey work that requires this – however, Scott will dynamically assess for any risk of impact throughout each survey and adjust accordingly if necessary.

b) Scott 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.