OneBAT Training on Bat Sanitary Surveillance

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Balancing Science and Welfare: Protection of Bats in the OneBat Project under Directive 2010/63/EU

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- Directive 2010/63/EU of the European Union establishes a comprehensive legal framework for the protection of animals used for scientific purposes, grounded in the principles of Replacement, Reduction and Refinement (the 3Rs).
- The Directive applies to all live non-human vertebrate animals, **including wildlife species** such as **bats**, when used in research that may cause pain, suffering, distress, or lasting harm.

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- Its objective is to **ensure a high level of animal welfare while facilitating high-quality scientific research within the EU**.
- In the context of the OneBat project involving bats, Directive 2010/63/EU provides the **regulatory and ethical foundation for all experimental procedures**.
- As bats are protected wildlife species in many Member States, their use requires **strict project authorization**, **ethical evaluation**, and compliance with both **animal welfare legislation and conservation law**.

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Article 38
Project evaluation
1. The project evaluation shall be performed with a degree of detail appropriate for the type of project and shall verify that the project meets the following criteria:
(a) the **project is justified** from a scientific or educational point of view or required by law;
(b) the purposes of the project justify the **use of animals**; and
(c) the project is designed so as to enable **procedures** to be carried out in the most **humane and environmentally sensitive manner possible**.

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Article 7
Endangered species
1. Specimens of those endangered species listed in Annex A to Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein (1), which do not fall within the scope of Article 7(1) of that Regulation, shall not be used in procedures, with the exception of those procedures meeting the following conditions:
(a) the procedure has one of the purposes referred to in points (b)(i), (c) or (e) of Article 5 of this Directive; and

(b) there is scientific justification to the effect that the purpose of the procedure cannot be achieved by the use of species other than those listed in that Annex.

(b) translational or applied research with any of the following aims:
(i) the avoidance, prevention, diagnosis or treatment of disease, ill-health or other abnormality or their effects in human beings, animals or plants;
(c) for any of the aims in point (b) in the development, manufacture or testing of the quality, effectiveness and safety of drugs, foodstuffs and feed-stuffs and other substances or products;
(e) research aimed at preservation of the species;

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Article 9
Animals taken from the wild
1. Animals taken from the wild shall not be used in procedures.
2. **Competent authorities** may grant exemptions from paragraph 1 on the basis of scientific justification to the effect that the purpose of the procedure cannot be achieved by the use of an animal which has been bred for use in procedures.
3. The capture of animals in the wild shall be carried out only by **competent persons** using methods which **do not cause the animals** avoidable pain, suffering, distress or lasting harm.
Any animal found, at or after capture, **to be injured or in poor health** shall be examined by a veterinarian or another competent person and action shall be taken **to minimise the suffering of the animal**.
Competent authorities may grant exemptions from the requirement of taking action to minimise the suffering of the animal if there is scientific justification.

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Article 19
Setting free of animals and rehoming
Member States may allow animals used or intended to be used in procedures to be **rehomed**, or **returned to a suitable habitat or husbandry system appropriate to the species**, provided that the following conditions are met:
(a) the state of health of the animal allows it;
(b) there is no danger to public health, animal health or the environment; and
(c) appropriate measures have been taken to safeguard the well- being of the animal.

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- Furthermore, the Directive requires that **personnel** are **adequately trained**, that facilities meet specific standards, and that **procedures are classified by severity** with **continuous monitoring and retrospective assessment** where required.
- For wildlife research such as OneBat, additional attention must be given **to minimizing ecological impact** and **ensuring humane release when animals are returned to their natural habitat**.

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- Overall, Directive 2010/63/EU ensures that the **OneBat project balances scientific objectives** with:
  - robust ethical safeguards,
  - promoting responsible research, and
  - the highest achievable standards of animal welfare.

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The project must demonstrate scientific necessity, justify the choice of species, and show that no satisfactory non-animal or less sentient alternative methods are available (**Replacement**).

The number of animals used must be statistically justified to avoid unnecessary use (**Reduction**),

and all procedures must be designed to minimize pain, suffering, and distress through appropriate handling, anesthesia or analgesia where applicable, and refined capture and housing conditions (**Refinement**).

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Replacement

Use of environmental methods (DNA, aerosols) to reduce the need for invasive animal sampling.

Reduction

- Statistical optimization of sample size focused on the target species.

Refinement

Improvement of capture, handling, and sampling techniques to minimize pain and stress.

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Thanks for your attention!

www.onebat.eu

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