

Sampling scheme identifier: **PT-ELE-fishery-independent-electrofishing**

MS: PRT
Region: North-East Atlantic
Sampling scheme identifier: PT-ELE-fishery-independent-electrofishing
Sampling scheme type: Diadromous (scientific)
Observation type: Scientific observer on rivers, lagoons, etc. (SciObs water body)
Time period of validity: 2025-2027
Short description (max 100 words): Sampling scheme (Work Plan - Table 2.3) aiming at sampling standing stock, as well as length and biological variables (age, weight and sex) of yellow and silver eel in two “Management Unit / River” (ES_Min that corresponds to Body of water Minho; and PT_Port in which the sampled Body of water is Mondego).
Description of the population Population: Length and biological variables (age, weight and sex) of yellow and silver eel in two “Management Units / River” ES_Min and PT_Port. Population targeted: Length and biological variables (age, weight, sex) of yellow and silver eel in freshwater of two “Management Unit / River” ES_Min and PT_Port. Population sampled: Length and biological variables (age, weight, sex) of yellow and silver eel in freshwater in one “Body of water” (Minho) of “Management Unit / River” ES_Min and in one “Body of water” (Mondego) of “Management Unit / River” PT_Port. Population not sampled: Remaining bodies of water of the two “Management Unit / River” Es_Min and PT_Port, and remaining reaches of the “Body of water” Minho of the “Management Unit / River” ES_Min and of the “Body of water” Mondego of the “Management Unit / River” PT_Port. Stratification: Stratification is used to improve sampling coverage through the year (by month).
Sampling design and protocols
Sampling design description: Method – electrofishing: In each “Body of water” sampled with this method, a fixed number of sites (in freshwater) is sampled once per season (in Spring and in Autumn); in each season, sites are selected by SRSWOR. All individuals of eel are sampled for length, weight and silvering index and returned alive to the water, except for a subsample that is sampled in the laboratory for further biological variables. Is the sampling design compliant with the 4S principle?: NA – Diadromous sampling scheme.

Regional coordination: N. Link to sampling design documentation: Documentation will be developed in 2025-2027. Design follows international recommendations: Y. Sampling design in line with international recommendations, e.g. from ICES WGEEL (Working Group on Eels). Link to sampling protocol documentation: Documentation will be developed in 2025-2027. Protocol follows international recommendations: Y. Sampling protocol in line with international recommendations, e.g. from ICES WGEEL (Working Group on Eels).
Sampling implementation
Recording of refusal rate: N. Recording of refusal rate will be developed in 2025-2027. Monitoring of sampling progress within the sampling year: The number of PSU per sampling scheme executed versus planned is monitored monthly. When necessary and possible, the number of PSU planned but not executed (due to operational/logistical constraints) is rescheduled.
Data capture
Means of data capture: Biological data is collected with measuring board/tape (variable length) and scale (variable weight), and caliper (variable ocular diameter, pectoral fin length). Data capture documentation: Documentation will be developed in 2025-2027. Quality checks documentation: Documentation will be developed in 2025-2027.
Data storage
National database: Local database. International database: NA. Quality checks and data validation documentation: N. Documentation will be developed in 2025- 2027.
Sample storage
Storage description: Biological samples are stored at FCUL/CIIMAR. Hard tissues (otoliths for age reading) are stored until and after processing/analysis. Soft tissues (swimbladder, gonads) are stored until processing/analysis. Information on hard tissues (otoliths for age reading) stored by species/stock, geographic sub-area and by year will be developed in 2025-2027.

Sample analysis:

N.

Documentation will be developed in 2025-2027.

Data processing**Evaluation of data accuracy (bias and precision):**

Documentation will be developed in 2025-2027.

Editing and imputation methods:

Documentation will be developed in 2025-2027.

Quality document associated to a dataset:

Documentation will be developed in 2025-2027.

Validation of the final dataset:

Data quality checks are carried out yearly to detect before response to data calls.