IMPEL CAED Project

A proposed methodology for the determination of the environmental damage

Training Session of CAED Project

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What are the CAED Project objectives:

CAED project aims to provide criteria, methods and useful tools to enhance competent authorities and practitioner's capability in promptly and effectively determining the *clues* and *evidence* of environmental damage caused by environmental incidents, non-compliances, offences and criminal actions

What CAED Project 2021/15 focus on:

- **Screen potential ELD cases/non-ELD cases**

- **Determination of the clues** of environmental damage

- **Decide if further investigations are required** to determine evidence of damage

The three steps of the ascertainment

The project proposed a **NEW METHODOLOGY** for the determination of the environmental damage by dividing the process of ascertainment into three steps:

SCREENING PROCESS

The **screening of potential environmental damage** and imminent threat of damage cases

Potential ELD cases →

DETERMINATION OF CLUES

The **determination of clues** for the **identification of candidate environmental damage** and imminent threat of damage cases

Candidate ELD cases →

DETERMINATION OF EVIDENCE

The **determination of evidence** for the **confirmation of environmental damage** and imminent threat of damage cases

The three steps may or may not be conducted in a sequential manner

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The three steps of the ascertainment

Screening process

- After the notification or the discover of an event/incident the competent authority should be able to determine whether it is a potential case of environmental damage or a case that may be dealt with under regulations other than those of environmental liability.

- The information available at the moment of notification/ discover should be sufficient to make quick decisions

- Key aspect to be verified: **exposition of natural resources covered by the ELD to the source of potential adverse effect**

Determination of clues

- The aim of the "determination of clues" is to identify cases that are **suspect to have significant adverse effect** on natural resources (**candidate ELD cases**).

- **Clues:** data, information or other element referred to the natural resources and the impact on them which trigger further investigation and assessment to confirm the occurrence of the environmental damage in the light of the requirements of the ELD (*significant* end *measurable* adverse effect)

- Pre-definition of the clues of damage can be very useful to easily recognise and dismiss **non-candidate** cases of being significant environmental damage. As a consequence, the pre-definition of the clues under ELD can save effort, time and money (because the collection of sound evidence can be an expensive and time-consuming process) on unsuccessful assessments.
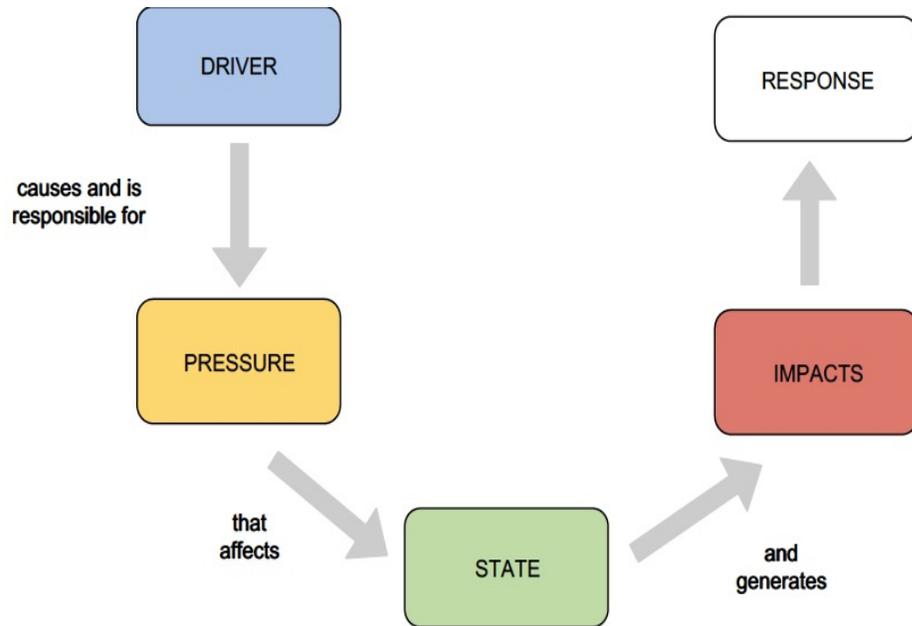
Determination of evidences

- It is a deeper and more extensive evaluation of the affected natural resources aiming to determine the occurrence of a significant damage

- It may required collection of new data and information to qualify the kind of damage (effect on *reference concepts* for all natural resources) and to estimate the gap between the baseline condition and the level of the adverse effect

- This assessment is preliminary to the definition and designing of the remedial, complementary and compensatory measures

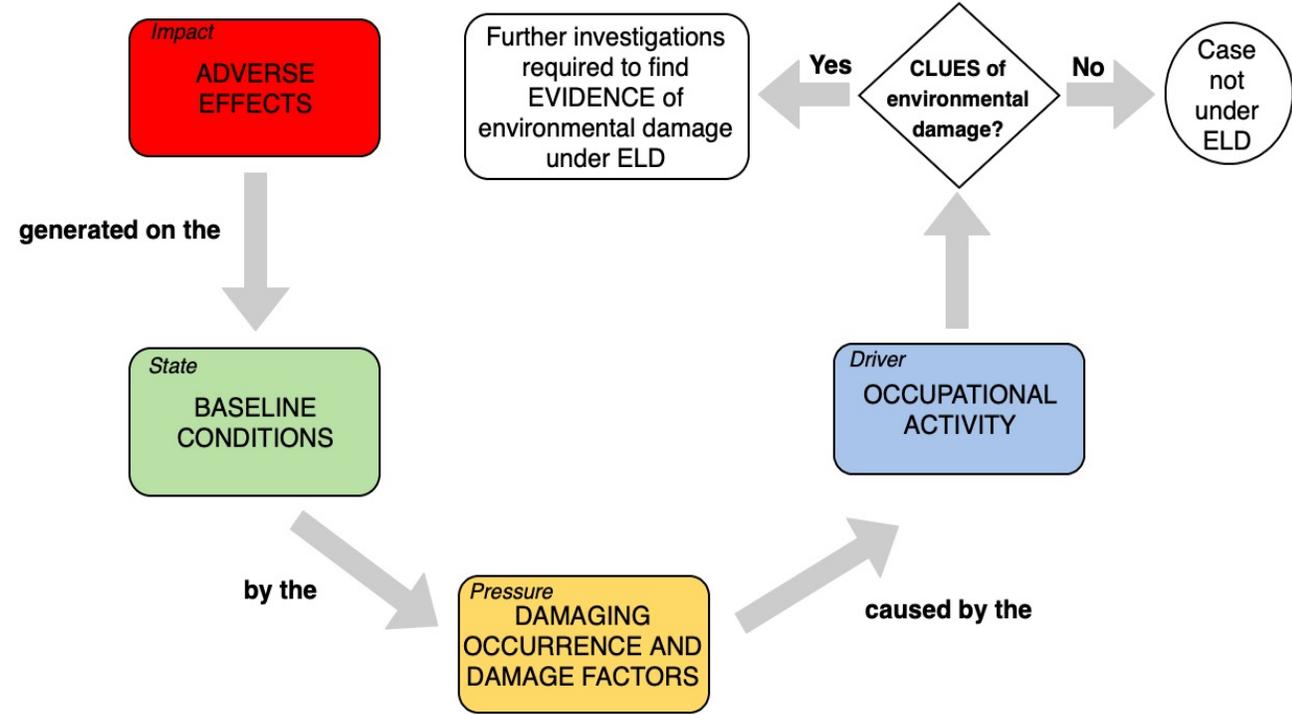# Methodology for the determination of clues

Determination of the clues of damage, may benefit from the evaluation of selected qualitative and quantitative indicators

CAED Project proposes several indicator grouped around evaluation objectives specific for the aspects requiring investigation

This methodological approach is based on the DPSIR model (EEA)

A DPSIR model adapted to the environmental damage assessment is proposed

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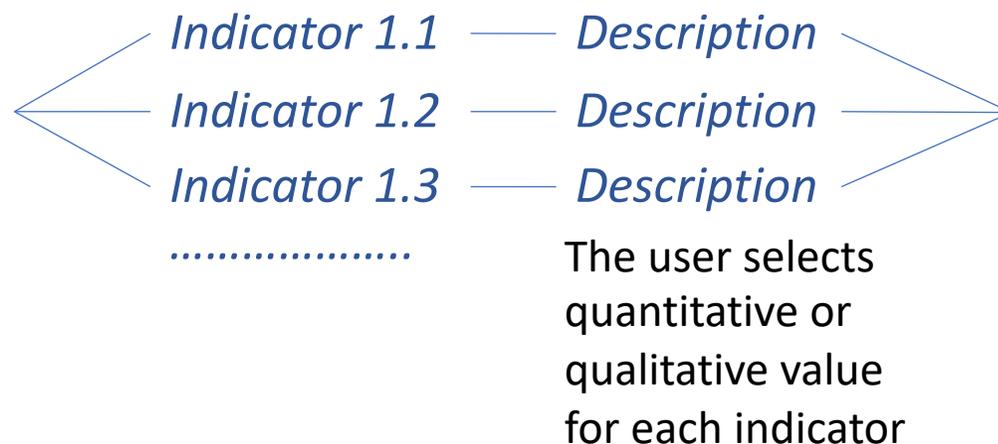
Methodology for the determination of clues

For each component of the DPSIR model, PRACTICAL TABLES containing a list o pre-defined indicator was developed

The value or the description (based on the available information) attributed to each indicator should drive the user toward the identification, or not, of the clues of damage

Structure of the Practical tables

Indicator 1.1 —— Description

Objective 1 —— Indicator 1.2 —— Description —— Evaluation

Indicator 1.3 —— Description

....

It describes the evaluation objective of each group of indicator

The user selects quantitative or qualitative value for each indicator

Depending on the values attributed to the indicators, they may be:

FAVOURABLE to the identification of the clues of environmental damage

UNFAVOURABLE to the identification of the clues of environmental damage

Evaluation also express whether indicator's values are

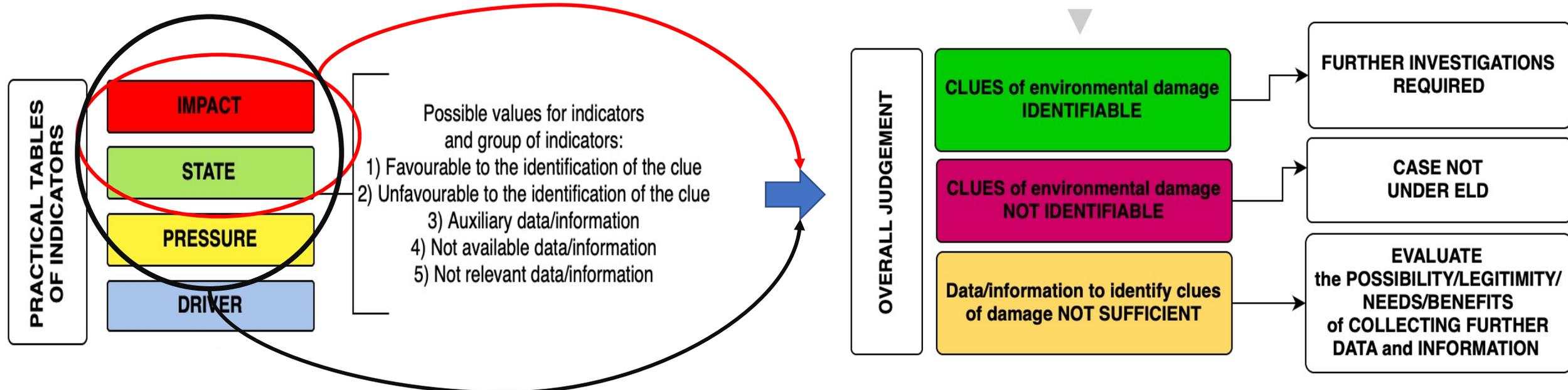**AUXILARY** data/information
NOT RELEVANT data/information
NOT AVAILABLE

Methodology for the determination of clues

The Overall Judgement

Taking into account the evaluation for each indicator or group of indicators, the determination of clue process may result in an overall judgment of the case investigated
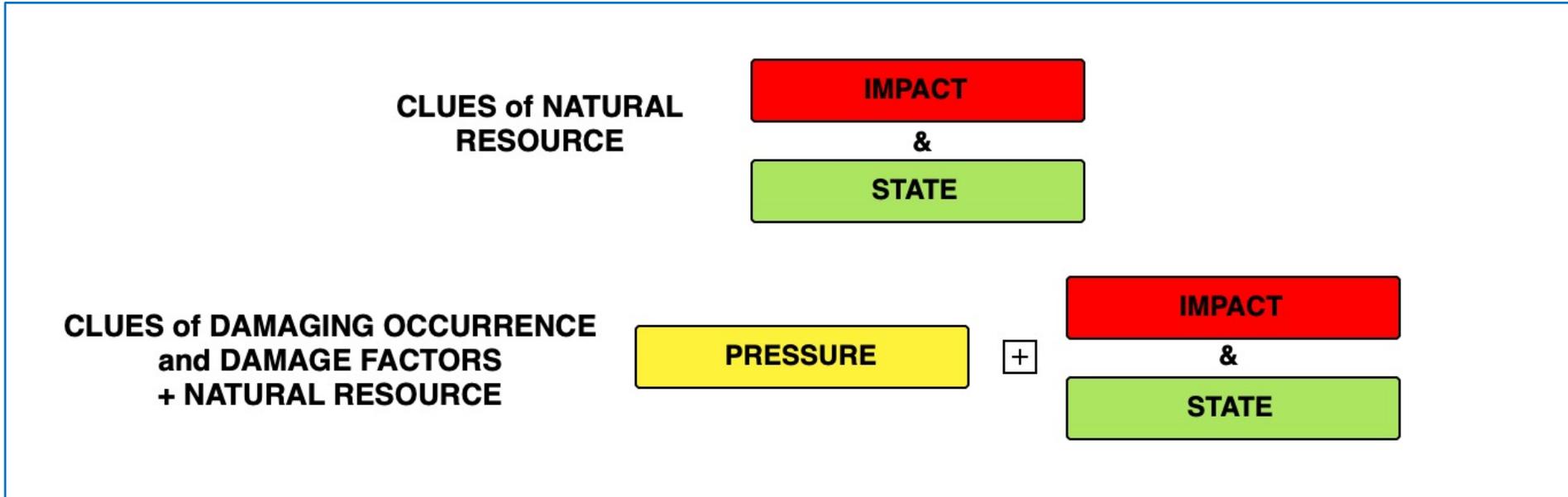
Indicators that describes IMPACT (Adverse effect) and STATE (baseline) may be sufficient to express the overall judgment

PRACTICAL TABLES OF INDICATORS

- IMPACT
- STATE
- PRESSURE
- DRIVER

Possible values for indicators and group of indicators:
1) Favourable to the identification of the clue
2) Unfavourable to the identification of the clue
3) Auxiliary data/information
4) Not available data/information
5) Not relevant data/information

OVERALL JUDGEMENT

- CLUES of environmental damage IDENTIFIABLE → FURTHER INVESTIGATIONS REQUIRED
- CLUES of environmental damage NOT IDENTIFIABLE → CASE NOT UNDER ELD
- Data/information to identify clues of damage NOT SUFFICIENT → EVALUATE the POSSIBILITY/LEGITIMITY/NEEDS/BENEFITS of COLLECTING FURTHER DATA and INFORMATION

When information on IMPACT and STATE are not sufficient, data relating to PRESSURE (i.e. hazardousness, magnitude, duration, ...) may be fundamental to determine the existence, or not, of clues of damage

Methodology for the determination of clues

Types of clues of damage

THANKS FOR THE ATTENTION!

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