# How participatory approaches could enhance the evaluation of animal health surveillance systems?



Work Package 5: Evaluation of epidemiological and economic effectiveness of surveillance systems

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#### INTRODUCTION

Regular and relevant evaluations of surveillance systems are critical in order to improve their performance and efficiency. Multiple attributes are required to assess their performance and many different types of methods & tools are available to evaluate them.

In order to identify the potential use of participatory approaches to improve these evaluations, it is necessary to identify and analyse evaluation attributes, as well as the existing methods & tools.

> How to improve the evaluation of surveillance systems?

# **EVALUATION OF SURVEILLANCE SYSTEMS: MAIN STEPS**



# MATERIAL & METHODS

To highlight the needs for innovative tools to assess specific attributes or to address specific evaluation questions, the following methodology was implemented:

- Selection of references provided in the literature to list the existing methods & tools used for attributes assessment;
- Analysis of references, looking at their field of application, the data required, the type of



# **PARTICIPATORY APPROACHES**

Range of methods/tools which enable stakeholders to play an **active role** in the definition and in the analysis of the problems they may encounter, and in their solution. These approaches could bring an added value to the evaluation by allowing **better** understanding of the system and of stakeholders' expectations.

outputs provided, and their advantages and limitations;

Identification of the main gaps, and assessment of the potential contribution of participatory approaches in addressing those gaps.

## **PRELIMINARY RESULTS (Table 1)**

- **38** attributes were identified: **11** related to the performance of the system, **8** functional and structural attributes, and **3** temporal attributes.
- 44 methods and tools were identified: 14 qualitative and 30 quantitative.

#### Table 1: Snapshot example of the list of attributes and existing assessment methods identified by the study

Attribute types	Attributes	Existing assessment method(s)	Type of method(s)
Functional	Acceptability	Semi-structured interviews	Qualitative / Semi-quantitative
	Flexibility	Semi-structured interviews	
Surveillance effectiveness	Sensitivity	Capture-Recapture, Scenario trees	Quantitative
	Representativeness	Spatial estimation	
	Timeliness	Statistical models	
Surveillance value	Cost	Cost-estimation	

**Potential use of participatory approaches** 

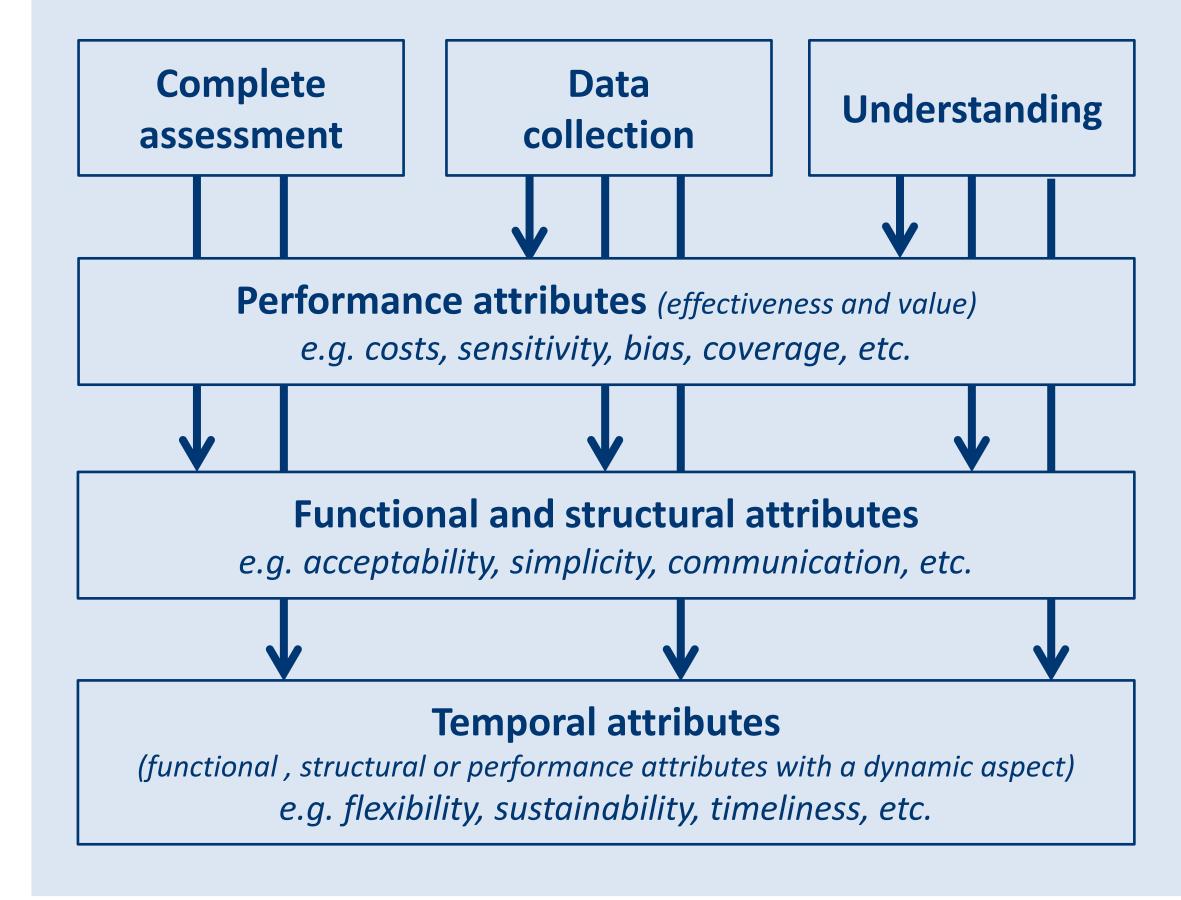


# **Development of participatory approaches**

- Three circumstances where participatory methods & tools could be used (Figure1):
- To undertake the **complete assessment** of attributes for which there is no existing method (or tool), or when the method is not standardized enough (e.g. semi-structured interviews) or not completely addressing all aspects of the attribute;
- To contribute to the collection of data required for existing methods and tools (e.g. scenario trees);
- To better understand some of the outputs, leading to better recommendations and better communication.

Figure 1: Application of participatory approaches according to the groups of attributes considered

# **PARTICIPATORY APPROACHES**



- Proposed methodology on how to implement participatory approaches (with an example in Figure 2):
- **1. Understand the definition** of each attribute for which a complete assessment is required.
- 2. Identify each system components which contribute to the assessment of these attributes (= sub-indicators of the attribute)
- 3. Associate suitable participatory methods/tools to each of these identified elements with no existing assessment methods and/or
- 4. Associate suitable participatory methods/tools to existing methods to facilitate data collection.

Figure 2: Definition of acceptability of the surveillance system and identification of associated sub-indicators

# **1. Understand the definition of ACCEPTABILITY**

Willingness of persons/organisations to participate in the surveillance system; the degree to which each of these users is involved in the surveillance.

2. Identify sub-indicators of ACCEPTABILITY

Acceptability of the OBJECTIVE of the surveillance system

Acceptability of the OPERATION of the surveillance system

- Role of each actor and representation of its own utility
- Consequences of information flow for each actor
- Perception by each actor of its own role relative to other actors'
- **Relations between stakeholders**

# **Acceptability of the GOUVERNANCE**

- Confidence given to decision makers
- Confidence given to other stakeholders involved in the surveillance system

## **CONCLUSION**

Surveillance attributes and assessment methods & tools were identified through this study. The next steps of this work will be to identify a list of relevant indicators for the implementation of participatory approaches, and to test these approaches in the field. Outputs from evaluation performed using existing "" classical" methods and participatory approaches will be compared to conclude on the added value of the participatory methods & tools, and on their advantages and limitations for the evaluation of surveillance systems.



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