



# The EVA tool: a decision support tool for the evaluation of surveillance systems

## LinkTADs workshop

Design and evaluation of animal health surveillance systems

25<sup>th</sup> -27<sup>th</sup> April 2016, Qingdao, China



# Presentation outline

- Objectives
- Target users
- The EVA tool process
  - How to Frame and define the evaluation protocol?
    - Evaluation context and question
    - Evaluation attribute relevance
    - Attribute assessment methods
  - How to implement the evaluation?
    - Practical workplan
    - New methods to assess functional attributes
    - New effectiveness assessment method
    - Methods for economic evaluation
  - How to address the (economic) evaluation question?
  - How to report to decision makers?
- Conclusion/Perspectives

# RISKSUR DESIGN and EVALUATION Tools



( Current surveillance system:

[Home](#) [Surveillance System](#) [Design Tool](#) [Evaluation Tool](#) [Statistical Tools](#) [Admin](#) >

## Introduction to the RISKSUR tool

Edit

This RISKSUR tool has been developed to facilitate the design and evaluation of surveillance systems.

**SURVEILLANCE SYSTEM** - The first step in this process is the characterisation of the surveillance system which you can do in the SURVEILLANCE SYSTEM tab. Here you can describe a NEW SURVEILLANCE SYSTEM or LIST EXISTING SYSTEMS that you have previously described. Within the tool you need to either select a surveillance system from the drop down list in the top right hand corner of the screen or create a new surveillance system before you can use the design or evaluation tools. The name of the system that is currently active will be displayed in the top right hand corner of the screen.

**DESIGN TOOL** - Once your surveillance system has been described you can describe the individual components within your surveillance system using the DESIGN TOOL tab. Here you can ADD COMPONENTS or LIST EXISTING components within your selected surveillance system. The detailed design of these components and re-design to improve their effectiveness can be carried out using the associated excel design tool which is described in the DETAILED DESIGN tab.

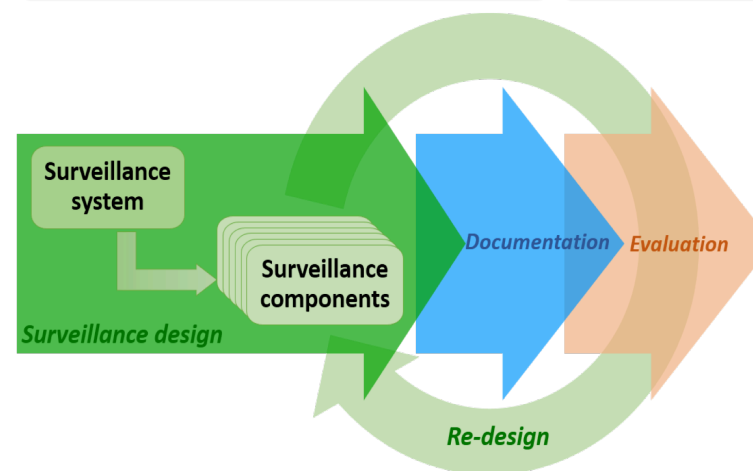
**EVALUATION TOOL** - To plan the evaluation of a surveillance system or its components you must first describe or select a surveillance system as described above. You can then use the EVALUATION TOOL where you first need to DEFINE an EVALUATION CONTEXT before being guided through the process of selecting an appropriate evaluation question and associated assessment methods. You must either describe the evaluation context or select a previously created context using the DEFINE EVALUATION CONTEXT page before you can select an evaluation question or assessment methods. The evaluation context that you have selected will be displayed in the top right hand corner of the screen.

**WIKI** - The tool is associated with a WIKI space for the each of the design and evaluation tools in which you will find information to assist with the use of the tool and definitions of key terms used.

## Surveillance 2.0

Surveillance design framework

EVA Tool



# Target users

- “competent and technical level users who design, implement or evaluate surveillance strategies for infectious livestock diseases”.
- Likely it will not be an individual, **but rather a team**, gathering knowledge in epidemiology, surveillance and evaluation. The team is also expected to be supported by diagnostic experts and **ideally an economist advisor**.

# EVA TOOL Process

**CONTEXT**

What is my situation? (surveillance system and evaluation needs)

**EVA QUESTION**

**WHY** doing an evaluation?

**EVA ATTRIBUTES**

**WHAT** to evaluate?

**EVA METHODS**

**HOW?**

# Introduction to the EVA Tool



Current surveillance system:

Current evaluation context: None

Home Surveillance System Design Tool **Evaluation Tool** Statistical Tools Admin >

Introduction to Evaluation of Surveillance

Describe Evaluation Context

Select Evaluation Question

Select Evaluation Methods

Summary of the evaluation protocol

Perform the evaluation

How to report on the evaluation results

## What is the EVA tool?

EVA tool is a decision making tool for the design of evaluation protocols, by considering questions such as **Why do I need/want to evaluate my system ? What should I assess ? How can I do the evaluation? it allows you to design an appropriate evaluation for your situation**

Edit

## Objectives of the EVA tool

The EVA tool allows you to decide how you will carry out an evaluation, it is not a tool for carrying out an evaluation

## The EVA tool takes you through a four step process, these steps are

1. Describe the evaluation context
2. Select the evaluation question
3. Select the evaluation method
4. Review summary of evaluation protocol

## It then provides you with information about how to

Perform the evaluation  
Report on the evaluation

## To start your evaluation go to the 'Describe Evaluation Context' page

On this page you can either select an existing evaluation or create a new evaluation context

To get more information on Evaluation concepts go to the next sections of this introduction and/or login to the [EVALUATION Wiki page](#)



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LinkTADs

Animal Diseases and Zoonoses in EU and China



# RISKSUR EVALUATION WIKI page

> surveillance-evaluation > Page principale

Chercher

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Mes wikis

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Membres

Projects

Events

Assessment

Para

## ☆ Welcome to RISKSUR tools

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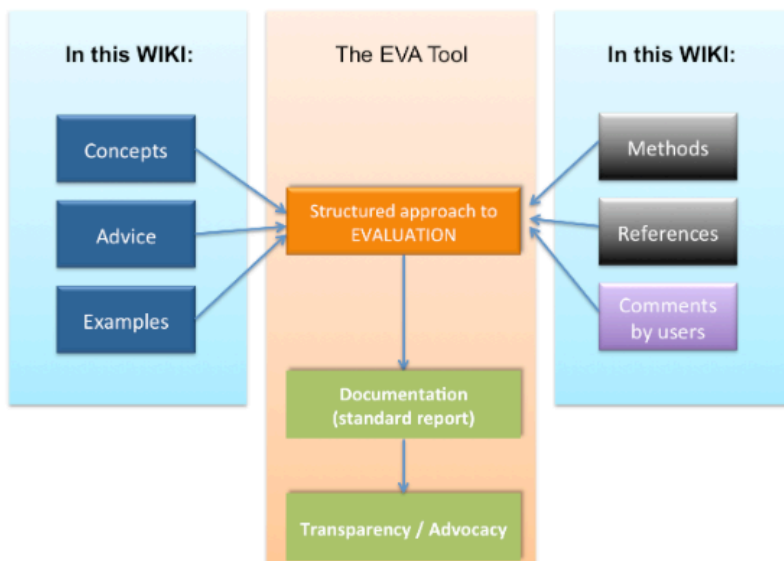
...

### Welcome to the RISKSUR support to EVALUATE animal health surveillance!

A framework for the Evaluation of animal health surveillance systems including a tool to define the evaluation plan ([EVA Tool](#)) has been developed under the RISKSUR project (<http://www.fp7-risksur.eu/>).

The aim was to provide a structured approach for an integrated evaluation including strengths and weaknesses of the process, effectiveness and economics.

This document provides all the content and advice to support users needs to evaluate surveillance systems. **This information provides indepth knowledge on the concept, methods and tools presented and used in the EVA tool** (EVA tool link\_under construction).



1. Welcome page
2. Introduction to the evaluation of animal health surveillance

- 2.1 Definitions
- 2.2 What is Evaluation?
- 2.3 Evaluation framework
- 2.4 Challenges in animal health evaluation

### 3. The Evaluation process

- 3.1 Plan (Manage, frame and define)

- The Evaluation context
- The Evaluation question

- 3.2 Implement (describe, document, analyses)

- 3.3 Report (synthesis, reporting)

### 4. Economic evaluation methods

### 5. How to report on the evaluation

### 6. Evaluator Best Practices

### 7. RISKSUR EVA tool

- 7.1 Tool development process

- 7.2 Target users

- 7.3 Evaluation attributes

- 7.4 Assessment methods
- 7.5 EVA tool manual download

### 8. Important links

- 8.1 RISKSUR Website

# Introduction– Evaluation concepts



Current surveillance system:

Current evaluation context: None

Home Surveillance System Design Tool **Evaluation Tool** Statistical Tools Admin >

Introduction to Evaluation of Surveillance >

Describe Evaluation Context

Select Evaluation Question

Select Evaluation Methods >

Summary of the evaluation protocol

Perform the evaluation

How to report on the evaluation results

**The EVA Tool** ?

**Evaluation Concepts**

Economic Methods

Evaluation Attributes

making tool for the design of evaluation protocols, by considering questions such as **Why do I need my system ? What should I assess ? How can I do the evaluation?** it allows you to design an evaluation for your situation

Edit

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**The EVA tool takes you through a four step process, these steps are**

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4. Review summary of evaluation protocol

**It then provides you with information about how to**

Perform the evaluation  
Report on the evaluation

**To start your evaluation go to the 'Describe Evaluation Context' page**

On this page you can either select an existing evaluation or create a new evaluation context

**To get more information on Evaluation concepts** go to the next sections of this introduction and/or login to the [EVALUATION Wiki page](#)





# Introduction- Evaluation concepts



Current surveillance system:

Current evaluation context: None

Home Surveillance System Design Tool **Evaluation Tool** Statistical Tools Admin >

- Introduction to Evaluation of Surveillance >
- Describe Evaluation Context
- Select Evaluation Question
- Select Evaluation Methods >
- Summary of the evaluation protocol
- Perform the evaluation
- How to report on the evaluation results

## What is Evaluation of Animal Health surveillance systems? Edit

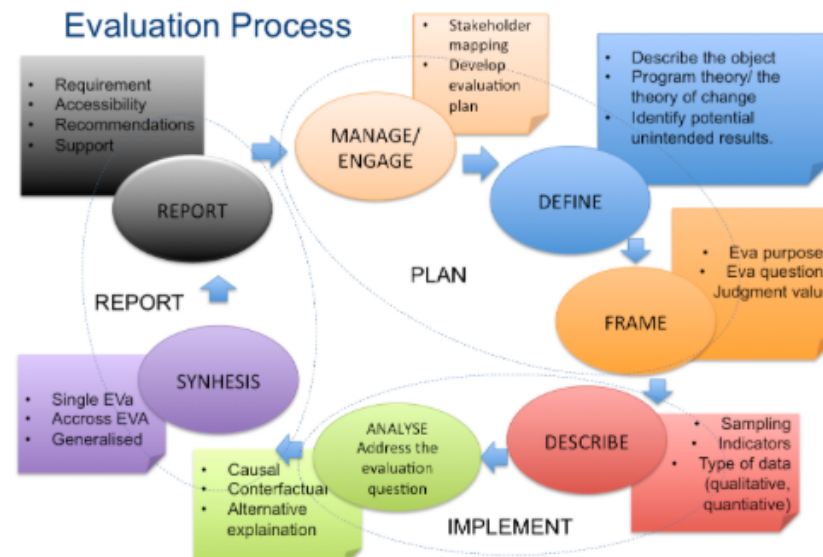
Evaluation is the determination of the merit of a surveillance system/component, by confronting the results of the assessment with standards targets, criteria or a counterfactual system. **This process shall be transparent, objective and evidence-based.**

The outcome of an evaluation is a judgement and /or recommendations **placed in the overall surveillance context**. An evaluation can be performed at **any development stage of the surveillance system**. Ideally, an evaluation is conducted in regular intervals in line with the policy cycle, by internal and/or external evaluators.

One, several or all components in the surveillance system and any number of attributes and/or criteria can be considered, **depending on the evaluation question and the context.**

### Important definitions

([link to RISKSUR Glossary](#)): [Assessment](#); [Evaluation](#); [Monitoring](#); [Surveillance](#);



## Glossary


This glossary is a concise guide to the terminology and definitions related to animal health surveillance, aiming to facilitate communication between those commissioning, designing, implementing and contributing to surveillance activities to provide a common understanding of these different surveillance activities. The glossary includes established definitions that have been published elsewhere as well as suggestions for additional terms or refinements where gaps or difficulties in understanding were identified by the RISKSUR consortium. Unless noted otherwise, all definitions are derived from the ICAHS [Animal Health Surveillance Terminology Final Report](#) (version 1.2).


If you have additional terms to add or propose a revision to one of the definitions listed, please [email us](#). Your suggestions will be incorporated into the glossary following a peer-review. Final recommendations regarding surveillance terminology will be made available online at the end of the project. We welcome your input!

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

### A

**Acceptability and engagement** 

**Active surveillance** 

**Assessment** 

The assessment of a surveillance system/component is the collection and analysis of data on the relevant surveillance attributes and/or criteria. It is a technical step within the evaluation process.

**Associated legislation and regulations** 

### B

**Benefit** 

**Bias** 

### C

# Introduction– Evaluation concepts



Current surveillance system:

Current evaluation context: None

Home Surveillance System Design Tool **Evaluation Tool** Statistical Tools Admin >

- Introduction to Evaluation of Surveillance >
- Describe Evaluation Context
- Select Evaluation Question
- Select Evaluation Methods >
- Summary of the evaluation protocol
- Perform the evaluation
- How to report on the evaluation results

## What is Evaluation of Animal Health surveillance systems?

Edit

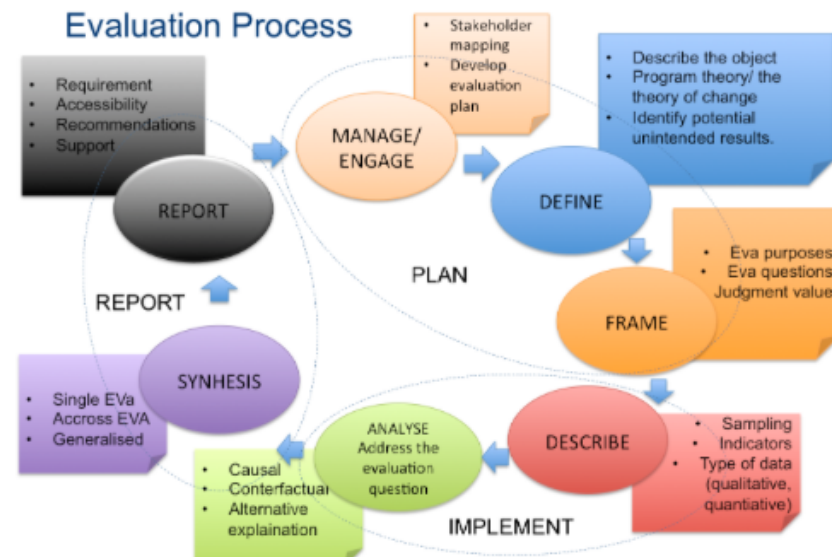
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([link to RISKSUR Glossary](#)): **Assessment**; **Evaluation**; Monitoring; Surveillance;



# Introduction– Economic methods

- Introduction to >
- Evaluation of Surveillance
- Describe Evaluation Context
- Select Evaluation Question
- Select Evaluation Methods >
- Summary of the evaluation protocol
- Perform the evaluation
- How to report on the evaluation results

- The EVA Tool
- Evaluation Concepts**
- Economic Methods
- Evaluation Attributes

## What is the purpose of Animal Health surveillance systems?

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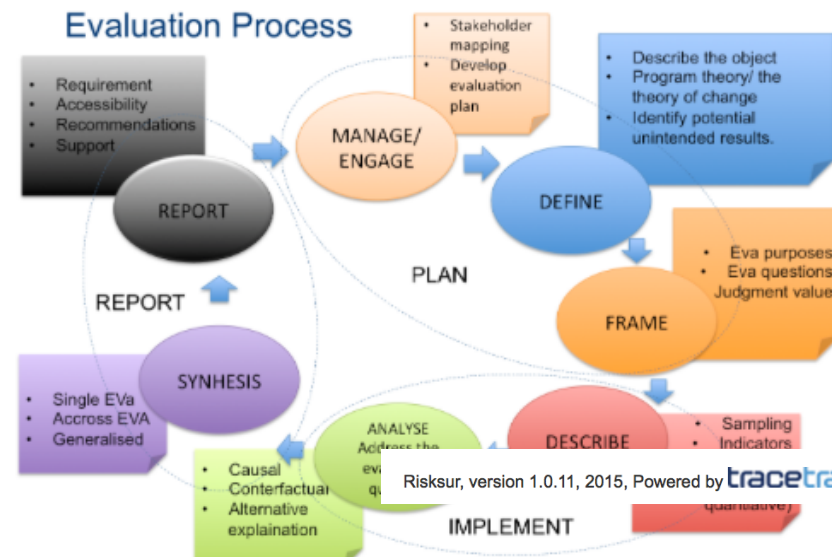
The purpose of an evaluation is the determination of the merit of a surveillance system/component, by confronting the results of the system with standards targets, criteria or a counterfactual system. **This process shall be transparent, objective and**

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### Important definitions

(link to RISKSUR Glossary): [Assessment](#); [Evaluation](#); [Monitoring](#); [Surveillance](#);



# Introduction– Economic methods



Current surveillance system:

Current evaluation context: None

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Describe Evaluation Context

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Summary of the evaluation protocol

Perform the evaluation

How to report on the evaluation results

This is a short description of the most common methods used in economic evaluation.

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For more detailed information please go the [economic evaluation methods EVA wiki page](#)

Cost analysis	Estimating surveillance costs is often the first step in conducting an economic evaluation, whether it is cost-benefit analysis or cost-effectiveness analysis. It helps to determine the total costs of components, allows comparison between different component designs, can show the distribution of costs among surveillance activities and stakeholders involved as well as the proportion of fixed and variable costs.
Cost-effectiveness analysis	Cost-effectiveness analysis (CEA) allows comparing the effects of different possible surveillance alternatives in terms of cost per unit of outcome obtained, i.e. it aims to assess the outcome of an activity in non-monetary units in relation to its cost. Of course, to allow a comparison, effects should be measurable with the same type of physical units.
Cost benefit analysis	Cost-benefit analysis (CBA) aims to evaluate, in monetary terms, all types of costs and benefits of surveillance, direct and indirect, market and non-market values, in order to find out if it generates a positive net value. In CBA, direct costs and benefits are related to the direct effects resulting from animal health surveillance (e.g. resource use, animal health), while indirect costs and benefits are related to its wider positive or negative external effects (externalities), e.g. on the whole economy, on human health or on the general social welfare, on the environment. Some costs and benefits originate from goods and services created by surveillance and are valued through the market, i.e. their value is expressed through a market price. But some inputs, goods and services are not exchanged in a market (e.g. absence of pain or suffering) and therefore have



# ☆ Economic evaluation methods

This page has been developed by B. Haesler, RVC

## 1. The economic evaluation of surveillance in relation to intervention and disease mitigation

In the three variable relationship of disease mitigation, surveillance and intervention, the latter two can either be economic **complements** or **substitutes**. Surveillance and intervention resources as **complements** means that they always go together in a given ratio and can be considered to be one input, for example as seen in a testing (surveillance) and culling (intervention) strategy. Surveillance and intervention as **substitutes** means that using more of one input will allow the use of less resources for the other to achieve the same loss avoidance. The most prominent example here is early warning surveillance that aims to enable early response and containment of disease.

For optimal efficiency, the *combined* cost of surveillance and intervention should be minimised for a given disease mitigation objective. A disease mitigation objective is typically expressed as a reduction in prevalence or incidence (e.g. "reduce prevalence of disease x in population y by 10%", "eradicate disease from population z"); both are technical measures of disease occurrence. If the value of loss avoidance is of interest (e.g. in a cost-benefit analysis), such prevalence or incidence reduction must be translated into the corresponding economic values of loss avoidance (Häsler and Howe 2012 [↗](#)).

Any given level of value losses avoided may be obtained from different combinations of surveillance and intervention effort. In general, allocating more resources to surveillance should lead to better information about a disease threat which allows more targeted intervention. For example, identification of holdings or areas infected or at risk of disease, allows focusing treatment on those populations instead of choosing a blanket approach. Similarly, detecting a disease early through surveillance enables intervening at a point when the losses due to animal disease and disease spread are still limited, and resources required to tackle cases are lower than later in an outbreak.

For any disease of interest it is therefore necessary to consider the technical trade-offs between surveillance and intervention that lead to distinct

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### Table of Contents

1. The economic evaluation of surveillance in relation to intervention and disease mitigation
2. Common economic evaluation methods applied to surveillance
  - 2.1 Cost-effectiveness analysis (CEA)
  - 2.2 Least-cost analysis
  - 2.3 Cost-benefit analysis
    - 2.3.2 Quantifying surveillance benefits



🏠 Page principale

📄 pages ⌚ changes

1. Welcome page

2. Introduction to the evaluation of animal health surveillance

- 2.1 Important definitions
- 2.2 What is Evaluation?
  - What is evaluation of animal health surveillance?
- 2,3 *What is economic evaluation? (soon)*
- 2.4 Evaluation frameworks
- 2.5 Challenges in animal health surveillance evaluation

3. The Evaluation process

- 3.1 Plan (Manage, frame and define)
  - The Evaluation context
  - The Evaluation question
  - Evaluation attributes
- 3.2 *Implement (describe, document, analyses) (soon)*
  - Organisational attributes



25/04/16

# Introduction– Economic methods



Current surveillance system:

Current evaluation context: None

- [Home](#)
- [Surveillance System](#)
- [Design Tool](#)
- [Evaluation Tool](#)
- [Statistical Tools](#)
- [Admin >](#)

Introduction to >	The EVA Tool	
Evaluation of Surveillance	Evaluation Concepts	
Describe Evaluation Context	Economic Methods	
Select Evaluation Question	Evaluation Attributes	
Select Evaluation Methods >		Estimating surveillance costs is often the first step in conducting an economic evaluation, whether it is cost-benefit analysis or cost-effectiveness analysis. It helps to determine the total costs of components, allows comparison between different component designs, can show the distribution of costs among surveillance activities and stakeholders involved as well as the proportion of fixed and variable costs.
Summary of the evaluation protocol	Cost-effectiveness analysis	Cost-effectiveness analysis (CEA) allows comparing the effects of different possible surveillance alternatives in terms of cost per unit of outcome obtained, i.e. it aims to assess the outcome of an activity in non-monetary units in relation to its cost. Of course, to allow a comparison, effects should be measurable with the same type of physical units.
Perform the evaluation		
How to report on the evaluation results	Cost-benefit analysis	Cost-benefit analysis (CBA) aims to evaluate, in monetary terms, all types of costs and benefits of surveillance, direct and indirect, market and non-market values, in order to find out if it generates a positive net value. In CBA, direct costs and benefits are related to the direct effects resulting from animal health surveillance (e.g. resource use, animal health), while indirect costs and benefits are related to its wider positive or negative external effects (externalities), e.g. on the whole economy, on human health or on the general social welfare, on the environment. Some costs and benefits originate from goods and services created by surveillance and are valued through the market, i.e. their value is expressed through a market price. But some inputs, goods and services are not exchanged in a market (e.g. absence of pain or suffering) and therefore have no market



# Introduction– Evaluation attributes


Current surveillance system:   
Current evaluation context: None

Home Surveillance System Design Tool Evaluation Tool Statistical Tools Admin >

- Introduction to Evaluation of Surveillance >
- Describe Evaluation Context
- Select Evaluation Question >
- Select Evaluation Methods >
- Summary of the evaluation protocol
- Perform the evaluation
- How to report on the evaluation results

In the EVA tool evaluation attributes have been divided into four categories Edit

- **Value attributes** – assess the value of surveillance for stakeholders
- **Effectiveness attributes** – assess how effectively the surveillance achieves its objectives, the effectiveness of surveillance influences its value
- **Functional attributes** – assess how well surveillance functions, the function of surveillance will influence its effectiveness and value
- **Organisational attributes** – assess the overall structure and processes of surveillance which will have an impact on the function, effectiveness and value of surveillance

The list of attributes is provided below, please click on any of the attributes to display its definition.

Please visit the [EVA wiki for more information on the evaluation attributes](#)

Effectiveness

Sensitivity (detection fraction or probability)

False Alarm rate (inverse of specificity)

Bias

Precision

Timeliness

Negative predictive value (NPV)

Positive predictive value (PPV)

Representativeness

Coverage

Robustness

Value

Benefit

Cost

Functional

Multiple hazard

Acceptability and engagement

Availability

Sustainability

Flexibility

Simplicity

Compatibility

Organisational

Risk-based criterion definition

Surveillance system organisation





# Introduction– Evaluation attributes

The screenshot shows the RISK SUR web application interface. At the top right, it displays 'Current surveillance system: Select one...' and 'Current evaluation context: None'. The main navigation bar includes 'Home', 'Surveillance System', 'Design Tool', 'Evaluation Tool' (which is highlighted), 'Statistical Tools', and 'Admin'. A sidebar on the left contains a menu with items like 'Introduction to Evaluation of Surveillance', 'Describe Evaluation Context', 'Select Evaluation Question', 'Select Evaluation Methods', 'Summary of the evaluation protocol', 'Perform the evaluation', and 'How to report on the evaluation results'. The main content area is titled 'In the EVA tool evaluation attributes have been divided into four categories' and lists 'Value attributes', 'Effectiveness a value', 'Functional attri', and 'Organisational effectiveness and The list of attribut'. A modal window titled 'Evaluation attribute description' is open, displaying text about the sensitivity of a surveillance system. The modal text reads: 'Sensitivity of a surveillance system can be considered on three levels. • Surveillance sensitivity (relevant for case detection and prevalence estimation) refers to the proportion of individual animals or herds in the target population of interest that have the health-related condition of interest that the surveillance system is able to detect. This is determined by the sensitivity of the testing protocol used and the coverage of the population and has also been referred to as detection fraction or detection probability. • Surveillance sensitivity (for outbreak detection) refers to the probability that the surveillance system will detect a significant increase (outbreak) of disease. This may be an increase in the level of a disease that is currently present in the population at a low level or the occurrence of any cases of a disease that is not currently present. • Surveillance sensitivity (for demonstrating freedom and early detection) refers to the probability that at least one case will be detected if disease is present at a certain level (prevalence) in the population. more information: [surveillance-evaluation.wikispaces.com/Evaluation+attributes](http://surveillance-evaluation.wikispaces.com/Evaluation+attributes)'. The modal also has a 'Close' button. In the background, several evaluation attributes are visible as buttons: 'Effectiveness', 'Sensitivity fraction', 'False Alarm sp', 'P', 'Ti', 'Negative predictive value (NPV)', 'Sustainability', 'Postive predictive value (PPV)', 'Flexibility', and 'Simplicity'. The 'cirad' logo is visible in the bottom left corner.

# Introduction– Evaluation attributes



Current surveillance system:   
Current evaluation context: None

Home Surveillance System Design Tool **Evaluation Tool** Statistical Tools Admin >

Introduction to Evaluation of Surveillance >

Describe Evaluation Context

Select Evaluation Question >

Select Evaluation Methods >

Summary of the evaluation protocol

Perform the evaluation

How to report on the evaluation results

In the EVA tool evaluation attributes have been divided into four categories

Edit

- **Value attributes** – assess the value of surveillance for stakeholders
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## Effectiveness

Sensitivity (detection fraction or probability)

False Alarm rate (inverse of specificity)

Bias

Precision

Timeliness

Negative predictive value (NPV)

Positive predictive value (PPV)

## Value

Benefit

Cost

## Functional

Multiple hazard

Acceptability and engagement

Availability

Sustainability

Flexibility

Simplicity



# Describe Evaluation context



Current surveillance system:   
Current evaluation context: None

Home Surveillance System Design Tool **Evaluation Tool** Statistical Tools Admin >

Please select a surveillance system above before proceeding

Introduction to Evaluation of Surveillance >

Describe Evaluation Context

Select Evaluation Question

Select Evaluation Methods >

Summary of the evaluation protocol

Perform the evaluation

How to report on the evaluation results

## What is the EVA tool?

EVA tool is a decision making tool for the design of evaluation protocols, by considering questions such as **Why do I need/want to evaluate my system ? What should I assess ? How can I do the evaluation?** it allows you to design an appropriate evaluation for your situation

Edit

## Objectives of the EVA tool

The EVA tool allows you to decide how you will carry out an evaluation, it is not a tool for carrying out an evaluation

## The EVA tool takes you through a four step process, these steps are

1. Describe the evaluation context
2. Select the evaluation question
3. Select the evaluation method
4. Review summary of evaluation protocol

## It then provides you with information about how to

Perform the evaluation  
Report on the evaluation

## To start your evaluation go to the 'Describe Evaluation Context' page

On this page you can either select an existing evaluation or create a new evaluation context

To get more information on Evaluation concepts go to the next sections of this introduction and/or login to the [EVALUATION Wiki page](#)



# Select surveillance system



Current surveillance system:

Home **Surveillance System** Design Tool Evaluation Tool Statistical Tools Admin >

- Introduction
- New Surveillance System
- List Existing Systems**

Show  entries Search:

Surveillance system name	Hazard	Surveillance objective	Edit	Delete
<a href="#">BTV-8 surveillance in Germany</a>	Blauzungenkrankheit	Freedom from disease	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
<a href="#">CSF wild boar</a>	Classical swine fever	Freedom from disease	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>


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Risksur, version 1.0.11, 2015, Powered by tracetracker



# Select surveillance system



Current surveillance system:   
Current eval



Home Surveillance System Design Tool **Evaluation Tool** Statistical Tools Admin >

Please select a surveillance system above before proceeding

Select one...   
Select one...   
**CSF wild boar**   
BTV-8 surveillance in Germany

Introduction to Evaluation of Surveillance >	<b>What is the EVA tool?</b> EVA tool is a decision making tool for the design of evaluation protocols, by considering questions such as <b>Why do I need/want to evaluate my system ? What should I assess ? How can I do the evaluation? it allows you to design an appropriate evaluation for your situation</b>	<b>Edit</b>
Describe Evaluation Context	<b>Objectives of the EVA tool</b> The EVA tool allows you to decide how you will carry out an evaluation, it is not a tool for carrying out an evaluation	
Select Evaluation Question >	<b>The EVA tool takes you through a four step process, these steps are</b>	
Select Evaluation Methods >	1.Describe the evaluation context 2.Select the evaluation question 3.Select the evaluation method 4.Review summary of evaluation protocol	
Summary of the evaluation protocol	<b>It then provides you with information about how to</b>	
Perform the evaluation	Perform the evaluation Report on the evaluation	
How to report on the evaluation results	<b>To start your evaluation go to the 'Describe Evaluation Context' page</b> On this page you can either select an existing evaluation or create a new evaluation context	
	<b>To get more information on Evaluation concepts go to the next sections of this introduction and/or login to the <a href="#">EVALUATION Wiki page</a></b>	

Risksur, version 1.0.11, 2015, Powered by **tracetracker**



# Select surveillance system



Current surveillance system: CSF wild boar

Home **Surveillance System** Design Tool Evaluation Tool Statistical Tools Admin >

The surveillance system is now CSF wild boar

Introduction

New Surveillance System

List Existing Systems

Show 10 entries Search:  Print Save

Surveillance system name	Hazard	Surveillance objective	Edit	Delete
<a href="#">BTV-8 surveillance in Germany</a>	Blauzungenkrankheit	Freedom from disease		
<a href="#">CSF wild boar</a>	Classical swine fever	Freedom from disease		

Showing 1 to 2 of 2 entries First Previous Page 1 of 1 Next Last



# Describe Evaluation context



Current surveillance system: CSF wild boar  
 Current evaluation context: None

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- Introduction to Evaluation of Surveillance >
- Describe Evaluation Context**
- Select Evaluation Question >
- Select Evaluation Methods >
- Summary of the evaluation protocol
- Perform the evaluation
- How to report on the evaluation results

The evaluation context provides the background information that will help to make choices about how the evaluation needs to be carried out (Why? What? How?). **Edit**

The table below lists the evaluations contexts that you have already created, you can either select an existing evaluation from this list or create a new evaluation context by selecting the 'Create new evaluation context' button

For more information please visit the [EVA wiki](#) page on evaluation context.

**Create new evaluation context**


Show 10 entries		Search: <input type="text"/>	
▲ Evaluation name	◆ Surveillance System	◆ Evaluation Question	
<a href="#">ASF surveillance in Poland</a>	CSF wild boar	Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target	
<a href="#">CSF in wild boar</a>	CSF wild boar	Assess the costs and effectiveness of surveillance components (out of two or more) to determine which achieves a defined effectiveness target at least cost, the effectiveness needs to be determined	
<a href="#">Evaluation of different surveillance strategies fo</a>	CSF wild boar	Assess the costs and effectiveness of surveillance components (out of two or more) to determine which achieves a defined effectiveness target at least cost, the effectiveness needs to be determined	

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# Describe Evaluation context



Current surveillance system: CSF wild boar

Current evaluation context: None

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Describe Evaluation Context

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## Create Evaluation Context

On this page you can either CREATE a new evaluation context or EDIT an existing one. Edit

The following questions are relevant to help you frame your evaluation plan.

Please provide as much detail information as possible.

For more information please visit the [EVA wiki page on evaluation context](#)

**Evaluation Name \***

**Strengths and weaknesses of current approach \***

**Stakeholder concerns about current approach \***

**Alternative strategies to consider? \***

**Do you want to evaluate or change the system or some components in the system? \***

**How many components will you include in this evaluation?**

**Are you considering risk-based options? \***

**Will you consider the costs of surveillance in your evaluation? \***

**Do you know the current cost of your system and/or components?**

**Do you have a budget constraint? \***


Create evaluation context

Summary of the surveillance system


▲	▼
Geographical area	Germany
Hazard Name	Classical swine fever
Hazard situation	Confirmed absent
Legal Requirements	Council directive (2002/106/EG) 95% confidence, 5% prevalence 59 samples/year on district level Currently examined serologically and virologically Recommendations: sampling all "passive" animals
Surveillance components	<a href="#">add surveillance components</a>
Surveillance system name	CSF wild boar


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Linking Epidemiology and Laboratory Research on Transboundary Animal Diseases and Zoonoses in EU and China





# Describe Evaluation context



Current surveillance system: CSF wild boar  
Current evaluation context: CSF-Wild boar\_2

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Evaluation protocol created successfully

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Describe Evaluation Context

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**Choosing an evaluation question allows you to identify the criteria and methods that you will need to use in your evaluation.** The RISKSUR tool allows you to select an evaluation question from a pick list if you are familiar with evaluation methods or provides guidance on the selection of an appropriate evaluation question by asking a series of questions.

Edit

- Select the 'Evaluation pick list' option to select an evaluation question
- or the 'Guidance to define evaluation question' to obtain more guidance on how to select an appropriate question.

For more information: [Evaluation question EVA WIKI page](#)

What would you like to do?

Guidance to define the evaluation question

Evaluation question pick list



# Select Evaluation question



Current surveillance system: CSF wild boar  
Current evaluation context: CSF-Wild boar

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Evaluations can be carried out at system or component level, at what level would you like to carry out your evaluation /improvement.

- System level
- Component level

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# Select Evaluation question

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Chercher

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MarisaPeyre

Mes wikis

Aide

Déconnexion

Membres

Projects

Events

Assessment

Paramètres

## ☆ Evaluation question guidance pathway

Modifier

0

2

...

As part of the RISKSUR project, a decision tree was created to assist with the choice of the evaluation question.

The following list of questions was arranged in a logical sequence in a decision tree presented in the diagram below in order to help the evaluator to define the evaluation question.

- PATHWAY A1 Do you want to evaluate or improve at component or system level
- PATHWAY A2 do you want to evaluate or re-design surveillance to improve its performance
- PATHWAY A3 Have you evaluated the effectiveness of surveillance
- PATHWAY A4 Have you evaluated functional aspects that may influence effectiveness
- PATHWAY A5 Do you want to evaluate effectiveness, functional aspects or strengths and weaknesses
- PATHWAY A6 Do you want to compare components or evaluate a single component
- PATHWAY A7 Do components to be compared have the same objective
- PATHWAY A8 What criteria will you include in your evaluation (e.g. costs, effectiveness, benefits)
- PATHWAY A9 Do components achieve a specified technical effectiveness target
- PATHWAY A10 Is there a budget constraint
- PATHWAY A11 How can you measure benefits

**PATHWAY A1 Do you want to evaluate or improve at component or system level**

**PATHWAY A2 do you want to evaluate or re-design surveillance to improve its performance**

**PATHWAY A3 Have you evaluated the effectiveness of surveillance**

**PATHWAY A4 Have you evaluated functional aspects that may influence effectiveness**

**PATHWAY A5 Do you want to evaluate effectiveness, functional aspects or strengths and weaknesses**



Page principale

pages

changes

1. Welcome page
2. Introduction to the evaluation of animal health surveillance

- 2.1 Definitions
- 2.2 What is Evaluation?
- 2.3 What is economic evaluation?
- 2.4 Evaluation frameworks
- 2.5 Challenges in animal health evaluation

### 3. The Evaluation process

- 3.1 Plan (Manage, frame and define)
  - The Evaluation context
  - The Evaluation question
  - Evaluation attributes
- 3.2 Implement (describe, document, analyses)
  - Evaluation attributes assessment methods
- 3.3 Report (synthesis, reporting)
  - How to report on the evaluation



# Select Evaluation question



Current surveillance system: CSF wild boar  
Current evaluation context: CSF-Wild boar

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Evaluations can be carried out at system or component level, at what level would you like to carry out your evaluation /improvement.

- System level
- Component level

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# Select Evaluation question



Current surveillance system: CSF wild boar  
Current evaluation context: CSF-Wild boar\_2

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Are you aiming to evaluate or to re-design surveillance to improve its performance?

- To evaluate the component
- To redesign surveillance to improve its performance?

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Q: Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target  
A: Evaluate / improve one or more distinct surveillance components

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# Select Evaluation question



Current surveillance system: CSF wild boar ▾

Current evaluation context: CSF-Wild boar\_2

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What do you want to evaluate

- Evaluate the efficiency and/or effectiveness of component
- To evaluate the strengths and weaknesses of the structure, function and processes of the component
- To evaluate the functional aspects of the component that may influence its effectiveness.

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Next

Q: Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target

A: Evaluate / improve one or more distinct surveillance components

Q: Are you aiming to evaluate or to re-design surveillance to improve its performance?

A: To evaluate the component

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# Select Evaluation question

- Introduction to Evaluation of Surveillance >
- Describe Evaluation Context
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Do you want to make a comparison between two or more alternative surveillance designs (e.g. risk-based vs conventional) to find out whether one is preferable to the other one or to compare a novel surveillance component to a situation in which there is no surveillance or do you want to evaluate the performance of a surveillance component without making a comparison?

- I want to compare alternative designs or compare a surveillance design to a situation with no surveillance
- I just want to evaluate a single component

**Back** **Next**

Q: Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target  
A: Evaluate / improve one or more distinct surveillance components  
Q: Are you aiming to evaluate or to re-design surveillance to improve its performance?  
A: To evaluate the component  
Q: What do you want to evaluate  
A: Evaluate the efficiency and/or effectiveness of component

# Select Evaluation question



Current surveillance system: CSF wild boar ▾

Current evaluation context: CSF-Wild boar\_2

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?

Do the components that you want to compare have the same objective

- NO the components to be compared do not have the same objective
- YES the components to be compared have the same objective
- The comparison will be to a situation in which there is no surveillance

Back

Next

Q: Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target  
A: Evaluate / improve one or more distinct surveillance components

Q: Are you aiming to evaluate or to re-design surveillance to improve its performance?  
A: To evaluate the component

Q: What do you want to evaluate  
A: Evaluate the efficiency and/or effectiveness of component

Q: Do you want to make a comparison between two or more alternative surveillance designs (e.g. risk-based vs conventional) to find out whether one is preferable to the other one or to compare a novel surveillance component to a situation in which there is no surveillance or do you want to evaluate the performance of a surveillance component without making a comparison?





# Select Evaluation question

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What criteria would you like to include in your evaluation?

- Cost and effectiveness
- Cost only
- Effectiveness only
- Cost and benefits

**Back**

**Next**

Q: Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target  
A: Evaluate / improve one or more distinct surveillance components

Q: Are you aiming to evaluate or to re-design surveillance to improve its performance?  
A: To evaluate the component

Q: What do you want to evaluate  
A: Evaluate the efficiency and/or effectiveness of component

Q: Do you want to make a comparison between two or more alternative surveillance designs (e.g. risk-based vs conventional) to find out whether one is preferable to the other one or to compare a novel surveillance component to a situation in which



# Select Evaluation question

Introduction to Evaluation of Surveillance >

Describe Evaluation Context

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?

Do you want to assess and compare the cost of components that achieve specified technical effectiveness target or assess the cost and effectiveness of components without specifying a technical effectiveness target?

- Assess whether components achieve a specified technical effectiveness
- NO, technical effectiveness target will not be specified.

Back

Next

Q: Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target

A: Evaluate / improve one or more distinct surveillance components

Q: Are you aiming to evaluate or to re-design surveillance to improve its performance?

A: To evaluate the component

Q: What do you want to evaluate

A: Evaluate the efficiency and/or effectiveness of component

Q: Do you want to make a comparison between two or more alternative surveillance designs (e.g. risk-based vs conventional) to find out whether one is preferable to the other one or to compare a novel surveillance



# Select Evaluation question

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Has the effectiveness of components been assessed or is the effectiveness determined by the surveillance protocol specified in the legal requirements to carry out surveillance?

- Effectiveness of components is known
- Effectiveness of components has not yet been assessed

**Back** **Next**

Q: Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target  
A: Evaluate / improve one or more distinct surveillance components  
Q: Are you aiming to evaluate or to re-design surveillance to improve its performance?  
A: To evaluate the component  
Q: What do you want to evaluate  
A: Evaluate the efficiency and/or effectiveness of component  
Q: Do you want to make a comparison between two or more alternative surveillance designs (e.g. risk-based vs conventional) to find out whether one is preferable to the other one or to compare a novel surveillance



# Select Evaluation question



Current surveillance system: CSF wild boar  
 Current evaluation context: CSF-Wild boar\_2

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A question has been selected as per your previous choices

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- Describe Evaluation Context
- Select Evaluation Question >
- Select Evaluation Methods >
- Summary of the evaluation protocol
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If you already know the purpose of your evaluation, please choose the most appropriate question from the list below.

**Edit**

If you are not sure about what you want to evaluate please go back to follow the Guidance pathway to define your evaluation question.

Click here for [more information on the evaluation question](#) and [on the guidance pathway](#)

## Select Evaluation Question

Search: <input type="text"/>				
	Question ↕ Number	↕ Question	Evaluation ↕ Criteria	Evaluation ↕ Method
<input type="radio"/>	1	Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target	Effectiveness	Effectiveness attribute assessment
<input type="radio"/>	2	Assess the costs of surveillance components (out of two or more) that achieve a defined effectiveness target	Effectiveness, Cost	Least cost assessment
<input checked="" type="radio"/>	3	Assess the costs and effectiveness of surveillance components (out of two or more) to determine which achieves a defined effectiveness target at least cost, the effectiveness needs to be determined	Effectiveness, Cost	Least cost assessment
<input type="radio"/>	4	Assess the technical effectiveness of one or more surveillance components	Effectiveness	Effectiveness attribute assessment
<input type="radio"/>	5(a)	Assess whether a surveillance component generates a net benefit for society, industry, or animal holder(s): Benefit to be measured in monetary terms	Effectiveness, Cost, Monetary benefit	Cost benefit analysis
<input type="radio"/>		Assess whether a surveillance component generates a net	Effectiveness	

# Select Evaluation question



Current surveillance system: CSF wild boar  
 Current evaluation context: CSF-Wild boar\_2

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A question has been selected as per your previous choices

- Introduction to Evaluation of Surveillance >
- Describe Evaluation Context
- Select Evaluation Question >
- Select Evaluation Methods >
- Summary of the evaluation protocol
- Perform the evaluation
- How to report on the evaluation results

If you already know the purpose of your evaluation, please choose the most appropriate question from the list below.

**Edit**

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## Select Evaluation Question

Search: <input type="text"/>				
	Question ↕ Number	↕ Question	Evaluation ↕ Criteria	Evaluation ↕ Method
<input type="radio"/>	1	Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target	Effectiveness	Effectiveness attribute assessment
<input type="radio"/>	2	Assess the costs of surveillance components (out of two or more) that achieve a defined effectiveness target	Effectiveness, Cost	Least cost assessment
<input checked="" type="radio"/>	3	Assess the costs and effectiveness of surveillance components (out of two or more) to determine which achieves a defined effectiveness target at least cost, the effectiveness needs to be determined	Effectiveness, Cost	Least cost assessment
<input type="radio"/>	4	Assess the technical effectiveness of one or more surveillance components	Effectiveness	Effectiveness attribute assessment
<input type="radio"/>	5(a)	Assess whether a surveillance component generates a net benefit for society, industry, or animal holder(s): Benefit to be measured in monetary terms	Effectiveness, Cost, Monetary benefit	Cost benefit analysis
<input type="radio"/>		Assess whether a surveillance component generates a net	Effectiveness	

# Select Evaluation question



Current surveillance system: CSF wild boar  
 Current evaluation context: CSF-Wild boar\_2

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A question has been selected as per your previous choices

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- Describe Evaluation Context
- Select Evaluation Question >**
- Select Evaluation Methods >
- Summary of the evaluation protocol
- Perform the evaluation
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If you already know the purpose of your evaluation, please choose the most appropriate question from the list below.

**Edit**

If you are not sure about what you want to evaluate please go back to follow the Guidance pathway to define your evaluation question.

Click here for [more information on the evaluation question](#) and [on the guidance pathway](#)

- Guidance pathway
- Evaluation question pick list**

## Question

Search: <input type="text"/>				
	Question ↕ Number	↕ Question	Evaluation ↕ Criteria	Evaluation ↕ Method
<input type="radio"/>	1	Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target	Effectiveness	Effectiveness attribute assessment
<input type="radio"/>	2	Assess the costs of surveillance components (out of two or more) that achieve a defined effectiveness target	Effectiveness, Cost	Least cost assessment
<input checked="" type="radio"/>	3	Assess the costs and effectiveness of surveillance components (out of two or more) to determine which achieves a defined effectiveness target at least cost, the effectiveness needs to be determined	Effectiveness, Cost	Least cost assessment
<input type="radio"/>	4	Assess the technical effectiveness of one or more surveillance components	Effectiveness	Effectiveness attribute assessment
<input type="radio"/>	5(a)	Assess whether a surveillance component generates a net benefit for society, industry, or animal holder(s): Benefit to be measured in monetary terms	Effectiveness, Cost, Monetary benefit	Cost benefit analysis

# Select Evaluation question



Current surveillance system: CSF wild boar

Current evaluation context: CSF-Wild boar\_2

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If you already know the purpose of your evaluation, please choose the most appropriate question from the list below.

**Edit**

If you are not sure about what you want to evaluate please go back to follow the Guidance pathway to define your evaluation question.

Click here for [more information on the evaluation question](#) and [on the guidance pathway](#)

## Select Evaluation Question

Search: <input type="text"/>				
	Question ⚡ Number	⚡ Question	Evaluation ⚡ Criteria	Evaluation ⚡ Method
<input type="radio"/>	1	Assess whether one or more surveillance component(s) is/are capable of meeting a technical effectiveness target	Effectiveness	Effectiveness attribute assessment
<input type="radio"/>	2	Assess the costs of surveillance components (out of two or more) that achieve a defined effectiveness target	Effectiveness, Cost	Least cost assessment
<input checked="" type="radio"/>	3	Assess the costs and effectiveness of surveillance components (out of two or more) to determine which achieves a defined effectiveness target at least cost, the effectiveness needs to be determined	Effectiveness, Cost	Least cost assessment
<input type="radio"/>	4	Assess the technical effectiveness of one or more surveillance components	Effectiveness	Effectiveness attribute assessment
<input type="radio"/>	5(a)	Assess whether a surveillance component generates a net benefit for society, industry, or animal holder(s): Benefit to be measured in monetary terms	Effectiveness, Cost, Monetary benefit	Cost benefit analysis
<input type="radio"/>	5(b)	Assess whether a surveillance component generates a net benefit for society, industry, or animal holder(s): Benefit to be measured in non-monetary terms (effectiveness is one type of non-monetary benefit)	Effectiveness, Cost, Non monetary benefit	Cost effectiveness analysis

## Select Evaluation question

<input type="radio"/>	5(c)	industry, or animal holder(s): Benefit to be measured in both monetary and non-monetary terms (effectiveness is one type of non-monetary benefit)	Cost, monetary benefit, Non monetary benefit	analysis, Cost effectiveness analysis
<input type="radio"/>	6(a)	Identify the surveillance component (out of two or more) that generates the biggest net benefit for society, industry, or animal holder(s) and benefit to be measured in monetary terms	Effectiveness, Cost, Monetary benefit	Cost benefit analysis
<input type="radio"/>	6(b)	Identify the surveillance component (out of two or more) that generates the biggest net benefit for society, industry, or animal holder(s) and benefit to be measured in non-monetary terms or to be expressed as an effectiveness measure	Effectiveness, Cost, Non monetary benefit	Cost effectiveness analysis
<input type="radio"/>	6(c)	Identify the surveillance component (out of two or more) that generates the biggest net benefit for society, industry, or animal holder(s) and benefit to be measured in both monetary and non-monetary terms (or to be expressed as an effectiveness measure)	Effectiveness, Cost, Monetary benefit, Non monetary benefit	Cost benefit analysis, Cost effectiveness analysis
<input type="radio"/>	7(a)	Identify the surveillance component (out of two or more) that generates the biggest net benefit for society, industry, or animal holder(s): Benefit to be measured in monetary terms	Effectiveness, Cost, Monetary benefit	Cost benefit analysis
<input type="radio"/>	7(b)	Identify the surveillance component (out of two or more) that generates the biggest net benefit for society, industry, or animal holder(s) under a budget constraint Budget constraint and benefit to be measured in non-monetary terms (effectiveness is one type of non-monetary benefit)	Cost, Non monetary benefit	Cost effectiveness analysis
<input type="radio"/>	7(c)	Identify the surveillance component (out of two or more) that generates the biggest net benefit for society, industry, or animal holder(s): Benefit to be measured in both monetary and non-monetary terms (effectiveness is one type of non-monetary benefit)	Effectiveness, Cost, Monetary benefit, Non monetary benefit	Cost benefit analysis, Cost effectiveness analysis
<input type="radio"/>	8	Assess the functional aspects of surveillance which may influence effectiveness	Function	Functional assessment
<input type="radio"/>	9	Assess the technical effectiveness of one or more surveillance components and the functional aspects of surveillance that may influence effectiveness	Effectiveness, Function	Effectiveness attribute assessment, Functional assessment
<input type="radio"/>	10	Assess the technical effectiveness of the surveillance system	Effectiveness	Effectiveness attribute assessment
<input type="radio"/>	11	Assess the surveillance structure, function and processes	Strength and weaknesses	Functional assessment, Process assessment, Structure assessment



# Select surveillance components



Current surveillance system: chicken Surveilla...  
 Selected evaluation context: Webinar Test

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Evaluation name	Webinar Test
Surveillance system name	chicken Surveillance
Surveillance components to evaluate	
Surveillance objective	Estimate prevalence
Evaluation question	Assess whether a surveillance component generates a net benefit for society, industry, or animal holder(s): Benefit to be measured in monetary terms
Evaluation criteria	Effectiveness, Cost, Monetary benefit
Evaluation method	Cost benefit analysis
Whether risk based approach used	Yes

## Select Components

Edit

Please select the components you would like to include in your evaluation from the components included in this system using the table below. If the components you want to include are not listed in this table please go back and enter the information about your components into the [add components](#) screen.

Show 10 entries Search:

	Component Name	Target Species	Data collection point	Study type
<input checked="" type="checkbox"/>	Contamination test	Chicken	50	
<input checked="" type="checkbox"/>	Feathers Check	Passive	50	
<input type="checkbox"/>	Component 1	Chicken	At the source (farm, wild life habitat, etc)	

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# Select surveillance components



Current surveillance system: chicken Surveilla...  
 Selected evaluation context: Webinar Test

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Evaluation name	Webinar Test
Surveillance system name	chicken Surveillance
Surveillance components to evaluate	
Surveillance objective	Estimate prevalence
Evaluation question	Assess whether a surveillance component generates a net benefit for society, industry, or animal holder(s): Benefit to be measured in monetary terms
Evaluation criteria	Effectiveness, Cost, Monetary benefit
Evaluation method	Cost benefit analysis
Whether risk based approach used	Yes

## Select Components

Edit

Please select the components you would like to include in your evaluation from the components included in this system using the table below. If the components you want to include are not listed in this table please go back and enter the information about your components into the [add components](#) screen.

Show 10 entries Search:

	Component Name	Target Species	Data collection point	Study type
<input checked="" type="checkbox"/>	Contamination test	Chicken	50	
<input checked="" type="checkbox"/>	Feathers Check	Passive	50	
<input type="checkbox"/>	Component 1	Chicken	At the source (farm, wild life habitat, etc)	

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# Select surveillance components

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Evaluation name	Webinar Test
Surveillance system name	chicken Surveillance
Surveillance components to evaluate	Contamination test, Feathers Check
Surveillance objective	Estimate prevalence
Evaluation objective	Assess whether a surveillance component generates a net benefit for society, industry, or animal holder(s): Benefit to be measured in monetary terms
Evaluation attributes	Effectiveness, Cost, Monetary benefit
Evaluation methods	Cost benefit analysis
Evaluation economic methods	Yes

**Select Components** Edit

Please select the components you would like to include in your evaluation from the components included in this system using the table below. If the components you want to include are not listed in this table please go back and enter the information about your components into the [add components](#) screen.

Show 10 entries Search:


	Component Name	Target Species	Data collection point	Study type
<input checked="" type="checkbox"/>	Contamination test	Chicken	50	
<input checked="" type="checkbox"/>	Feathers Check	Pasive	50	
<input type="checkbox"/>	Component 1	Chicken	At the source (farm, wild life habitat, etc)	

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# Select evaluation attributes



Current surveillance system: CSF wild boar ▾

Current evaluation context: CSF-Wild boar\_2

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## Evaluation summary

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50
▾
entries

Evaluation name		CSF-Wild boar_2
Surveillance system name		CSF wild boar
Surveillance components to evaluate		
Surveillance objective		Freedom from disease
Evaluation question		Assess the costs and effectiveness of surveillance components (out of two or more) to determine which achieves a defined effectiveness target at least cost, the effectiveness needs to be determined
Evaluation criteria		Effectiveness, Cost
Evaluation method		Least cost assessment
Strengths and weaknesses of current approach		good Se, too expensive
Stakeholder concerns about current approach		Costs
Alternative strategies to consider?		Yes, risk-based looking at age of the hunted pigs and hunting season
Do you want to evaluate or change the system or some components in the system?		Component
Are you considering risk-based options?		Yes
Will you consider the costs of surveillance in your evaluation		Yes
Do you know the current cost of your system and/or components?		Yes
Do you have a budget constraint?		No



# Select evaluation attributes

The attributes that are thought to be relevant for your evaluation question and surveillance objective are listed in the table below – decide whether you wish to include each of the attributes listed in your evaluation based on the information provided in the table and for each one that you wish to include click on the button to complete the assessment form to make a final decision about whether you are able to include this attribute and select the assessment method based on the availability of data and expertise. <http://surveillance-evaluation.wikispaces.com/Welc...>

**Edit**

[More information in the EVA wiki](#)

Show 10 entries		Search: <input type="text"/>		
	Attribute Name	Attribute Description	Attribute Type	Relevance
<input type="checkbox"/>	Negative predictive value (NPV)	Negative predictive value refers to the proportion of epidemiological units (e.g. animal, holding, herd) classified as free from disease or infection by the surveillance system which are actually free from disease or infection. It depends partly on the sensitivity and specificity of the surveillance system, but is also influenced by the disease prevalence in the target population	Effectiveness	High
<input type="checkbox"/>	Sensitivity (detection fraction or probability)	Sensitivity of a surveillance system can be considered on three levels. • Surveillance sensitivity (relevant for case detection and prevalence estimation) refers to the proportion of individual animals or herds in the target population of interest that have the health-related condition of interest that the surveillance system is able to detect. This is determined by the sensitivity of the testing protocol used and the coverage of the population and has also been referred to as detection fraction or detection probability. • Surveillance sensitivity (for outbreak detection) refers to the probability that the surveillance system will detect a significant increase (outbreak) of disease. This may be an increase in the level of a disease that is currently present in the population at a low level or the occurrence of any cases of a disease that is not currently present. • Surveillance sensitivity (for demonstrating freedom and early detection) refers to the probability that at least one case will be detected if disease is present at a certain level (prevalence) in the population. more information: <a href="http://surveillance-evaluation.wikispaces.com/Evaluation+attributes">surveillance-evaluation.wikispaces.com/Evaluation+attributes</a>	Effectiveness	High
<input type="checkbox"/>	Bias	The extent to which a prevalence estimate produced by the surveillance system deviates from the true prevalence value. Bias is reduced as representativeness is increased.	Effectiveness	High



## Select evaluation attributes

<input type="checkbox"/>	Cost	The concept of economic cost includes 1) the losses due to disease (e.g. reduced milk yield, mortality), and 2) the resources required to react to disease in a system (e.g. time, services, consumables for surveillance). In economic evaluation, the resources used to manage disease are compared with the disease losses with the aim to identify an optimal balance where a higher economic efficiency is achieved. Estimation of the total economic cost stemming from losses and expenditures is called a disease impact assessment. Estimation of the resource expenditures only is called a cost analysis.	Value	High
<input type="checkbox"/>	Representativeness	The extent to which the features of the population of interest are reflected by the population included in the surveillance activity, these features may include herd size, production type, age, sex or geographical location or time of sampling (important for some systems e.g. for vector borne disease).	Effectiveness	High
<input type="checkbox"/>	Robustness	The ability of the surveillance system to produce acceptable outcomes over a range of assumptions about uncertainty by maximising the reliability of an adequate outcome.	Effectiveness	Medium
<input type="checkbox"/>	False Alarm rate (inverse of specificity)	The proportion of negative events (e.g. non-outbreak periods) incorrectly classified as events (outbreaks). This is the inverse of the specificity but is more easily understood than specificity.	Effectiveness	Medium
<input type="checkbox"/>	Coverage	Refers to the proportion of the target population that is included in the surveillance activity when using risk-based approaches coverage refers to the proportion of the selected populations included.	Effectiveness	Medium
<input type="checkbox"/>	Timeliness	Timeliness is usually defined as the time between any two defined steps in a surveillance system, the time points chosen are likely to vary depending on the purpose of the surveillance activity. For planning purposes timeliness can also be defined as whether surveillance detects changes in time for risk mitigation measures to reduce the likelihood of further spread.	Effectiveness	Medium
<input type="checkbox"/>	Precision	The confidence interval of a numerical estimate. A precise estimate has a narrow confidence interval. Precision is influenced by prevalence, sample size and surveillance approach used.	Effectiveness	Low

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Risksur, version 1.0.11, 2015, Powered by **tracetracker**

## Select evaluation attributes

Show 10 entries		Search: <input type="text"/>		
	Attribute Name	Attribute Description	Attribute Type	Relevance
<input type="checkbox"/>	Negative predictive value (NPV)	Negative predictive value refers to the proportion of epidemiological units (e.g. animal, holding, herd) classified as free from disease or infection by the surveillance system which are actually free from disease or infection. It depends partly on the sensitivity and specificity of the surveillance system, but is also influenced by the disease prevalence in the target population	Effectiveness	High
<input checked="" type="checkbox"/>	Sensitivity (detection fraction or probability)	Sensitivity of a surveillance system can be considered on three levels. • Surveillance sensitivity (relevant for case detection and prevalence estimation) refers to the proportion of individual animals or herds in the target population of interest that have the health-related condition of interest that the surveillance system is able to detect. This is determined by the sensitivity of the testing protocol used and the coverage of the population and has also been referred to as detection fraction or detection probability. • Surveillance sensitivity (for outbreak detection) refers to the probability that the surveillance system will detect a significant increase (outbreak) of disease. This may be an increase in the level of a disease that is currently present in the population at a low level or the occurrence of any cases of a disease that is not currently present. • Surveillance sensitivity (for demonstrating freedom and early detection) refers to the probability that at least one case will be detected if disease is present at a certain level (prevalence) in the population. more information: <a href="http://surveillance-evaluation.wikispaces.com/Evaluation+attributes">surveillance-evaluation.wikispaces.com/Evaluation+attributes</a>	Effectiveness	High
<input type="checkbox"/>	Bias	The extent to which a prevalence estimate produced by the surveillance system deviates from the true prevalence value. Bias is reduced as representativeness is increased.	Effectiveness	High
<input checked="" type="checkbox"/>	Cost	The concept of economic cost includes 1) the losses due to disease (e.g. reduced milk yield, mortality), and 2) the resources required to react to disease in a system (e.g. time, services, consumables for surveillance). In economic evaluation, the resources used to manage disease are compared with the disease losses with the aim to identify an optimal balance where a higher economic efficiency is achieved. Estimation of the total economic cost stemming from losses and expenditures is called a disease impact assessment. Estimation of the resource expenditures only is called a cost analysis.	Value	High
		The extent to which the features of the population of interest are		

# Select evaluation attributes



Current surveillance system: CSF wild boar  
 Current evaluation context: CSF-Wild boar\_2

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Evaluation attributes saved successfully

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## Evaluation summary

Show 50 entries	
Evaluation name	CSF-Wild boar_2
Surveillance system name	CSF wild boar
Surveillance components to evaluate	
Surveillance objective	Freedom from disease
Select components	Assess the costs and effectiveness of surveillance components (out of two or more) to determine which achieves a defined effectiveness target at least cost, the effectiveness needs to be determined
Select attributes	Effectiveness, Cost
Select attribute assessment methods	Least cost assessment
Select economic analysis technique	
Strengths and weaknesses of current approach	good Se, too expensive
Stakeholder concerns about current approach	Costs
Alternative strategies to consider?	Yes, risk-based looking at age of the hunted pigs and hunting season
Do you want to evaluate or change the system or some components in the system?	Component
Are you considering risk-based options?	Yes
Will you consider the costs of surveillance in your evaluation	Yes
Do you know the current cost of your system and/or components?	Yes





# Select attribute assessment method



Current surveillance system: CSF wild boar  
Current evaluation context: CSF-Wild boar\_2

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- Introduction to Evaluation of Surveillance >
- Describe Evaluation Context
- Select Evaluation Question >
- Select Evaluation Methods >
- Summary of the evaluation protocol
- Perform the evaluation
- How to report on the evaluation results

On this page you can select the assessment methods that you would like to use for each of the attributes that you would like to include in your evaluation. Select an attribute from the drop down list below in order to be provided with a list of assessment methods from which you may select the one you would like to use by checking the box in the column at the left end of the table, you can also indicate whether the required data is available in the fourth column. If you would prefer to use an alternative assessment method you can enter this in the free text box below the table or if you decide not to include this attribute you can indicate that you do not want to include this attribute in your evaluation

**Edit**

<http://surveillance-evaluation.wikispaces.com/Eval...>

Evaluation Attribute

Show 10 entries	Search: <input type="text"/>		
Method Name	Description, data and expertise required	Data available	References
No data available in table			

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# Select attribute assessment method



Current surveillance system: CSF wild boar  
Current evaluation context: CSF-Wild boar\_2

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Edit

<http://surveillance-evaluation.wikispaces.com/Eval...>

## Evaluation Attribute

Select attribute

Search:

Description, data and expertise required	◇ Data available	◇ References
No data available in table		

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# Select attribute assessment method



Current surveillance system: CSF wild boar

Current evaluation context: CSF-Wild boar\_2

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Edit

**Evaluation Attribute**

Sensitivity (detection fraction or pr... ▾)

Show 10 entries		Search: <input type="text"/>		
	Method Name	Description, data and expertise	Data available	References
	⚡	⚡ required		
<input type="checkbox"/>	Unilist CR	<p><b>Description:</b> Model the frequency of the successive detections of the epidemiological units presenting the characteristic of interest (e.g. disease) using zero-truncated or zero-inflated count model.</p> <p><b>Data required:</b> Number of times each epidemiological unit of the population has been identified as presenting the characteristic of interest.</p> <p><b>Expertise required:</b> Count data regressions (Poisson, negative binomial models)</p>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Data collection needed	Hook EB. 1995; Del Rio Vilas VJ, Pfeiffer DU. 2010; Vergne T. 2015
<input type="checkbox"/>	Bayesian Network Model	<p><b>Description:</b> Use of Bayesian networks in probabilistic evaluation of detection methods to answer the question of which algorithmic setting is more likely to result in a desirable overall performance</p> <p><b>Data required:</b> Surveillance data and algorithm used for syndromic surveillance</p> <p><b>Expertise required:</b> Bayesian networks (using softwares, ex: Netica TM software)</p>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Data collection needed	Izadi M, et al. 2009

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**Custom Assessment Method**

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# Select attribute assessment method



Current surveillance system: CSF wild boar

Current evaluation context: CSF-Wild boar\_2

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# Select attribute assessment method



Current surveillance system: CSF wild boar

Current evaluation context: CSF-Wild boar\_2

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# Select attribute assessment method



Current surveillance system: CSF wild boar

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# Select attribute assessment method



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Current evaluation context: CSF-Wild boar\_2

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**Edit**

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# Select economic analysis technique



Current surveillance system: CSF wild boar  
 Current evaluation context: CSF-Wild boar\_2

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## Evaluation summary

Show 50 entries

Evaluation name	CSF-Wild boar_2
Surveillance system name	CSF wild boar
Surveillance components to evaluate	
Surveillance objective	Freedom from disease
Evaluation question	Assess the costs and effectiveness of surveillance components (out of two or more) to determine which achieves a defined effectiveness target at least cost, the effectiveness needs to be determined
Evaluation criteria	Effectiveness, Cost
Evaluation method	Least cost assessment
Strengths and weaknesses of current approach	good Se, too expensive
Stakeholder concerns about current approach	Costs
Alternative strategies to consider?	Yes, risk-based looking at age of the hunted pigs and hunting season
Do you want to evaluate or change the system or some components in the system?	Component
Are you considering risk-based options?	Yes
Will you consider the costs of surveillance in your evaluation	Yes
Do you know the current cost of your system and/or components?	Yes
Do you have a budget constraint?	No

[More information in the EVA wiki](#)

Edit

Show 10 entries Search:

	Economic Method	Economic analysis technique	Description	References
<input type="checkbox"/>	Cost analysis	Excel spreadsheet	From the excel spreadsheet you can identify and select the cost to assess <a href="#">surveillance-evaluation.wikispaces.com/Cost+analysis</a>	Haesler et al., 2015
<input type="checkbox"/>	Least-cost assessment	Cost ranking	Select the components which meet the effectiveness target and rank them according to their cost	Haesler et al., 2015

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# Select economic analysis technique



Current surveillance system: CSF wild boar  
 Current evaluation context: CSF-Wild boar\_2

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Edit

Show 10 entries		Search:		
<input type="checkbox"/>	Economic Method	Economic analysis technique	Description	References
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LinkTADs work  
13th and 14th Jul



# Select economic analysis technique



Current surveillance system: CSF wild boar  
 Current evaluation context: CSF-Wild boar\_2

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Edit

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# Summary of the evaluation protocol



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## Evaluation summary

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Evaluation name	CSF-Wild boar_2
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# Summary of the evaluation protocol

## Evaluation Attributes

Show 10 entries Search:  Print Save

Attribute Type	Attribute Name	Description
Effectiveness	Sensitivity (detection fraction or probability)	<p>Sensitivity of a surveillance system can be considered on three levels. • Surveillance sensitivity (relevant for case detection and prevalence estimation) refers to the proportion of individual animals or herds in the target population of interest that have the health-related condition of interest that the surveillance system is able to detect. This is determined by the sensitivity of the testing protocol used and the coverage of the population and has also been referred to as detection fraction or detection probability. • Surveillance sensitivity (for outbreak detection) refers to the probability that the surveillance system will detect a significant increase (outbreak) of disease. This may be an increase in the level of a disease that is currently present in the population at a low level or the occurrence of any cases of a disease that is not currently present. • Surveillance sensitivity (for demonstrating freedom and early detection) refers to the probability that at least one case will be detected if disease is present at a certain level (prevalence) in the population. more information: <a href="http://surveillance-evaluation.wikispaces.com/Evaluation+attributes">surveillance-evaluation.wikispaces.com/Evaluation+attributes</a></p>
Value	Cost	<p>The concept of economic cost includes 1) the losses due to disease (e.g. reduced milk yield, mortality), and 2) the resources required to react to disease in a system (e.g. time, services, consumables for surveillance). In economic evaluation, the resources used to manage disease are compared with the disease losses with the aim to identify an optimal balance where a higher economic efficiency is achieved. Estimation of the total economic cost stemming from losses and expenditures is called a disease impact assessment. Estimation of the resource expenditures only is called a cost</p>

# Summary of the evaluation protocol

## Evaluation Assessment Methods

Show 10 entries Search: <input type="text"/>		
Attribute Name	Assessment Method	Data collection needed
Sensitivity (detection fraction or probability)	<p><b>Description:</b> Model the frequency of the successive detections of the epidemiological units presenting the characteristic of interest (e.g. disease) using zero-truncated or zero-inflated count model. <a href="http://google.com">google.com</a></p> <p><b>Data required:</b> Number of times each epidemiological unit of the population has been identified as presenting the characteristic of interest.</p> <p><b>Expertise required:</b> Count data regressions (Poisson, negative binomial models)</p>	Yes
Sensitivity (detection fraction or probability)	<p><b>Description:</b> Model the frequency of the successive detections of the epidemiological units presenting the characteristic of interest (e.g. disease) using zero-truncated or zero-inflated count model. <a href="http://google.com">google.com</a></p> <p><b>Data required:</b> Number of times each epidemiological unit of the population has been identified as presenting the characteristic of interest.</p> <p><b>Expertise required:</b> Count data regressions (Poisson, negative binomial models)</p>	No

## Evaluation Economic Analysis Techniques

Show 10 entries Search: <input type="text"/>			
Economic method	Economic analysis technique	Description	Reference
Cost analysis	Excel spreadsheet	From the excel spreadsheet you can identify and select the cost to assess <a href="http://surveillance-evaluation.wikispaces.com/Cost+analysis">surveillance-evaluation.wikispaces.com/Cost+analysis</a>	Haesler et al., 2015
Least-cost assessment	Cost ranking	Select the components which meet the effectiveness target and rank them according to their cost	Haesler et al., 2015

Showing 1 to 2 of 2 entries

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## Perform the evaluation



Current surveillance system: chicken Surveilla...  
Selected evaluation context: Webinar Test

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- How to report on the evaluation results

### ADDITIONAL GUIDANCE ON HOW TO PERFORM THE EVALUATION

Edit

In this section:

- Levels of evaluation: selective or comprehensive evaluation
- Limits of evaluation
- Data collection (if required)
- Evaluation workplan
- Evaluator Best practices

#### Levels of evaluation: selective or comprehensive evaluation

The scale of evaluation relates to whether the evaluation is directed to a single (or few) of its components, or to the entire system . The degree of complexity relates to whether a selection or all elements are under evaluation . Evaluation elements can be: Process, effectiveness, optimisation, and/or cost-benefit evaluation. The combination of its scale and the degree of complexity determine the level of the evaluation, ranging from selective (evaluation of selected elements) to comprehensive (evaluation of all elements). Selective evaluation will consider the assessment of only one element of the evaluation process, for instance effectiveness, process/functional, economic, and if performed at the component level this would be a simpler evaluation approach (Figure 11). This approach will be sufficient to inform the design or re-design process on the effectiveness of e.g. selection from two or more alternative surveillance designs. In such case, the evaluation could be reduced to the assessment of a single selected effectiveness attribute, e.g. detection probability, to inform if a newly designed surveillance component, e.g. active surveillance in wildlife, is able to meet a target effectiveness and therewith to conclude on its relevance. Comprehensive evaluation , on the other hand would imply the assessment of all elements of the evaluation process. Comprehensive evaluation performed at the system level would represent the most complex evaluation approach. Comprehensive evaluation could be performed at the system level to assess the effectiveness of the system to generate its outputs (effectiveness attributes, e.g. sensitivity or timeliness) and the performance of the system process (functional attributes, e.g. acceptability and engagement) and provide recommendations about how to improve the effectiveness and even efficiency of the system if economics is considered. Evaluation of surveillance system (components) will provide guarantees to decision makers (internal or external) on the quality of the information generated by it and on the disease situation in the area under surveillance. These guarantees are critical elements for instance for trade regulations and access to international trading market .



LinkTADs workshop – Design and evaluation of animal health surveillance systems  
13th and 14th July 2015, Qingdao, China



## Perform the evaluation: Workplan

EVA step	Description	Responsible	Deadline	Status
<b>1. Review of the evaluation protocol produced by the EVA tool (EVA report)</b>				
1.1	Identify if one or more effectiveness evaluation attributes should be assessed from the list of primary attributes provided by the EVA report.			
<b>2. Descriptive analysis (qualitative assessment)</b>				
2.1	To collect descriptive data on the surveillance system			
2.2	Assess the surveillance system process (strengths and weaknesses)			
2.3	To draw a flowchart of the system process Review the flowchart			
<b>Descriptive analysis of the novel design</b>				
2.4	identify all the aspects of the system process influenced by the novel design			
2.5	Assess the relevance/validity of the risk criteria selected			
2.6	assess the validity of the simulation model used (if any)			
<b>3. COST analysis</b>				
3.1	identify specific actions involved for each component considered based on the surveillance flowcharts			
3.2	identify the cost involved from the costing table & data available to cost each action			
<b>4. EFFECTIVENESS assessment</b>				
4.1	Assess the effectiveness attributes selected for all the components considered (collect data and perform calculation)			
<b>5. Assessment of functional attributes</b>				
5.1	Implement data collection for acceptability assessment			
5.2	Analyze data and provide outputs on acceptability attribute			
5.3	Review data outputs			
<b>6. Address the evaluation question(s)</b>				
5.1	Address the evaluation question, using the methods presented in D5.18			
5.2	Report on the meaning of the assessment outputs provide recommendations based on these outputs and the descriptive analysis of the system using guidance presented in D5.18			

# How to report on the evaluation results



Current surveillance system: chicken Surveilla...  
Selected evaluation context: Webinar Test

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## HOW TO REPORT ON THE EVALUATION RESULTS

Edit

In this section

- how to translate evaluation outputs into recommendations or guidance for recommendations
- communication means with decision makers
- examples of evaluation reports

Evaluation itself is a tool help see what is happening so to improve effectiveness and efficiency of the surveillance systems. The evaluation exercise is completed by a deep analysis of the results that would potentially lead to the identification of improvement measures.

The team needs to examine how the results of the evaluation can be used. Internal meetings with other members of the evaluation and surveillance groups are required to review the data, identify key areas for improvement, and brainstorm and come to consensus on how to address issues that have been raised. Careful attention to your evaluation results can help inform which courses of action you should take to improve your efforts. These results should allow the evaluation team members and other members (e.g. decision makers, policy officers, risk assessment bodies, etc...) to critically reflect on the completed work and look for opportunities to improve. Some key reflection questions that might be considered:

**What are we seeing?** (e.g., amount and kind of activities implemented; results shown – efficiency, efficacy of the systems, trends);

**What does it mean?** (e.g., how to interpret the results and translate them in concrete research and/or policy actions);

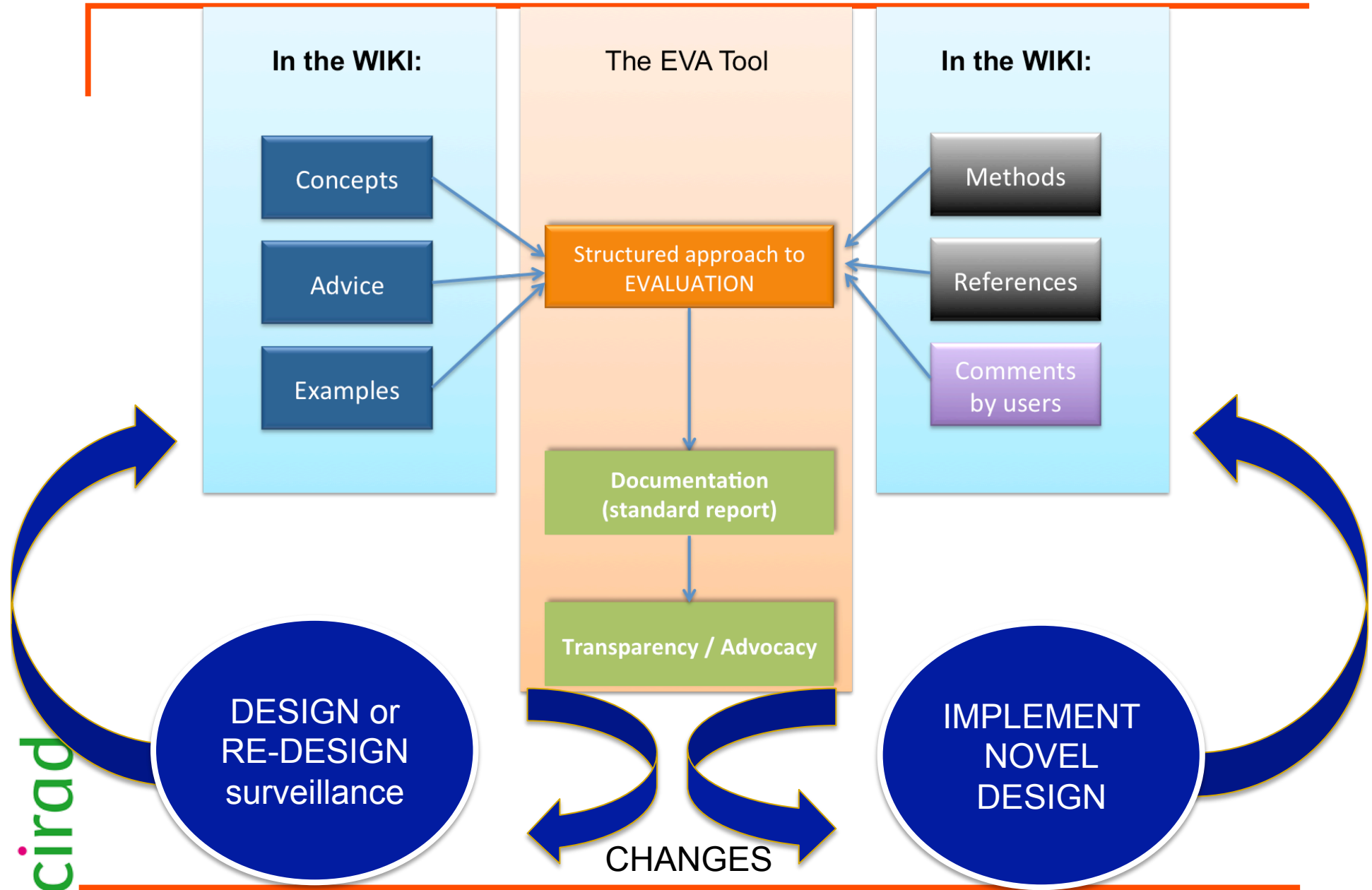
**What are the implications for improvement?** (e.g., do the results suggest that the intervention should be sustained, altered, discontinued; what changes are suggested).

The reflection questions depend on the nature of your intervention and the reasons why the evaluation has been conducted. The above set of questions is a correct starting point as long as additional targeted questions are added to this initial list.

Consider holding a meeting or brief retreat where the evaluation results can be presented through graphs and charts, and key questions can be discussed. Participants to this meeting should include the evaluators and the responsible bodies of the surveillance programme(s) under scrutiny but not only. The meeting shall also include external experts and policy officers that could bring an external view of the results of the evaluation. The best plan here is to involve a number of stakeholders, depending to some extent on who has been involved in the planning and evaluation of the effort. Such a meeting might benefit from an experienced facilitator to keep the process moving toward consensus for specific recommendations on how to improve.







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**Thanks for your attention!**

**EVA Tool link: <http://webtools.fp7-risksur.eu/>**

**EVA wiki link: <http://surveillance-evaluation.wikispaces.com>**

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