Guide to answer the Surveillance Systems Table

General comments

The 'Surveillance Systems' - Table is designed to get an overview on surveillance systems for **zoonotic** and foodborne diseases in different sectors (Public health, Animal health, Feed & Food). Hence, some columns and some drop-down options are not relevant to other sectors.

The idea is to describe these systems as detailed as possible. For that reason, there is also the option to describe each surveillance system component, when a surveillance system contains more than one component.

If a surveillance component cannot be completed within a single row of information, a new row should be created and completed accordingly.

For example, if a surveillance system includes an active system (meaning that the component is planned and individuals are randomly sampled) and a passive system (e.g. testing diseased individuals), you should fill in two rows.

If a system covers different target groups, e.g. different species or different groups of animals, you should add a row for each single target species or group. In detail, for *Salmonella* in animals there are different components covering laying hens, cattle and pigs. Then you will need a row for each target group (three in this case). If broilers are covered as well, you will need to add a fourth row.

Most terms that are used in this table are described in the EJP Orion glossary (https://docs.google.com/spreadsheets/d/10nT-gjqTg4rSlcM9WUgHzkHIEu_L6tKWmmEfUKiSrE0/edit#gid=337722280).

For animal health there is an existing framework that offers a description of surveillance systems and surveillance components in detail: https://survtools.org/wiki/surveillance-design-framework/doku.php?id=4-disease-suspicion)

The dropdown list options have been developed to align with the EFSA regulations, but may include additional options.

I Animal Health

1 Health targets

1.1 Hazard

1.1.1 Description

To keep the questionnaire open, we used the term hazard to ask for a biological, chemical or physical agent in, or a condition of an animal or animal product, with the potential to cause an adverse health effect. In this questionnaire, it is synonymous with "infectious agent". In EFSA there are several catalogues with lists of infectious agents, we used the following list: ZOO_FACT_PREVALENCE_MAN | CAT_Param_microParam.

1.1.2 Data type

Open drop down list: Please pick one from the given list! If the hazard you would like to enter is not in the given list, please enter it as free text.

1.1.3 *Comments*

Please do not enter a subtype here!

It is mandatory to fill in either "Hazard" or "Disease or Syndrome".

If you fill in only "Disease or Syndrome", please leave this field empty and enter the disease or syndrome in the respective column.

If you want to show all infectious agents that are covered within a disease or syndrome, please add multiple rows.

1.2 Subtype

1.2.1 Description

While '1.1 Hazard' refers to the causative agent, in '1.2 Subtype' the causative agent can be defined in more detail. If the surveillance system component is for a subtype of an infectious agent, please fill it in here (e.g. Hazard: Avian Influenza -> Subtype: H5N7, Hazard: E.coli -> Subtype: EHEC).

In EFSA there are several catalogues with lists of infectious agents, we used the following list: ZOO_FACT_PREVALENCE_MAN| CAT_Param_microParam.

1.2.2 Data type

Open drop-down list: Please pick one from the given list! If the subtype you would like to enter is not in the given list, please enter it as free text.

1.2.3 *Comments*

This field is **optional**. Only fill it in if the hazard you entered needs further definition

1.3 Disease or Syndrome

1.3.1 *Description*

The column "Disease or syndrome" refers to the adverse health effect caused by the zoonotic or foodborne infectious agent.

1.3.2 Data type

Open drop down list: Please pick one from the given list! If the disease or syndrome you would like to enter is not in the given list, please enter it as free text.

1.3.3 *Comments*

It is mandatory to fill in either "Hazard" or "Disease or Syndrome"

If you fill in only the hazard, please leave this field empty and enter the hazard in the respective column.

If you want to show all infectious agents that are covered within a disease or syndrome please add multiple entries in the column "Hazard".

2 Time Frame

2.1 Start date

2.1.1 Description

Please state the starting date for data collection in the surveillance system. This information is necessary to inform us when the program started, and how many data points should be available.

2.1.2 Data type

Date (day/month/Year), if only year is available please enter 01/01/xxxx

2.1.3 *Comments*

This field is mandatory.

2.2 End date

2.2.1 <u>Description</u>

Please state when the program ended. If it is a continuous program enter 01/01/2022

2.2.2 Data type

Date (day/month/Year), if only year is available please enter 01/01/xxxx

2.2.3 *Comments*

Although this field is **optional, it is highly recommended to fill in an end-date when it exists!**

3 Geographical Information

3.1 **Country**

3.1.1 Description

Please indicate the country for which this surveillance system (component) is in place. Please pick from the list! We use the "Nomenclature of territorial units for statistics (NUTS)" ¹ to be comparable to other databases.

It is similar to EFSA catalogue ZOO_FACT_PREVALENCE_MAN | CAT_COUNTRY but limited to Europe

¹ https://ec.europa.eu/eurostat/statisticsexplained/index.php/Glossary:Nomenclature of territorial units for statistics %28NUTS%29

3.1.2 Data type

Drop down list: Please pick one from the given list!

3.1.3 *Comments*

This field is mandatory.

3.2 Region

3.2.1 Description

Please indicate the region(s) for which this surveillance system (component) is in place. Please pick from the list! We use the "Nomenclature of territorial units for statistics (NUTS)" to be comparable to other databases

Only choose individual regions if the surveillance system (component) you enter is active only in a specific region(s) of the given country, otherwise, choose 'All regions' It is similar to EFSA catalogue ZOO_FACT_PREVALENCE_MAN | CAT_NUTS_nuts2013 but limited to Europe

3.2.2 Data type

Open drop down list: Please pick one from the given list! If the region(s) you would like to enter is not in the list, please enter it as free text.

3.2.3 *Comments*

This field is optional.

4 Disease Status

4.1 Description

This field asks for the current status of the disease in the geographical area covered (e.g. historically absent, absent (eradicated), endemic etc.). For your convenience, definitions for drop-down options are provided in sheet '4. Disease Status Definitions'.

4.2 Data type

Open drop down list: Please pick one from the given list!

If the disease status you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please first consult the ORION Glossary to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

4.3 <u>Comments</u>

This field is optional.

5 Surveillance Objective

5.1 Description

In this field, please state those goal(s) that when met will result in the collection and analysis of data in order to achieve the purpose of the system.

5.2 Data type

Open drop down list: Please pick one from the given list!

If the surveillance objective you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please first consult the ORION Glossary to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

5.3 *Comments*

This field is mandatory.

6 Legal Basis

6.1 EU legal disease classification

6.1.1 *Description*

Please state if the disease is notifiable, reportable or none!

6.1.2 Data type

Dropdown list

6.1.3 *Comments*

This field is mandatory

6.2 National legal disease classification

6.2.1 Description

Please state the legal status of the disease/hazard in your country. This might differ from the EU classification. If you cannot translate it into English, please use the national language and send us an explanation.

6.2.2 Data type

Open drop down list. Please define the status, when entering a new term.

6.2.3 Comments

This field is mandatory

7 Sampling Context

7.1 Description

Please indicate in which context sampling is carried out.

For example, 'Active' means that there is an active search for cases. Surveillance based on reporting of cases as they occur is considered as passive (meaning that there was no a priori decision or protocol on which units to sample). If you have questions regarding any of the options you can also consult the ORION glossary!

7.2 Data type

Drop-down list: please pick one!

7.3 Comments

This field is mandatory

8 Case definition

8.1 Description

Please provide the definition used to determine when a sample is considered to be positive for the hazard, disease or syndrome, or when the person, animal, herd or flock is considered to be positive for the hazard, disease or syndrome.

8.2 <u>Data type</u>

Open text

8.3 *Comments*

This field is optional

9 Sampling strategy

9.1 Description

Please describe the sampling strategy in place for this particular surveillance system. The sampling strategy describes how the sample was selected from the population being monitored or surveyed (e.g. selective sampling, census, convenient sampling etc). For clarification, sheet '9.Sampling Strategy definitions' includes definitions for the drop-down options.

9.2 <u>Data type</u>

Open drop down list: Please pick one from the given list!

If the sampling strategy you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

9.3 *Comments*

This field is optional

10 Target

10.1 Target species

10.1.1 <u>Description</u>

Each surveillance component targets a susceptible population about which conclusions are drawn. Please define this population!

10.1.2 Data type

Open drop down list: Please pick one from the given list! If the species is not in the list.

If the target species you would like to enter is not in the given list, please enter the new species as free text.

10.1.3 *Comments*

This field is mandatory

10.2 Target unit

10.2.1 Description

Please define the unit that is targeted in the surveillance system component. For example, it could be an animal, a batch or a herd.

10.2.2 Data type

Drop-down list.

10.2.3 Comments

This field is mandatory

11 Sampling stage

11.1 Description

Please indicate the point where the samples are collected. For animals this can be the farm, the slaughterhouse, etc.

It refers to where your units can be reached, and therefore where samples will be collected.

11.2 Data type

Open drop down list: Please pick one from the given list!

If the sampling stage you would like to enter is not in the given list, please enter the new term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

11.3 *Comments*

This field is optional

12 Sampling Unit

12.1 <u>Description</u>

Please specify if individuals, groups or multiple groups are sampled.

- a) INDIVIDUALS: Individual animal samples
- b) MULTIPLE GROUP SAMPLE: Collective/pooled samples which represent multiple animals, but not the entire target unit referred to above (for instance you will take one sample per pen, but target units are expected to be composed of multiple pens; bulk milk samples for more than one group of cows per herd, etc.)
- c) 1 SAMPLE PER GROUP: Collective/pooled samples which represent the entire group referred to in your target unit (for instance, if your target unit is a pen, and you will take one environmental sample per pen; or one bulk milk sample per herd

12.2 Data type

Open drop down list: Please pick one from the given list! If the sampling unit you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

12.3 <u>Comments</u>

13 Sample Type

13.1 Description

Please name the primary type of sample. The type of sample could be blood, faeces, tissue, etc.

13.2 Data type

Open drop-down list: Please pick one from the given list! If the sample type you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references

13.3 *Comments*

This field is optional

14 Sampler

14.1 <u>Description</u>

Please indicate who takes the sample (veterinarian/doctor, the farmer, etc.)?

14.2 Data type

Open drop down list: Please pick one from the given list.

If the sampler option you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references

14.3 *Comments*

This field is optional

15 Website

15.1 Description

Please indicate where resources related to the surveillance systems can be found.

15.2 *Data type*

Free text

15.3 *Comments*

II Public Health

1 Health targets

1.1 Hazard

1.1.1 Description

To keep the questionnaire open, we used the term hazard to ask for a biological, chemical or physical agent in, or a condition of, an animal or animal product, with the potential to cause an adverse health effect. In this questionnaire, it is synonymous with "infectious agent". In TESSy DataSource [Core Variable] "hazard" is not defined, but there are several references in DECISION No 1082/2013/EU. It can be compared to a subset of TESSy "Subjects" (only Zoonoses), but in contrast to TESSy "Subjects" we are asking for the causative agent of a disease (e.g. Campylobacter, Salmonella). If you want to refer to TESSy "Subjects", please use 1.3 "Disease or Syndrome" instead.

1.1.2 Data type

Open drop down list: Please pick one from the given list! If the hazard you would like to enter is not in the given list, please enter it as free text.

1.1.3 *Comments*

Please do not enter a subtype here!

It is mandatory to fill in either "Hazard" or "Disease or Syndrome".

If you fill in only "Disease or Syndrome", please leave this field empty and enter the disease or syndrome in the respective column.

If you want to show all infectious agents that are covered within a disease or syndrome, please add multiple entries.

1.2 Subtype

1.2.1 <u>Description</u>

While '1.1 Hazard' refers to the causative agent, in '1.2 Subtype' the causative agent can be defined in more detail. If the surveillance system component is for a subtype of an infectious agent only, please fill it in here (e.g. Hazard: E.coli -> Subtype: EHEC).

1.2.2 Data type

Open drop-down list: Please pick one from the given list! If the subtype you would like to enter is not in the given list, please enter it as free text.

1.2.3 *Comments*

This field is **optional**. Only fill it in if the hazard you entered needs further definition.

1.3 Disease or Syndrome

1.3.1 *Description*

The column "Disease or syndrome" refers to the adverse health effect caused by the zoonotic or foodborne infectious agent. In TESSy *DataSource [Core Variable]* this variable can be compared to a subset of TESSy "Subjects" (only zoonoses).

1.3.2 Data type

Open drop down list: Please pick one from the given list! If the disease or syndrome you would like to enter is not in the given list, please enter it as free text.

1.3.3 *Comments*

It is mandatory to fill in either "Hazard" or "Disease or Syndrome"

If you fill in only the hazard, please leave this field empty and enter the hazard in the respective column.

If you want to show all infectious agents that are covered within a disease or syndrome please add multiple entries in the column "Hazard".

2 Time frame

2.1 Start date

2.1.1 Description

Please state the starting date for data collection in the surveillance system.

This information is necessary to inform us when the program started, and how many data points should be available.

2.1.2 Data type

Date (day/month/Year), if only year is available please enter 01/01/xxxx. This is in line with Beauté et al (2020)², Table, "Period of time", "Reporting period".

2.1.3 *Comments*

It is mandatory to fill it in

2.2 End date

2.2.1 Description

Please state when the program ended. If it is a continuous program, insert 01/01/2022.

2.2.2 Data type

Date (day/month/Year), if only year is available please enter 01/01/xxxx.

This is in line with Beauté et al (2020)², Table, "Period of time", "Reporting period".

2.2.3 *Comments*

Although this field is **optional, it is highly recommended to fill in an end-date when it exists!**

² Beauté Julien , Ciancio Bruno Christian , Panagiotopoulos Takis . Infectious disease surveillance system descriptors: proposal for a comprehensive set. Euro Surveill. 2020;25(27):pii=1900708. https://doi.org/10.2807/1560-7917.ES.2020.25.27.1900708

3 Geographical Information

3.1 **Country**

3.1.1 <u>Description</u>

Please indicate the country for which this surveillance system (component) is in place. Please pick from the list! We use the "Nomenclature of territorial units for statistics (NUTS)" ³ to be comparable to other databases.

3.1.2 Data type

Drop down list: Please pick one from the given list!

3.1.3 *Comments*

This field is mandatory.

3.2 Region

3.2.1 <u>Description</u>

Please indicate the region(s) for which this surveillance system (component) is in place. Please pick from the list! We use the "Nomenclature of territorial units for statistics (NUTS)" to be comparable to other databases.

Only choose individual regions, if the surveillance system (component) you enter is in place only in a specific region(s) of the given country, otherwise select 'All Regions'. Please compare to TESSy "NationalCov" (choose individual regions only when TESSy "NationalCov" = No)

3.2.2 Data type

Open drop down list: Please pick one from the given list! If the region(s), you would like to enter is not in the given list, please enter it as free text.

3.2.3 *Comments*

This field is optional.

4 Disease Status

4.1 *Description*

This field asks for the current state of the disease in the geographical area covered (e.g. historically absent, absent (eradicated), endemic, etc.).

For your convenience, definitions for drop-down options are provided in sheet '4. Disease Status Definitions'.

4.2 Data type

Open drop down list: Please pick one from the given list!

If the disease status you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION

Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

³ https://ec.europa.eu/eurostat/statisticsexplained/index.php/Glossary:Nomenclature of territorial units for statistics %28NUTS%29

4.3 *Comments*

The field is optional.

5 Surveillance Objective

5.1 Description

In this field, please state those goal(s), that when met, will result in the collection and analysis of data in order to achieve the purpose of the system.

5.2 Data type

Open drop down list: Please pick one from the given list!

If the surveillance objective you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

5.3 <u>Comments</u>

This field is mandatory.

6 Legal Basis

6.1 EU legal disease classification

6.1.1 Description

Please indicate (by selecting 'communicable') if the disease is on the list of communicable diseases described in the COMMISSION IMPLEMENTING DECISION (EU) 2018/945⁴, or if it is reportable, notifiable or none. At an EU level, reportable and notifiable are more likely associated with animal and food safety surveillance; however, to keep the questionnaire open we have maintained these options in the drop-down menu. Definitions are provided in sheet '6.1 & 6.2 Legal Class. Defs', and can also be found in the Orion glossary.

6.1.2 Data type

Dropdown list

6.1.3 *Comments*

This field is mandatory

6.2 National legal disease classification

6.2.1 Description

Please state the legal status of the disease/hazard in your country. This might differ from the EU classification. If you cannot translate it into English, please use the national language and send us an explanation.

6.2.2 Data type

Open dropdown list or free text. Please define the status, when entering a term.

⁴ https://www.ecdc.europa.eu/en/surveillance-and-disease-data/eu-case-definitions

6.2.3 *Comments*

This field is mandatory

7 Sampling Context

7.1 Description

Please indicate in which context the sampling is carried out.

This variable is comparable to the TESSy [Core data set] variable 'Active'. We note that some definitions differ in the Animal Health and Public Health sectors (specifically for 'active' and 'passive'). Therefore, please use the definition in common use in your sector. If you have questions regarding any of the options you can also consult the ORION glossary.

7.2 Data type

Drop-down list: please pick one!

7.3 *Comments*

This field is mandatory

8 Case definition

8.1 Description

Please give the definition used to determine when a sample is considered to be positive for the hazard, disease or syndrome or when the person, animal, herd or flock is considered to be positive for the hazard, disease or syndrome.

This will most likely be a set of commonly agreed diagnostic criteria that have to be fulfilled in order to accurately identify cases of the hazard/disease or syndrome, while excluding the detection of unrelated hazards/diseases or syndromes'

If the case definition in use is from EU decisions (EU)2018/945, 2012/506/EU, 28/IV/2008 or 2002/253/EC, you can simply select the appropriate option from the drop-down menu (as is done in TESSy). Sheet '8. Case Defs in EU decisions' lists all the diseases for which there is a case definition in each of the EU decisions. If the case definition is different, please enter it in as free text.

8.2 Data type

Open drop-down list and free text.

Please type in the case definition as free text, if the one in use is not described in an EU decision.

8.3 <u>Comments</u>

9 Sampling strategy

9.1 Description

Please describe the sampling strategy in place for this particular surveillance system. The sampling strategy describes how the sample was selected from the population being monitored or surveyed (e.g. selective sampling, census, convenient sampling etc). For clarification, sheet '9.Sampling Strategy definitions' includes definitions for each of the drop-down options.

9.2 Data type

Open drop down list: Please pick one from the given list!

If the sampling strategy you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

9.3 *Comments*

This field is optional

10 Target

10.1 Target species

10.1.1 Description

Each surveillance component targets a susceptible population about which conclusions are drawn. Please define this population! For Public Health, the target species will most likely be 'Human'; however, to keep the survey open we have also included non-human species.

10.1.2 *Data type*

Open drop down list: Please pick one from the given list! If the target species you would like to enter is not in the given list, please enter the new species as free text.

10.1.3 *Comments*

This field is mandatory

10.2 Target unit

10.2.1 <u>Description</u>

Please define the unit that is targeted in the surveillance system component. For example, it could be an individual, an age group, or an occupational group etc. Some drop-down options are related to animals and may not be relevant to Public health.

10.2.2 <u>Data type</u>

Drop-down list.

If the target unit you would like to enter is not in the given list, please enter your chosen term as free text, and send us a definition if the term is possibly not familiar to us.

10.2.3 Comments

This field is mandatory

11 Sampling stage

11.1 Description

Please indicate the point where the samples are collected. For instance, this could be the primary care sector or the hospital sector.

11.2 Data type

Open drop down list: Please pick one from the given list!

If the sampling stage you would like to enter is not in the given list, please enter the new term as free text. When entering a new term, please consult the ORION

Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

11.3 *Comments*

This field is optional

12 Sampling Unit

12.1 Description

Please specify whether individuals, groups or multiple groups are sampled.

- a) INDIVIDUALS: Individuals sampled
- b) MULTIPLE GROUP SAMPLE: Collective/pooled samples which represent multiple individuals, but not the entire target unit referred to above (for instance you will take one sample per ward, but target units are expected to be composed of multiple wards)
- c) 1 SAMPLE PER GROUP: Collective/pooled samples which represent the entire group referred to in your target unit (for instance, if your target unit is a ward, you will take one environmental sample per ward)

12.2 Data type

Open drop down list: Please pick one from the given list! If the sampling unit you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

12.3 *Comments*

This field is optional

13 Sample Type

13.1 Description

Please name the primary type of sample. The type of sample could be blood, faeces, tissue, etc. 'Sample type' is equivalent to the 'Specimen' variable available for some zoonoses in TESSy.

13.2 *Data type*

Open drop-down list: Please pick one from the given list!

If the sampler type you would like to enter is not in the given list, please enter your chosen term as free text, and send us a definition if the term is possibly not familiar to us.

13.3 *Comments*

This field is optional

14 Sampler

14.1 <u>Description</u>

Please indicate who takes the sample (a primary care physician, nurse, nurse or technician at the request of a primary care physician, the patient etc.)

14.2 <u>Data type</u>

Open drop down list: Please pick one from the given list.

If the sampler option you would like to enter is not in the given list, please enter your chosen term as free text, and send us a definition if the term is possibly not familiar to us.

14.3 *Comments*

This field is optional

15 Website

15.1 Description

Please indicate where resources related to the surveillance systems can be found?

15.2 *Data type*

Free text

15.3 *Comments*

III Feed & Food

1 Health targets

1.1 Hazard

1.1.1 Description

To keep the questionnaire open, we used the term hazard to ask for a biological, chemical or physical agent in, or a condition of, an animal or animal product, with the potential to cause an adverse health effect. In this questionnaire, it is synonymous with "infectious agent". In EFSA there are several catalogues with lists of infectious agents, we used the following list: ZOO_FACT_PREVALENCE_MAN | CAT_Param_microParam.

1.1.2 Data type

Open drop down list: Please pick one from the given list! If the hazard you would like to enter is not in the given list, please enter it as free text.

1.1.3 *Comments*

Please do not enter a subtype here!

It is mandatory to fill in either "Hazard" or "Disease or Syndrome".

If you fill in only "Disease or Syndrome", please leave this field empty and enter the disease or syndrome in the respective column.

If you want to show all infectious agents that are covered within a disease or syndrome, please add multiple entries.

1.2 Subtype

1.2.1 Description

While '1.1 Hazard' refers to the causative agent, in '1.2 Subtype' the causative agent can be defined in more detail. If the surveillance system component is for a subtype of an infectious agent, please fill it in here (e.g. Hazard: Avian Influenza -> Subtype: H5N7, Hazard: E.coli -> Subtype: EHEC).

In EFSA there are several catalogues with lists of infectious agents, we used the following list: ZOO_FACT_PREVALENCE_MAN| CAT_Param_microParam.

1.2.2 Data type

Open drop-down list: Please pick one from the given list! If the subtype you would like to enter is not in the given list, please enter it as free text.

1.2.3 *Comments*

This field is **optional**. Only fill it in if the hazard you entered needs further definition

1.3 Disease or Syndrome

1.3.1 *Description*

The column "Disease or syndrome" refers to the adverse health effect caused by the zoonotic or foodborne infectious agent.

1.3.2 Data type

Open drop down list: Please pick one from the given list! If the disease or syndrome you would like to enter is not in the given list, please enter it as free text.

1.3.3 *Comments*

It is mandatory to fill in either "Hazard" or "Disease or Syndrome"

If you fill in only the hazard, please leave this field empty and enter the hazard in the respective column.

If you want to show all infectious agents that are covered within a disease or syndrome please add multiple entries in the column "Hazard".

2 Time Frame

2.1 Start date

2.1.1 <u>Description</u>

Please state the starting date for data collection in the surveillance system. This information is necessary to inform us when the program started, and how many data points should be available.

2.1.2 Data type

Date (day/month/Year), if only year is available please enter 01/01/xxxx

2.1.3 *Comments*

This field is mandatory.

2.2 End date

2.2.1 <u>Description</u>

Please state when the program ended. If it is a continuous program type please input 01/01/2022.

2.2.2 Data type

Date (day/month/Year), if only the year is available please enter 01/01/xxxx

2.2.3 Comments

Although this field is **optional**, it is highly recommended to fill in an end-date when it exists!

3 Geographical Information

3.1 **Country**

3.1.1 <u>Description</u>

Please indicate the country for which this surveillance system (component) is in place. Please pick from the list! We use the "Nomenclature of territorial units for statistics (NUTS)" ⁵ to be comparable to other databases.

It is similar to EFSA catalogue ZOO_FACT_PREVALENCE_MAN | CAT_COUNTRY but limited to Europe

3.1.2 Data type

Drop down list: Please pick one from the given list!

3.1.3 *Comments*

This field is mandatory.

3.2 **Region**

3.2.1 Description

Please indicate the region(s) for which this surveillance system (component) is in place. Please pick from the list! We use the "Nomenclature of territorial units for statistics (NUTS)" to be comparable to other databases

Only choose individual regions, if the surveillance system (component) you enter is in place only in specific region(s) of the given country.

It is similar to EFSA catalogue [ZOO_FACT_PREVALENCE_MAN| CAT_NUTS but limited to Europe

3.2.2 Data type

Open drop down list: Please pick one from the given list! If the region(s) you would like to enter is not in the list, please enter it as free text.

3.2.3 *Comments*

This field is optional.

4 Disease Status

4.1 <u>Description</u>

This field asks for the current state of the disease in the geographical area covered (e.g. historically absent, absent (eradicated), endemic etc.).

For your convenience, definitions for drop-down options are provided in sheet '4. Disease Status Definitions'.

4.2 <u>Data type</u>

Open drop down list: Please pick one from the given list!

If the disease status you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION

Glossary first, to check if it is in line with the terminology. If not, or if it is missing,

send us your definition including references!

⁵ https://ec.europa.eu/eurostat/statisticsexplained/index.php/Glossary:Nomenclature of territorial units for statistics %28NUTS%29

4.3 <u>Comments</u>

This field is optional.

5 Surveillance Objective

5.1 Description

In this field, please state those goal(s), that when met, will result in the collection and analysis of data in order to achieve the purpose of the system.

5.2 Data type

Open drop down list: Please pick one from the given list!

If the surveillance objective you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

5.3 *Comments*

This field is mandatory.

6 Legal Basis

6.1 EU legal disease classification

6.1.1 Description

Please state if the disease is notifiable, reportable or none!

6.1.2 Data type

Dropdown list

6.1.3 *Comments*

This field is mandatory

6.2 National legal disease classification

6.2.1 Description

Please state the legal status of the disease/hazard in your country. This might differ from the EU classification. If you cannot translate it into English, please use the national language and send us an explanation.

6.2.2 Data type

Open drop down list. Please define the status, when entering a term.

6.2.3 *Comments*

This field is mandatory

7 Sampling Context

7.1 Description

Please indicate in which context the sampling is carried out.

For example, 'Active' means that there is an active search for cases. Surveillance based on reporting of cases as they occur is considered as passive (meaning that there was no a priori decision or protocol on which units to sample). If you have questions regarding any of the options you can also consult the ORION glossary!

7.2 Data type

Drop-down list: please pick one!

7.3 *Comments*

This field is mandatory

8 Case definition

8.1 <u>D</u>escription

Please give the definition used to determine when a sample is considered to be positive for the hazard, or when a product is considered to be positive for the hazard, disease or syndrome.

8.2 <u>Data type</u>

Free text

8.3 *Comments*

This field is optional

9 Sampling strategy

9.1 Description

Please describe the sampling strategy in place for this particular surveillance system. The sampling strategy describes how the sample was selected from the population or product being monitored or surveyed (e.g. selective sampling, census, convenient sampling etc). For clarification, sheet '9.Sampling Strategy definitions' includes definitions for the drop-down options.

9.2 Data type

Open drop down list: Please pick one from the given list!

If the sampling strategy you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

9.3 *Comments*

10 Target

10.1 Target matrix

10.1.1 Description

Each surveillance component targets a potentially contaminated product or matrix, about which conclusions are drawn. Please define this product! The Target matrix is based on the FOODEX catalogue of EFSA.

10.1.2 *Data type*

Open drop down list: Please pick one from the given list!

If the product or matrix you would like to enter is not in the given list, please enter the new product or matrix as free text.

10.1.3 *Comments*

This field is mandatory

10.2 Target unit

10.2.1 Description

Please define the unit that is targeted in the surveillance system component. For example, it could be a single unit or a batch.

10.2.2 Data type

Drop-down list.

10.2.3 Comments

This field is mandatory

11 Sampling stage

11.1 Description

Please indicate the point where the samples are collected. For feed and food, this could be at the border, at a feedmill or a wholesale premise.

It refers to where your units can be reached, and therefore where samples will be collected.

11.2 Data type

Open drop down list: Please pick one from the given list!

If the sampling stage you would like to enter is not in the given list, please enter the new term as free text. When entering a new term, please consult the ORION

Glossary first, to check if it is in line with the terminology. If not or if it is missing,

send us your definition including references!

11.3 *Comments*

12 Sampling Unit

12.1 Description

Please specify if individuals, groups or multiple groups are sampled.

- a) INDIVIDUALS: Individual samples
- b) MULTIPLE GROUP SAMPLE: Collective/pooled samples which represent multiple product sources, but not the entire target unit referred to above (for instance you take bulk milk samples for more than one group of cows per herd)
- c) 1 SAMPLE PER GROUP: Collective/pooled samples which represent the entire group referred to in your target unit (for instance, you take one bulk milk sample for the entire herd).

12.2 Data type

Open drop down list: Please pick one from the given list!

If the sampling unit you would like to enter is not in the given list, please enter your chosen term as free text. When entering a new term, please consult the ORION Glossary first, to check if it is in line with the terminology. If not, or if it is missing, send us your definition including references!

12.3 *Comments*

This field is optional

13 Sample Type

13.1 Description

Please name the primary type of sample. The type of sample is based on the EFSA catalogue ZOO_CAT_SMPTYP. It can be feed or food sample.

13.2 Data type

Open drop-down list: Please pick one from the given list! If the sample type you would like to enter is not in the given list, please enter your chosen term as free text, and send us a definition if the term is possibly not familiar to us.

13.3 *Comments*

This field is optional

14 Sampler

14.1 Description

Please indicate who takes the sample (Official, private etc)?

14.2 Data type

Open drop down list: Please pick one from the given list.

If the sampler option you would like to enter is not in the given list, please enter your chosen term as free text, and send us a definition if the term is possibly not familiar to us.

14.3 *Comments*

15 Website

15.1 <u>Description</u>

Please indicate where resources related to the surveillance systems can be found.

15.2 <u>Data type</u>

Free text

15.3 *Comments*