



FSP Regionalization and harmonization of epidemiologic surveillance



Situation of an epidemiologic surveillance network

“country”

“network”

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How to use this questionnaire?

Objectives

This questionnaire was developed to realize an inventory of the situation of epidemiologic surveillance networks, as programmed in the FSP project “support to the regionalization and the harmonization of epidemiosurveillance networks for animal diseases”.

The majority of epidemiosurveillance networks have common organizational methods, and it seemed relevant to develop a questionnaire which could be used in all countries of a same region, and possibly in the three regions of the FSP project.

Organization of the questionnaire

This questionnaire is built according to two logics. The first is to draw up a detailed inventory of the structures and procedures of an epidemiosurveillance network for animal diseases. The second is to present a synthesis of the progress of the epidemiosurveillance network for its principal fields of activity, through a summary table. This questionnaire and the summary table can also be filled in an interactive way on the Internet to regularly update information.

How to fill in the questionnaire?

The summary part of the questionnaire is always located on the left part (or even pages) of the document and is always presented in the form of four criteria which are satisfied or not by the network under study. If the criterion is satisfied, which is established after having filled in the page on the right-hand side (odd pages) with the detailed questions, the box corresponding to the criterion is ticked.

Once the four criteria have been addressed, the summary of the chapter is done by counting the number of satisfied criteria (number of boxes ticked) then by surrounding the pie chart corresponding to the result (for example, a pie chart half filled would correspond to two criteria satisfied out of four).

When to fill in this questionnaire?

This questionnaire is intended to be used in a participative way with the persons in charge of the network under study. The ideal is to fill it in jointly, during a mission in the country, so that all questions can be detailed and clarified for the persons in charge of the network. It is thus necessary to avoid simply sending the questionnaire to the persons in charge and expect the results from them. If several missions were already carried out in a country, it is possible to inform the whole or only part of the questionnaire with the information collected previously and to ask further information from the countries concerned.

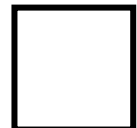
Questionnaire

Central institutional organization

- Surveillance budget at least equal to 20% of the total budget devoted to animal health
- Central unit composed of several people (1 coordinator devoting 100% of its time to the network, 1 person in charge of data management, 1 representative of the laboratory, etc) and equipped with sufficient operational means (material and financial)
- Steering committee is organized, aims at defining the main orientations of surveillance (diseases to monitor, validation of surveillance protocols, etc), includes at least a member of each partner institution for surveillance (including a representative of livestock farmers and private veterinarians), and meets regularly
- Technical committee is organized, aims at supporting the development of all technical documents of the network (data collection files, surveillance protocols, training organization, epidemiologic bulletin, etc), includes at least a member of each partner institution that can legitimately take part to the development of the technical documents (researcher or faculty member specialized in a field covered by the network, specialist in diagnosis, specialist in training, epidemiologist, etc), and meets regularly

Comments:

Circle the result



1. INSTITUTIONAL ORGANIZATION OF THE SURVEILLANCE NETWORK

1.1 Administration in charge of surveillance

1.1.1 General information

Name:

Supervising Ministry(ies):

Address:
.....
.....

Telephone:

Fax:

E-mail:

Member State of OIE Yes Not

1.1.2 Human resources (for the whole country)

Number of veterinarians: (DMV)

Number of technicians: (technician with 2 or 3 years of training)

Numbers of other employees (secretary, driver, etc):

1.1.3 Financial resources (for the whole country)

Annual budget devoted to animal health, except wages: US \$ or Euros

Percentage of the animal health budget devoted to surveillance: %

(A minimum, budget of the veterinary services (central and regional) allocated annually by the Ministry)

1.1.4 Equipment in vehicles (for the whole country)

Number of 4 X 4 vehicles:

Number of mopeds:

Number of non 4x4 vehicles:

Number of bicycles:

Number of motor bikes:

1.2 Surveillance coordination unit = Central unit

Existing Yes No

On paper (join to the questionnaire)

Operational

1.2.1 Composition

Formalized Yes No If yes, which kind of formalization.....

Composition:
.....
.....

Executive manager: Name

Organization

Time devoted % (compared to full time)

Coordinator: Name

Organization

Time devoted % (compared to full time)

Definition of the main orientations of surveillance by a steering committee Yes No

Writing of technical documents (protocols, etc) by a technical committee Yes No

1.2.2 Roles and attributions

Defined Yes No

Formalized Yes No

Material means Yes No

Financial means Yes No

If yes proper to central unit

Integrated to general budget

Field institutional organization

- Provincial units formalized (one person having official skills for the network at the intermediate level between central level and field agents) on the whole territory.
- Active role of the provincial units in the network (active supervision of agents, data validation)
- Official and formalized concept of surveillance field agents with exhaustive field coverage
- Sufficient material and financial means of provincial units and field agents for a correct operation of the network

Comments:

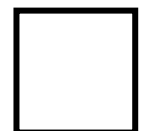
Circle the result



Diagnostic laboratory and mobile team

<ul style="list-style-type: none"><input type="checkbox"/> Formalization and efficient integration of the diagnostic laboratory in the national surveillance network<input type="checkbox"/> Skilled human resources in sufficient number for the diagnostic needs of the network<input type="checkbox"/> Diagnostic equipment sufficient for the needs of the network or formalized procedure to resort to a reference laboratory<input type="checkbox"/> Mobile team (central unit/laboratory) equipped to support or supervise field units
Comments:

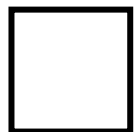
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Role of private sector in surveillance

<ul style="list-style-type: none"><input type="checkbox"/> Private veterinarians involved in surveillance (more than 50% accredited or under sanitary mandate)<input type="checkbox"/> Other private partners (farmers, slaughterhouse personnel, NGO...) involved in surveillance<input type="checkbox"/> Professional organizations involved in surveillance decision-making (technical committee, steering committee)<input type="checkbox"/> Professional organizations financially involved in surveillance (private networks)
Comments:

Circle the result



1.9 Involvement of the private sector in surveillance

1.9.1 Private veterinarians

Number of private veterinarians (not civil servant) in the country:

- Small animals
- Large animals
- Mixed

Formalized involvement in surveillance Yes No

Formalization mean:

- | | | | |
|--------------------|------------------------------|-----------------------------|---------------------------------|
| - Sanitary mandate | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Number of vets concerned: |
| - Accreditation | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Number of vets concerned: |
| - Other: | | | Number of vets concerned: |

Diseases concerned:

.....
.....

Remuneration of private veterinarians for surveillance activities

- State
- Farmer
- Project
- Other

1.9.2 Other private partners

Nature of other private partners intervening in surveillance:

- Farmers
- Livestock assistant
- Assistant for private veterinarians
- Paraveterinary professionals
- (OIE definition)
- Professional organizations Names:
- Private slaughterhouse
- Cutting & processing workshops
- NGOs Names:
- Private Laboratories Names:
- Research institutes Names:
- Hunters

Formalized roles and attributions of the private partners Yes No

Strategy in animal health

<input type="checkbox"/> Priority diseases listed in the regulation <input type="checkbox"/> Official sanitary measures registered in the regulation <input type="checkbox"/> Control plan for priority diseases in progress (in particular zoonoses) <input type="checkbox"/> Sufficient funding of control plan to guarantee their effectiveness
Comments:

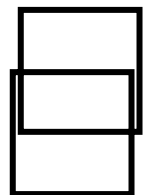
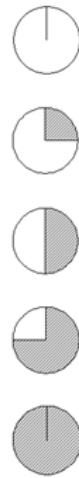
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Formalization of surveillance

<input type="checkbox"/> Network organization and operation registered in the regulation or in a charter, and priority diseases listed officially <input type="checkbox"/> Surveillance objectives clearly formalized and relevant for each disease <input type="checkbox"/> Formalized surveillance protocol for each disease supervised <input type="checkbox"/> Complete surveillance protocols (> 75% of the surveillance protocol form filled in) and standardization of data collected
Comments:

Circle the result



2 STRATEGY IN ANIMAL HEALTH AND FORMALIZATION OF SURVEILLANCE

2.1 Regulation

- Sanitary surveillance formalized in the regulation Yes No
 Nature of the regulation
- Sanitary measures formalized in the regulation Yes No
 Nature of the regulation
- Charter for surveillance operation among partner institutions Yes No

2.2 Strategy for surveillance and control

2.2.1 Diseases present in the country (OIE source over the last 24 months)

Disease	Bov	Pigs	OV	CP	Poultry

2.2.2 Strategy for surveillance and control

- Choice of the diseases supervised according to a particular methodology Yes No
 Which methodology:

Disease	Surveillance	Compulsory screening	Compulsory culling	Compulsory vaccination	Other	Funding		
						State	Professionals	External funding agency

2.2.3 Production of vaccines for priority diseases

Disease	Place of production	Number of doses prod/year	Needs covered (yes/no)	Quality assurance of production (yes/no)

2.3 Protocols by disease

Fill in a "Disease protocol" for each disease supervised. (see form at the end of the questionnaire)

Importation and quarantine

Circle the result

- Complete and easily accessible information on importation rules
- Good organization of importation procedures (preliminary authorization, collection of information on the exporting country, accreditation of the exporting establishments)
- Sufficient and functional sanitary inspection at the borders
- Sufficient number of functional quarantine stations

Comments:



2.4 Importation and quarantine

2.4.1 Organization of importation

Availability of information on importation procedures:

- By asking the Ministry concerned
- Web site
- Other:

Preliminary authorization necessary before importation:

- Never
- Always
- Sometimes: according to criteria
- No criteria
- Geographical. Which ones
- Species. Which ones



Collection of information on the exporting country Yes No
Preliminary accreditation of the exporting structures Yes No

2.4.2 Inspection at the borders

Number of border posts equipped with sanitary inspection:

Air: equipped/..... existing
Ground: equipped/..... existing
Sea: equipped/..... existing

2.4.3 Quarantine

Number of quarantine stations:

Locations:

.....
.....
.....

Species which can be accommodated:

- All
- Bovine
- Caprine/ovine
- Poultry
- Rabbits
- Domestic carnivores
- Caged birds

Sustainability of service insured by quarantine fee Yes No

Fee

- Real cost
- Contribution

Infrastructure

- Very insufficient
- Insufficient
- Correct
- Sufficient
- Perfect

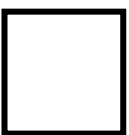
Equipment

- Very insufficient
- Insufficient
- Correct
- Sufficient
- Perfect

Emergency preparedness plans

<ul style="list-style-type: none"><input type="checkbox"/> Use of risk analysis to identify major risks<input type="checkbox"/> Emergency preparedness plans available for priority diseases<input type="checkbox"/> Sufficient funds quickly available for emergency interventions<input type="checkbox"/> Simulation exercises for emergency preparedness plans
Comments:

Circle the result



2.5 Emergency preparedness plans

Disease	Absence of plan	Plan writing in progress	Entirely written plan	Simulation carried out	Date of last simulation

Existence of a national emergency fund Yes No

Fund sufficient to cover all interventions Yes No

Destination of funds:

Equipment

- National laboratory
- Agents
- Vaccines

Operation

- Communication
- Field interventions
- Shipment to international laboratory
- Compensations

Amount: US \$ or Euros

Risk analysis used to determine priorities Yes No

Number of persons trained for risk analysis within the veterinary services:

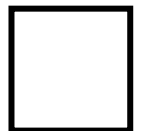
Number of them which already carried out a risk analysis for the veterinary services:

Data management

- Existence of a database, on adapted computer equipment, to manage data of the network
- Routine use of a geographic information system for data analysis (regular production of maps for disease cases and suspicions)
- Specific personnel available and trained for data entry, management and analysis
- Multi-disciplinary analysis of data (interpretation of data)

Comments:

Circle the result



3 DATA MANAGEMENT

3.1 General information

Existence of a procedure for data management Yes No

Means:

- Relational database
- Spreadsheet
- Paper classification

Adapted computer equipment Yes No

3.2 Data entry

Data entered regularly Yes No

Data entry Centralized
 Decentralized, at which level:

Number of persons in charge of data entry:

Checking of data entry Yes No By who

Data validation Yes No By who

3.3 Data analysis and interpretation

Data analyzed regularly Yes No

Level of analysis:

- Tables with summary of cases
- Mapping of cases
- Situation analysis

Person(s) in charge of analysis

- Coordinator
- Multi-disciplinary team
- Technical committee
- Other

Person(s) in charge of analysis trained for analysis techniques Yes No

Statistical and scientific validation of the analysis Yes No

Availability of a GIS Yes No Which one:

GIS actually used Yes No

- For the network
- For the emergency plan

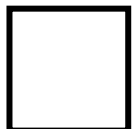
Number of persons trained for GIS:

Coordination/Supervision of the network

- Existence of coordination meetings of the network at the central level and the provincial level, involving at least all agents once per year
- Coordination meetings take place according to the predetermined frequency and a report is produced at the end of each meeting
- Central unit active for field agents supervision (annual visit of all provincial units and at least 10% of the surveillance posts)
- Provincial unit active for field agents supervision (annual visit of all surveillance posts)

Comments:

Circle the result



4 COORDINATION/SUPERVISION OF THE NETWORK

4.1 Coordination of the network

Coordination meetings/ information (of surveillance posts) Yes No

If so, pre-determined frequency of meetings with all agents:

- at the central level: times/year Respected frequency: Yes No
- at the provincial level: times/year Respected frequency: Yes No

Another form of coordination Yes No

Which one?
.....

4.2 Supervision of agents

Supervision of field agents (visits of the surveillance posts) Yes No

by the central level Yes No

Number of visits/year or proportion of visited stations:

by the provincial level Yes No

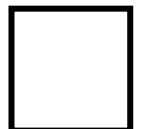
Number of visits/year or proportion of visited stations:

Training

- Satisfying epidemiology training level of all members of the central unit
- Initial training implemented for all field agents at their entry in the network
- Objectives and content of the training in adequacy with the operational needs of the network
- Regular refreshing course (if possible annual, collective or individual) of all field agents

Comments:

Circle the result



5 TRAINING

5.1 Managers/coordinators

Veterinarians trained in epidemiology Yes No
 If so, how many and at which level:

Basic concepts	1 to 4 week course	Master	PhD

5.2 Initial training of field agents (surveillance posts and provincial units)

Nature of the initial training:

- Collective
- Individual
- Information

Duration:

Content:

- Regional policy for animal health and regulation Yes No
- Arguments for setting up the network Yes No
- Training on general procedures of the network Yes No
- Training on surveillance protocols Yes No
 - o Knowledge of the disease monitored
 - o Clinical sign identification (suspicion)
 - o Knowledge of documents to be filled
 - o Knowledge and practical on sample collection
 - o Knowledge of sample packaging
 - o Knowledge of sample conservation
 - o Knowledge of shipment of sample and form
 - o Knowledge of deadlines
 - o Knowledge of first control measures
 - o Communication to farmers

- Satisfactory use of practical work Yes No
- Programming and supervision by a specialist in training methodology Yes No
- Involvement of all agents of the network Yes No
- Qualitative evaluation and anonymous control of knowledge (MCQ) Yes No
- Availability of sufficient funds for training organization Yes No

5.3 Refreshing course for surveillance posts and provincial units

Considered Yes No Frequency

Content of refreshing course

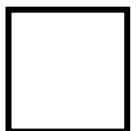
- New diseases
- Update of procedures
- Synthesis of information already gathered
- Collection of field feedback

Restitution and diffusion of information

- Easy access for all actors of the network to communication means (Internet for central and provincial level, telephone or radio at minimum for surveillance posts)
- OIE notifications and reports realized at 100%
- Solid policy of external communication (bulletins, reports, Web) to animal health partners (including farmers), neighboring countries and international organizations
- Broad diffusion, in particular to the field level, of an epidemiologic bulletin published regularly (at least twice a year) and restitution of laboratory analysis results to field agents

Comments:

Circle the result



6 RESTITUTION AND DIFFUSION OF INFORMATION

6.1 Methods of communication among members of the network

Only tick if effective

- | | | | |
|-------------------------|--------------------------|-------------------------------------|--------------------------|
| - Mail paper | <input type="checkbox"/> | - Individual Meetings (supervision) | <input type="checkbox"/> |
| - E-mail | <input type="checkbox"/> | - Meetings | <input type="checkbox"/> |
| - Telephone discussions | <input type="checkbox"/> | - Forum on Internet | <input type="checkbox"/> |

Access to Internet and email:

- | | | | | | | |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--|
| - Direction of the veterinary services in general | | <input type="checkbox"/> | | | | |
| - Executive manager of epidemiosurveillance | | <input type="checkbox"/> | | | | |
| - Provincial units (only tick if all concerned) | | <input type="checkbox"/> | | | | |
| - Surveillance posts | None <input type="checkbox"/> | <25% <input type="checkbox"/> | <50% <input type="checkbox"/> | <75% <input type="checkbox"/> | > 75% <input type="checkbox"/> | |
| - Private veterinarians | None <input type="checkbox"/> | <25% <input type="checkbox"/> | <50% <input type="checkbox"/> | <75% <input type="checkbox"/> | > 75% <input type="checkbox"/> | |

6.2 Communication of surveillance results

6.2.1 Target

- | | | | |
|-------------------------------------|--------------------------|-----------------------------|--------------------------|
| General public | <input type="checkbox"/> | Neighboring countries | <input type="checkbox"/> |
| Members of the network | <input type="checkbox"/> | International organizations | <input type="checkbox"/> |
| Public or private national partners | <input type="checkbox"/> | | |

OIE reports: Notification respected Yes No
 No. of monthly reports during the last 12 months:

6.2.2 Means

- | | | | | |
|-----------------------------------|--------------------------|------------|------------------------------|-----------------------------|
| Laboratory results | <input type="checkbox"/> | Systematic | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Meetings | <input type="checkbox"/> | Frequency | ..... |  |
| Review reports | <input type="checkbox"/> | Frequency | ..... |  |
| Information leaflet (2 pages max) | <input type="checkbox"/> | Frequency | ..... |  |
| News bulletins | <input type="checkbox"/> | See below | | |
| Radio broadcasts | <input type="checkbox"/> | Frequency | ..... |  |
| Television broadcasts | <input type="checkbox"/> | Frequency | ..... |  |
| Web site | <input type="checkbox"/> | Which one | ..... |  |

If news bulletin:

Pre-determined frequency :

Respected frequency Yes No

Writers:

- | | |
|-------------------------------------|--------------------------|
| - Executive manager of the network | <input type="checkbox"/> |
| - Person in charge of communication | <input type="checkbox"/> |
| - Others | |

Number of copies

Mailing list: Yes No

Recipients:

- | | | | |
|-------------------------------|--------------------------|------|-------|
| - Agents of the network | <input type="checkbox"/> | Mode | ..... |
| - Other livestock agents | <input type="checkbox"/> | Mode | ..... |
| - Other private veterinarians | <input type="checkbox"/> | Mode | ..... |
| - Other livestock projects | <input type="checkbox"/> | Mode | ..... |
| - Funding agencies | <input type="checkbox"/> | Mode | ..... |
| - Neighboring countries | <input type="checkbox"/> | Mode | ..... |
| - International organizations | <input type="checkbox"/> | Mode | ..... |
| - Other | <input type="checkbox"/> | Mode | ..... |

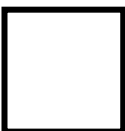
Evaluation of the bulletin Yes No

Evaluation and performance indicators

- Performance indicators developed and validated by the persons in charge of the network
- Performance indicators regularly calculated, interpreted and subsequent information diffused
- At least one external evaluation of the network has been carried out
- Correcting measures implemented following the use of performance indicators or the external evaluation

Comments:

Circle the result



SURVEILLANCE PROTOCOL FORM

Disease

Compulsory notification according to the legislation Yes No
Existence of a formalized protocol Yes No

1. SURVEILLANCE OBJECTIVES

Existing Yes No
Precise Yes No

2. CASE DEFINITION

Existing Yes No
If so, consequences for surveillance sensitivity
Very sensitive Fairly sensitive Not very sensitive

3. MEANS FOR CASE DETECTION

3.1 Passive clinical surveillance

Implementation of passive surveillance Yes No
Detection on farmer call
Detection on programmed visit
Detection on visit for another reason
Other

Definition of the procedure to be followed in case of suspicion Yes No
Standardized suspicion form filled Yes No
Sample commemorative form filled Yes No
Suspicion recorded (register, spreadsheet or database) Yes No
Maximum sample transmission time to the laboratory

Motivation keeping for passive surveillance Yes No
Meetings to sensitize farmers
Press, media
Individual sensitizing (telephone, visit)
Other

3.2 Active surveillance

Specific and standardized form filled Yes No

Serologic surveillance Yes No
Oriented sample
Representative sample
Sentinel populations
Exhaustive surveillance (whole population)
Other

Virological/bacteriological/parasitological surveillance Yes No
Laboratory data
Oriented sample
Representative sample
Exhaustive surveillance
Surveillance in vectors
Other

LABORATORY ANALYSIS FORM

This form aims at facilitating collection of data necessary for the internet-based database of laboratories (CaribVET network)

	Diseases					

Serology						
Antigen identificat°						
Isol. /Culture						
Typing						
Send to ref. lab.						
Formalized proced.						
OIE standard						
Reagents available (Y/N)						
# samples analyzed/month						

	Diseases					

Serology						
Antigen identificat°						
Isol. /Culture						
Typing						
Send to ref. lab.						
Formalized proced.						
OIE standard						
Reagents available (Y/N)						
# samples analyzed/month						