

European Commission / FACE Conference

Preparing hunters to eradicate ASF

30-01-2018

"Jagd und Hund" / Dortmund

The example of Belgium

Prof. J.M. Giffroy DVM

Royal Saint Hubert Club de Belgique

1. Introduction

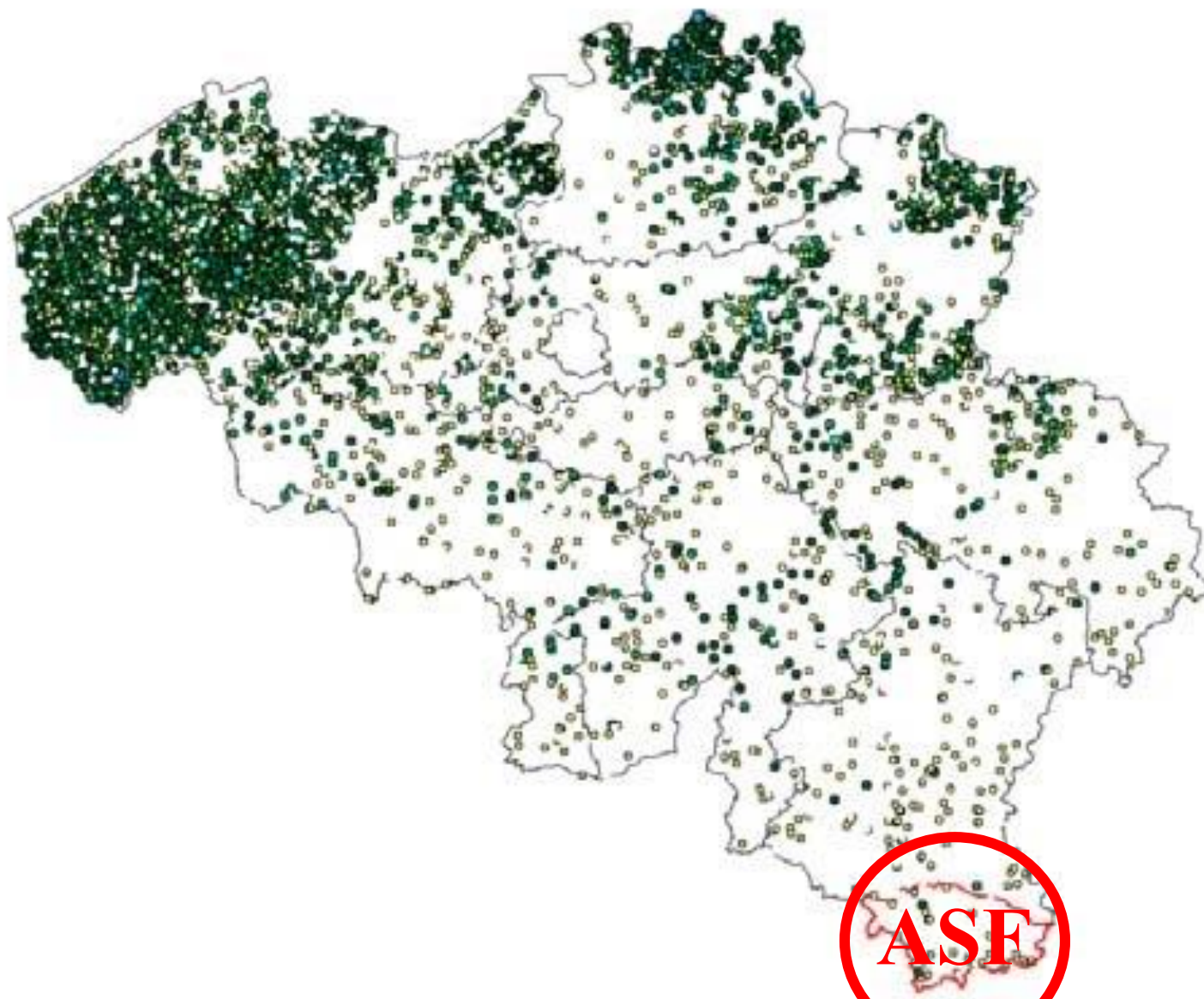
**Pig farming in Belgium,
1st measures**

2. ASF in Belgium

The story, month to month

3. Conclusions

25/9/2018



number of pigs / farm

- > 10.000
- 5.001 to 10.000
- 1.001 to 5.000
- 501 to 1.000
- 101 to 500
- 1 to 100

Pig farming in Belgium

PIG PRODUCTION in E.U.

Number of slaughtered pigs/year (millions) :

Germany	58
Spain	50
France	23
Poland	22
Netherlands	15
Belgium	11 (Flanders 93%)
Italy	11
(United Kingdom)	11

Exports : E.U. exports yearly 4.000.000 tons of pig meat (= 13% of the production)

Germany	850.000 tons (pig industry = 100.000 workers)
Denmark	528.000 tons
Belgium	100.000 tons

Countries : China, South Korea, Japan, the Philippines

As soon as ASF was registered in Belgium, those countries banned all import. The price of pig decreased immediatly of more than 10%.

Before september

29-03-2018 : « Task Force ASF » by the belgian food safety agency (Federal minister, responsible ASF / Pigs)

07-06-2018 : plan for ASF in WB populations (Regional minister, responsible ASF / WB)

April 2018 : RSHCB :

Collaboration (culling, carcasses, training, biosecurity, ...).

Sharing of experience / partners for decisions
Silencers and night scopes.



African swine fever, Belgium

Information received on 14/09/2018 from Dr Jean-François Heymans, Director, Animal Health and Safety of Products of Animal Origin, Federal Agency for the Safety of the Food Chain (AFSCA - FAVV), Bruxelles, Belgium

Report type

Immediate notification

**Date of start
of the event**

09/09/2018

Date of confirmation of the event

13/09/2018

Report date

14/09/2018

Date submitted to OIE

14/09/2018

Reason for notification

Recurrence of a listed disease

Date of previous occurrence

1985

Manifestation of disease

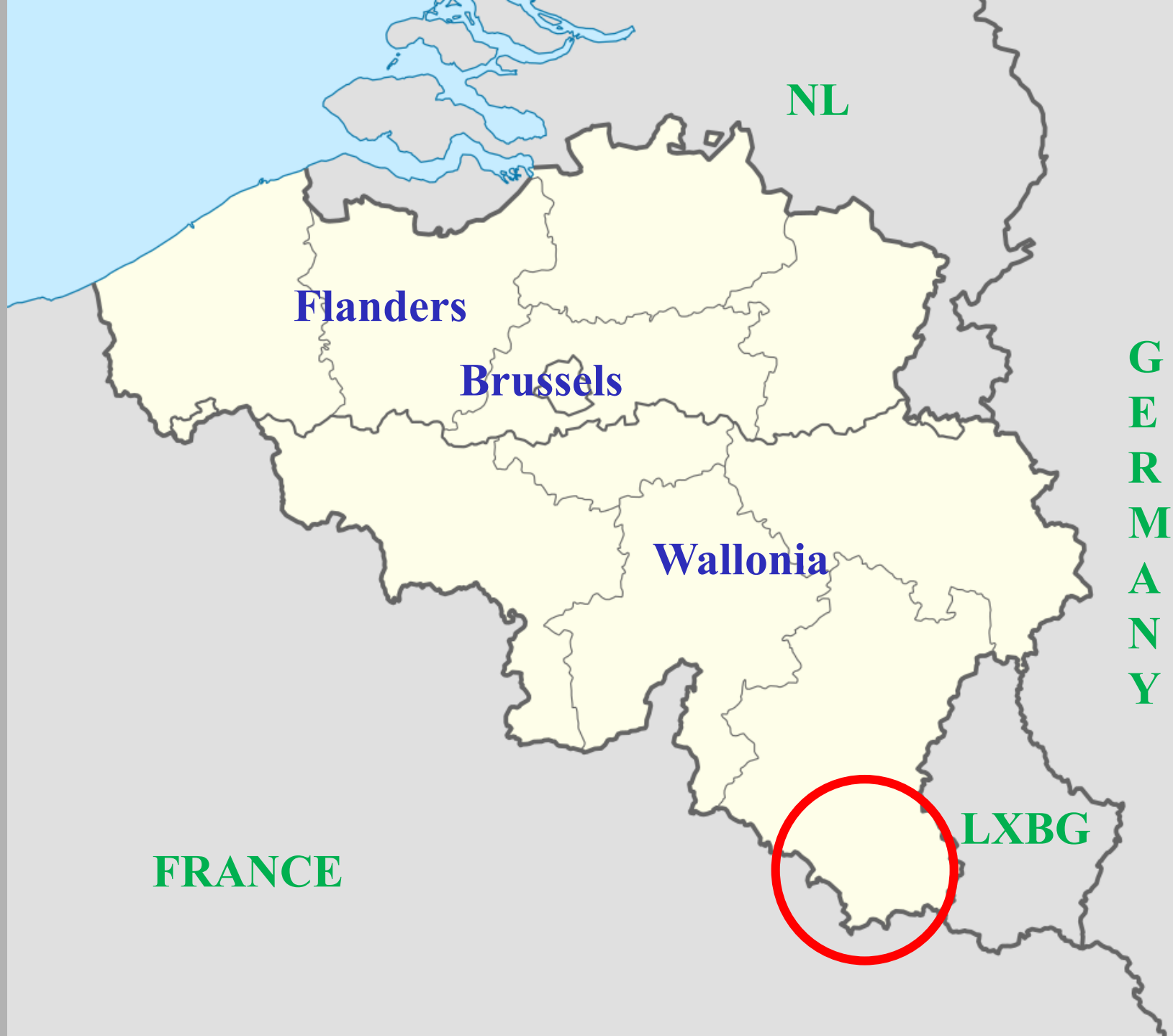
Clinical disease

Causal agent

African swine fever virus

Nature of diagnosis

Laboratory (advanced) Necropsy



Flanders

Brussels

Wallonia

LXBG

NL

FRANCE

**G
E
R
M
A
N
Y**

From mid-Sep to mid-Oct (I)

**Definition of a (provisional)
infected area in accordance
with E.U. (63.000 ha)**

Main road

Motorway E 411

Infected area

FRANCE

**L
X
B
G**



From mid-Sep to mid-Oct (II)

Measures :

1. Hunting, circulation, works, feeding banned

Goal : to avoid dispersion of infected WB

2. Research of carcasses (with the hunters)

Goals : to remove the virus from environment
to better know where is the virus

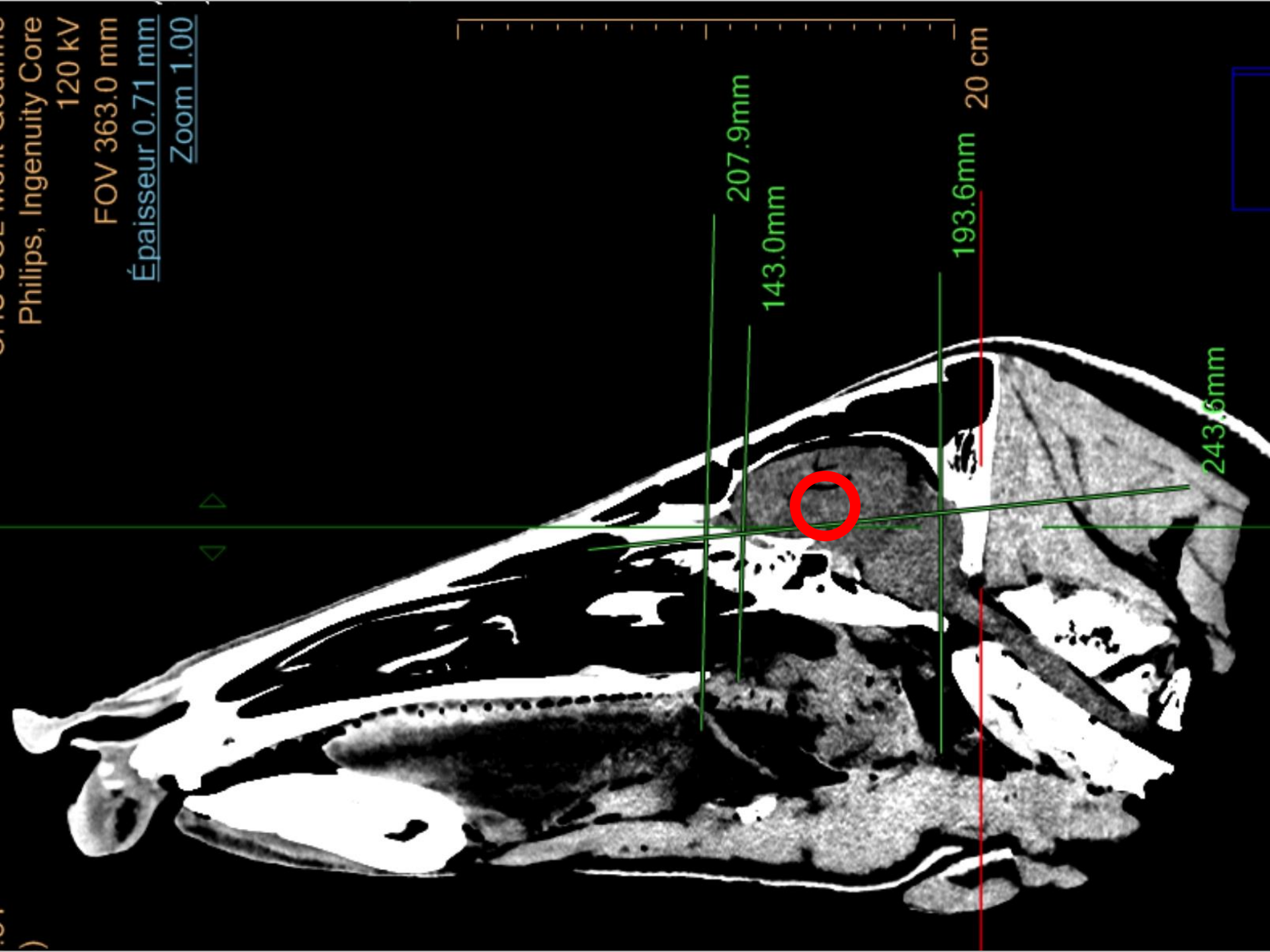
From mid-Sep to mid-Oct (III)

From mid-sep. : press campaign (farmers & environmentalist associations) blaming hunters for importing infected WB and for fostering high densities

27-09-2018 : stamping out of all domestic pigs (4.000) in the infected area.

04-10-2018 : RSHCB proposes a training (biosecurity & accurate shooting in order to kill

Philips, Ingenuity Core
120 kV
FOV 363.0 mm
Épaisseur 0.71 mm
Zoom 1.00

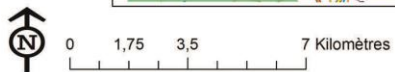
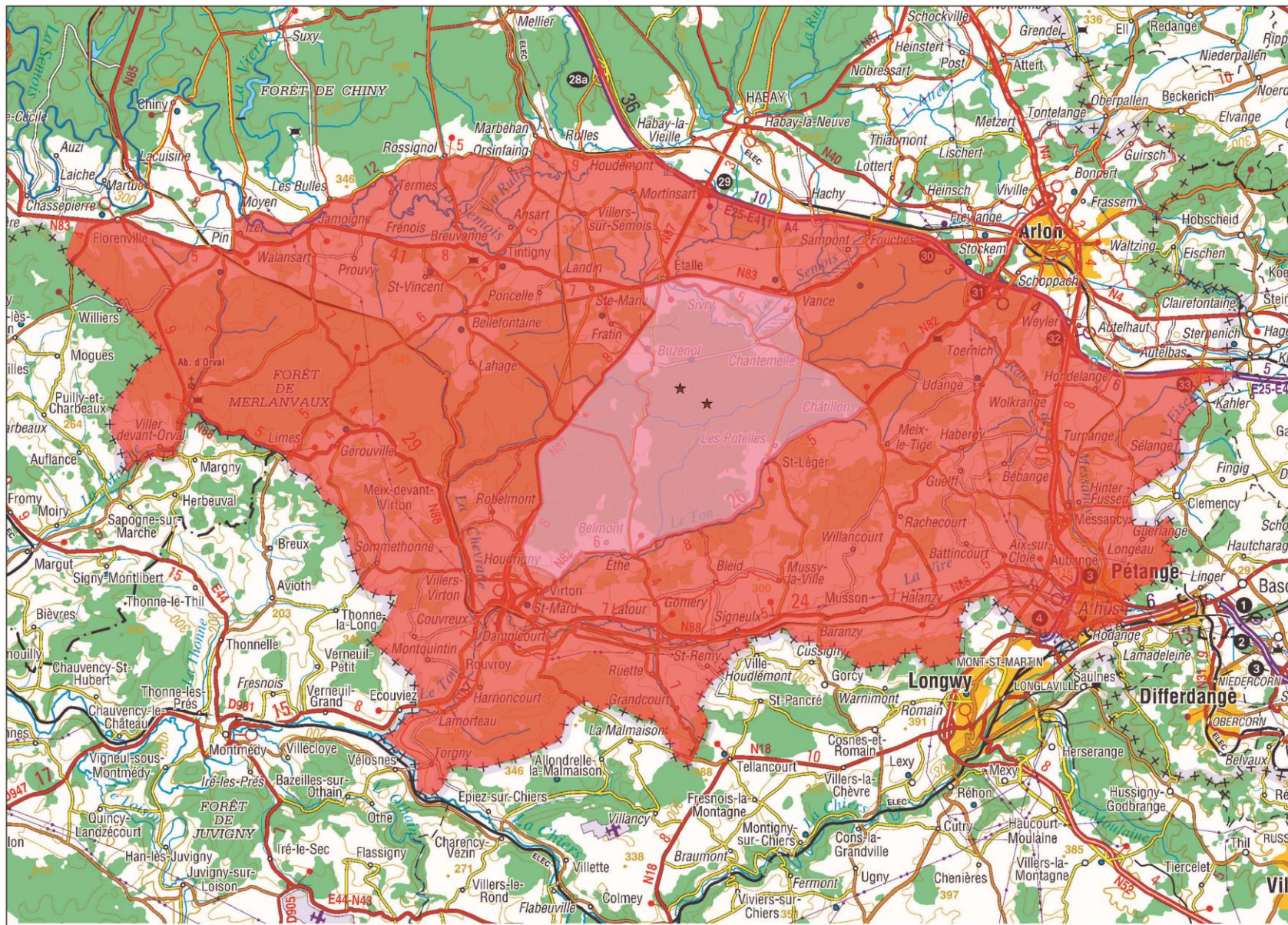


From mid-Sep to mid-Oct (IV)

WB on their tracks & avoid bleeding). Other propositions : volunteers for research of carcasses and to built and pay a fence.

Viropositive WB (total) :

14-09-2018	:	2
20-09-2018	:	6
28-09-2018	:	18
04-10-2018	:	32
11-10-2018	:	75



Friday 14-09-2018

Situation PPA dans la zone infectée

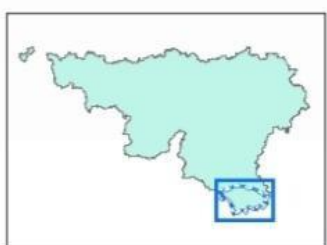


Légende

qPCR_ASFV

- POSITIVE
- NEGATIVE
- DUBIOUS
- ◆ NOT APPLICABLE
- Zone infectée PPA (cfr. Annexe AGW 14/09/2018)

0 1 2 Kilomètres



Wallonie

SPW
Service public de Wallonie

SPW - DG03 - DEMNA

Fond de carte: IGN (CartoWeb-TOPO)

28/09/2018

Friday 28-09-2018

From mid-Oct to mid-Nov (I)

IA infected area (630 Km²) divided into :

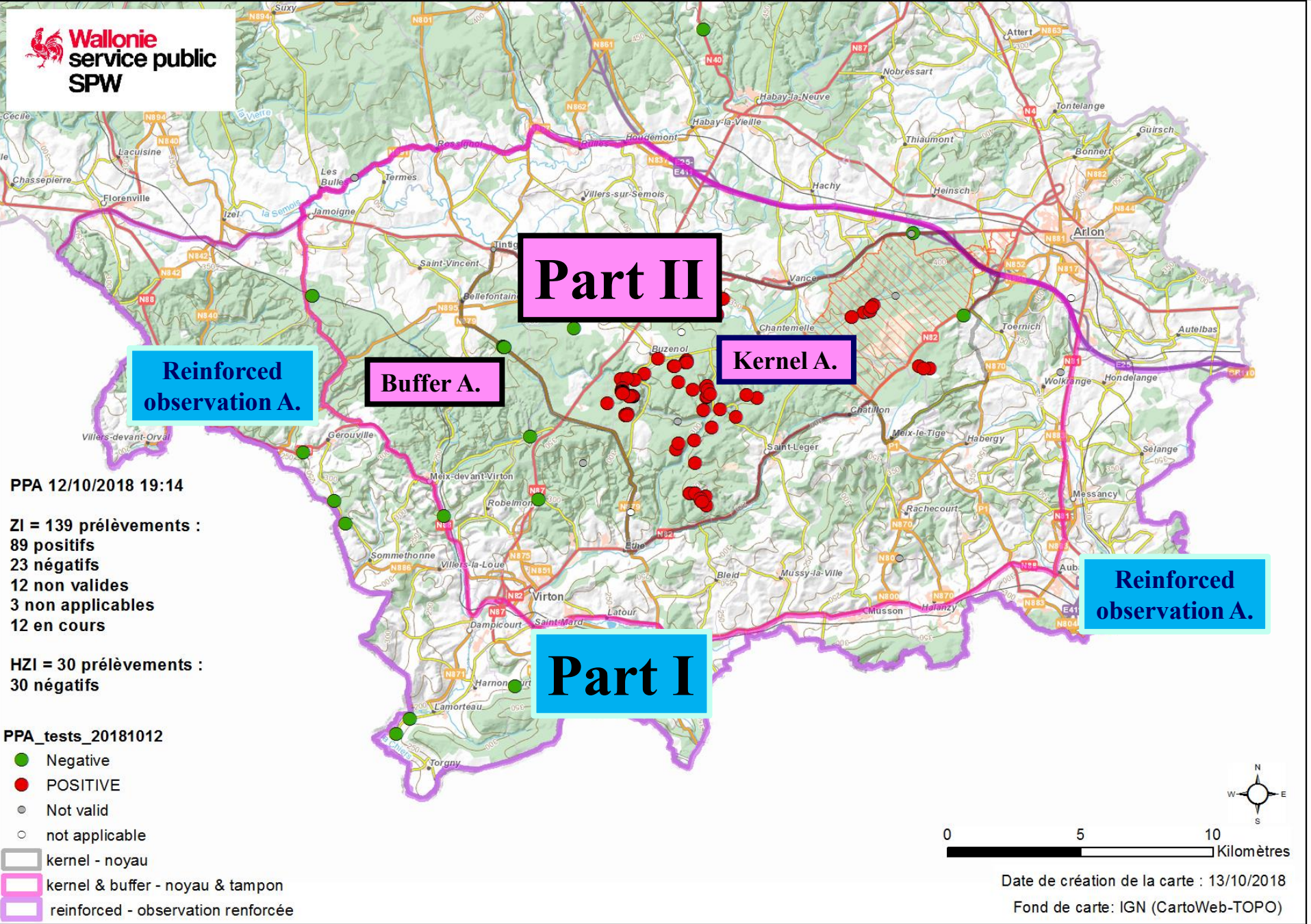
- Part I limited risk

ROA = reinforced observation area (210 Km²)

- Part II high risk

KA = kernel area (150 Km²) with +WB

BA = buffer area (270 Km²)



From mid-Oct to mid-Nov (II)

Measures

Kernel & buffer A. Hunting, feeding, circulation & works : banned, some tolerance

Reinforced Observation A.

Hunting without dogs : authorised

Circulation & works : +/- authorised

Biosecurity training for hunters (29-10 : 300 trained) → destruction of WB may begin.

Goal : kill 150% (= 660 WB) of the 2017-18 WB bag before mid-Jan.

But ... it is difficult without dogs and hunting period is reduced.

From mid-Oct to mid-Nov (III)

Measures

All the infected area

Research, removal & analysis of carcasses

Belgium : reduction of WB populations

Flanders : Zero damage in most areas

Wallonia : minus 50% in 3 years

2 Fences : West & South, +/- border

BA/ROA. Not continuous, covering only +/- 50% of the total distance because roads, villages,

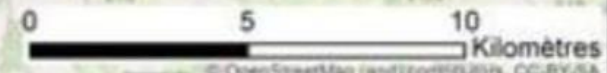
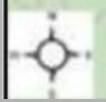
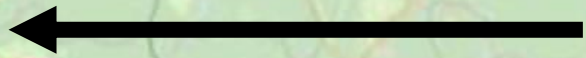
Goal : slow down the movements, not "wild boar proof".

Main road

Motorway E 411

FENCE West

FENCE South



Sunday 14-10-2018

From mid-Oct to mid-Nov (IV)

Measures

Financial assistance to hunters

ROA : 100 € for every WB (removal & transport respecting biosecurity)

All Wallonia : obligation for registered game meat wholesalers to take every WB

06-11-2018 : as a result of positive WB in BA, KA enlarged and BA reduced.



From mid-Oct to mid-Nov (V)

Viropositive WB (total) :

17-10-2018 : 104

06-11-2018 : 159

PPA 6/11/2018

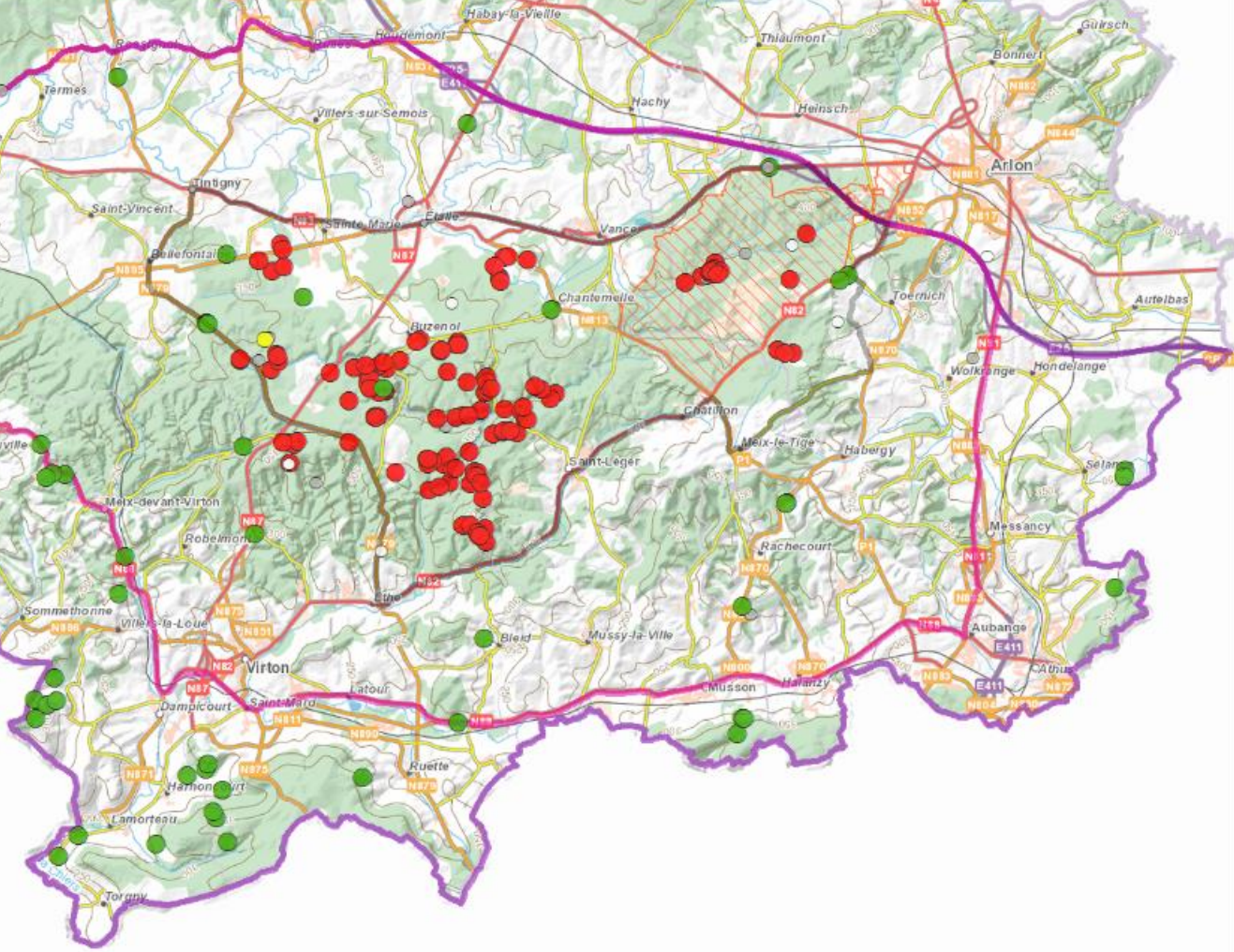
ZI = 268 prélèvements :
 159 positifs
 81 négatifs (tous ne sont pas affichés)
 19 non valides
 7 non applicables
 1 douteux
 1 en cours d'analyse

Polygone infecté = 9283 ha
 Plus grande distance = 15 930 m

HZI = 46 prélèvements :
 Aucun positif

Légende

- PPA_tests
- Negative
 - POSITIVE
 - In progress
 - DUBIOUS
 - Not valid
 - Not applicable
- Zone noyau
 - Zone tampon
 - Zone d'observation renforcée

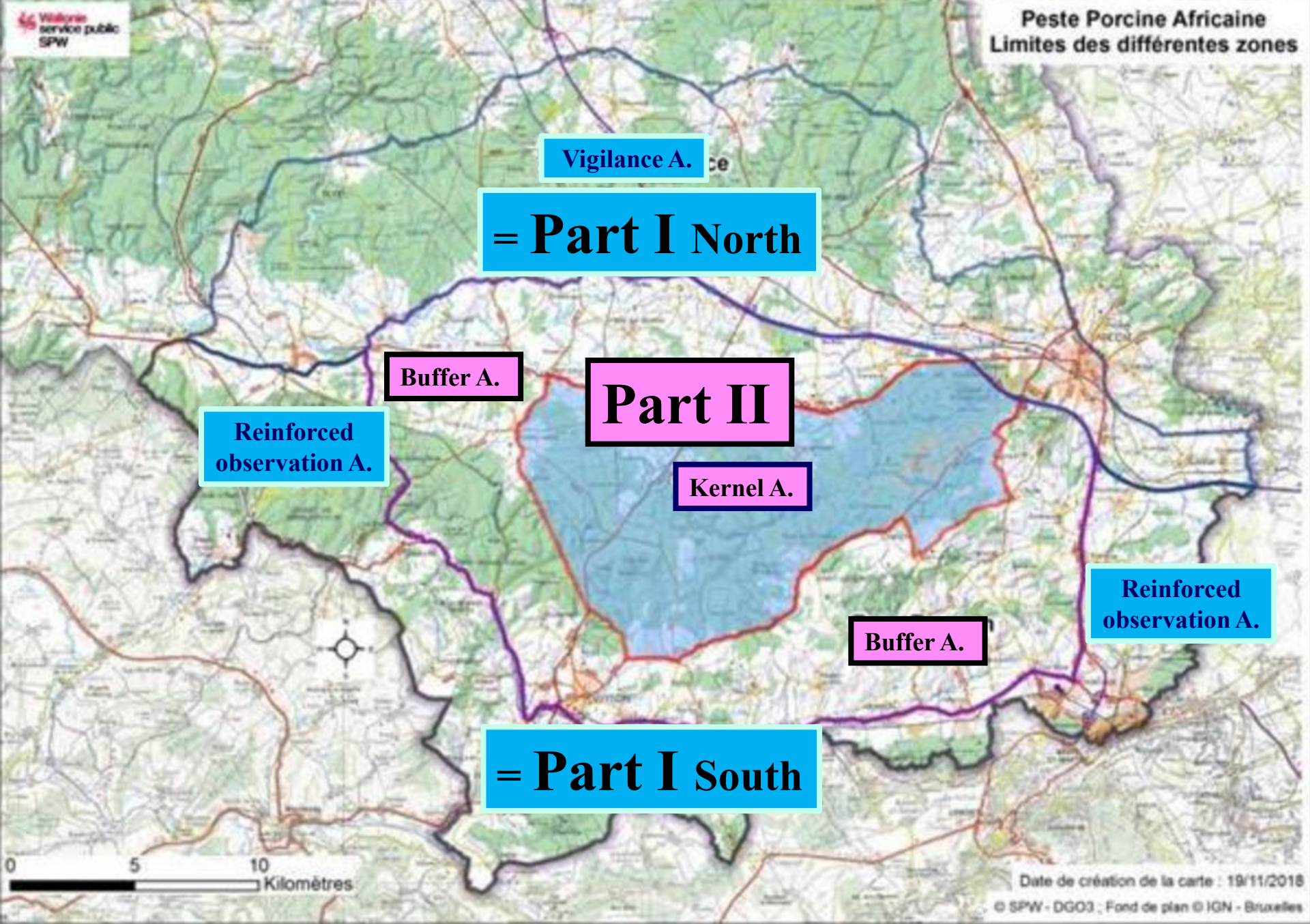


Date de création de la carte : 06/11/2018

Fond de carte: © IGN

From mid-Nov to mid-Dec (I)

**At the request of E.U.,
(provisional) infected area en-
larged : Vigilance Area (280 Km²)**



From mid-Nov to mid-Dec (II)

Measures

Vigilance Area :

Hunting with dogs : authorised

Circulation & works : authorised

Wild boars (not eviscerated) must be delivered at a collect center → destructed, some analysed

Goal : kill 130% of the 2017 bag for end of Feb

Financial assistance to hunters

VA : 50 € for every WB delivered

From mid-Nov to mid-Dec (III)

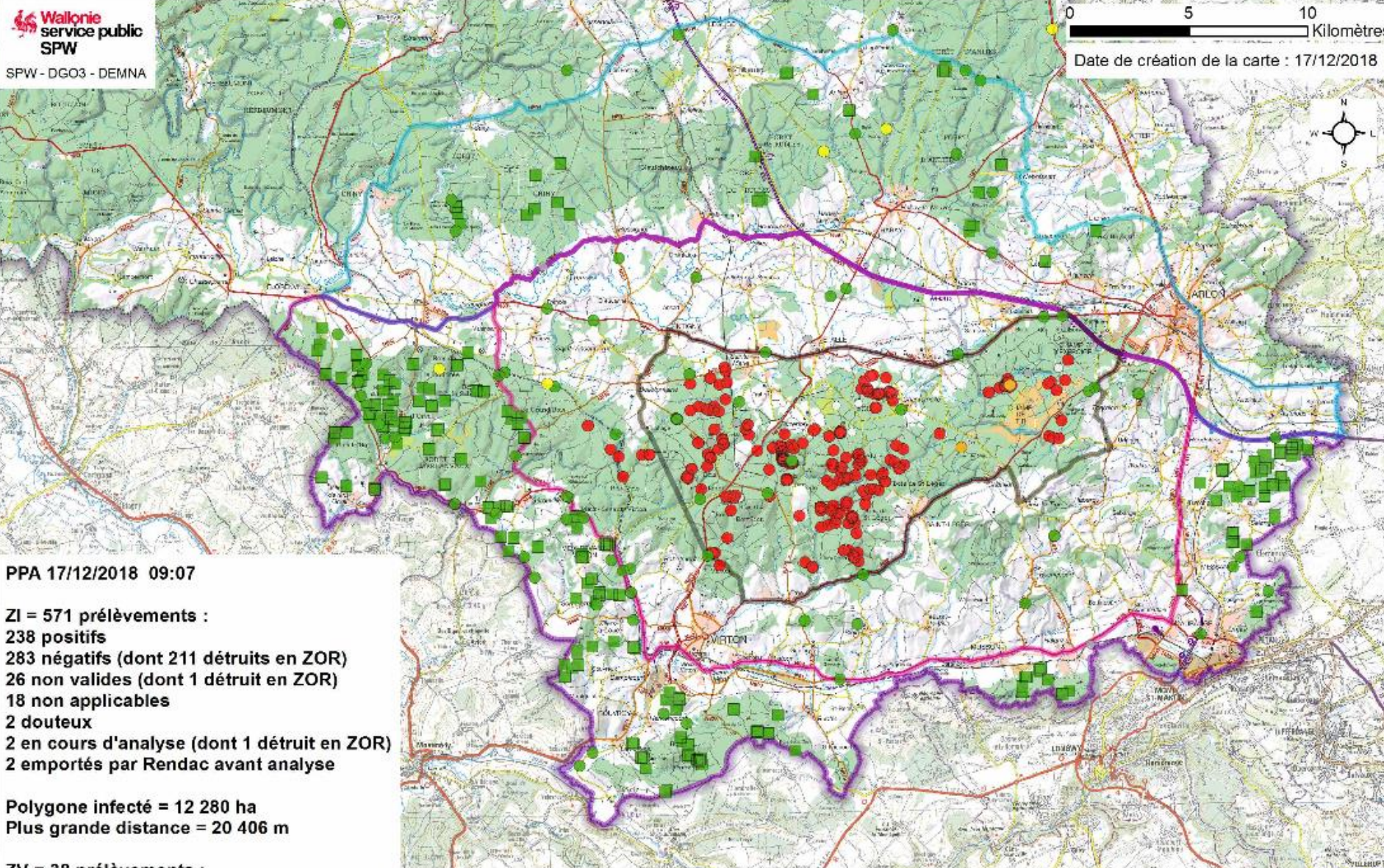
Hunting in January & February

Every hunting territory must set up at least 3 collective (team of 5 minimum) hunts.

Goal in Wallonia : have at the end of 2019-2010 season a population reduced of 50%.

Viropositive WB (total) :

28-11-2018 : 184



PPA 17/12/2018 09:07

ZI = 571 prélèvements :
238 positifs
283 négatifs (dont 211 détruits en ZOR)
26 non valides (dont 1 détruit en ZOR)
18 non applicables
2 douteux
2 en cours d'analyse (dont 1 détruit en ZOR)
2 emportés par Rendac avant analyse

Polygone infecté = 12 280 ha
Plus grande distance = 20 406 m

ZV = 38 prélèvements :
tous négatifs sauf 1 non valide
et 3 en cours d'analyse

Légende

PPA_tests

- Negative
- Negative (culled)
- POSITIVE
- In progress
- DUBIOUS
- Not applicable
- Not valid
- No analysis

- ▭ Zone noyau
- ▭ Zone tampon
- ▭ Zone d'observation renforcée
- ▭ Zone de vigilance

From mid-Dec to now (I)

- 18-12-2018** : building of traps
- 07-01-2019** : trapping begins.
- 06-01-2019** : 2 viropositive WB
shot by hunters in the ROA,
near French border.

Dispersion of virus faster ?

**Transposition of the figures not
suitable for Wallonia? WB densities?
WB disturbed? Fences? Ban of
feeding in KA & BA?**

From mid-Dec to now (II)

11-01-2019 : 2 measures :

- 1. Redefinition of areas : Part II extended to French border
ROA divided in north & south.
VA lightly extended.**




Vigilance A

ROA North

Part II

ROA South

Légende

-  Zone de vigilance
-  Zone noyau et tampon
-  Zone d'observation renforcée

0 5 10
Kilomètres



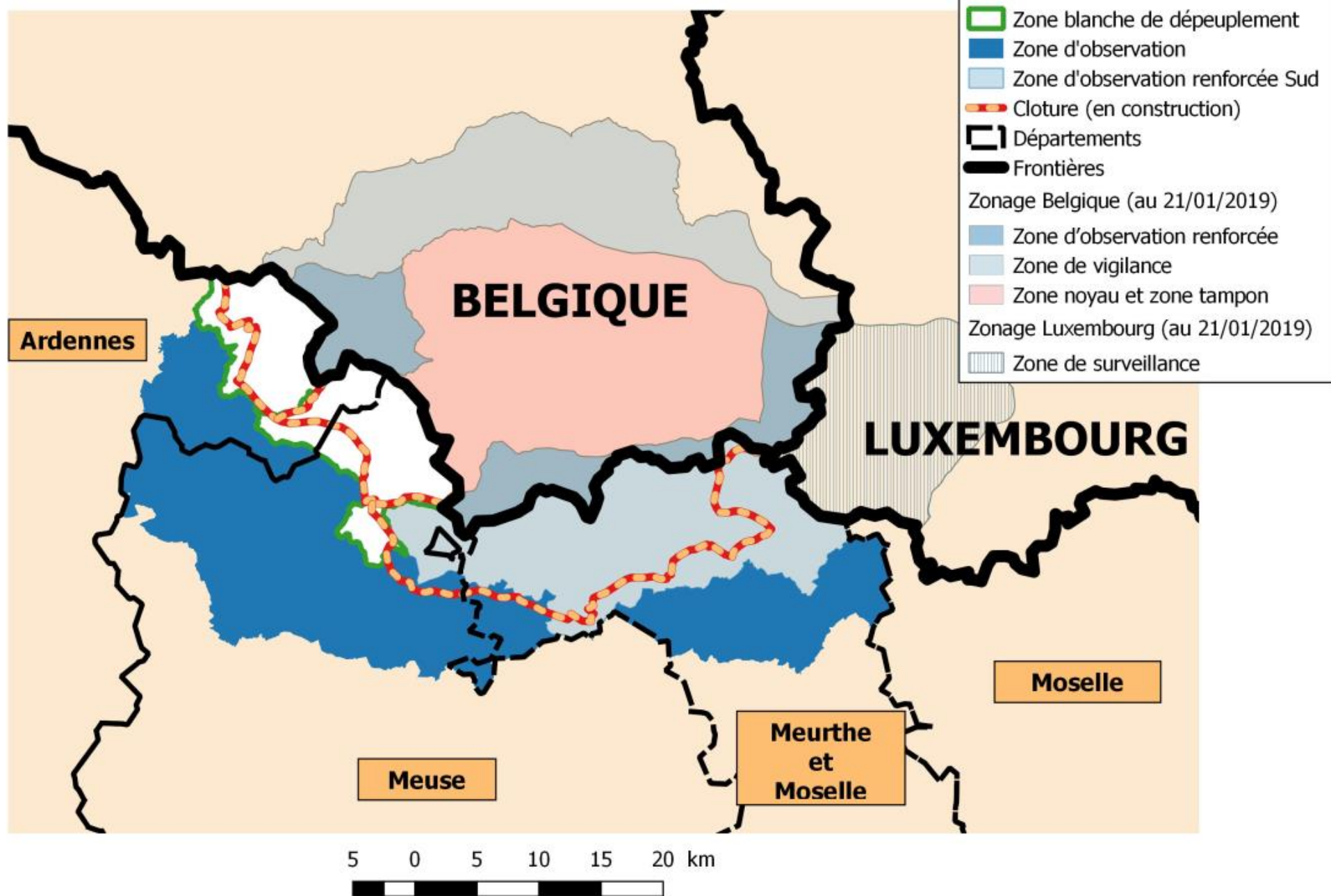
From mid-Dec to now (III)

Our firebreak could have failed

: 334 bagged instead of 660.

Why ? : late hunting & trapping, no dogs, no silencers, no night scopes, too fast disease, ...?

France has to create its firebreak on its side.



Monday 21-01-2019

From mid-dec to now (IV)

2. New fence built partially along the French border, +/- 18 Km. Building began on January the 20th.

11 to 16-01-2019 : ban of hunting in ROA North

17-01-2018 : decision for a complete eradication of all

From mid-dec to now (V)

WB in ROA & VA

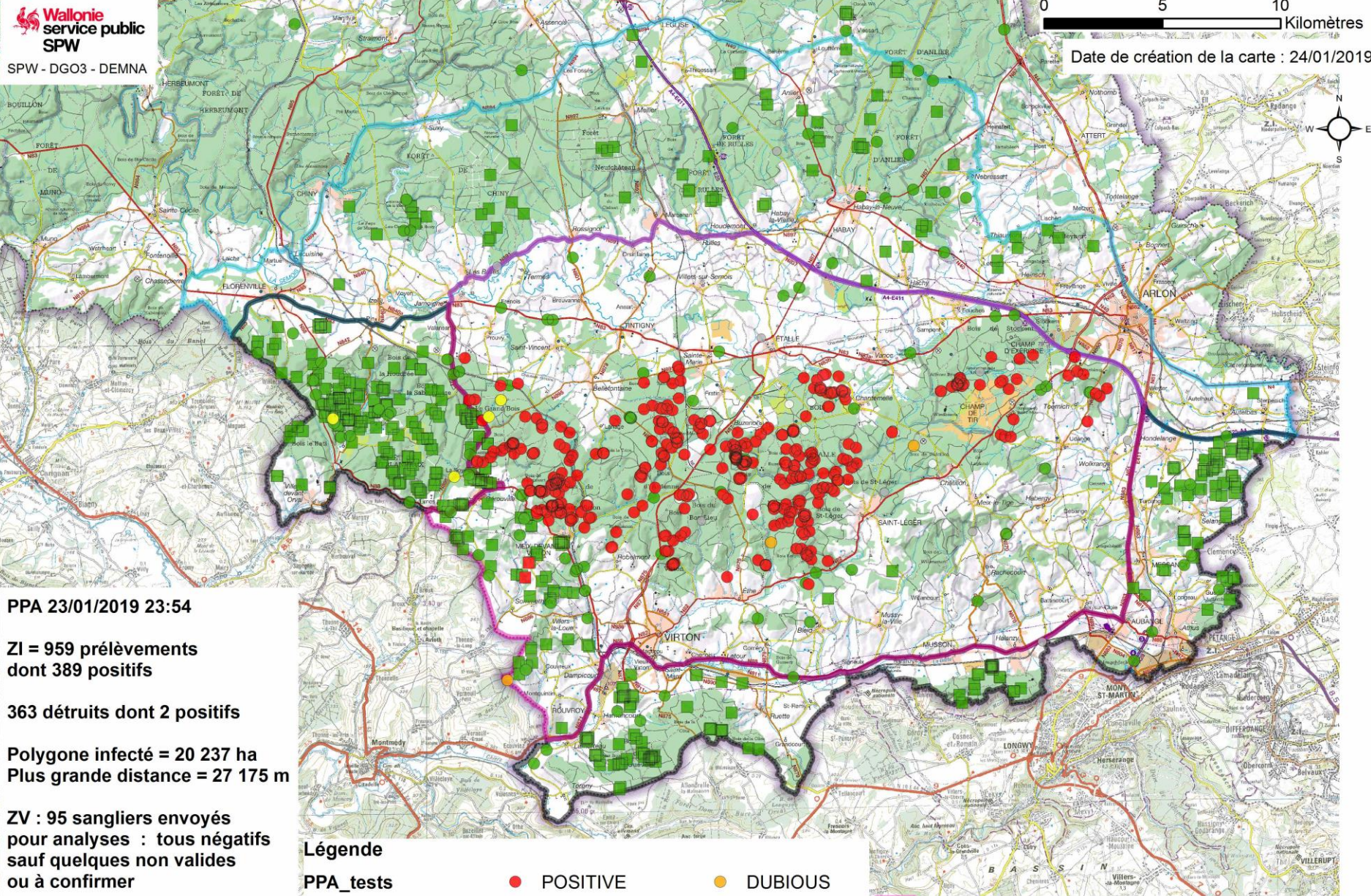
21-01-2019 : 50 active traps,
51 WB captured.

24-01-2018 : decision for
shooting WB in Part II where
disease is less active

From mid-dec to now (VI)

Viropositive WB (total) :

17-12-2018	:	238	+
04-01-2018	:	288	+
17-01-2018	:	343	+
25-01-2018	:	389	+



PPA 23/01/2019 23:54

**ZI = 959 prélèvements
dont 389 positifs**

363 détruits dont 2 positifs

**Polygone infecté = 20 237 ha
Plus grande distance = 27 175 m**

**ZV : 95 sangliers envoyés
pour analyses : tous négatifs
sauf quelques non valides
ou à confirmer**

PIEGEAGES : 52 : tous négatifs

Légende

- | | | | | | |
|------------------|---------------------|---------------------|-------------|------------------|--------------------------------|
| PPA_tests | ● Negative | ● POSITIVE | ● DUBIOUS | ○ Not applicable | ■ Zone tampon et noyau |
| | ■ Negative (culled) | ■ POSITIVE (culled) | ○ Not valid | ● No analysis | ■ Zone d'observation renforcée |
| | | ● In progress | | | ■ Zone de vigilance |

CONCLUSIONS

Excellent management of the crisis in a complicated country

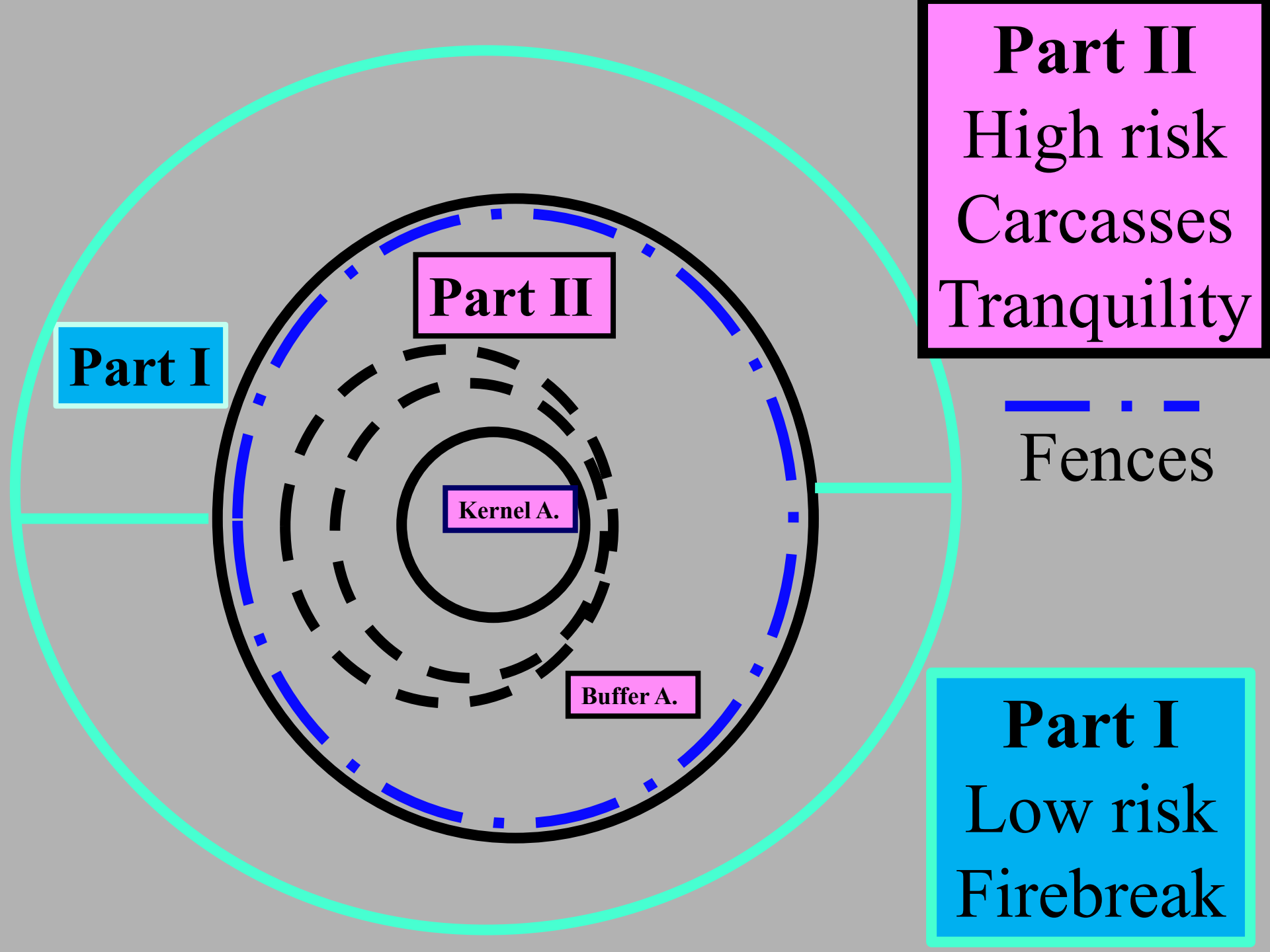
But

Communication / negociation

Field experience unrecognised
(trapping, dogs, feeding)

No official solution for leases
and payment for damages

**Thank you for
your attention**



Part I

Part II

Kernel A.

Buffer A.

Part II
High risk
Carcasses
Tranquility

— · —
Fences

Part I
Low risk
Firebreak

Wild boar densities in Wallonia

2017 hunting bag : 28.000 WB

Wallonia = 550.000 Ha (forests only)

1.300.000 Ha (hunted)

1.680.000 Ha (all)

Hunting bag = 5,1 WB / 100 Ha (forests only)

2,2 WB / 100 Ha (hunted)

1,6 WB / 100 Ha (all)

WB density = (2 x hunting bag)

10,2 WB / 100 Ha (forests only)

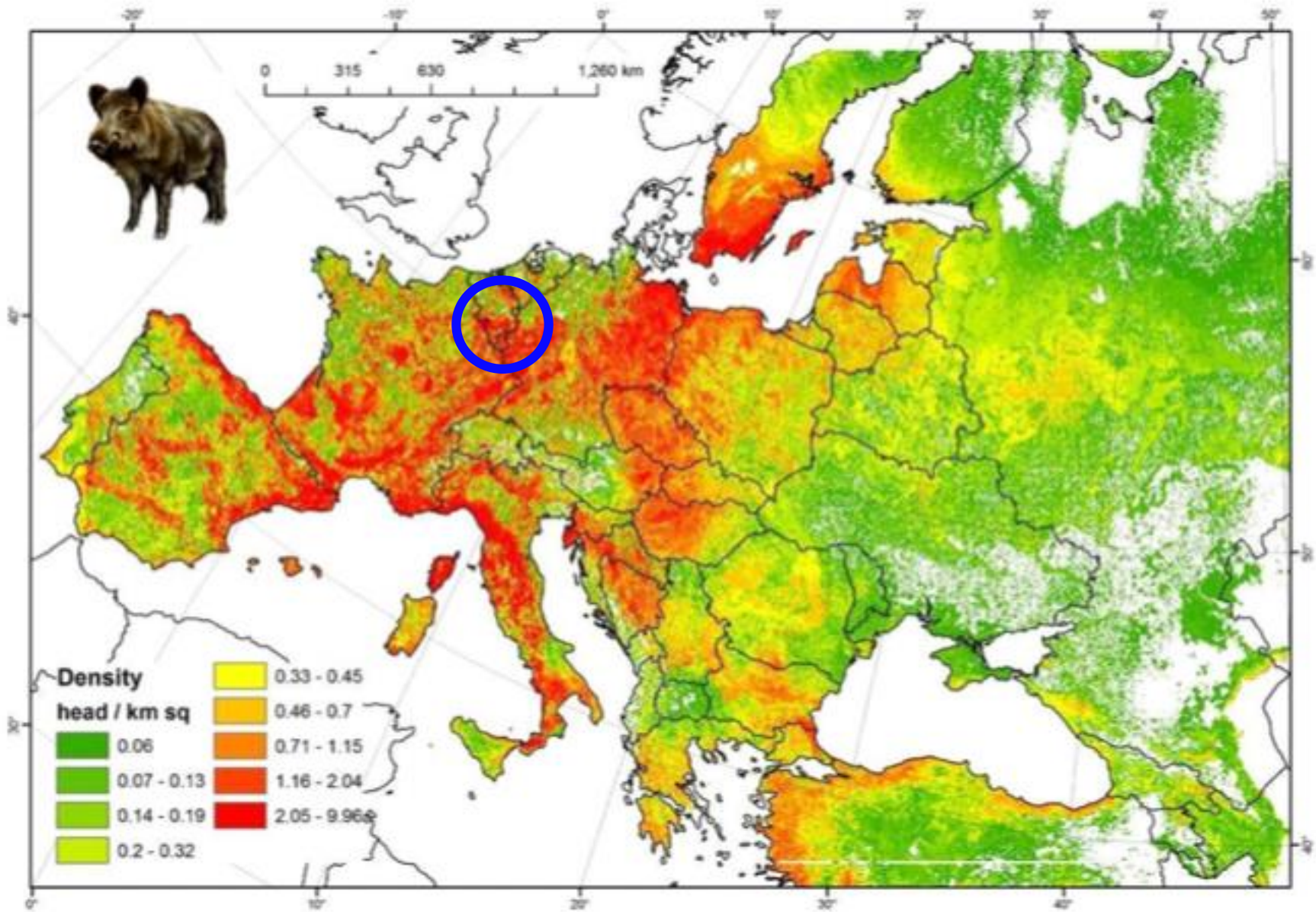
4,4 WB / 100 Ha (hunted)

3,2 WB / 100 Ha (all)

2017 hunting bag in **infected area** (63.000 Ha)

= 1.100 = 1,75 / 100 Ha

WB density in infected area = **3,5 WB / 100 Ha**



Wild boar densities in Europe

Origin of the virus

First outbreak(s)

Buzenol ? (center of KA) First viro+ WB found (one living)

Lagland ? (area for military manoeuvres) Oldest carcasses, found later because later investigated. Marches / dry summer

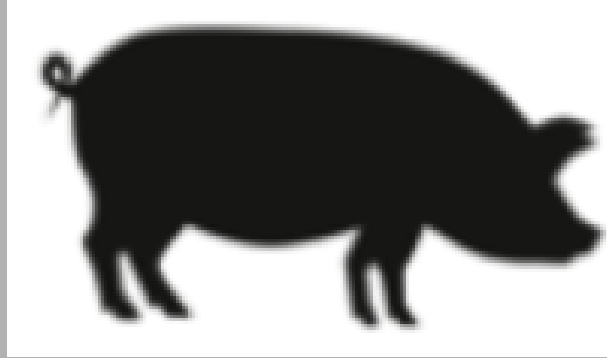
But water still present

Buzenol and Lagland ?

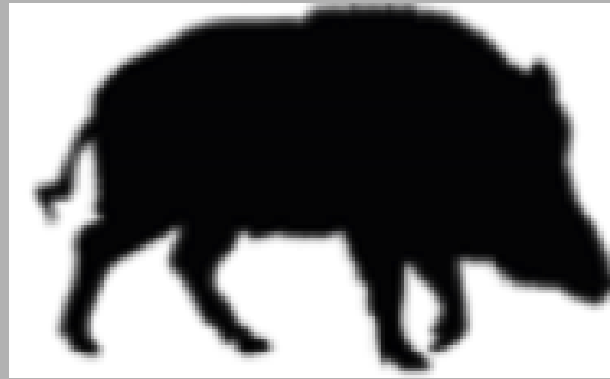
Other ?

Forensic entomology

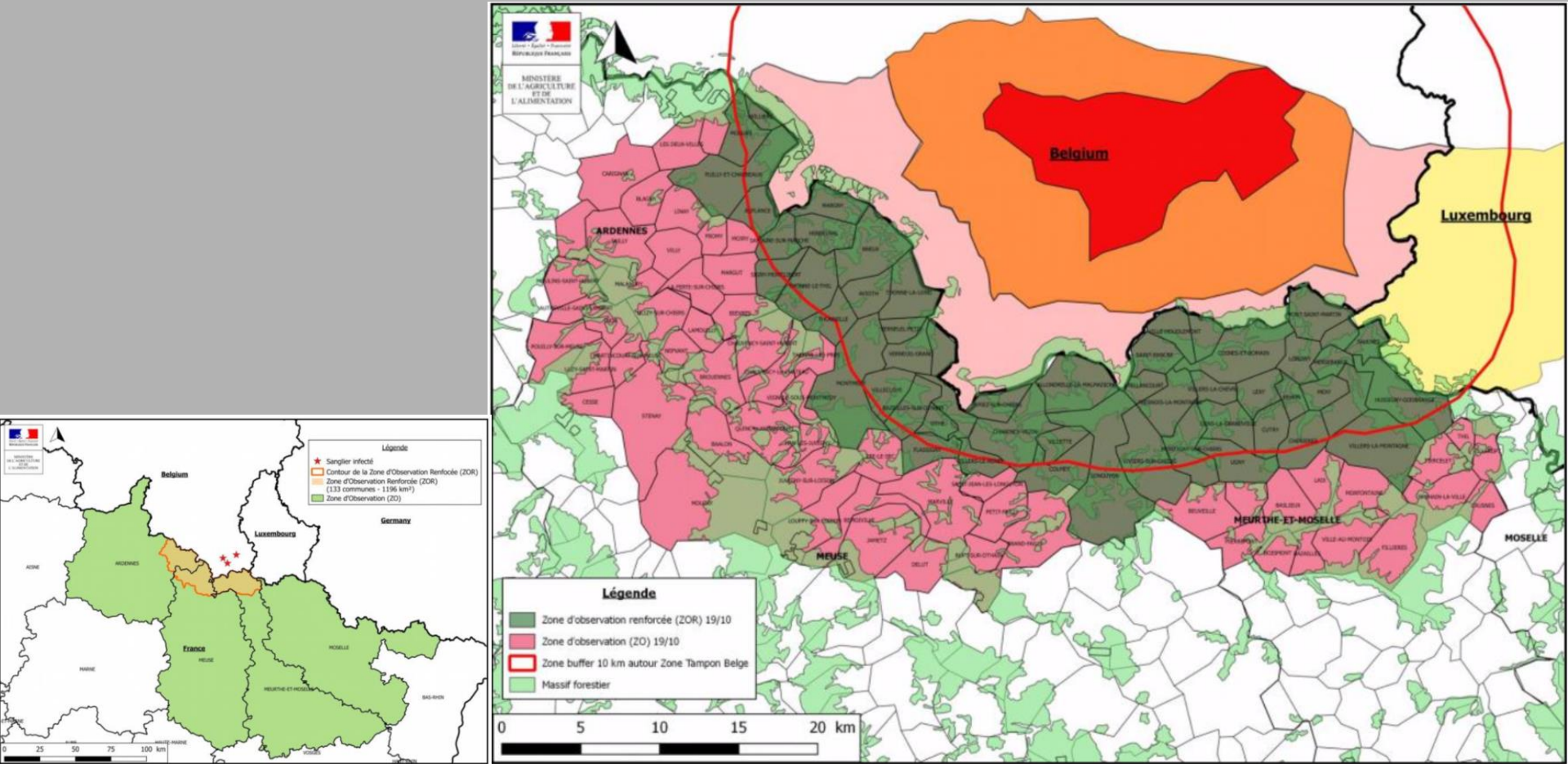
Dating of the skeletons of Lagland : july 2018



easy to eradicate the virus
(“we go quicker than the virus”)



much more difficult
ASF becomes endemic for tens of years
“virtual pigpen in the forest” (as Czech Rep.)
Vaccination (?) as for CSF



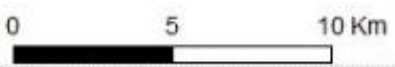
France (Fri 19-10-2018)

ZOR : i) chasse à l'affût, à l'approche et en battue silencieuse (sans chien) + formation des chasseurs à la biosécurité, ii) quota minimum, notamment en sangliers adultes

ZO : i) toutes les formes de chasse, sensibilisation des chasseurs à la biosécurité, ii) agrainage.

Legend

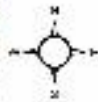
-  zone_vigilance
-  Noy au
-  Tampon
-  Observation renforcée



A. Licoppe, 31/10/2018

Date de création de la carte : 31/10/2018

Wednesday 31-10-2018



PPA 21/01/2019 08:52

ZI = 894 prélèvements
dont 364 positifs

335 détruits dont 2 positifs

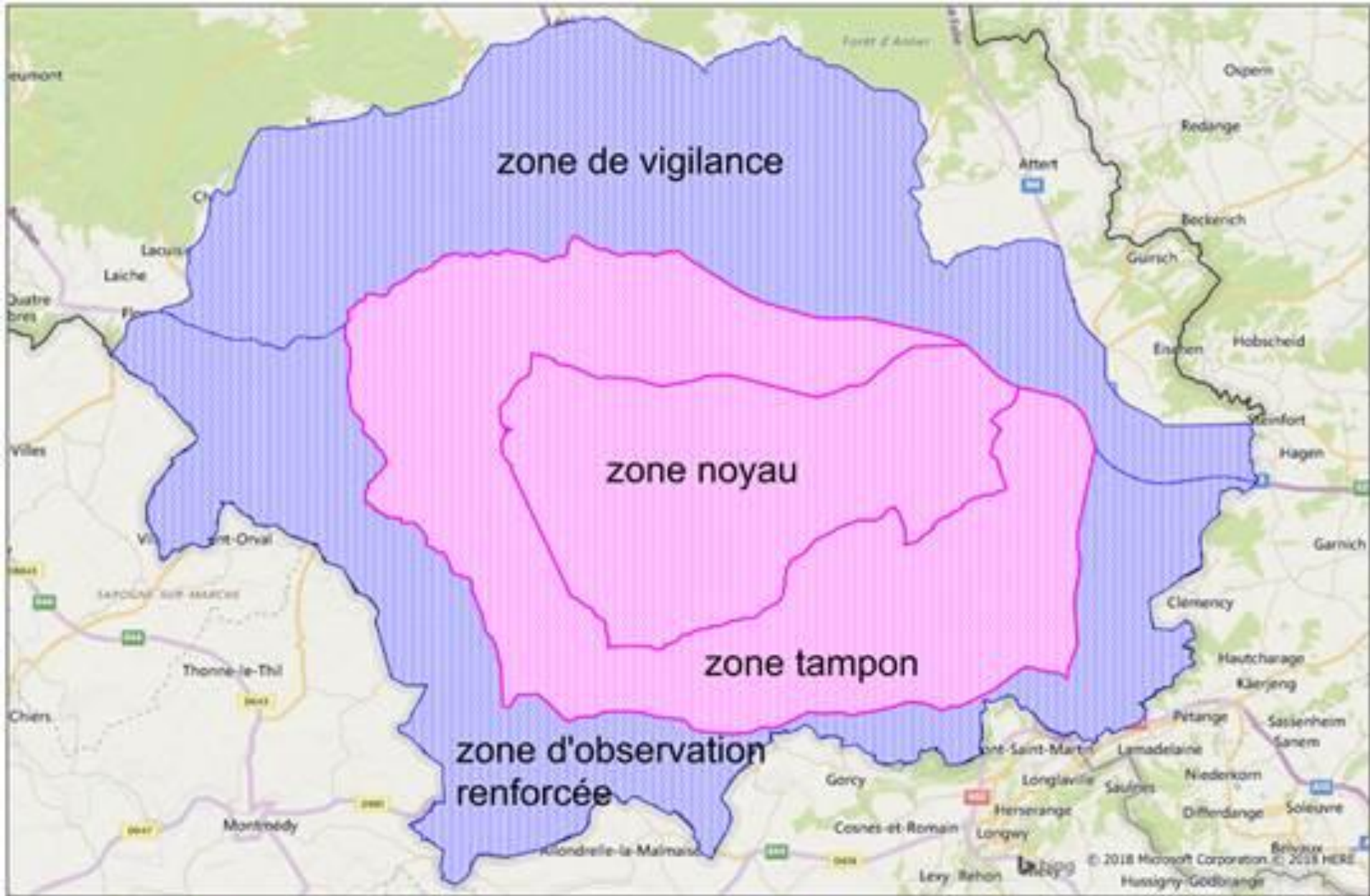
Polygone infecté = 19 054 ha
Plus grande distance = 26 961 m

ZV : 88 sangliers envoyés
pour analyses : tous négatifs
sauf quelques non valides
ou à confirmer

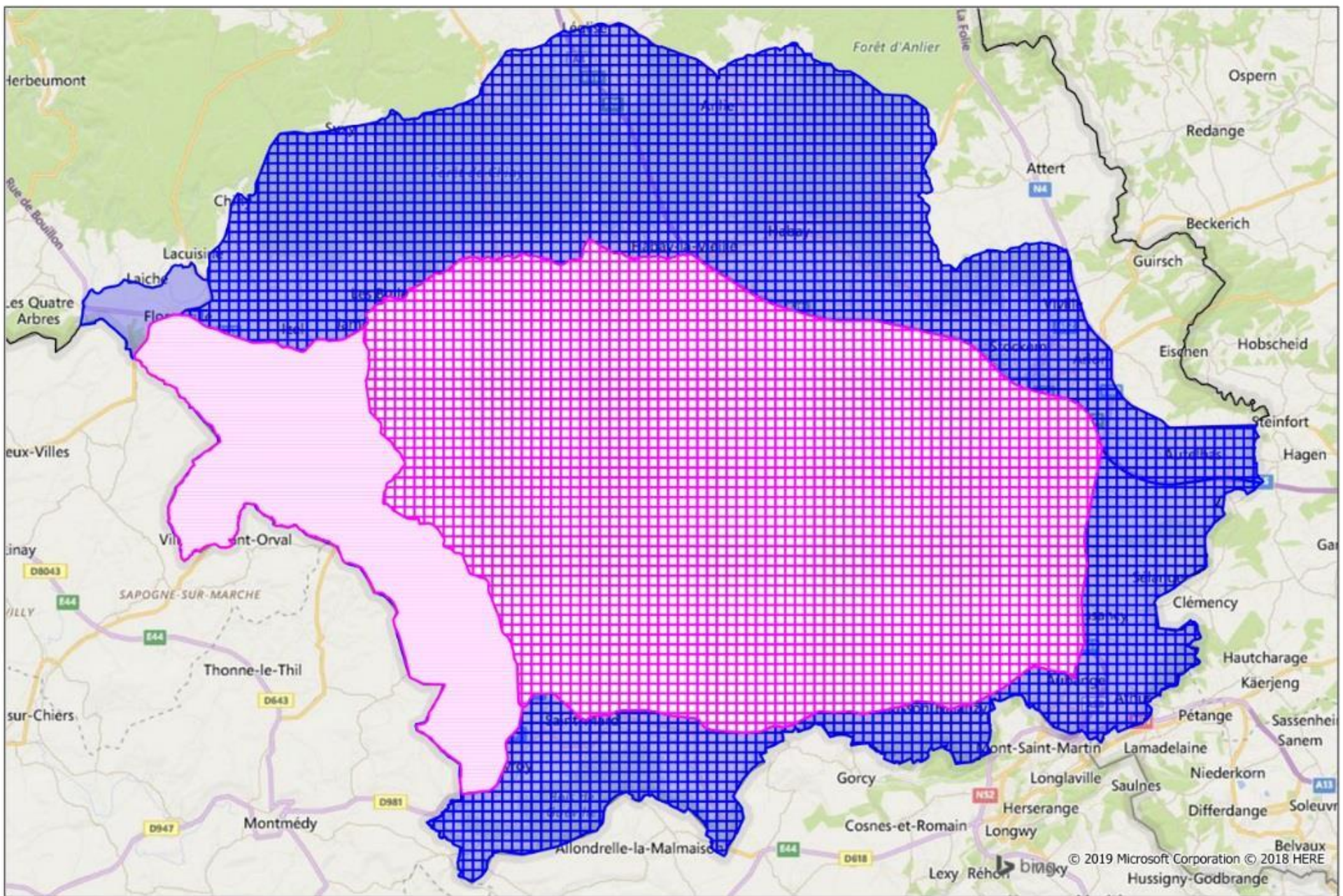
PIEGEAGES : 43 : tous négatifs
(37 en ZOR et 6 en ZT)

Légende

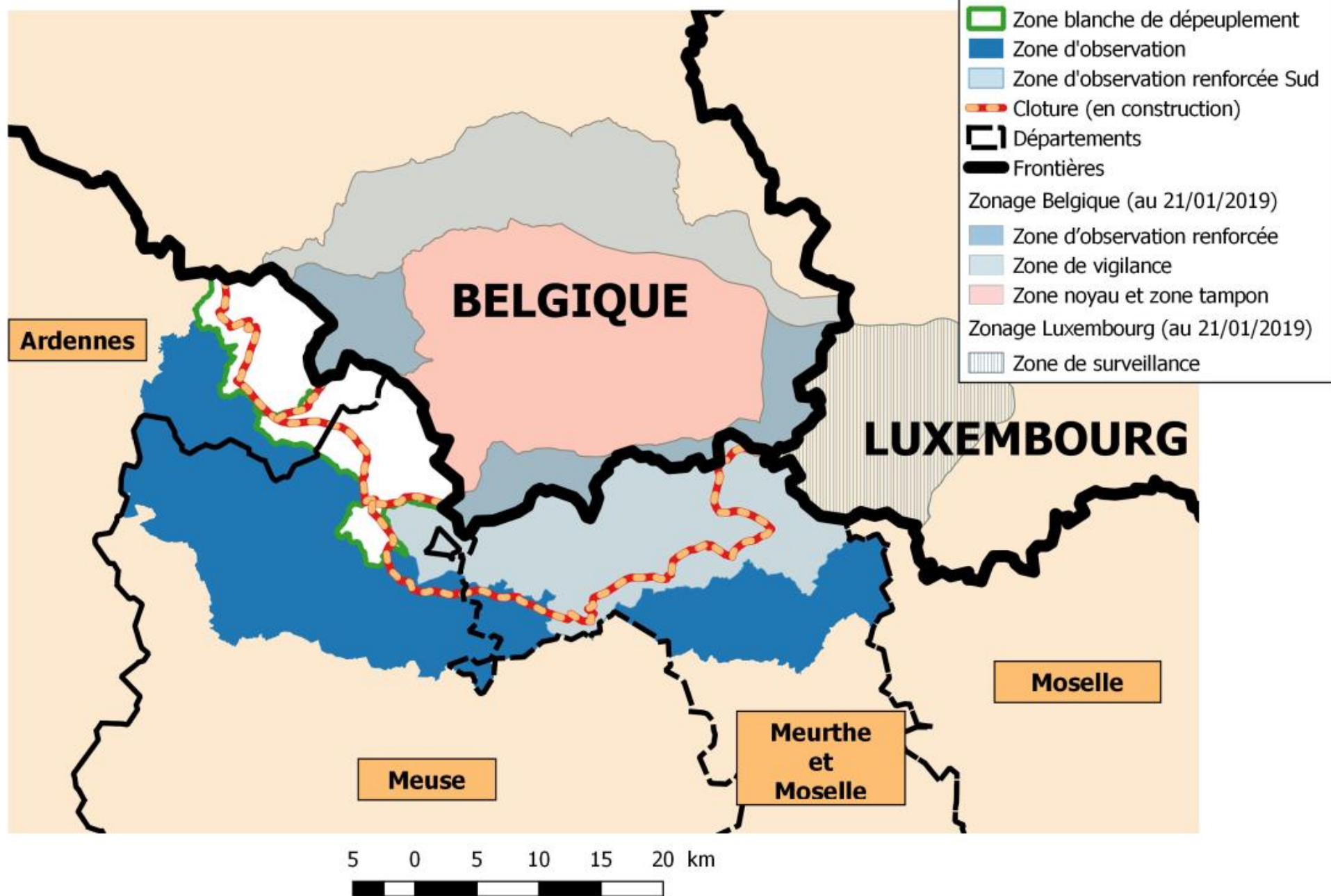
- | | | | |
|---------------------|---------------------|------------------|--------------------------------|
| PPA_tests | ● POSITIVE | ● DUBIOUS | ■ Zone tampon et noyau |
| ● Negative | ■ POSITIVE (culled) | ○ Not applicable | ■ Zone d'observation renforcée |
| ■ Negative (culled) | ● In progress | ■ Not valid | ■ Zone de vigilance |
| | | ● No analysis | |



zone I zone II



zone II zone II NEW zone I zone I NEW



Monday 21-01-2019