

## Eradication: Final report for Rabies 2018

For each approved annual or multi-annual programme Member States shall submit to the Commission by the 30 April each year an annual detailed technical and financial report covering the previous year. That report shall include the results achieved and a detailed account of eligible costs incurred (Art 14 of Regulation (EU) No 652/2014).

This form is for information only, no submission possible.

ID: 20190826-97ICZPII

**Country code:** PL

### Reporting period

**From:** 2017

**To:** 2018

**Year of implementation:** 2018

## 1. Technical implementation of the programme

### **1.1 Description and evaluation of the evolution of the epidemiological situation, the technical implementation of the activities foreseen under the programme and the cost-effectiveness of the programme.**

In Poland the number of affected terrestrial animals (without bats) slightly increased from 2 in 2017 to 4 in 2018. However, the epidemiological situation seems to be stable. The disease occurs in Poland at a very low rate.

In 2018 cases caused by classical rabies virus occurred in Lubelskie region (2 foxes), Malopolskie region (1 fox) and Podkarpackie region (1 fox).

The rabies case in Malopolskie region was caused by the vaccine strain.

The rabies cases in Lubelskie and Podkarpackie region were positive for field strain. They were located very close to the border with Belarus and Ukraine and probably caused by a migration of affected wild animals from these countries.

Moreover, European bat lyssavirus 1 was confirmed in bats in Lubelskie region (1 case), Podlaskie region (1 case), Warminsko-mazurskie region (1 case) and Wielkopolskie region (2 cases).

Please find attached the map of rabies cases locations in Poland (Annex1).

The activities were technically implemented as foreseen under the programme. Additional vaccination campaign was implemented in the whole Malopolskie and Podkarpackie region due to the recommendation included in the European Commission letter of 10 March 2016 (Ref.: Ares(2016)1229203). During the additional campaign approximately 30 vaccine doses per square kilometer were distributed with reduced flights' distances (500 m).

The programme was implemented cost-effectively.

Poland signed agreements with Belarus and Ukraine regarding vaccination buffer zones for 2018. However, only autumn vaccination campaign was performed in Belarus. This might have had negative impact on rabies situation in Lubelskie and Podkarpackie region.

Please find attached the 2018 final report from Belarus (Annex2). Poland received only Russian version of the report with data, which are incomplete in comparison with the requirements indicated in the agreement.

### **1.2 Details on the level of achievement of the targets set in the approved programme and technical difficulties.**

Taking into account all samples taken in Poland in 2018:

- The target on the number of RTCIT tests have been achieved in animals other than foxes. The schedule for FAT tests for this group of animals was implemented at the level of 89.79%, so the target has almost been reached;
  - In case of foxes the targets on the number of FAT in healthy hunted animals, FAT in susceped animals, RTCIT, ELISA and tetracycline detection tests have not been achieved mostly due to lack of the material for tests and decrease in rabies suspisions. The schedules for these tests were implemented at the level of 98.52%, 73.57%, 70.49%, 94.62% and 99.63% respectively, so the goals have been nearly reached;
  - The target on the number of tests for differentiation of rabies virus strains has not been achieved, because the number of rabies cases in foxes in 2018 was lower than planned. There were only 4 rabies case in fox. All of them were tested in order to distinguish field rabies strains from vaccine strains;
- The targets on vaccination have been achieved.

The target on % of positive results has been reached in tetracycline detection and almost met in ELISA tests (planed: 54.00% / achieved: 47.97%).

The target on the number of vaccine titration tests has not been achieved as the number of vaccine batches distributed was lower than planned.

The number of rabies cases significantly declined in Poland in 2018 in comparison with year 2015 (the decrease of 95,70%). Therefore, the target on rabies cases has been reached.

### **1.3 Epidemiological maps for infection and other relevant data on the disease/activities (information on serotypes involved,...) (Please attach files of data using the PDF attachment feature) Use the textbox below to provide clarifications for the maps you attach, if needed.**

Please find attached the above-mentioned maps (Annex3).

Monitoring tests (Poland):

- In most cases % of seropositives and vaccine uptake was higher in adult foxes than in juvenile ones;
- Usually % of seropositives was the lowest in regions bordering with unvaccinated areas.

Tests performed in 2019 on samples taken in 2018 were excluded from the table A1.

Moreover, the data on tests carried out in 2018 on foxes shot in 2017 were included in the table A1. These data were not included in the final report for 2017.

Surveillance tests (Poland):

- Virus isolation tests (RTCIT) were carried out due to human exposure and when FAT results needed to be confirmed;
- As the laboratory method is recommended by OIE and WHO, the costs of RTCIT should be co-financed by the European Union;
- The data concerning surveillance tests were not indicated separately for each species to avoid overloading of the form.

Tests performed in 2019 on samples taken in 2018 were excluded from the table A2.

Moreover, the data on tests carried out in 2018 on samples taken in 2017 were included in the table A2. These data were not included in the final report for 2017.

Vaccine tests (Poland):

- Each vaccine batch was sampled and tested in the National Reference Laboratory directly before the distribution;
- The number of vaccine titration tests performed is higher than the number of vaccine batches distributed, because one batch could be distributed in more than one region;
- The costs of vaccine titration tests performed directly before vaccine distribution were covered by vaccine suppliers.

The following criteria qualifying of tests to the reporting period were taken into account during preparing Annex4:

- in case of healthy hunted foxes - the date of shooting;

- in case of suspected animals - the date of delivery of samples to the laboratory.  
 These criteria are the most appropriate for the evaluation of programme implementation.  
 The maps included in Annex3 are in line with the data in Annex4.

There was no possibility to enter the data on RTCIT (virus isolation) into the Table A2 : Surveillance tests, so please find attached the data in Annex5.

## ANNEX VI TECHNICAL REPORT ON RABIES PROGRAMMES

VERY IMPORTANT: Please fill out the following tables with figures corresponding to measures performed during the implementing period (1/1 to 31/12).

**Table A1 - TEST FOR THE MONITORING OF VACCINATION EFFECTIVENESS**

Region	Species and age	Type of test	Test description	Number of tests	Number positive	% positive
Lubelskie	Foxes juvenile	Biomarker	Tetracycline in bones	45	19	42.22 %
Lubelskie	Foxes adult	Biomarker	Tetracycline in bones	870	833	95.75 %
Malopolskie	Foxes juvenile	Biomarker	Tetracycline in bones	3	1	33.33 %
Malopolskie	Foxes adult	Biomarker	Tetracycline in bones	442	440	99.55 %
Mazowieckie (part covered by vaccination)	Foxes juvenile	Biomarker	Tetracycline in bones	203	131	64.53 %
Mazowieckie (part covered by vaccination)	Foxes adult	Biomarker	Tetracycline in bones	411	395	96.11 %
Podkarpackie	Foxes juvenile	Biomarker	Tetracycline in bones	3	0	0 %
Podkarpackie	Foxes adult	Biomarker	Tetracycline in bones	646	612	94.74 %
Podlaskie	Foxes juvenile	Biomarker	Tetracycline in bones	291	258	88.66 %
Podlaskie	Foxes adult	Biomarker	Tetracycline in bones	579	568	98.1 %
Pomorskie (part covered by vaccination)	Foxes juvenile	Biomarker	Tetracycline in bones	15	13	86.67 %
Pomorskie (part covered by vaccination)	Foxes adult	Biomarker	Tetracycline in bones	73	57	78.08 %
Slaskie	Foxes juvenile	Biomarker	Tetracycline in bones	8	2	25 %
Slaskie	Foxes adult	Biomarker	Tetracycline in bones	363	293	80.72 %
Swietokrzyskie	Foxes juvenile	Biomarker	Tetracycline in bones	18	2	11.11 %
Swietokrzyskie	Foxes adult	Biomarker	Tetracycline in bones	360	344	95.56 %
Warminsko-mazurskie	Foxes juvenile	Biomarker	Tetracycline in bones	79	64	81.01 %
Warminsko-mazurskie	Foxes adult	Biomarker	Tetracycline in bones	507	464	91.52 %
Lubelskie	Foxes juvenile	Serological	VNT/FAVN/ELISA	43	7	16.28 %
Lubelskie	Foxes adult	Serological	VNT/FAVN/ELISA	827	261	31.56 %
Malopolskie	Foxes juvenile	Serological	VNT/FAVN/ELISA	3	1	33.33 %
Malopolskie	Foxes adult	Serological	VNT/FAVN/ELISA	458	305	66.59 %
Mazowieckie (part covered by vaccination)	Foxes juvenile	Serological	VNT/FAVN/ELISA	164	82	50 %
Mazowieckie (part covered by vaccination)	Foxes adult	Serological	VNT/FAVN/ELISA	347	243	70.03 %
Podkarpackie	Foxes juvenile	Serological	VNT/FAVN/ELISA	3	0	0 %
Podkarpackie	Foxes adult	Serological	VNT/FAVN/ELISA	616	378	61.36 %
Podlaskie	Foxes juvenile	Serological	VNT/FAVN/ELISA	252	125	49.6 %
Podlaskie	Foxes adult	Serological	VNT/FAVN/ELISA	511	343	67.12 %
Pomorskie (part covered by vaccination)	Foxes juvenile	Serological	VNT/FAVN/ELISA	15	11	73.33 %
Pomorskie (part covered by vaccination)	Foxes adult	Serological	VNT/FAVN/ELISA	73	23	31.51 %
Slaskie	Foxes juvenile	Serological	VNT/FAVN/ELISA	8	1	12.5 %
Slaskie	Foxes adult	Serological	VNT/FAVN/ELISA	382	95	24.87 %
Swietokrzyskie	Foxes juvenile	Serological	VNT/FAVN/ELISA	18	2	11.11 %
Swietokrzyskie	Foxes adult	Serological	VNT/FAVN/ELISA	360	130	36.11 %

Warminsko-mazurskie	Foxes juvenile	Serological	VNT/FAVN/ELISA	79	37	46.84 %
Warminsko-mazurskie	Foxes adult	Serological	VNT/FAVN/ELISA	497	260	52.31 %
<b>Total</b>				9,572	6,800	71.04 %

**Table A2 - SURVEILLANCE TESTS**

Region	Animal species	Category	Test description	Number of tests	Number of cases
Lubelskie	Foxes	Active	fluorescent antibody test (IF)	848	0
Malopolskie	Foxes	Active	fluorescent antibody test (IF)	620	0
Mazowieckie (part covered by vaccination)	Foxes	Active	fluorescent antibody test (IF)	575	0
Podkarpackie	Foxes	Active	fluorescent antibody test (IF)	662	0
Podlaskie	Foxes	Active	fluorescent antibody test (IF)	667	0
Pomorskie (part covered by vaccination)	Foxes	Active	fluorescent antibody test (IF)	70	0
Slaskie	Foxes	Active	fluorescent antibody test (IF)	400	0
Swietokrzyskie	Foxes	Active	fluorescent antibody test (IF)	446	0
Warminsko-mazurskie	Foxes	Active	fluorescent antibody test (IF)	579	0
Dolnoslaskie	Foxes	Passive	fluorescent antibody test (IF)	164	0
Kujawsko-pomorskie	Foxes	Passive	fluorescent antibody test (IF)	79	0
Lubelskie	Foxes	Passive	fluorescent antibody test (IF)	89	2
Lubuskie	Foxes	Passive	fluorescent antibody test (IF)	62	0
Lodzkie	Foxes	Passive	fluorescent antibody test (IF)	35	0
Malopolskie	Foxes	Passive	fluorescent antibody test (IF)	64	1
Mazowieckie	Foxes	Passive	fluorescent antibody test (IF)	83	0
Opolskie	Foxes	Passive	fluorescent antibody test (IF)	36	0
Podkarpackie	Foxes	Passive	fluorescent antibody test (IF)	93	1
Podlaskie	Foxes	Passive	fluorescent antibody test (IF)	40	0
Pomorskie	Foxes	Passive	fluorescent antibody test (IF)	57	0
Slaskie	Foxes	Passive	fluorescent antibody test (IF)	34	0
Swietokrzyskie	Foxes	Passive	fluorescent antibody test (IF)	35	0
Warminsko-mazurskie	Foxes	Passive	fluorescent antibody test (IF)	70	0
Wielkopolskie	Foxes	Passive	fluorescent antibody test (IF)	85	0
Zachodniopomorskie	Foxes	Passive	fluorescent antibody test (IF)	44	0
Dolnoslaskie	Other species	Passive	fluorescent antibody test (IF)	122	0
Kujawsko-pomorskie	Other species	Passive	fluorescent antibody test (IF)	106	0
Lubelskie	Other species	Passive	fluorescent antibody test (IF)	124	1
Lubuskie	Other species	Passive	fluorescent antibody test (IF)	67	0
Lodzkie	Other species	Passive	fluorescent antibody test (IF)	95	0
Malopolskie	Other species	Passive	fluorescent antibody test (IF)	200	0
Mazowieckie	Other species	Passive	fluorescent antibody test (IF)	367	0
Opolskie	Other species	Passive	fluorescent antibody test (IF)	44	0
Podkarpackie	Other species	Passive	fluorescent antibody test (IF)	172	0
Podlaskie	Other species	Passive	fluorescent antibody test (IF)	51	1
Pomorskie	Other species	Passive	fluorescent antibody test (IF)	151	0
Slaskie	Other species	Passive	fluorescent antibody test (IF)	207	0
Swietokrzyskie	Other species	Passive	fluorescent antibody test (IF)	57	0
Warminsko-mazurskie	Other species	Passive	fluorescent antibody test (IF)	95	1
Wielkopolskie	Other species	Passive	fluorescent antibody test (IF)	206	2
Zachodniopomorskie	Other species	Passive	fluorescent antibody test (IF)	131	0
<b>Total</b>				8,132	9

<b>Number of rabies virus isolates typed for differentiation from vaccine</b>	4
<b>Typing results (please indicate the number of field strains/vaccine strains, and</b>	One result positive for vaccine strain and three results positive for field strain.

**Table B - WILDLIFE ORAL VACCINATION**

Aerial distribution data files:

Sent via post (USB, DVD, etc...)

The data will be sent by post (DVD).

Description of the analysis performed by the Competent Authority on the aerial distribution data and conclusions of the assessment for the quality of the distribution:

In Poland the representatives of the Competent Authority were present at the airports to evaluate and document the implementation of vaccine aerial distribution. The flight tracks and bait dropping data received from the contractors were compared and checked electronically through the computer software, including GIS mapping. The density of bait drop was evaluated. The results of analysis were satisfactory in general. However, in case of some flights the following minor defects in the vaccine distribution were identified:

- the vaccine was not distributed evenly on some tracks;
- the failure of devices responsible for recording of flight tracks and bait dropping data.

The scale of the mentioned defects is not significant and should not influence on the positive evaluation of vaccine distribution. The corrective actions were implemented.

Start date of additional campaign: 11.11.2018

End date of additional campaign: 21.11.2018

<b>Start date of First Campaign</b>	7/4/2018	<b>End date of First Campaign</b>	17/4/2018
<b>Start date of Second Campaign</b>	15/9/2018	<b>End date of Second Campaign</b>	5/10/2018

Region/Area	Product used	Number of doses	Size of vaccinated area (km <sup>2</sup> )	Distribution method
Lubelskie (spring campaign)	Lysvulpen	566,800	22,208	Aerial
Lubelskie (spring campaign)	Lysvulpen	2,600	117	Manual
Malopolskie (spring campaign)	Lysvulpen	455,340	15,178	Aerial
Malopolskie (spring campaign)	Lysvulpen	9,150	386	Manual
Mazowieckie (spring campaign)	Lysvulpen	310,525	15,435	Aerial
Podkarpackie (spring campaign)	Lysvulpen	484,830	16,021	Aerial
Podkarpackie (spring campaign)	Lysvulpen	12,600	344	Manual
Podlaskie (spring campaign)	Lysvulpen	439,500	19,175	Aerial
Slaskie (spring campaign)	Lysvulpen	202,620	10,131	Aerial
Slaskie (spring campaign)	Lysvulpen	160	4	Manual
Swietokrzyskie (spring campaign)	Lysvulpen	262,500	10,500	Aerial
Swietokrzyskie (spring campaign)	Lysvulpen	126	3	Manual
Lubelskie (autumn campaign)	Lysvulpen	566,800	22,208	Aerial
Lubelskie (autumn campaign)	Lysvulpen	2,600	79	Manual
Malopolskie (autumn campaign)	Lysvulpen	455,340	15,178	Aerial
Malopolskie (autumn campaign)	Lysvulpen	9,150	412	Manual
Mazowieckie (autumn campaign)	Lysvulpen	310,525	15,435	Aerial
Podkarpackie (autumn campaign)	Lysvulpen	484,830	16,021	Aerial
Podkarpackie (autumn campaign)	Lysvulpen	12,600	352	Manual
Podlaskie (autumn campaign)	Lysvulpen	439,500	19,175	Aerial
Pomorskie (autumn campaign)	Lysvulpen	32,700	1,635	Aerial
Slaskie (autumn campaign)	Lysvulpen	202,620	10,131	Aerial
Slaskie (autumn campaign)	Lysvulpen	160	4	Manual
Swietokrzyskie (autumn campaign)	Lysvulpen	262,500	10,500	Aerial
Swietokrzyskie (autumn campaign)	Lysvulpen	126	3	Manual
Warminsko-mazurskie (autumn campaign)	Lysvulpen	301,360	15,068	Aerial
Malopolskie (additional campaign)	Lysvulpen	455,340	15,178	Aerial
Malopolskie (additional campaign)	Lysvulpen	9,150	385	Manual
Podkarpackie (additional campaign)	Lysvulpen	484,830	16,021	Aerial
Podkarpackie (additional campaign)	Lysvulpen	12,600	348	Manual
<b>Total</b>		<b>6,789,482</b>	<b>267,635</b>	

**Table C - OFFICIAL CONTROL OF ORAL VACCINES BEFORE THEIR DISTRIBUTION**

Number of batches distributed	Number of batches controlled by CA	Number of batches rejected
-------------------------------	------------------------------------	----------------------------

Batch number	Manufacturer	Sampling date	Virus titration result	Outcome of the titration
8325	Bioveta	5/4/2018	1.8 x 10 7.8 TCID50	Acceptable
8625	Bioveta	5/4/2018	1.8 x 10 7.41 TCID50	Acceptable
7024	Bioveta	5/4/2018	1.8 x 10 7.48 TCID50	Acceptable
9225	Bioveta	18/9/2018	1.8 x 10 6.64 TCID50	Acceptable
9325	Bioveta	18/9/2018	1.8 x 10 7.5 TCID50	Acceptable
9425	Bioveta	18/9/2018	1.8 x 10 7.16 TCID50	Acceptable
8925	Bioveta	5/4/2018	1.8 x 10 7.8 TCID50	Acceptable
9025	Bioveta	5/4/2018	1.8 x 10 7.89 TCID50	Acceptable
1225	Bioveta	25/9/2018	1.8 x 10 7.93 TCID50	Acceptable
1325	Bioveta	25/9/2018	1.8 x 10 7.76 TCID50	Acceptable
2325	Bioveta	9/11/2018	1.8 x 10 7.43 TCID50	Acceptable
8825	Bioveta	5/4/2018	1.8 x 10 7.89 TCID50	Acceptable
8325	Bioveta	5/4/2018	1.8 x 10 7.3 TCID50	Acceptable
9425	Bioveta	12/9/2018	1.8 x 10 7.18 TCID50	Acceptable
9525	Bioveta	12/9/2018	1.8 x 10 7.41 TCID50	Acceptable
9025	Bioveta	5/4/2018	1.8 x 10 7.6 TCID50	Acceptable
9125	Bioveta	5/4/2018	1.8 x 10 7.99 TCID50	Acceptable
1225	Bioveta	25/9/2018	1.8 x 10 7.93 TCID50	Acceptable
1325	Bioveta	25/9/2018	1.8 x 10 7.68 TCID50	Acceptable
1425	Bioveta	25/9/2018	1.8 x 10 7.89 TCID50	Acceptable
1225	Bioveta	27/9/2018	1.8 x 10 7.93 TCID50	Acceptable
1325	Bioveta	27/9/2018	1.8 x 10 7.51 TCID50	Acceptable
1425	Bioveta	27/9/2018	1.8 x 10 7.6 TCID50	Acceptable
2325	Bioveta	9/11/2018	1.8 x 10 7.51 TCID50	Acceptable
2425	Bioveta	9/11/2018	1.8 x 10 7.75 TCID50	Acceptable
8825	Bioveta	5/4/2018	1.8 x 10 7.89 TCID50	Acceptable
8925	Bioveta	5/4/2018	1.8 x 10 7.39 TCID50	Acceptable
9525	Bioveta	12/9/2018	1.8 x 10 6.85 TCID50	Acceptable
9625	Bioveta	12/9/2018	1.8 x 10 6.93 TCID50	Acceptable
9625	Bioveta	12/9/2018	1.8 x 10 6.85 TCID50	Acceptable
9125	Bioveta	5/4/2018	1.8 x 10 7.7 TCID50	Acceptable
9225	Bioveta	5/4/2018	1.8 x 10 7.6 TCID50	Acceptable
1425	Bioveta	12/9/2018	1.8 x 10 7.8 TCID50	Acceptable
9225	Bioveta	5/4/2018	1.8 x 10 7.7 TCID50	Acceptable
1425	Bioveta	12/9/2018	1.8 x 10 7.68 TCID50	Acceptable
9625	Bioveta	12/9/2018	1.8 x 10 7.2 TCID50	Acceptable
9625	Bioveta	25/9/2018	1.8 x 10 7.25 TCID50	Acceptable

## COMMENT / ADDITIONAL CLARIFICATION

In the report costs of the oral vaccination, effectiveness monitoring (serology and biomarker) and awareness campaigns concern regions and parts thereof listed in the message received by e-mail on 1 December 2016. As the vaccination area covered by the programme is bigger than the vaccination area approved for EU funding, in the report the costs were calculated pro-rata based on the information provided in the above-mentioned message.

The costs of serology and biomarker tests performed in 2018 on foxes shot in 2017 and the costs of FAT and RTCIT tests performed in 2018 on samples taken in 2017 were included in the financial report as well.

The costs of the tests performed in 2019 on samples taken in 2018 were not included in the financial

report.

There is a difference between number of units for vaccine purchase and distribution in Poland, because some vaccine doses were distributed manually free of charge.

Exchange rate 1: 1 EUR = 4.3006 PLN

Exchange rate 2: 1 EUR = 2.426 BYN

1.8.10 SANTE Data Collection Platform - PRODUCTION • Contact us at [SANTE-XMLGATE3@ec.europa.eu](mailto:SANTE-XMLGATE3@ec.europa.eu)