

## 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: 20191004-53OVI8MZ

**Country code:** HR

### Reporting period

**From:** 2014

**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.**

Rabies eradication programme in Croatia is in place since 2011. In that period, measure of vaccination and testing of wild animals (red fox) was co-financed by IPA funds. Due to fact that Croatia joined EU on July 1st 2013, co-financing of rabies eradication programme continued till the end of 2013 through IPA funds.

On 5th of February 2014, during regular hunting activities, three foxes were shot, and sampled for the purpose of control of immunization of foxes against rabies. One out of three sampled animals tested positive, and rabies was confirmed. Since that , there were no confirmed cases of rabies in Croatia, neither in wildlife or domestic animals.

There were no technical difficulties during implementation of eradication program. Both distribution campaigns were completed successfully.

Aerial distribution of vaccine baits during spring campaign 2018 has been successfully implemented from 4 airports (Brač, Rijeka, Osijek and Varaždin) from 23 May - 29 May 2018. Total number of distributed vaccine baits during the spring campaign 2018 was 1.344.846 baits.

Aerial distribution of vaccine baits during autumn campaign 2018 has been successfully implemented from 4 airports (Brač, Rijeka, Osijek and Čakovec) from 26 September 2018 till 03 October 2018. Total number of distributed vaccine baits during the autumn campaign in 2018 was 1.345.560 baits.

Taken into account the fact that during the aerial distribution in some cases temporary technical problems may arise in the functioning of the equipment for automatic distribution of vaccine baits, which can cause negative consequences for the proving of meeting contractual obligations, the Contractor added 5-6 extra vaccine baits to each box (less than 1%) as a reserve for such unforeseen circumstances. Therefore a higher number of baits than prescribed 1.332.925/campaign were distributed.

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

Lack of samples for monitoring from certain counties is still present, and in order to straighten the monitoring programme results other species (jackal) were included, as population of foxes is very low in those areas. According to GUIDELINES FOR MEMBER STATES FOR EU FUNDING OF VETERINARY PROGRAMMES, jackals are included in sampling and are eligible cost in 2018, therefore were included in monitoring program in order to receive necessary epidemiological information.

Additional input to improve realisation of OVF programme is done throughout cooperation with Directorate for Forestry, Hunting and Wood Industry (MoA). In order to implement OVF program as well as to maintain health status of wild population additional financial reward is paid for carcass of fox and golden jackal submitted by Directorate for Forestry, Hunting and Wood Industry.

Detail education as well as written information were given to authorised veterinary organisations on sampling for the purpose of passive surveillance.

## 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.

Raw data and maps related to bait density and testing results are attached to the document

## 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
Croatia total	Foxes juvenile	Serological	fluorescent antibody test (IF)	148	0	0 %
Croatia total	Foxes adult	Serological	fluorescent antibody test (IF)	638	0	0 %
Croatia total	Golden jackal	Serological	fluorescent antibody test (IF)	19	0	0 %
Croatia total	Foxes juvenile	Serological	VNT/FAVN/ELISA	138	14	10.14 %
Croatia total	Foxes adult	Serological	VNT/FAVN/ELISA	601	106	17.64 %
Croatia total	Golden jackal	Serological	VNT/FAVN/ELISA	19	4	21.05 %
Croatia total	Foxes juvenile	Biomarker	Tetracycline in bones	147	91	61.9 %
Croatia total	Foxes adult	Biomarker	Tetracycline in bones	632	578	91.46 %
Croatia total	Golden jackal	Biomarker	Tetracycline in bones	18	15	83.33 %
<b>Total</b>				2,360	808	34.24 %

**Table A2 - SURVEILLANCE TESTS**

Region	Animal species	Category	Test description	Number of tests	Number of cases
Croatia total	Foxes	Passive	fluorescent antibody test (IF)	159	0
Croatia total	Jackals	Passive	fluorescent antibody test (IF)	11	0
Croatia total	Cats	Passive	fluorescent antibody test (IF)	112	0
Croatia total	Dogs	Passive	fluorescent antibody test (IF)	71	0
Croatia total	Equidae	Passive	fluorescent antibody test (IF)	2	0
Croatia total	Pigs	Passive	fluorescent antibody test (IF)	1	0
Croatia total	Domestic ruminants	Passive	fluorescent antibody test (IF)	9	0
Croatia total	Other wilds carnivores	Passive	fluorescent antibody test (IF)	24	0
Croatia total	Other species	Passive	fluorescent antibody test (IF)	9	0
Croatia total	Cats	Passive	PCR	17	0
Croatia total	Dogs	Passive	PCR	21	0

Croatia total	Other species	Passive	PCR	7	0
Croatia total	Foxes	Passive	PCR	1	0
<b>Total</b>				444	0

<b>Number of rabies virus isolates typed for differentiation from vaccine</b>	0
<b>Typing results (please indicate the number of field strains/vaccine strains, and (optional) comment)</b>	0

## Table B - WILDLIFE ORAL VACCINATION

Aerial distribution data files:

Downloadable via URL	data sent by jumbo mail
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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:

Competent authority analysed distribution data related to number of baits distributed and results were satisfactory. No of baits distributed was monitored on daily basis . Data on areal distribution such are control of flight routes, real time controls, distribution near large cities were controlled and satisfactory. During distribution veterinary inspection preformed official controls at the airports of distribution according to Annual official control plan. Maps will be sent with Jumbo mail.
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<b>Start date of First Campaign</b>	22/5/2018	<b>End date of First Campaign</b>	28/5/2018
<b>Start date of Second Campaign</b>	25/9/2018	<b>End date of Second Campaign</b>	2/10/2018

Region/Area	Product used	Number of doses	Size of vaccinated area (km <sup>2</sup> )	Distribution method
Republic of Croatia	Lysvulpen	2,665,850	53,284	Aerial
<b>Total</b>		2,665,850	53,284	

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

Number of batches distributed	Number of batches controlled by CA	Number of batches rejected
9	9	0

Batch number	Manufacturer	Sampling date	Virus titration result	Outcome of the titration
7424	Bioveta	15/5/2018	og10TCID50 = 6.21; 6.71; 7.05; 6.88; 6.71 /dosis	Acceptable
8725	Bioveta	15/5/2018	log10TCID50 = 7.21; 7.07; 7.71; 7.21; 7.05 /dosis	Acceptable
7624	Bioveta	15/5/2018	og10TCID50 = 7.05; 6.71; 6.71; 7.05; 7.38 /dosis	Acceptable
77245	Bioveta	15/5/2018	log10TCID50 = 7.05; 7.21; 6.88; 7.21; 7.38 /dosis	Acceptable
7524	Bioveta	15/5/2018	log10TCID50 = 6.71; 6.71; 6.88; 6.71; 7.05 /dosis	Acceptable
0925	Bioveta	18/5/2018	og10TCID50 = 7.89; 7.89; 7.89; 8.05; 7.73 /dosis	Acceptable
1025	Bioveta	18/5/2018	og10TCID50 = 7.89; 7.73; 7.89; 7.73; 7.73 /dosis	Acceptable
1125	Bioveta	18/5/2018	og10TCID50 = 7.89; 7.73; 7.89; 7.73; 7.73 /dosis	Acceptable
1225	Bioveta	18/5/2018	log10TCID50 = 7.89; 7.73; 7.89; 7.56; 7.73 /dosis	Acceptable

## COMMENT / ADDITIONAL CLARIFICATION

n/a