

## About this dossier

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## Eradication: Final report for Bluetongue 2019

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: 20200424-QE2750IW

**Country code:** MT

### Reporting period

**From:** 2019

**To:** 2019

**Year of implementation:** 2019

## 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.

Malta as an island in the centre of the Mediterranean sea, is surrounded by various countries that have had outbreaks of Bluetongue in recent years. Due to its geographical location and the presence of potential vectors of the disease, in Malta the ongoing monitoring for the disease is necessary.

Malta is listed in the Zone H, no information is currently available on which sero-types is in circulation. No positive cases have been recorded in the past 5 years.

During the year 2002 an EU funded epidemiological survey for Bluetongue was carried out on the bovine, ovine and caprine population of Malta and Gozo. A total of 6894 animals were sampled.

In the first batch of results received, two bovine animals were positive to the ELISA test. These two samples were confirmed by means of sero-neutralisation tests for serotype 2.

These positive results must be interpreted in the light of climatic conditions as during the sampling period strong sandstorms could have carried infected vectors passively to the Maltese islands. There were no clinical signs of Bluetongue in the ruminant population observed to date. Even though infected vectors could be carried passively to the Maltese islands, there may not be the ideal climatic and environmental conditions for the vector to survive.

Total No. of samples tested 7868

Total No. of samples tested  
(excluding duplicates) 6894  
Total no. of Bovine farms tested (dairy)  
(excluding duplicates) 128  
Total no. of ovine, caprine farms tested  
(non-dairy) 158  
Total no. of bovine animals tested  
(excluding duplicates) 4893  
Total no. of positive bovine animals 2  
Total no. of ovine/caprine animals tested 2001  
Total no. of positive ovine/caprine animals 0

The Istituto Zooprofilattico Sperimentale dell' Abruzzo e del Molise (OIE Reference Laboratory) was able to offer its expertise to the NRL in Malta (VAFD laboratory). An entomological surveillance programme was initiated in May 2002, and six insect-traps were set up in four different areas of Malta and two areas on the island Gozo. These traps were activated once a week during the night. The insects caught in the traps were then observed and identified. The IZS carried out the identification until personnel from the Department was adequately trained.

During the late months of summer and early autumn 2002, *Culicoides imicola* and *C. pulicaris* were recorded in very small percentages (approx. 1% of the insects within the catches).

During the year 2004, a surveillance programme was set up. This time the programme made use of sentinel bovine animals on dairy farms distributed over the whole territory of the country. A total of 147 bovines distributed on 68 dairy holdings were sampled. The sera were tested using ELISA kits. Testing was carried out at the National Veterinary Laboratory of the Veterinary Regulation Fisheries Conservation and Controls Division. The number of animals to be sampled was calculated in order to detect 1% herd prevalence with a 5% seroprevalence. This approach was suggested by the IZS Teramo. All sentinel bovines were young adult milking cows. There was seroconversion in a very small number of samples.

In 2006, 56 sera samples were tested.

In 2007, 101 sera samples were tested.

In 2008, 569 serum samples were tested all were negative

In 2009, 2082 samples were tested. A further more 63 samples were also sent to the Community Reference Laboratory for Blue Tongue Pirbright-UK.

No tests resulted positive in 2009.

The number of animals tested in 2010 was 1341 and all samples were negative.

The number of animals tested in 2011 was 665 and all samples were negative.

The number of animals testes in 2012 was 1489 and all samples were negative.

The number of animals tested in 2013 was 1489 and all samples were negative.

The number of animals tested in 2014 was 1936 and all samples were negative.

The number of animals tested in 2015 was 1840 and all samples were negative.

The number of animals tested in 2016 was 1456 and all samples were negative.

The number of animals tested in 2017 was 1336 and all samples were negative.

Then number of animals tested in 2018 was 624 and all samples were negative.

The number of animals tested in 2019 was 480 and all samples were negative.

The National Veterinary laboratory also took part in 5 ring tests in the last 3 years: 2 in 2017 organised by Vetqas, 2 in 2018 organised one by Vetqas and one by Pirbright-UK, and one in 2019 organised by EURL AHS and BT. All samples analysed in these trials were correctly identified.

#### Serological surveillance

According to the Commission Regulation 1266/2007, amended by Reg. 456/2012, Annex 1 point 3, the minimum sample size "to demonstrate the absence of bluetongue virus circulation must be calculated to detect a prevalence of 5% with 95% confidence."

The bluetongue surveillance control plan in Malta has been rescheduled as described below in order to enhance the sensitivity of the programme. Considering:-

-the lack of proper entomological information collected in the recent years,

-the number of samples collected in previous years

-and the target of demonstrating the absence of the virus circulation and promptly detecting the possible introduction of the disease in the country. For this reason, the sample size has been maintained slightly higher then required by Reg. 456/2012 (prev. 5% LC 95%)

The National Programme for bluetongue is thus modified as follows:

- the sample size is calculated to detect a prevalence of 2% with a 95% confidence limit (as opposed to 2% with 99% LC)

- the number of sentinel herds is reduced from 45 to 20 herds

- the number of sentinel animals in each sentinel herd is increased from 5 to 8 animals. This will bring the total number of animals to be tested down from 225 to 160 animals per month.
- the implementation with priority of the entomological surveillance.

Considering Malta as one geographical unit of 45 x 45 Km, as stated in the Reg 1266/07 for the purpose of bluetongue monitoring and surveillance, a sample size of 148 animals was determined to be sufficient to detect a prevalence 2% LC 95%.

The area of the only one geographical unit is divided in 5 zones (the distribution of the farms within the zone is available on the Veterinary Information System) and number of sentinel herds and animals is defined as follow:

The sentinel animals were identified among the female young bovine present in the MDP farms (milk production), not vaccinated in the country of origin, identified as sentinel herds and all the 160 sentinel animals are sampled once a month for a total of 1920 samples per year.

In order to avoid the sampling of vaccinated animals and to have all the important information of immunological status of the animals, all the data related to the vaccinations performed on imported animals in the county of origin (information available on the animal passports) is registered in the Veterinary Information System.

All the samples are tested with ELISA at the national veterinary laboratory and in case of positive result, the sample is sent to the Institute for Animal Health in Pirbright, UK (OIE reference laboratory) for confirmation and serotyping.

#### Entomological surveillance

Entomological monitoring consists on an active programme of vector catching by means of n. 6 permanently sited traps intended to determine the population dynamics and overwintering features of the Culicoides species in the sampled sites in order to:

- identify the population of Culicoides spp. present on the islands;
- define the seasonal dynamics of Culicoides species with particular reference to those species with epidemiologic interest;
- provide all relevant entomological data in order to perform a proper risk analysis connected with the vector seasonality

Aspiration traps equipped with ultraviolet light are used in accordance with pre-established protocols. The traps are operating throughout the night and at a rate of at least one night every 15 days. The traps are located in six of the sentinel farms (4 in Malta and 2 in Gozo) chosen to represent the whole island with particular reference to the areas where are illustrated in the map below. The following parameters were considered when allocating trapping sites:

- the farm is a sentinel farm within the serological surveillance programme
- the livestock size >10 animals
- electricity is available to operate the light trap
- the farmer/owner is willing to collaborate.

Priority is given to farms where conditions such as pools of water or mud are found, created either naturally or by irrigation.

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

The main technical difficulties encountered were that:

- not all samples programmed were collected
- entomological surveillance was not carried out

These difficulties were mainly due to the fact that the sampling team is not dedicated only to bluetongue sampling but also carry out other duties.

The unit is presently understaffed.

### **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.**

See map attached.

## **2. TECHNICAL IMPLEMENTATION ON BLUETONGUE 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 A - DATA ON HERDS**

Table A is not to be filled in for Bluetongue

**Table B - DATA ON ANIMALS**

Region	Animal species	Total number of animals	Number of animals under the programme	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	Number of outbreaks
Malta & Gozo	Cattle	14,174	160	160	40	40	0	0
<b>Total</b>		14,174	160	160	40	40	0	0

**Table C - DATA ON VACCINATION PROGRAMMES**

Region	Animal species	Total number of herds	Total number of animals	Serotype	Number of herds in vaccination programme	Number of herds vaccinated	Number of animals vaccinated	Number of doses of vaccine administered	Number of adults vaccinated	Number of young animals vaccinated	Number of animals with primary vaccination (initial+ booster)
<b>Total</b>		0	0		0	0	0	0	0	0	0

**Table D - DATA ON STATUS OF HERDS AT THE END OF THE PERIOD**

Table D is not to be filled in for Bluetongue

**Table E - SUSPENSION/WITHDRAWAL OF THE FREE OR OFFICIALLY FREE STATUS**

Table E is not to be filled in for Bluetongue

**Table F - STRATIFIED DATA ON SURVEILLANCE AND LABORATORY TESTS**

Region	Animal species	Number of samples	Test type	Number of tests	Number of positive tests
Malta & Gozo	Cattle	480	Elisa test	480	0
<b>Total</b>		480		480	0
			<b>Methods of laboratory analysis</b>	<b>Total number of tests</b>	
			<b>Total - Elisa test</b>	480	

**COMMENT / ADDITIONAL CLARIFICATION**