



EUROPEAN COMMISSION
HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit 04 - Veterinary Control Programmes

SANCO/12890/2010

*Programmes for the eradication, control and monitoring of certain
animal diseases and zoonoses*

Surveillance and Eradication programme of Bluetongue

Approved* for 2011 by Commission Decision 2010/712/EU

Malta

* in accordance with Council Decision 2009/470/EC

Program for Eradication : ANNEX 1

Submission Date	Submission Number
30/04/2010	1272624793022-342

1. Identification of the programme		Request of Community co-financing from beginning of	To end of
Member State	Disease	Species	
Malte	Bluetongue in endemic or high risk areas	Bovines	2011 2011

1.1 Contact

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2. Historical data on the epidemiological evolution of the disease

2. Historical data on the epidemiological evolution of the disease

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 the geographical location and the presence of potential vectors of the disease, Malta is in a high risk area for Bluetongue and the ongoing monitoring for the disease is necessary. Malta is listed in the Zone A restricted zone in Annex 1 to Commission Decision 2005/393/EC. Serotypes 2 and 9 are the most recurrent serotypes in this region (BTV4 and BTV16 to a lesser extent).

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 trap 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* are 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 was tested using ELISA kits and 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 589 serum samples were tested all were negative

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

No tests resulted positive in 2009.

2. Historical data on the epidemiological evolution of the disease

The National Veterinary laboratory also took part in two ring tests; in 2006, 2007, 2008 and 2009 organised by Pirbright-UK. All samples analysed in these trials were correctly identified.

3. Description of the submitted programme

Serological surveillance

The whole Maltese territory is to be considered one serological unit. 15 dairy sentinel farms shall be chosen so as to be equally spread over the whole territory. Within each sentinel farm, 10 sentinel bovine animals shall be selected. This would detect a prevalence of 2% with a 95% confidence level. A bovine animal shall classify as a sentinel if it is female, docile, young and if the farmer intends keeping the animal on the holding for a reasonable span of time so that the same animal may be resampled. Each sentinel bovine shall be sampled on a monthly basis.

Each serological sample shall be tested by means of ELISA in the National Veterinary Laboratory of the Veterinary Regulation Fisheries Conservation and Controls Division.

10% of the samples shall also be sent to Pirbright - UK to be tested by means of PCR targeted at the BLUJETONGUEV serotypes circulating in the central Mediterranean region. Malta is listed in the Zone A restricted zone in Annex 1 to Commission Decision 2005/393/EC. Serotypes 2 and 9 are the most recurrent serotypes in this region (BLUJETONGUEV4 and BLUJETONGUEV16 to a lesser extent).

Any positive samples shall be sent to the CRL for confirmation and serotyping.

Entomological surveillance

The scope of the survey is to determine the *Culicoides* population distribution in the Maltese territory, and to identify potential vectors of the disease.

The surface area of the Maltese islands is 316 square kilometres. The grid system of 45km by 45 km units (2000 km²) does not apply, and the whole Maltese territory is to be considered as one serological unit. In the Maltese islands six insect traps are in use, two in Gozo and four in Malta.

The midges shall be collected on one night per week all over the year. Information on climatic conditions and temperature shall be collected together with the insects trapped. This would result in 312 catches each year.

The collected midges shall be counted and analysed in the National Veterinary Laboratory of the Veterinary Regulation Fisheries Conservation and Controls Division.

A small sample of midges caught shall be sent to IZS. Teramo for virus identification by PCR. The midges sampled must be blood engorged females belonging to a species of *Culicoides* that is a probable vector of *Bluetongue*.

4. Measures of the submitted programme
4.1 Summary of measures under the programme

Duration of the programme
beginning of 2011 to end of 2011

First Year :	
Control	
Testing	X
Slaughter and animals tested positive	
Killing of animals tested positive	X
Vaccination	
Treatment	
Disposal of products	
Eradication, control or monitoring	

Last Year :	
Eradication	
Testing	X
Slaughter of positive animals	

Killing of animals tested positive	
Extended slaughter of killing	
Disposal of products	
Other	X

4.2 Organisation, supervision and role of all stakeholders involved in the programme

The programme shall last one year.

The programme is a surveillance programme that shall confirm the disease-free status of the Maltese islands. Considering the geographical location of the islands in a high risk zone being surrounded by other countries that in recent years have had outbreaks of BLUETONGUE, and considering the recent evolution of the disease in certain member states in central Europe, an ongoing monitoring programme is necessary in order to detect the presence of the disease should it enter the Maltese territory.

4.3 Description and demarcation of the geographical and administrative areas in which the programme is to be implemented

- The surveillance programmes will apply to the Islands of Malta and Gozo (one region). The total surface area of the Maltese territory is 316 km²;
- There is a lack of extensive grazing land available;
- Average farm size is 0.5 hectares;
- Livestock is reared on farms having a higher stocking density than would apply to an extensive system.

4.4 Description of the measures of the programme

4.4.1 Notification of the disease

Council regulation (EC) No 21/2004 establishing a system for the identification and registration of ovine and caprine animals and amending Reg. (EC) No 1782/2003 and Directives 92/102/EEC and 64/432/EEC. Council regulation (EC) No 1760/2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Reg. (EC) No 820/97. The Regulations are currently being transposed into national legislation.

4.4.2 Target animals and animal population

Council regulation (EC) No 21/2004 establishing a system for the identification and registration of ovine and caprine animals and amending Reg. (EC) No 1762/2003 and Directives 92/102/EEC and 64/432/EEC. Council regulation (EC) No 1760/2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Reg. (EC) No 820/97. The Regulations are currently being transposed into national legislation.

4.4.3 Identification of animals and registration of holdings

Veterinary Services Act (Chapter 437) and Prevention of Disease Ordinance (Chapter 36). Council directive 64/432/EEC on the animal health problems affecting intra-Community trade in bovine animals and in swine and successive amendments, transposed as national legislation under Legal Notice 505 of 2004. Council Directive 2000/75/EC laying down specific provisions for the control and eradication of Bluetongue. Commission Decision 2005/393/EC on protection and surveillance zones in relation to Bluetongue and conditions applying the movements from or through these zones.

4.4.4 Qualifications of animals and herds

Veterinary Services Act (Chapter 437) and Prevention of Disease Ordinance (Chapter 36). Council directive 64/432/EEC on the animal health problems affecting intra-Community trade in bovine animals and in swine and successive amendments, transposed as national legislation under Legal Notice 505 of 2004. Council Directive 2000/75/EC laying down specific provisions for the control and eradication of Bluetongue. Commission Decision 2005/393/EC on protection and surveillance zones in relation to Bluetongue and conditions applying the movements from or through these zones.

4.4.5 Rules of the movement of animals

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Measures and terms of legislation es regards the different qualifications of animals and herds

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Council directive 64/432/EEC on the animal health problems affecting intra-Community trade in bovine animals and in swine and successive amendments,
transposed as national legislation under Legal Notice 505 of 2004.
Council Directive 2000/75/EC laying down specific provisions for the control and eradication of Bluetongue. Commission Decision 2005/393/EC on protection and surveillance zones in relation to Bluetongue and conditions applying the movements from or through these zones.

4.4.6 Tests used and sampling schemes

The tests used will be the ID Vet ELISA. PCR will be used to test a percentage of all the negative samples obtained by the ELISA.

4.4.7 Vaccines used and vaccination schemes

No Vaccination for BT is employed in the Maltese Islands.

4.4.8 Information and assessment on bio-security measures management and infrastructure

Assessment of bio- security measures in holdings is carried out a designated BT sampling team. All the holdings are also visited a several times a year as part of other disease surveillance/hygiene programmes

4.4.9 Measures in case of a positive result

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Veterinary Services Act (Chapter 437) and Prevention of Disease Ordinance (Chapter 36), Council Directive 64/432/EEC on the animal health problems affecting Intra-Community trade in bovine animals and in swine and successive amendments, transposed as national legislation under Legal Notice 505 of 2004, Council Directive 2000/75/EC, laying down specific provisions for the control and eradication of Bluetongue, Commission Decision 2005/393/EC, on protection and surveillance zones in relation to Bluetongue and conditions applying the movements from or through these Commission Regulation 1108/2008, zones.

4.4.10 Compensation scheme for owners of slaughtered and killed animals

na

4.4.11 Control on the implementation of the programme and reporting

The control, implementation and reporting of the programme is carried out by the National Veterinary Laboratory.

5. Benefits of the programme

NA

6. Data on the epidemiological evolution during the last five years

6.1 Evolution of the disease

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6.1 Evolution of the disease

6.1.1 Data on herds for year:

Year	Region	Total Nber of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herds coverage	% positive herds prevalence	% positive herds prevalence	% new positive herds incidence
Sum:								%	%	%	%	%
Total:												

6.1.2 Data on animals for year:

Year	Region	Total number of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positives animals	Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals prevalence
Sum:									%	%
Total:										

6.2 Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests for year :

Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
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6.2 Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests for year :

Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
2009	Malta	other test	PCR	63	0
	Malta	serological test	ELISA	2,082	0
			Sum:	2,145	0
2008	Malta	serological test	ELISA	569	0
			Sum:	569	0
2007	Malta	serological test	elisa	189	0
			Sum:	189	0
2006	Malta	serological test	elisa	3	0
	Malta	serological test	elisa	300	0
			Sum:	303	0
2005	Malta	serological test	ELISA	26	2
			Sum:	26	2
			Total:	3,232	2

6.3 Data on infection for year :

Year	Region	Number of herds infected	Number of animal infected
		Sum:	
		Total:	

6.4 Data on the status of herds at the end of year

6.4 Data on the status of herds at the end of year

Year	NUTS Region	Total number of herds and animals under the programme				Not Free or not officially free from disease				Free or officially free from disease status suspended		Free from disease		Officially free from disease	
		Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
				Unknown		Last check positive		Last check negative							
	Total:														

6.5 Data on vaccination or treatment programmes for year

Year	Region	Information on vaccination or treatment programme						Number of young animals vaccinated
		Total number of herds	Total number of animals	Number of herds in vaccination or treatment programme	Number of herds vaccinated or treated	Number of animals vaccinated or treated	Number of doses of vaccine or treatment administered	
	Total:							

6.5 Data on wildlife

6.6.1 Estimation of wildlife population for year :

Year	Region	Species	Method of estimation	Estimation of the population
				Sum:

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6.6 Data on wildlife

6.6.1 Estimation of wildlife population for year :

Year	Region	Species	Method of estimation	Estimation of the population
Total:				

6.6.2 Monitor of wildlife for year:

Year	Region	Species	Test Type	Test Description	Number of samples tested	Number of positive samples
Total:						

6.6.3 Data on vaccination or treatment of wildlife for year:

Year	Region	Square km	Number of doses of vaccine or treatment to be administered	Number of campaigns	Total number of doses of vaccine or treatment to be administered
Total:					

7. Targets

7.1 Targets related to testing (one table for each year of implementation)

7.1.1 Targets on diagnostic tests for year:

Year	Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests
Total:						

7. Targets

7.1 Targets related to testing (one table for each year of implementation)

7.1.1 Targets on diagnostic tests for year:

Year	Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests
2011	Malta	ELISA	Bovines	serum	surveillance	2,700
	Malta	PCR	Bovines	blood	Verification of a sample of Negative sera	270
Total:						2,970

7.1.2 Targets on testing herds and animals

7.1.2.1 Targets on the testing of herds for year :

Year	Region	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	Target indicators		
							% positive herds expected to be depopulated	Expected % herd coverage	% new positive herds Expected period herd prevalence incidence
2,011.00	Malta	45	45	0	0	0	0%	100%	0%
	Sum:	45	45	0	0	0			
Total:		45	45	0	0	0			

7.1.2.2 Targets on the testing of animals for year:

Slaughtering

Target Indicators

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7.1.2.2 Targets on the testing of animals for year:

Year	Region	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Slaughtering			Target indicators	
								Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)		
	Malta	16,861	225	2,700	225	0	0	0	1200%	0%		
2011	Sum:	16,861	225	2,700	225	0	0	0				
	Total:	16,861	225	2,700	225	0	0	0				

7.2 Targets on qualification of herds and animals for year:

Targets on the status of herds and animals under the programme													
Expected not free or not free from disease													
Year	Region	Total number of herds and animals under the programme		Expected unknown		Last check positive		Last check negative		Expected free or officially free from disease status suspended		Expected free from disease	
		Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
	Sum:												
	Total:												

7.3 Targets on vaccination or treatment

Targets on vaccination or treatment programme												
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- Program for Eradication : PDF detail

7.3 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment for year:

Targets on vaccination or treatment programme								
Year	NUTS Region	Total number of herds in vaccination or treatment programme	Number of herds in vaccination or treatment programme	Number of herds expected to be vaccinated or treated	Number of animals expected to be vaccinated or treated	Number of doses of vaccine or treatment expected to be administered	Number of adults expected to be vaccinated	Number of young animals expected to be vaccinated
		Sum:						
		Total:						

7.3.2 Targets on vaccination or treatment of wildlife for year

Targets on vaccination or treatment programme			
Year	NUTS Region	Square km	Total number of doses of vaccine or treatment expected to be administered
			Expected number of campaigns
		Sum:	
		Total:	

8. Detailed analysis of the cost of the programme for year

Year	Cost Category	Specification	Cost related to	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding request
2,011	1. Testing	ELISA	Cost of analysis	2,700	5.11	13,797.00	yes
		PCR	Cost of analysis	270	25.3	6,831.00	yes
		PCR	Shipping charges for PCR samples	4	200	800.00	yes

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8. Detailed analysis of the cost of the programme for year

Year	Cost Category	Specification	Cost related to	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding request
	1. Testing			Sum: 2,974		21,428.00	
	2. Vaccination or treatment						
	2. Vaccination or treatment			Sum:			
	3. Slaughter and destruction						
	3. Slaughter and destruction			Sum:			
	4. Cleaning and disinfection						
	4. Cleaning and disinfection			Sum:			
	5. Salaries (staff contracted for the programme only)						
	5. Salaries (staff contracted for the programme only)			Sum:			
	6. Consumables and specific equipment	sampling	Consumables and specific equipment	4,000	.12	460.00	yes
		testing	Consumables and specific equipment	13,500	.01	135.00	yes
	6. Consumables and specific equipment			Sum: 17,500		615.00	
2,011.00				Sum: 20,474		Sum: 22,043.00	
			Total:	20,474		Sum: 22,043.00	