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HEALTH & CONSUMER PROTECTION DIRECTORATE-GENERAL

Directorate G – Veterinary and International Affairs
Unit G5 – Veterinary Programmes

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SUMMARY REPORT ON THE OUTCOME OF EU CO-FINANCED ANIMAL DISEASE ERADICATION AND MONITORING PROGRAMMES PERIOD 2007-2011

Executive Summary

*This report aims to update the previous version published for the period 2005-2009 including the most recent data in order to provide a deeper insight to the **EU financial support** for the following diseases during the period **2007-2011**: Avian Influenza, African Swine Fever, Aujeszky's Disease, Bovine Brucellosis, Bovine Tuberculosis, Bluetongue, Classical Swine Fever, Enzootic Bovine Leucosis, Rabies, Enzootic Salmonellosis, Ovine and Caprine Brucellosis, Swine Vesicular Disease, TSEs (BSE and Scrapie).*

*With a total EU expenditure of **€ 880 million** for the period **2007-2011**, the report shows that good progress has been made in the majority of EU co-financed veterinary programmes with continuous expansion in disease free zones for **Bovine Tuberculosis, Bovine Brucellosis, Bluetongue, Enzootic Bovine Leucosis and Aujeszky's Disease**.*

*The implementation of **BSE monitoring and eradication programmes** led to a dramatic drop in the detected BSE cases within the period. In the case of **Rabies**, the co-funded oral vaccination programmes have proved very successful as they have **led to the steady eradication of Rabies from several Member States**. This is unique in the world as the EU has achieved a level of Rabies eradication that has never been experienced anywhere else before.*

***Classical Swine Fever (CSF)** in **domestic pigs has been eradicated** all over Europe. In wild boar, the restricted zones have been lifted due to the proved absence of virus circulation in most of the EU territories.*

*The implementation of **Avian Influenza** (AI) surveillance programmes has been another success. Surveillance programmes for the disease have proven effective in providing early warning for the timely detection of outbreaks of both high and low pathogenic strains.*

*The implementation of **Salmonellosis** programmes has led to a notable improvement of the situation both in poultry and in the number of reported human cases.*

*Co-funding for **Enzootic Bovine Leucosis and Aujeszky's Disease** was stopped in 2010 due to the favourable epidemiological situation.*

<u>The main areas of concern during this period were:</u>

***Bovine Tuberculosis** in the UK: Co-financed eradication programmes have been implemented across the UK since 2010 (except Scotland which is officially free since 2009). The epidemiological situation was a cause for concern during the studied period and continues to require careful attention, particularly in England.*

***Bovine Brucellosis and Ovine and Caprine Brucellosis:** In the south of **Italy,** the implementation of the programmes was not satisfactory. In **Greece,** the implementation of the eradication programme for ovine and caprine brucellosis was very poor during 2007, 2009 and 2011, and no programmes were presented for co-financing in 2008 or 2010.*

***African Swine Fever** (ASF) in Sardinia: In spite of the favourable decline in the previous years, there was a serious resurgence of the disease during the second half of 2011 and throughout 2012.*

Contents

1. Introduction and Background

A previous report[1] on the outcome of the EU co-financed animal disease eradication and monitoring programmes in the MS and the EU as a whole (2005-2009) was carried out in 2011. The study reviews the achievements of the programmes against their objectives and overall aims, in the context of the trend and the evolution of each of the diseases co-financed by the EU.

The aim of this report is to provide an update of the previous report including the most recent data and giving a deeper insight into the **EU financial support to the eradication of the following diseases** in the period of 2007 to 2011: Avian Influenza, African Swine Fever, Aujeszky's Disease, Bovine Brucellosis, Bovine Tuberculosis, Bluetongue, Classical Swine Fever, Enzootic Bovine Leucosis, Rabies, Zoonotic Salmonellosis, Ovine and Caprine Brucellosis, Swine Vesicular Disease and Transmissible Spongiform Encephalopathies (BSE and Scrapie). All of them are notifiable to the OIE.

In the framework of article 41 of Council Decision 2009/470/EC[2] a report from the Commission to the European Parliament and to the Council on the animal health situation and cost-effectiveness of the implementation of the EU co-financed veterinary programmes will be soon available aiming, inter-alia, at identifying the strengths and weaknesses in policy-related measures' development, gaps in implementation, as well as recommendations for better prioritisation, reduction of administrative burden and the best cost-effective use of the investments in this area.

The EU contribution to eradication and control veterinary programmes is part of a wider spectrum of financial tools used to support Member States in their fight against animal diseases like the Emergency Fund (used to fund emergency measures in the case of an outbreak) and the Common Organisation of the Market (exceptional market support measures).

2. Global EU Expenditure 2007-2011

Generally, the financial contribution is at the rate of 50% of the cost incurred by Member States to implement specific measures up to a maximum amount, with the exception of the costs of TSE monitoring, testing and genotyping which have been funded at 100% up to a ceiling, and rabies programmes, co-funded at the rate of 75% in 2009 and 2010.

Over the period 2007-2011 overall funding has increased from **€ 152,007,390** in **2007** to **€ 173,451,741** in **2011**[3], with the highest amounts spent during this period in 2009 (€ 196,659,953) and 2010 (€ 217,825,544) due to initiation of the co-financing of tuberculosis eradication programmes in Ireland in 2009 and in the UK in 2010 **(Figure 1).**

[1] http://ec.europa.eu/food/animal/diseases/eradication/docs/fcec_report_ah_eradication_and_monitoring_programmes.pdf

[2] OLJ L155, 18.6.2009, pp. 30-44

[3] It is to be noted that the balance for 2011 excludes some programmes which are still under on-going audits

The total amount of funding for the 2007-2011 varied greatly depending on the disease (as well as on the number of programmes approved for each disease): the largest amount (36 % of the total) was spent on TSE programmes with € 314 million, followed by € 163.8 million (18.6 %) for Bovine Tuberculosis and € 160.6 million (18.2 %) for Bluetongue. Rabies programmes accounted for 6,24 % of EU co-funding with € 55 million, Salmonella 5,53 % with 48.5 million and Sheep and Goat Brucellosis 4,26 % with € 37.4 million (**Figures 2 and 3).**

Figure 1:
EU Financial Contribution to Eradication, Surveillance and Monitoring Programmes 2007-2011

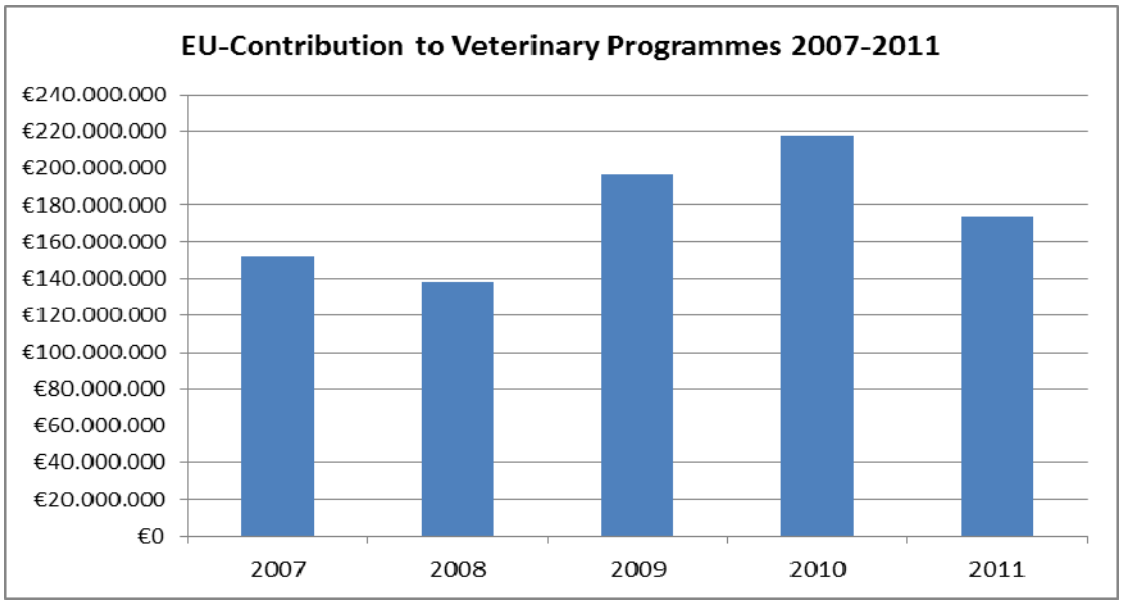


Figure 2: Evolution of EU Financial Contribution by Disease

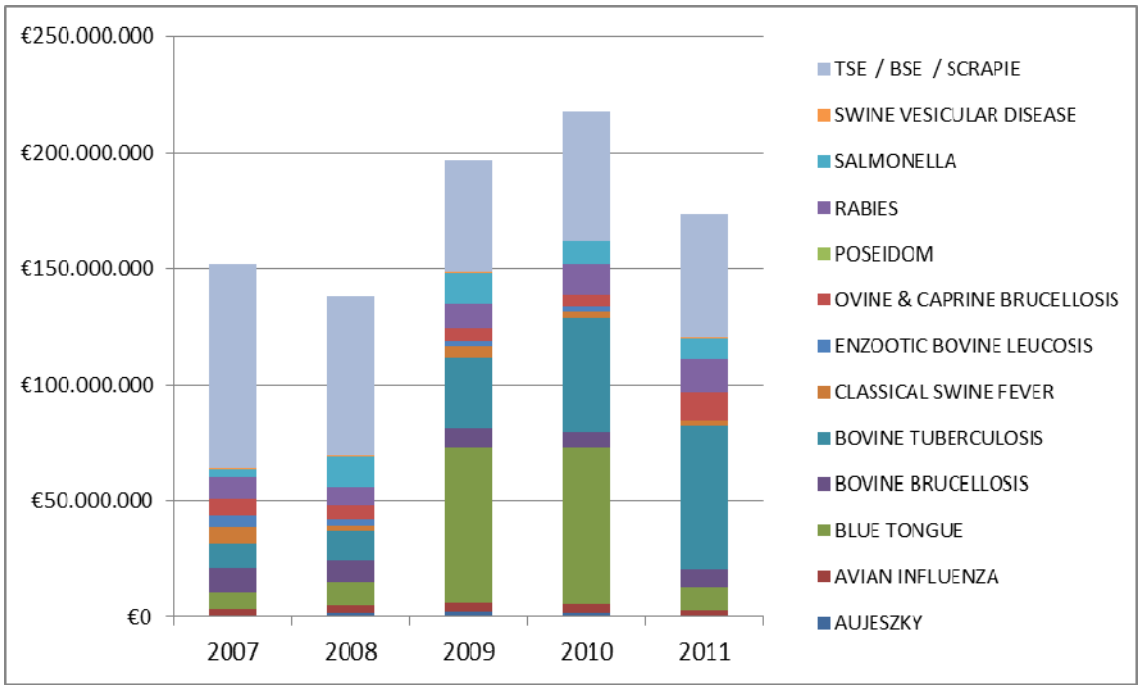
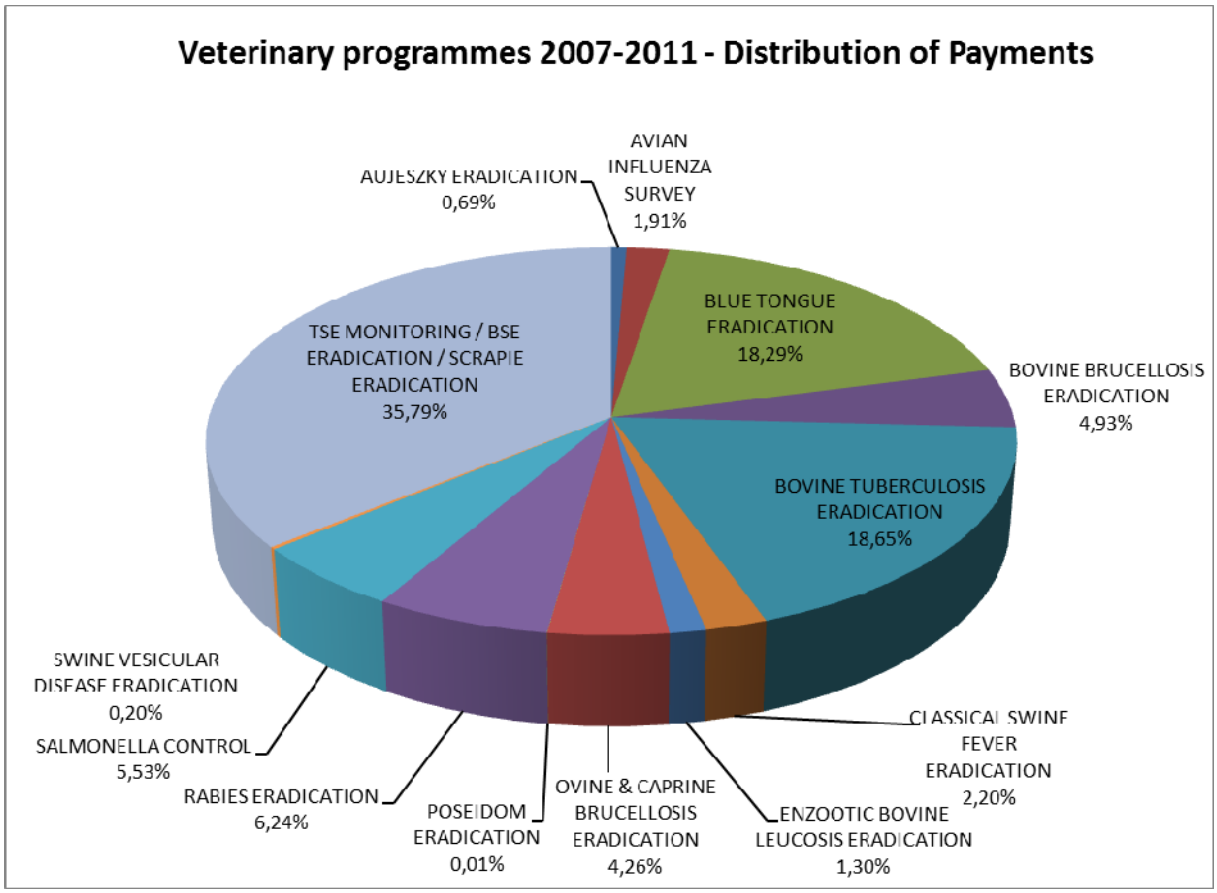


Figure 3: Distribution of EU Contribution (Payments) by Disease



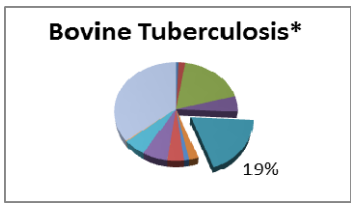
3. Description by Disease

This chapter provides an insight into each disease covered by EU co-funding during the period 2007-2011:

1. Short description of the disease
2. Disease situation and epidemiological evolution in the period 2007-2011 in co-funded MS
3. Funding: Level of EU contribution for the period 2007-2011 to the MS

3.1. Bovine Tuberculosis (bTB)

3.1.1. Description



*Percentage of total EU co-funding 2007-11

Tuberculosis is a disease of humans and animals caused by the bacterial species of the family *Mycobacteriacea;* the *mycobacterium bovis* is responsible for bovine tuberculosis.

Nearly all warmed-blood animals are susceptible to the infection and some wildlife animals (deer, wild boar, badgers) act as reservoir for the disease which complicates the control of bovine tuberculosis.

Mycobacterium bovis can infect humans mainly through contaminated food (raw non-pasteurized milk and milk products) or through direct contacts with infected animals (farmers and abattoir workers).

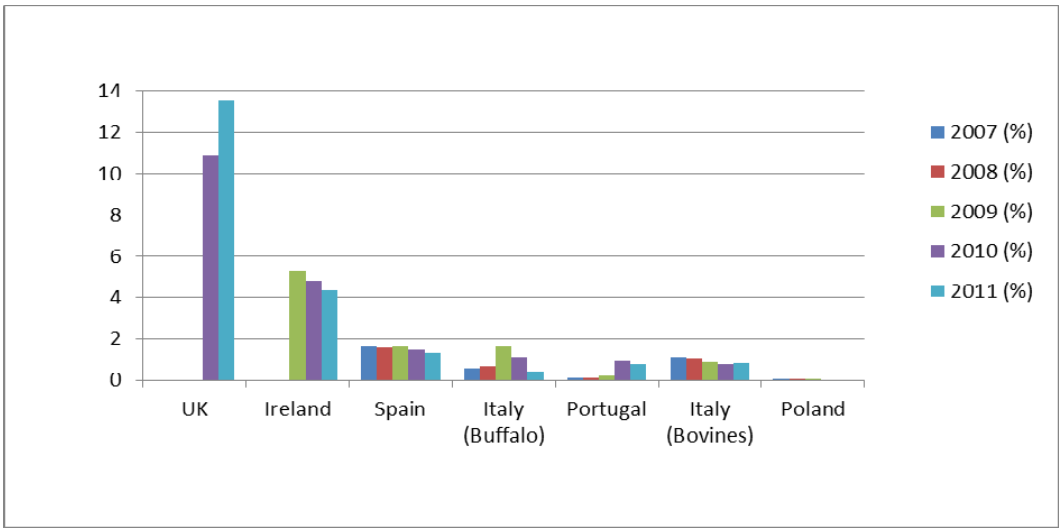
3.1.2. Disease situation

In the case of **Bovine Tuberculosis (bTB)**, 15 MS and regions from additional 2 MS have OTF (Officially Tuberculosis Free) status.

Between 2007 and 2011, the EU co-financed bovine tuberculosis eradication programmes in the following MS: Italy, Spain, Portugal, Poland, Ireland (since 2009) and the UK (since 2010).

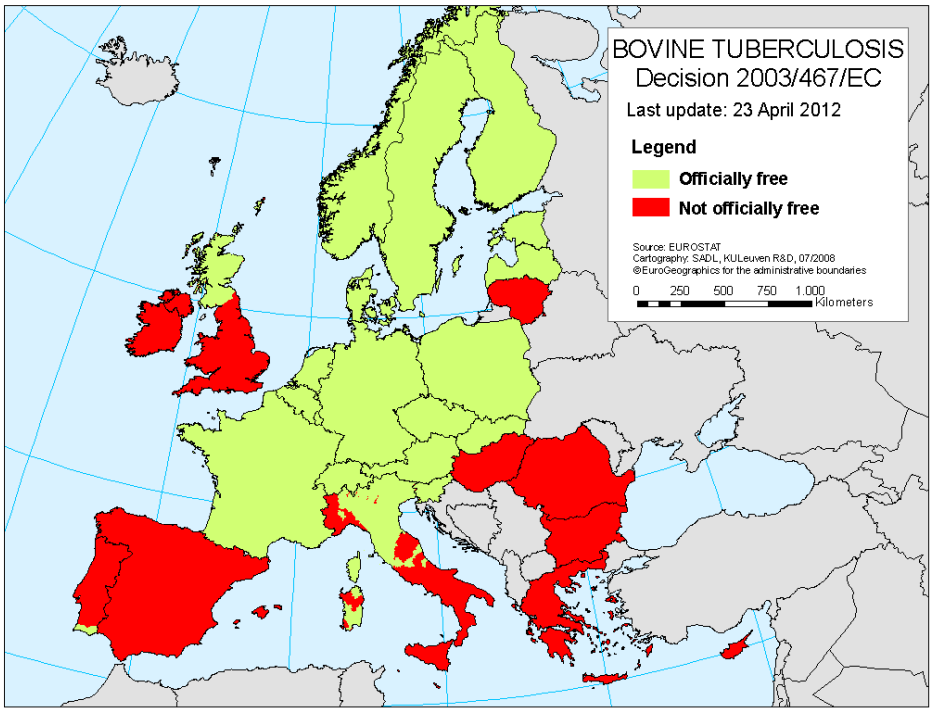
Epidemiological data for co-funded Member States indicate that between 2007 and 2011 progress has been made in the eradication of the disease (**Figure 4**).
In Italy and Poland, there was a clear decrease in the cases of bovine tuberculosis. Following the successful implementation of the eradication programme, **Poland** obtained "**officially tuberculosis free" (OTF)** status in 2009 as did **several regions of Italy** in the last few years.

Figure 4: Evolution of Bovine Tuberculosis Herd Prevalence (%) in Member States with co-funded programmes, 2007-2011



Source: DG SANCO- bovine tuberculosis eradication programmes 2007-2011

Map 1. Officially free zones April 2012



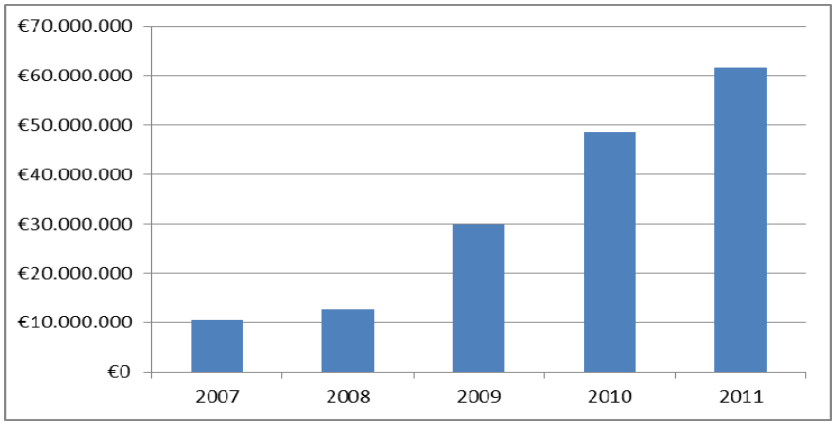
Source: Animals Disease Notification System (ADNS)

However, in Ireland and the UK the presence of bTB is high during this period. Some moderate improvements can nonetheless be noted: In the UK, herd prevalence in 2010 was at 14.4%, and 13.8% in 2011. In Ireland the rate went from 5.27% in 2009 (first year of the co-funded programme) to 4.37% in 2011.

3.1.3. Funding

Co-funding for bTB programmes[4],[5] between 2007 and 2011 accounts for almost 20% of the total EU contribution to veterinary programmes. MS receive financial support towards the cost of sampling in the form of a lump sum (introduced in 2011) towards the cost of laboratory testing with a 50% rate and up to a maximum (in 2011 this rate was raised to 60% and the ceiling was increased for tuberculin tests) and thirdly, towards compensation to farmers for slaughtered animals (maximum rates apply). In this period, the main beneficiaries of these funds were Spain (€ 53 million), the UK (€ 48.5 million) and Ireland (€ 41 million). Figures 5 and 6 show the trend over the studied period. Payments increased since 2008 due to the introduction of programmes from Ireland and the UK in 2009 and 2010, respectively. Furthermore, the above-mentioned increases in co-funding in 2011 further accounted for the rise in that year.

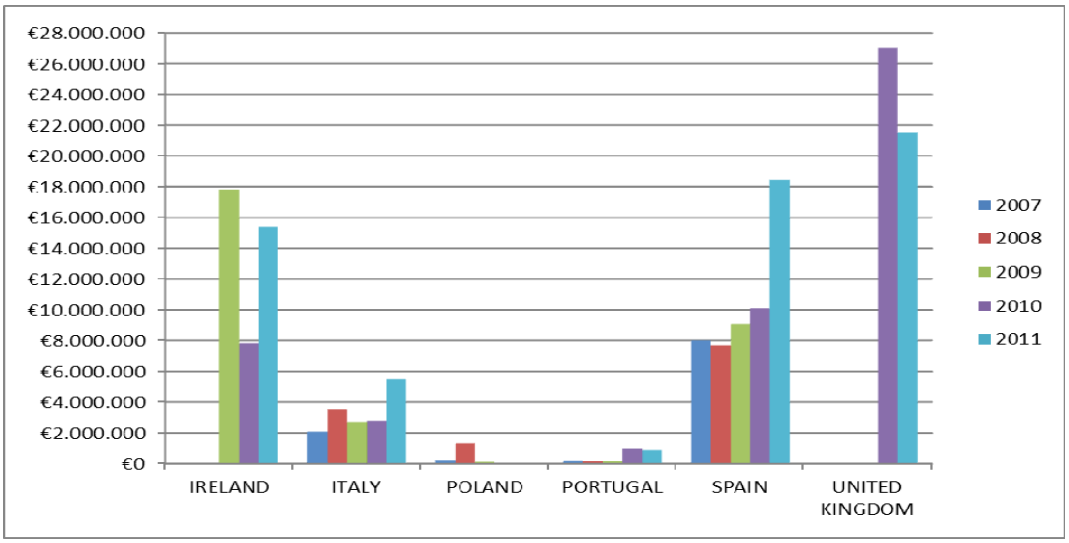
Figure 5: Bovine Tuberculosis EU Contribution (Payments) 2007-2011



[4] Council Directive 77/391/EEC introducing Community measures for the eradication of brucellosis, tuberculosis and leucosis in cattle

[5] Council Directive 78/52/EEC establishing the Community criteria for national plans for the accelerated eradication of brucellosis, tuberculosis and enzootic leucosis in cattle

Figure 6:
Distribution of EU Contribution to Bovine Tuberculosis Programmes by Member State 2007-2011

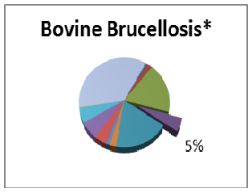


Source: DG SANCO- bovine tuberculosis financing decisions 2007-2011

3.2. Bovine Brucellosis

3.2.1. Description

Brucellosis is an infectious and contagious disease caused by the bacterial species of Brucella. It is a major zoonosis with 6 species known to potentially cause human disease, the preferred animal host in cattle and buffalo being the B. abortus and B. melitensis in sheep and goats.



*Percentage of total EU co-funding 2007-11

The main economic damage in livestock is caused by fertility problems in both female (abortion, retained placenta, reduction of milk yield and fertility) and male (orchitis and epididymitis) cattle, sheep, and goats *(for Brucellosis sheep and goats see point 3.3).*

Brucella is easily transmitted among susceptible animals in particular after abortion which results in large amounts of bacteria being released to the environment. In humans, it occurs mostly as an occupational infection in persons exposed to infectious materials from the animals and can also be food-borne by consumption of unpasteurized milk of fresh cheese.

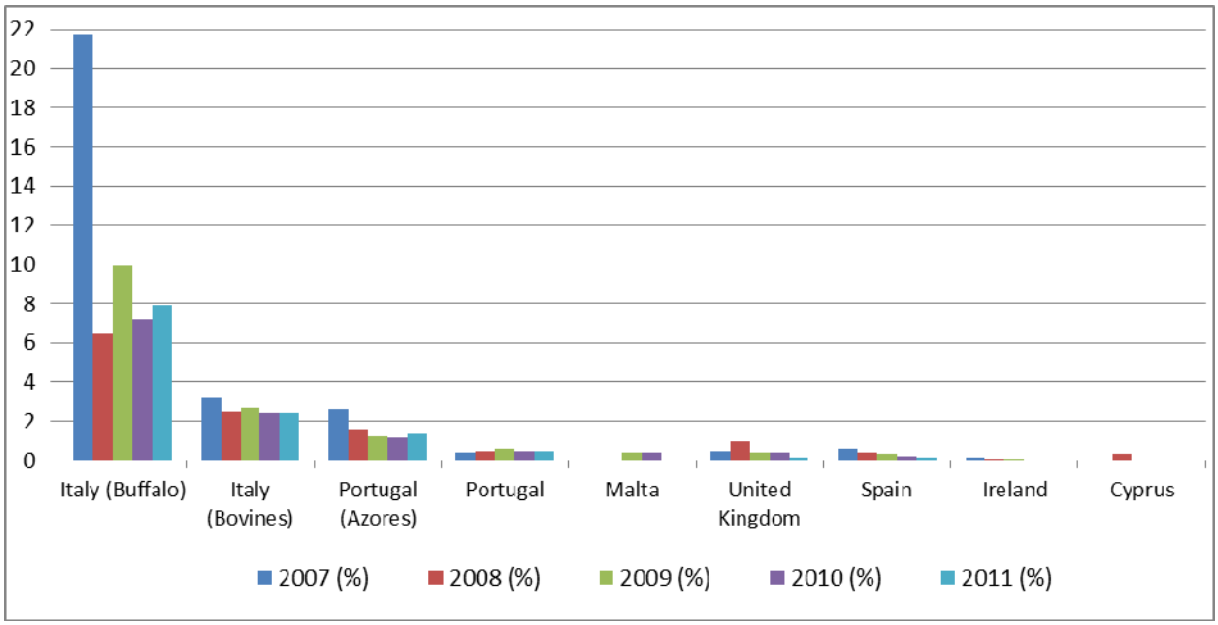
3.2.2. Disease situation

There are 15 MS "officially brucellosis free" (OBF) and regions from additional 4 MS. The disease is mainly concentrated in: Italy, Portugal, Spain, Cyprus and in Northern Ireland.

The success of the implementation of the eradication programmes in bovine/buffalo has led to a very significant reduction of bovine brucellosis. Ireland was granted OFB status in 2009 as well as several regions of Italy and some parts of the Canary Islands in Spain and Azores Island in Portugal. Moreover, the overall situation in all affected Member States has improved: as can be seen in figure 7, there is a downward trend in numbers of herds infected between 2007 and 2011.

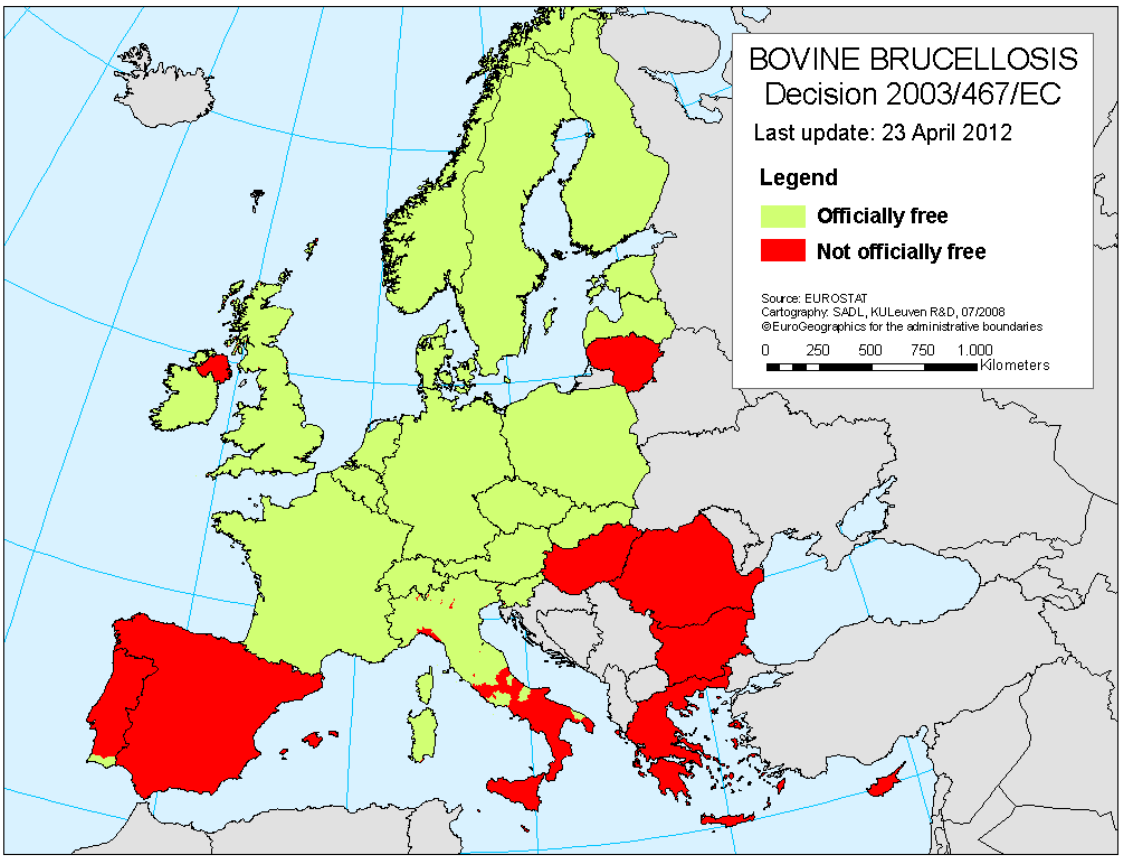
In Portugal, Spain and Italy, the situation differs considerably depending on the region. Some are free or officially free while other regions are reporting high levels of disease prevalence and incidence. However, in the southern regions of Italy (Puglia, Basilicata, Calabria, Campania and Sicilia) the prevalence and the incidence of the disease are still high in bovines and buffaloes compared to the northern and central Italy where several regions and provinces are officially free **(Map 2)**. In continental Portugal, there are also geographic variations in terms of the prevalence of the disease, which is higher in the regions of Alentejo and Tràs-os-Montes compared to the rest of the country. Nonetheless, there are marked improvements.

Figure 7: Evolution of Bovine Brucellosis Herd Prevalence Rate (%) in Member States with Co-Funded Programmes 2007-2011



Source: DG SANCO- bovine brucellosis eradication programmes 2007-2011

Map 2. Officially Free Zones, 2012

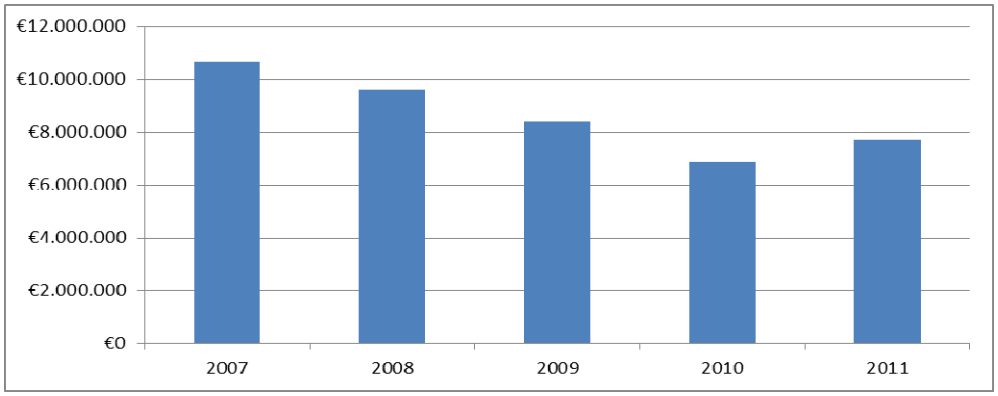


Source: Annual Report on notifiable disease of bovine animals and swine (2011)

3.2.3. Funding

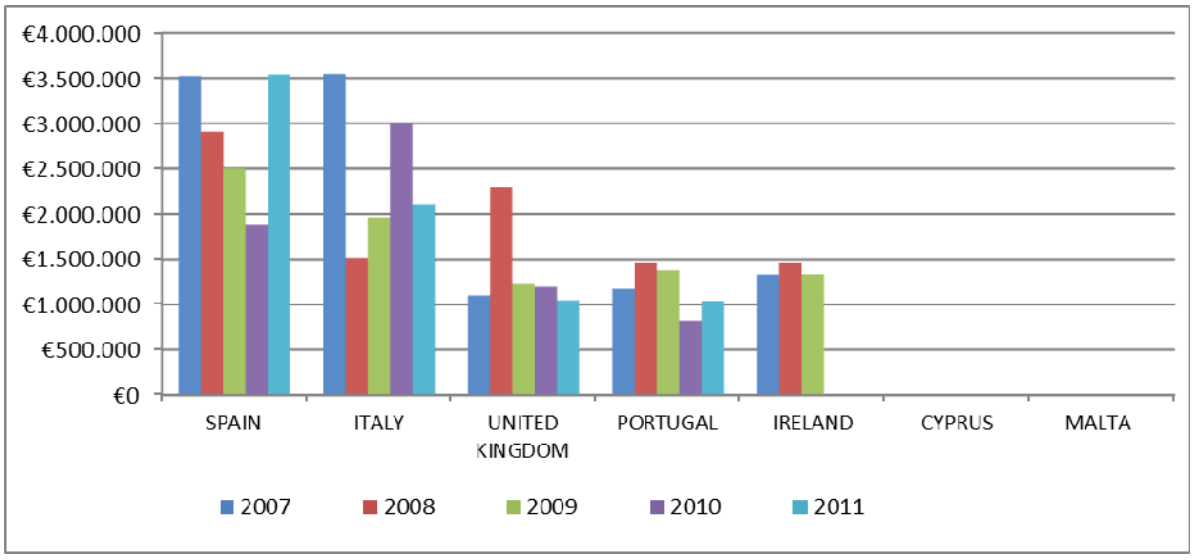
Over the period 2007-2011, the EU has co-financed bovine brucellosis eradication programmes [4,5] in Cyprus, Ireland until 2010, Italy, Northern Ireland, Portugal and Spain, with very small amounts going to Malta in 2009 and 2010. Measures co-funded include laboratory tests (50 % up to a maximum until 2010, 60% in 2011), compensation for slaughtered animals (maximum rates applicable) and the purchase of vaccine doses. As seen in figure 8, there is a gradual decline in the level of co-funding until 2010, with a slight increase in 2011 due to the higher rate of co-funding introduced in this year (60% for laboratory testing and compensation for animal slaughtered).

Figure 8: Bovine Brucellosis EU Contribution (Payments) 2007-2011



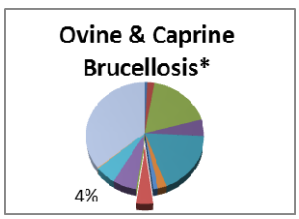
The major beneficiaries were those countries with higher prevalence of the disease and higher weight of cattle production i.e. Spain (€ 14 millions), Italy (€ 12 million), UK (€ 6.8 million) and Portugal (€ 5.8 million).

Figure 9:
Distribution of EU Contribution to Bovine Brucellosis Programmes by Member State 2007-2011



3.3. Ovine and Caprine Brucellosis

3.3.1. Description



*Percentage of total EU co-funding 2007-11

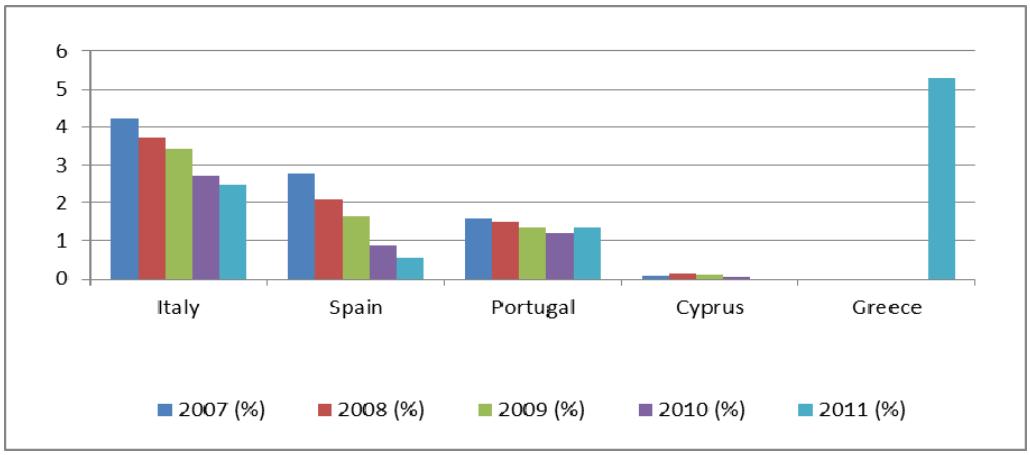
Brucellosis in sheep and goats is an infectious and contagious disease caused by the bacterial *Brucella melitensis* (see also 3.2.1 for more details).

3.3.2. Disease situation

In 2011, there were 19 MS "officially brucellosis melitensis free" (OBmF) and regions from additional 4 MS. The disease is mainly concentrated in the South of Europe.

The implementation of the eradication programmes in Italy (except in the South), Spain and Cyprus made excellent progress in eradicating the disease. This is clearly indicated by Figure 10, showing the same trend of continuous decline in herd prevalence in all affected Member States between 2007 and 2011, with the exception of Greece and the South of Italy

Figure 10: Evolution of Ovine and Caprine Brucellosis herd prevalence in Member States with co-funded programmes, 2007-2011



Source: DG SANCO-ovine and caprine eradication programmes 2007-2011

The main areas of concern in eradicating brucellosis in sheep and goats are in Greece and Southern Italy, where particular implementation issues of the programmes adversely affected the performance of the programme.

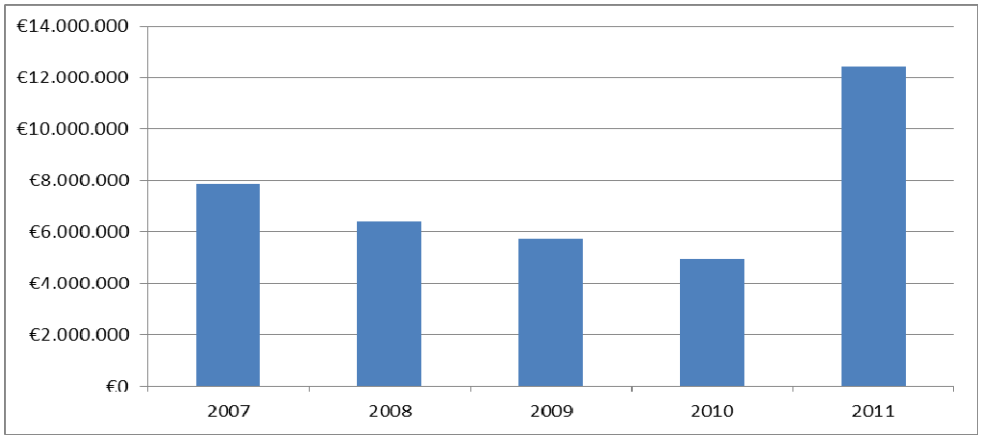
Whereas in some regions of Italy (Lazio) the eradication is progressing well, the Southern regions still present very high prevalence and incidence rates, in particular in Sicily where the negative epidemiological situation has been related to the poor implementation of the programmes. The financial contributions were consequently reduced.

In the case of Greece, the Commission approved programmes in 2007 and 2009 (no brucellosis eradication programmes for sheep and goats was submitted in 2008 and 2010). However, no payments were made as the programmes were poorly implemented.

3.3.3. Funding

EU co-funding goes towards the cost of laboratory tests at a rate of 50%, 60% in 2011 (maximum rates apply) and towards the compensation to farmers for slaughtered animals (maximum rates apply)

Figure 11: Ovine and Caprine Brucellosis EU Contribution (Payments) 2007-2011

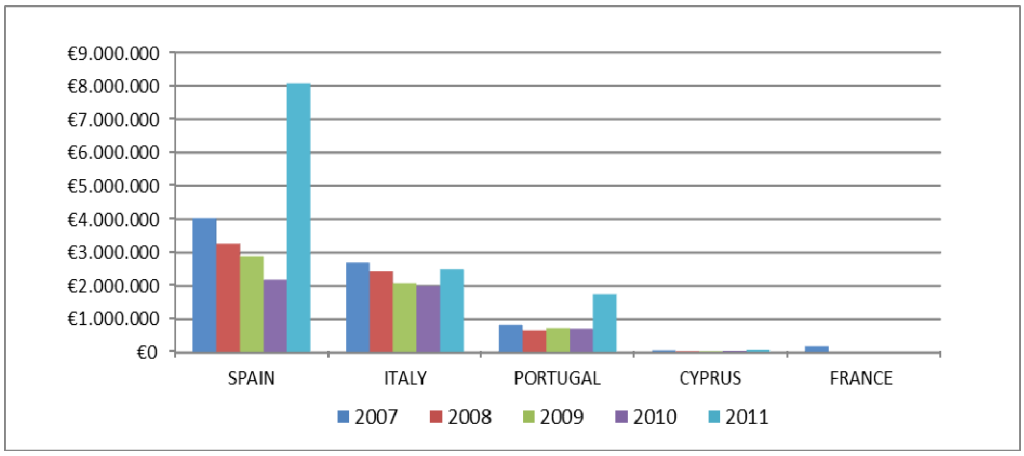


Over the period 2007-2011, the EU has co-financed ovine and caprine brucellosis eradication programmes in France (only in 2007) Portugal, Spain, Cyprus, Greece and Italy. Spain (€20.5 million) and Italy (€ 11.7 million) have been the largest recipients of the EU funding given the larger population of sheep and goats (60 % of the total EU sheep population and 36 % of the goats).

The incidence has been steadily decreasing with a significant decline in 2009 in particular in Portugal, Spain and Cyprus. The increase in funding in 2011 is due to the new co-funding rules to increase financial support to Member States: co-funding for laboratory tests and for compensation of animals slaughtered increased from 50% to 60% and the cost of sampling was covered with a lump sum per animal sampled.

Figure 12:

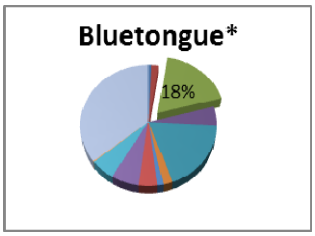
Distribution of EU Contribution to Ovine and Caprine Brucellosis Programmes by Member State 2007-2011



Source: DG SANCO-ovine and caprine brucellosis financing decisions 2007-2011

3.4. Bluetongue

3.4.1. Description



*Percentage of total EU co-funding 2007-11

Bluetongue is a viral disease that affects sheep, cattle, goats and other ruminants. The disease is non-contagious and transmitted by *Culicoides* (biting midges).

At present, 24 serotypes of the virus are known in different parts of the world. The virulence and mortality rate of the different virus serotypes vary considerably. The disease shows a seasonal pattern following the periods of high and low abundance of the *Culicoides* species throughout the year. It is mostly seen in late summer and autumn.

The disease is characterised by inflammation of the mucous membranes, congestion, swelling and haemorrhages. Sheep are generally the worst affected, while cattle and goats do not usually show any clinical signs of disease and can carry the virus for a certain period of time and transmit it to other ruminants.

3.4.2. Disease situation

Until 2006, bluetongue had only been recorded in southern regions of the EU including parts of Italy, Spain, France, Greece and Portugal, mainly caused by serotypes BTV-2, BTV-4 and BTV-16. In 2006, bluetongue serotype 8 made its first appearance in a more northern area of the EU, affecting the Netherlands, Belgium, Luxembourg and the western part of Germany. In 2007 and 2008, serotype 8 spread to large parts of Germany and France, and was detected in the United Kingdom, Austria, Czech Republic, Denmark, Sweden, Hungary, and even southern Spain. In 2007 outbreaks of BTV-1 occurred in the Iberian Peninsula and gradually spread northwards mainly in western parts of France.

BT is not controlled by depopulating infected farms or those at risk. The principal, most effective veterinary measure in response to bluetongue is vaccination accompanied by additional measures such as movement restrictions and surveillance. Vaccination using all available vaccines helps to reduce clinical disease and losses; to contain the spread of the disease and to facilitate safe trade in live animals.

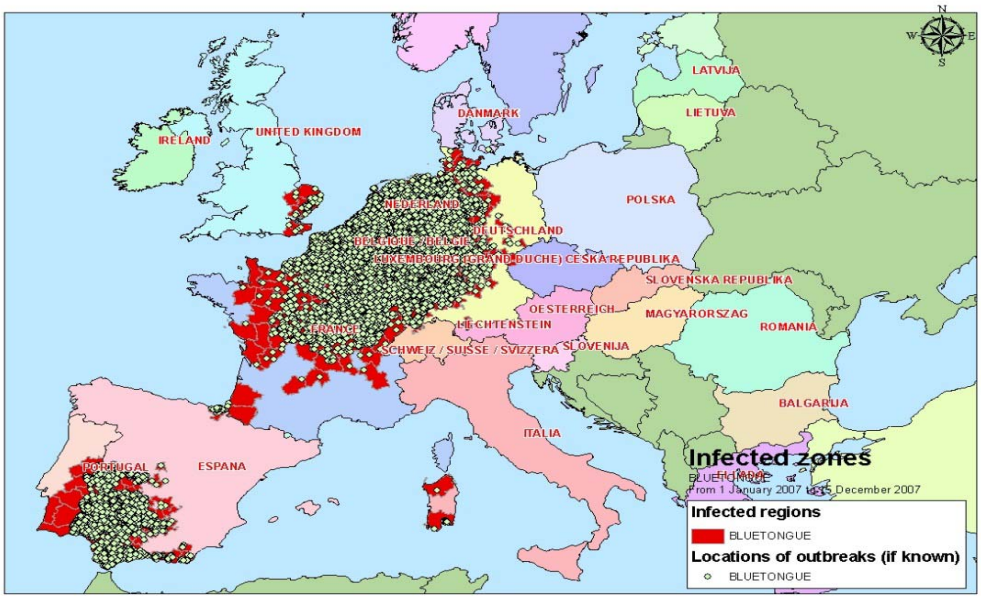
Following the unexpected outbreaks of serotypes BTV-1 and BTV-8, the EU mobilised significant financial resources which allowed Member States to launch a coordinated vaccination campaign across all infected areas; around € 165 million where allocated for the 2008 emergency vaccination plans and the surveillance programmes and € 66.9 million for 2009. The BT monitoring programmes have played an important role in the control and eradication of this disease as bluetongue has effectively been brought under control with BTV-1 and BTV-8 serotypes virtually eliminated from all over Europe (**maps 3 and 4**).

The spread of the disease was limited and a sharp reduction in the number of outbreaks was observed in 2009 and 2010.

Bluetongue 2007

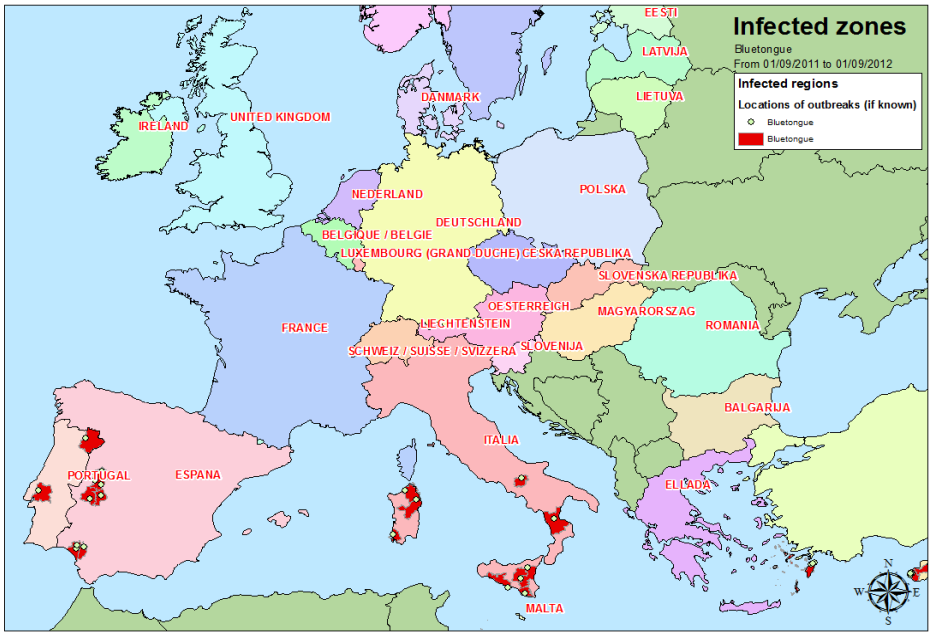
- BTV-8 spreading southwards to France
- BTV-1 and BTV-8 Spain, Portugal and France
- Start of mass vaccination campaign BTV-1 and BTV-8

Map 3. Bluetongue Zones with outbreaks, 2007



Source: Animal Disease Notification Service (ADNS)

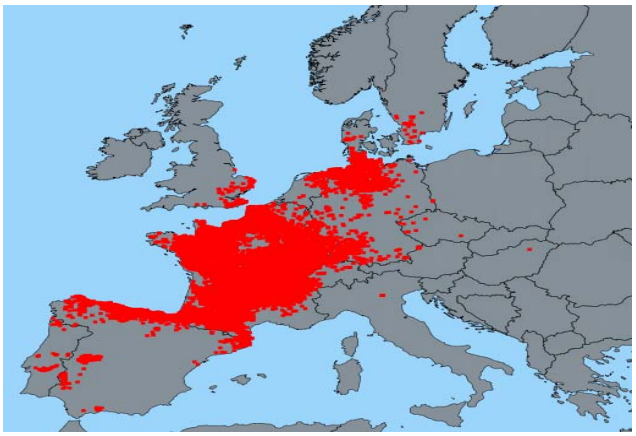
Map 4. Bluetongue Zones with outbreaks, 2012



Source: Animal Disease Notification Service (ADNS)

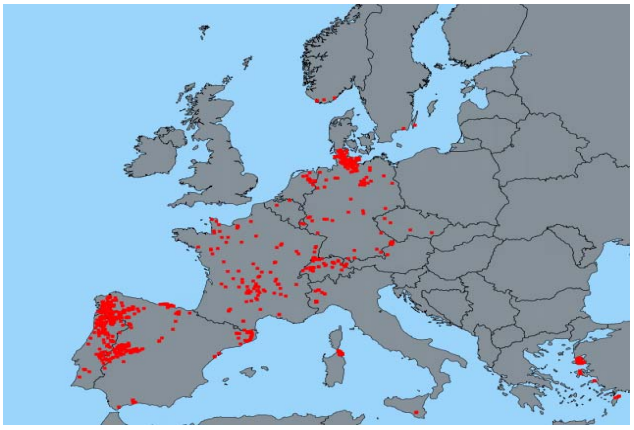
The sequence below shows the drastic reduction in new outbreaks between 2008 and 2010.

Bluetongue outbreaks in the EU, 2008



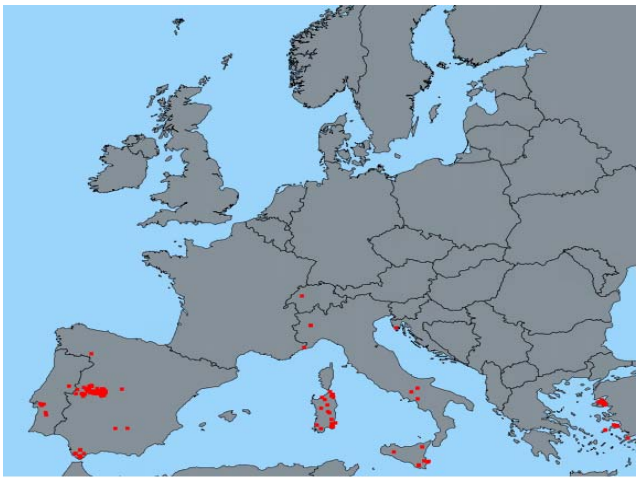
At the launch of vaccination campaign against BTV-1 and BTV-8

Bluetongue outbreaks in the EU, 2009



After first year of vaccination campaign against BTV-1 and BTV-8

Bluetongue outbreaks in the EU, 2010



After second year of vaccination campaign against BTV-1 and BTV-8

Source: DG SANCO -presentations at Standing Committee on the Food Chain and Animal Health (SCoFCAH), 2008-2009-2010

EU measures to combat bluetongue were updated in 2000 in Council Directive 2000/75/EC which lays down specific provisions for the control and eradication of this disease , including the establishment of protection and surveillance zones, a ban on the movement of susceptible animal species (live ruminants) from affected areas to non-infected regions where the vector is present, vector control (use of insecticides in the animal premises and in the areas where these insects live, insect repellents onto animals, mosquitoes nets, etc.), and the use of vaccines.

The EU started funding annual bluetongue monitoring and eradication programmes in 2002, with the aim of assisting MS to follow the disease presence and evolution in high risk areas and where necessary to apply measures such as vaccination; this was essential for the application of the EU control measures on animal movement from restricted areas and to later fulfil the requirements of Commission Regulation (EC) No 1266/2007. The Regulation introduced the obligation for MS to carry out bluetongue monitoring programmes in the restricted zones and surveillance programmes outside the restricted zones to tackle the 2006-2007 outbreaks through coordinated European action. These programmes generally include monitoring (clinical, serological, virological, and entomological) and sometimes vaccination.

Serological and virological monitoring is carried out by area with a geographically representative sample of animals being tested. Entomological monitoring is also carried out by capturing midges through special traps. The captured insects are counted and identified to define if they belong to species capable of transmitting the disease. This information helps in defining high risk areas for the spread of the disease as well as the seasonally free period for restricted areas, in accordance with the relevant EU regulation.

Vaccination, specific for each circulating serotype, is a very effective measure to control the spread of bluetongue, especially if the coverage of the susceptible animal population is high. For this reason, the Commission has approved for financing MS vaccination programmes that guaranteed high coverage of the susceptible population, preferably by means of a compulsory regime.

3.4.3. Funding

Between 2007 and 2011, 23 Member States have benefited from the funding. The total amount of funding during the period varies greatly between Member States, depending on whether vaccination eligible for EU funding was applied, and depending on the size of the ruminant population in the MS. The recipients of the largest amounts of funding were: France (€ 70 million), Spain (€ 50.8 million), Germany (€ 10.2 million), Belgium (€ 8.7 million), Italy (€5.1 million) and Portugal (€ 4.9 million).

In 2007, some Member States received financing for the monitoring and surveillance programmes following the first occurrence of serotype BTV-8.. In 2007 the emergency fund was used to finance vaccination for serotypes BTV-8 and BTV-1, at a rate of 100% of the costs for purchasing the vaccines (up to a certain limit), and also 50% of the costs of the administration of the vaccine as laid down in Council Decision 2009/470/EC.

As from 2008, the emergency fund was shifted to eradication funds. Commission Decision 2009/560/CE was adopted in mid-2009 which added vaccine administration as an eligible measure and allocated additional funds to the programmes for this purpose.

In 2009 and 2010 the level of co-funding increased dramatically due to the large scale vaccination programme (against BTV-8 and BTV-1). Vaccination campaigns then became voluntary measures in most MS thus leading to a return to 'normality' in 2011.

Figure 14: Bluetongue EU Contribution (Payments) 2007-2011

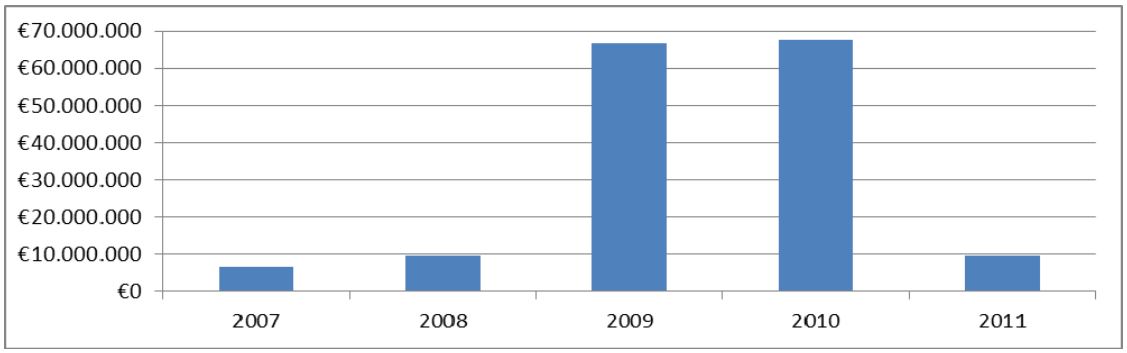
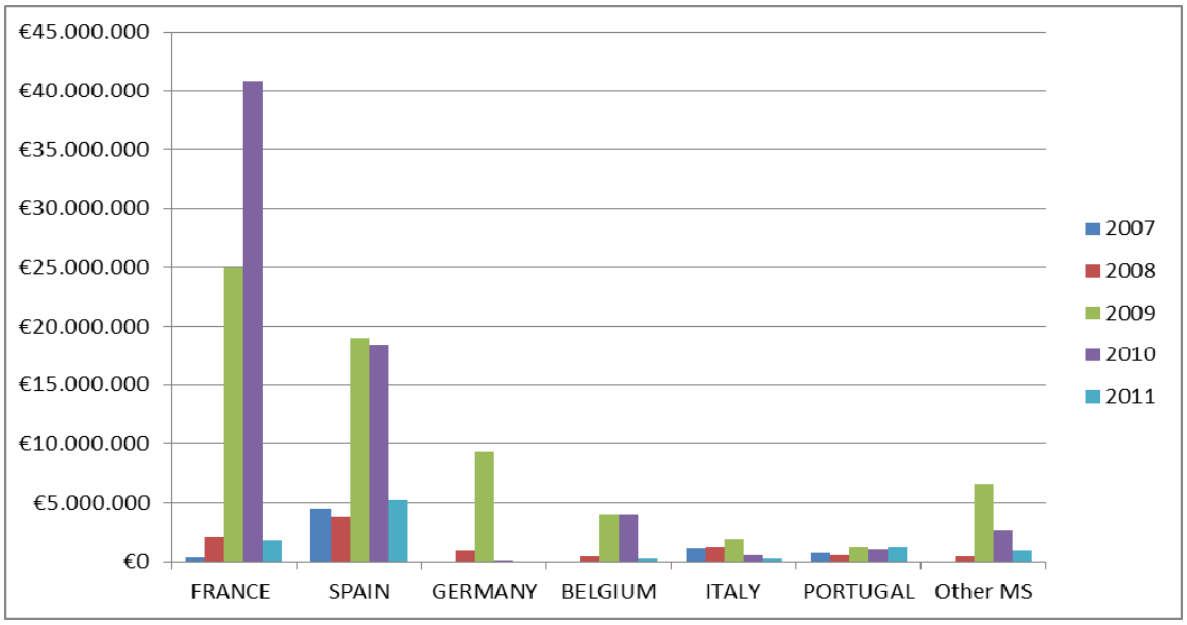


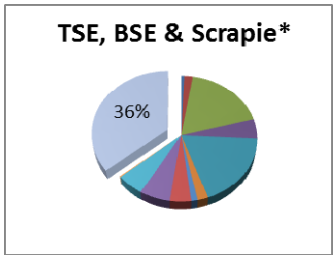
Figure 15:
Distribution of EU Contribution to Bluetongue Programmes by Member State 2007-2011



Source: DG SANCO-Bluetongue financing decisions 2007-2011

3.5. Transmissible Spongiform Encephalopathies (BSE and Scrapie)

3.5.1. Description



*Percentage of total EU co-funding 2007-11

Transmissible Spongiform Encephalopathies (TSEs) are a family of diseases caused by prions that occur in humans as well as animals and are characterised by a degeneration of the brain tissue giving it a sponge-like appearance, ultimately leading to death.

3.5.2. Disease situation

The family includes diseases such as *Creutzfeldt Jakob's Disease* (CJD) in humans, *Bovine Spongiform Encephalopathy* (BSE) in cattle, scrapie in small ruminants (sheep and goats), and *Chronic Wasting Disease* (CWD) in cervids (deer). The commonly accepted cause of the TSE disease is a transmissible agent called prion (PrPres), which is an abnormal form of a protein.

BSE is a TSE disease of cattle considered to be transmissible to humans (Variant CJD: vCJD). BSE was first diagnosed in the UK in 1986, and reached epidemic proportions due to cattle being fed with processed animal protein, produced from ruminant carcasses, some of which were infected. The number of cases has dropped sharply since its peak in the early 1990s and has continued to decrease dramatically since 2001 as can be seen in **Figure 16**. Between 2007 and 2011 the number of cases has reduced by 84%.

Scrapie is a TSE in small ruminants (sheep and goats) not considered to be transmissible to humans and can be divided into classical (typical) scrapie and atypical scrapie. The disease has been known for centuries. It is assumed that scrapie can both be transmitted horizontally, from one animal to another or via environmental routes, and vertically, from ewe to lamb / from goat to kid.

The variant CJD (vCJD) is the form of TSE in humans, first diagnosed in the EU in 1996. It is now generally assumed to be caused by oral transmission of the BSE agent to humans. Most cases have occurred in the UK.

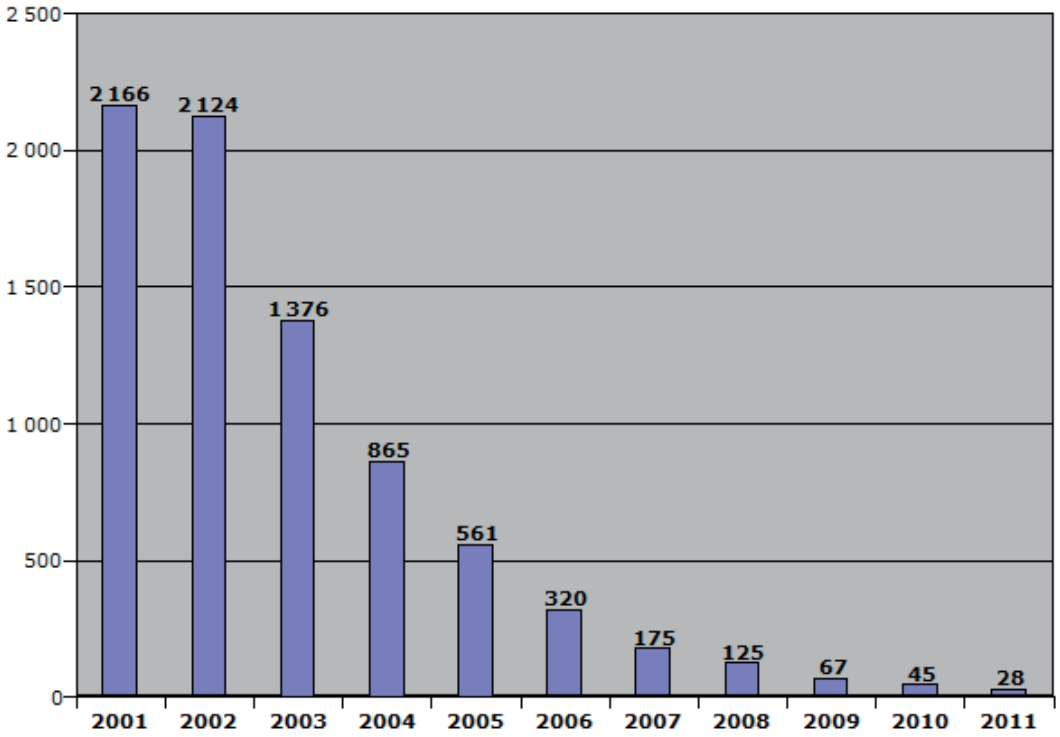
Both BSE and scrapie are OIE listed diseases. The main body of legislation covering BSE in the EU is Regulation (EC) No 999/2001[6] (the TSE Regulation). This gathers together all BSE measures adopted over the years, since BSE was first detected in 1989, into a single, comprehensive framework, consolidating and updating them in line with scientific advice and international standards.

Since July 2001, any animals considered likely to have received the same potentially-infected feed as an animal infected with BSE must be culled and destroyed. In addition, the most recent offspring of female BSE cases must be culled, due to potential maternal transmission.

The application of the stringent EU measures has had a very significant impact on the incidence of BSE. Since 2001, the number of positive BSE cases has declined steadily in the EU. There has been about a 35% per year reduction in positive cases since 2002, with figures falling from 2129 BSE cases in the EU-15 to 67 in the EU-25 in 2009. In the UK, the incidence has fallen sharply from over 37,056 cases in 1992 (at the peak of the epidemic) to 11 cases in 2009. The number of positive BSE cases has also dropped in almost all other Member States.

[6] Regulation (EC) No 999/2001 of the European Parliament and of the Council of 22 May 2001 laying down rules for the prevention, control and eradication of certain TSEs. *OJ L 147, 31.5.2001, p. 1–40*

Figure 16: Evolution of BSE positive cases in EU27 since 2001



Source: Report on the monitoring of ruminants for the presence of Transmissible Spongiform Encephalopathies (TSEs) in the EU in 2011

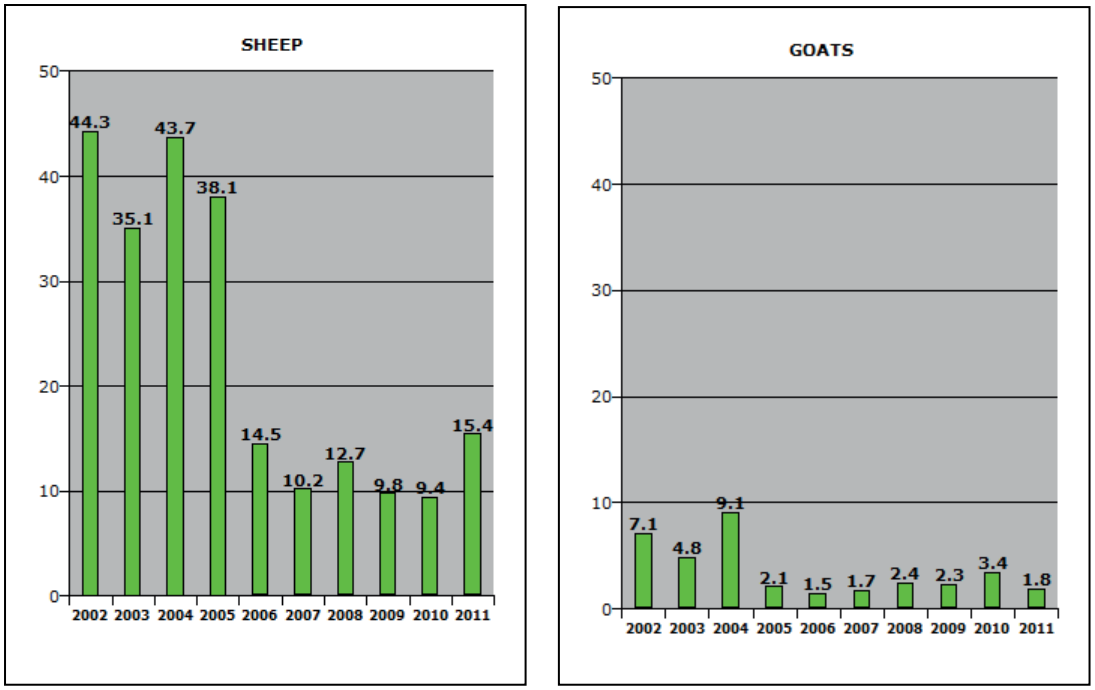
Monitoring and surveillance measures for the detection, control and eradication of BSE have been in place since 1 May 1998. Co-funding of these programmes was introduced in 2001 when monitoring of TSEs was made compulsory under Regulation 999/2001/EC. The programmes have evolved over the years in accordance with EU legislation (Regulation 999/2001/EC and the EU hygiene legislation). In particular, the Union co-funds programmes for the:

- Monitoring for BSE and for scrapie;
- Genotyping of sheep for scrapie; and
- Culling of infected animals.

Member States are also obliged to test annually a sample from different categories of animals based on their respective animal populations (separately for sheep and for goats).

Genotyping tests in sheep, the determination of certain alleles of the prion protein genotype, are required for the positive cases in this species. In addition MS may use this method in the framework of breeding programmes, in order to increase the number of animals in their sheep population that are TSE resistant by selecting animals for breeding with the appropriate genotype. TSE resistant sheep from scrapie infected flocks may be excluded from certain eradication requirements. Breeding programmes are applied by MS on a voluntary basis. Cyprus, the Member State with the highest incidence of scrapie, has applied a breeding programme extensively based on genotyping on its sheep population resulting in a significant drop in the detected cases in infected flocks.

Figure 17: Evolution of overall prevalence of Scrapie in small ruminants in the EU (except Cyrpus and Greece)



Source: Report on the monitoring of ruminants for the presence of Transmissible Spongiform Encephalopathies (TSEs) in the EU in 2011

A further part of the programme is the monitoring for chronic wasting disease (CWD) in cervids. Although the disease is not present in the EU, there was a decision to monitor wild and farmed deer in certain countries. This programme has run for a number of years and no positive results have been detected.

3.5.3. Funding

Elegible measures for Union co-financing (in all cases up to maximum limits):

- -The costs for testing under TSE monitoring, at a rate of 100%
- -The costs for the compensation to farmers for animals culled in accordance with the programmes, at a rate of 50% up to a maximum (the ceiling was increased in 2010)
- -The cost of genotyping, at a rate of 50%

Total EU funding from 2007-2011 amounted to €314 million.

In addition to veterinary measures, the EU has also implemented a large-scale scheme of purchase and destruction of animals under the market support measures.

Figure 18: TSE, BSE and Scrapie EU Contribution (Payments) 2007-2011

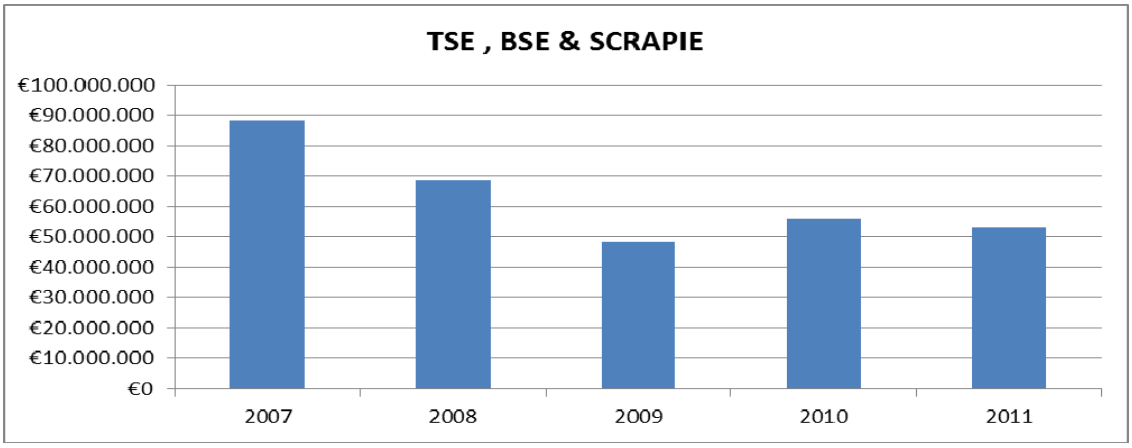
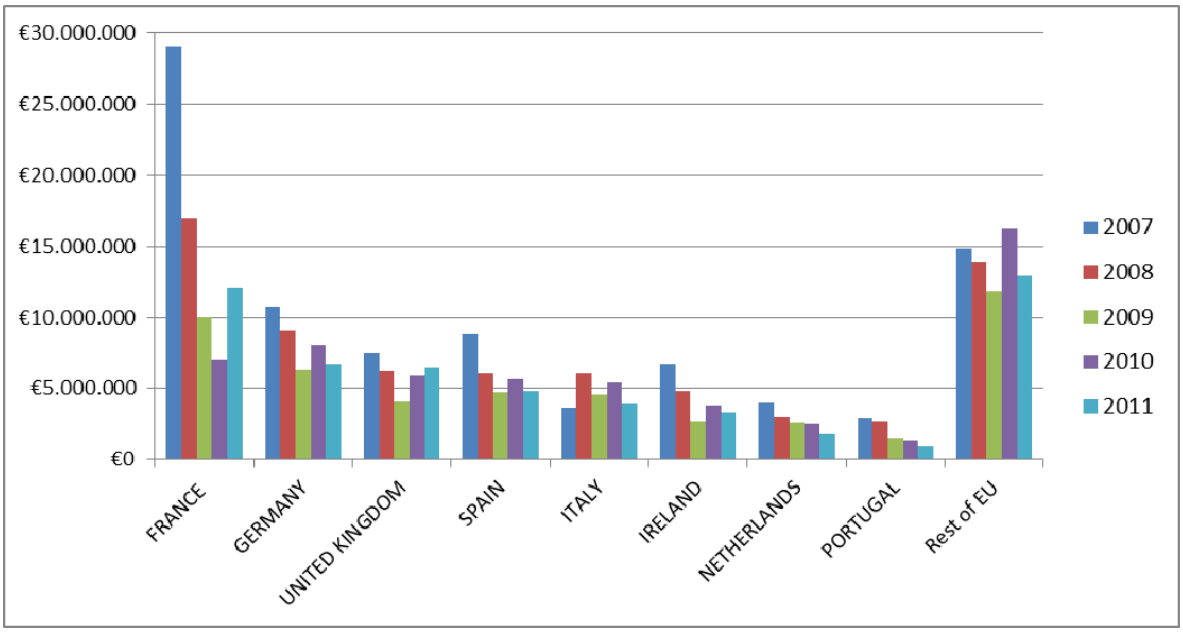


Figure 19 shows co-funding by Member States for the period 2007-2011. TSE programmes are compulsory, all 27 Member States have received funding. The chart shows the biggest recipients: France (€ 75 million), Germany (€ 40.9 million), UK (€ 30.3 million), Spain (€ 30 million), Italy (€ 23.6 million) and Ireland (€ 21.4 million). There is a clear trend of decline in funding between 2007 and 2011 for almost all Member States.

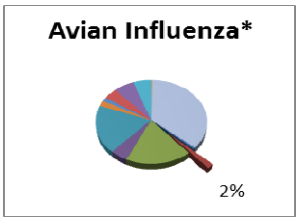
Figure 19: Distribution of Contribution for TSE Programmes by Member State 2007-2011



Source: DG SANCO TSE financing decisions 2007-2011

3.6. Avian Influenza

3.6.1. Description



* Percentage of total EU co-funding 2007-11

Avian influenza is an infectious viral disease in birds, domestic and wild. Infections with avian influenza viruses in domestic poultry cause two main forms of that disease that are distinguished by their virulence.

All known viruses which cause influenza in birds belong to the influenza A virus. The low pathogenic form (caused by avian influenza viruses of the H5 and H7 subtypes (LPAI), generally only causes mild symptoms, while the highly pathogenic form (caused by H5N1-HPAI) results in very high mortality rates in most poultry species. This disease may have a severe impact on the profitability of poultry farming.

Wild birds, especially migratory water birds, tend to act as reservoirs for avian influenza. They can often carry avian influenza viruses without showing any symptoms and then transmit the disease either by direct contact with local birds, or indirectly through their faeces which can contaminate the soil and water.

While avian influenza is primarily a bird disease, it can cross from birds to humans. This generally occurs through handling dead or infected birds or by contact with infected fluids. There is no evidence to suggest that avian influenza can be passed to humans through the consumption of poultry or eggs. Also, transmission among humans is considered to be extremely unlikely. Furthermore, thorough cooking ensures that the poultry meat or eggs are free of any virus.

3.6.2. Disease situation

Council Directive 2005/94/EC[7] introduced a new legal basis for the obligatory conduct of surveillance programmes in poultry to detect infections with LPAI of H5 and H7 subtype. During 2008-2010 the surveys were performed according to the guidelines set out in Commission Decision 2007/268/EC[8] , The experience gained during the implementation of surveillance programmes indicated that certain poultry species and poultry production categories were a higher risk. In wild birds, HPAI of the H5N1 subtype were almost exclusively found in sick or dead animals, being only the LPAI subtypes isolated in healthy wild birds. As a consequence the surveillance strategy was amended to incorporate risk-

[7] Council Directive of 20 December 2005 on Community measures for the control of avian influenza and repealing Directive 92/40/EEC. *OJ L 10, 14.1.2006, p. 16–65*

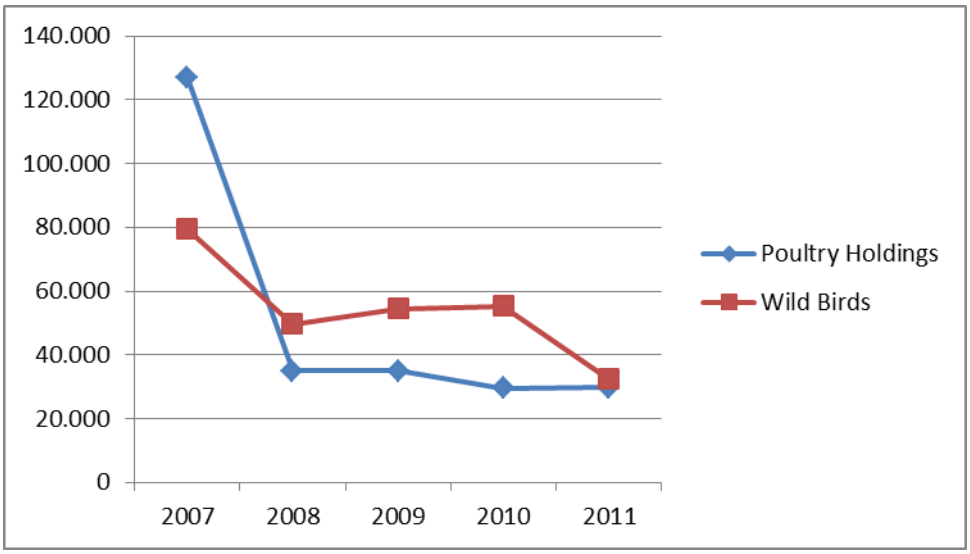
[8] Commission Decision 2007/268/EC of 13 April 2007 on the implementation of surveillance programmes for avian influenza in poultry and wild birds to be carried out in the MS and amending Decision 2004/450/EC (*OJ L 115, 3.5.2007, p. 3–17*

based surveillance complementing early detection systems and the guidelines were amended accordingly (Commission Decision 2010/367/EC)[9] as from 2011 programmes.
Those surveillance programmes that act mainly as an early warning strategy aim to identify:

- the circulation of LPAI viruses in poultry, in particular in waterfowl poultry species, before they become widespread in the poultry population, so that control measures can be taken to possibly prevent a mutation into a HPAI virus which might have devastating consequences.
- the circulation of LPAI of subtypes H5 and H7 and highly pathogenic avian influenza (HPAI) in domestic waterfowl (namely ducks, geese and mallards for re-stocking supplies of game);
- the circulation in wild birds for the timely detection of HPAI of the subtype H5N1 in order to protect poultry in poultry holdings and safeguard veterinary public health.

Overall, the implementation of avian influenza (AI) surveillance programmes has been a success. Surveillance programmes have proven effective in providing early signals for the timely detection of outbreaks of both high and low pathogenic strains. After the crises, these were also extremely useful in allowing early detection of HPAI in wild birds, thus preventing further spread to commercial flocks and to humans. The decreasing trend during the period under study in the number of both wild birds and domestic birds surveyed is due to a reduced number of outbreaks occurring since 2007, both in domestic poultry and wild birds.
1.649.255 poultry holdings were reported to be present in EU MS in 2011, 29.806 out of them were sampled.

Figure 17: Number of Wild Birds and Poultry Holdings Surveyed for Avian Influenza, 2007-2011

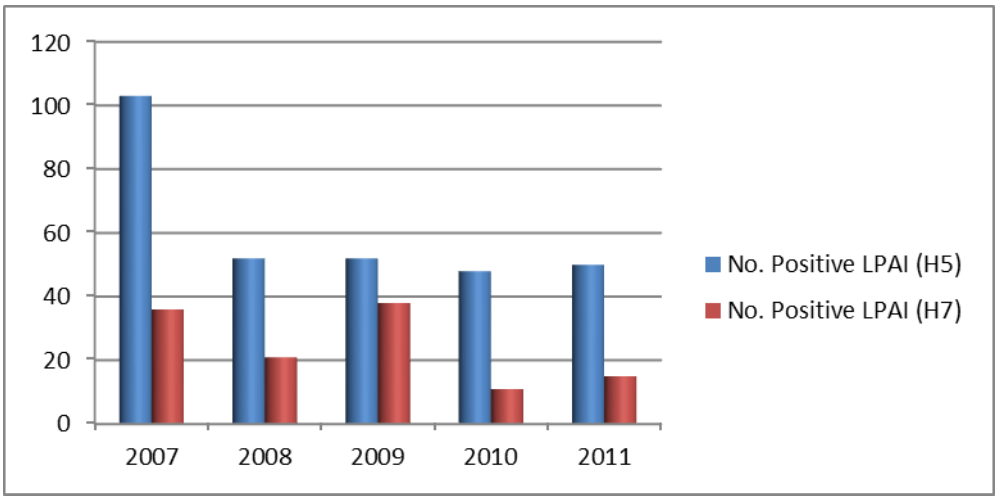


Source:
DG SANCO- Annual report on surveillance for avian influenza in poultry and wild birds in the EU in 2007-11

[9] Commission Decision 2010/367/EC of of 25 June 2010 on the implementation by Member States of surveillance programmes for avian influenza in poultry and wild birds. OJ L 166, 1.7. 2010, p.22.

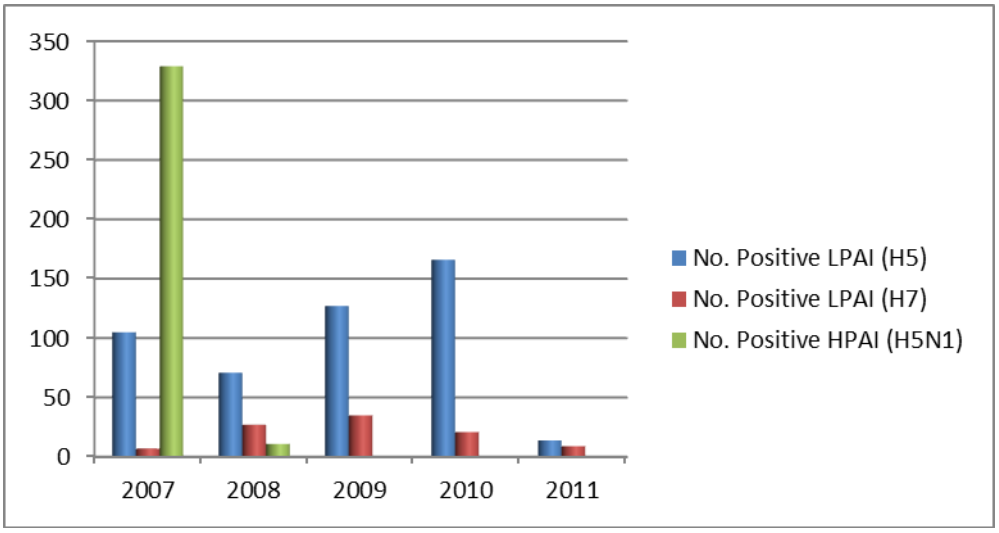
Figure 18 shows the number of infected poultry holdings found each year during the survey for the period 2007 and 2011[10]. The chart shows a decreasing trend in the number of infected poultry found, despite a peak in 2007. The number of HPAI outbreaks in the EU drastically fell, while LPAI outbreaks have remained steady in the years 2007-2011.

Figure 18: Number of Infected Poultry Holdings Found in Surveys 2007-2011



Source: DG SANCO- Annual Report on surveillance for avian influenza in poultry and wild birds in the EU in 2007-2011

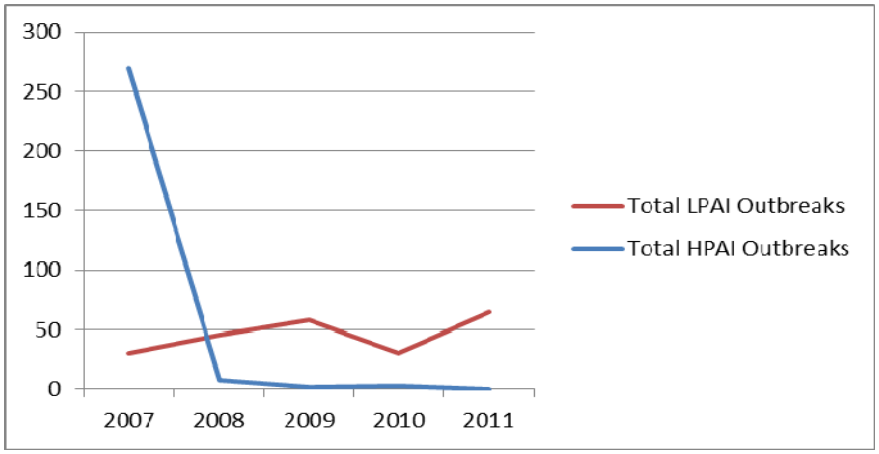
Figure 19: Number of Infected Wild Birds Found in Surveys 2007-2011



Source: DG SANCO- Annual Report on surveillance for avian influenza in poultry and wild birds in the EU in 2007-2011

[10] It should be noted that the figures here are the findings resulting directly from the survey, and not the number of outbreaks reported in ADNS.

Figure 20: Avian influenza Outbreaks, 2007-2011



Source: Animal Disease Notification System (ADNS)

3.6.3. Funding

The surveillance programmes are co-financed by the Commission at a rate of 50% of eligible costs up to a maximum amount. In order to address the high costs involved in the sampling, the European Commission has introduced since 2007 a lump sum for each wild bird sampled.

During the period 2007-2011, all 27 Member States have benefited from funding. The recipients of the largest amounts of funding were: Italy (€5.2 million), Germany (€1.5 million), the Netherlands (€1.7 million), Spain (€1.2), and the UK (€1 million). The high figure of funding for Italy is related to the intensive testing in some regions due to high population density of domestic birds in a high risk area.

The new guidelines laid down Commission Decision 2010/367/EC published in July 2010 encouraging to discontinue active surveillance in wild birds were already implemented in some MS for the 2011 programmes (*France, Latvia, Romania, Slovakia, Spain, Sweden and UK)* leading to a decrease in the needs for funds.

Figure 21: Avian Influenza EU Contribution (Payments) 2007-2011

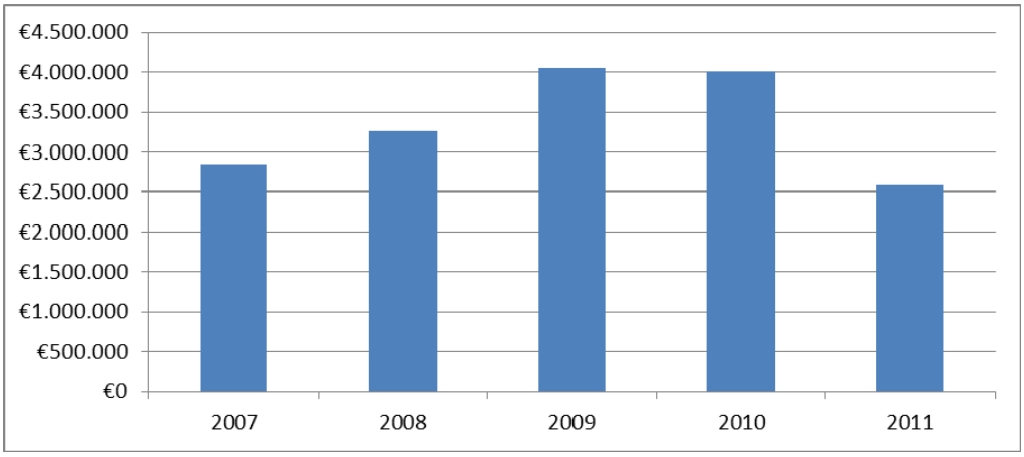
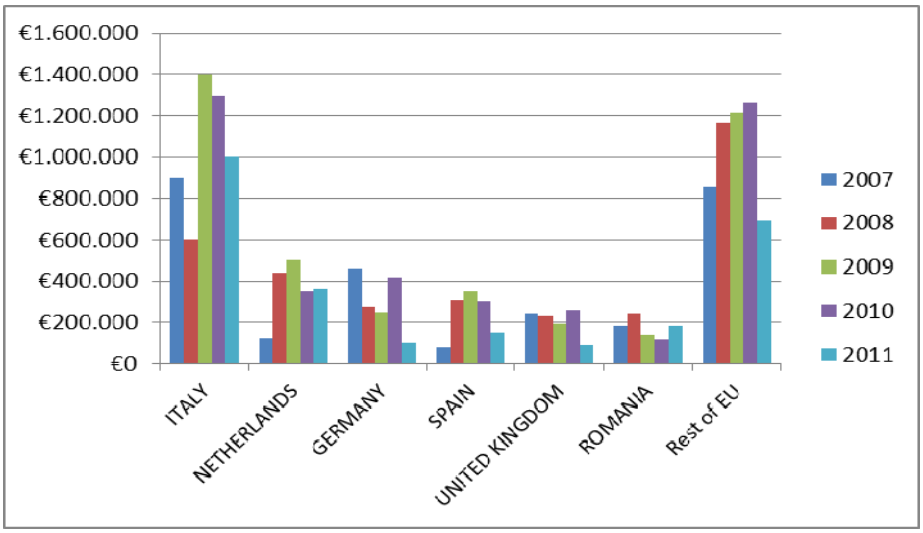


Figure 22: Avian influenza EU Contribution by Member State, 2007-2011

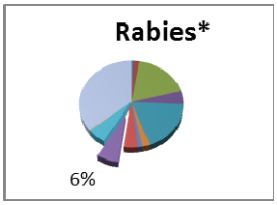


Source: DG SANCO based on financial decisions from 2007- 2011

3.7. Rabies

3.7.1. Description

Rabies is a disease caused by a *rhabdovirus* of the genus *Lyssavirus*. This virus can infect all warm blooded animal species and humans, and is transmitted through contact with saliva from infected animals, typically from foxes and stray dogs, e.g. via animal bites.



*Percentage of EU Co-Funding 2007-11

Foxes are the main reservoir, while the raccoon dog is a co-reservoir in some countries. The disease attacks the central nervous system of the host and is usually fatal. The majority of rabies cases in Europe are caused by the classical rabies virus (genotype 1). In addition, bat rabies, caused by European Bat *Lyssaviruses* type 1 and 2 (EBLV-1 and -2, respectively), is detected sporadically in bats in Europe. This form of rabies is epidemiologically distinct from rabies of other species. In rare cases, however, the infection from bats can be transferred to other mammals, including humans.

Rabies is a serious zoonosis; worldwide, it is estimated that approximately 50,000 humans die from the disease every year, mainly in developing countries in Asia and Africa. In Europe, human cases are nowadays rare due to the disappearance of urban rabies, the dramatic improvement of the situation in wildlife and the systematic application of post-exposure treatment in cases of contact of humans

with suspect animals. Human vaccination is available, and people working with bats and other wildlife in particular are encouraged to carry out preventive immunisation.
Generally, very few cases of rabies in humans are reported in the EU, and most MS have not had any indigenous cases for decades. During the 2007-2011 period, a total of 4,804 wildlife related cases were reported in 9 MS; 58% of theses case were located in Romania where also one human case occurred. During the same period, another 16 classical rabies cases occurred in 5 rabies free MS. These cases relate to illegal import of pets from infected non-EU countries[11].
Between 2008 and 2009, five cases of rabies in humans were reported by four EU MS, and of these three were indigenous. This is the first time since the year 2000 that an indigenous case of human rabies has occurred in the EU mainland territory and appears to be related to the fact that rabies is still prevalent in wildlife in Romania (EFSA-ECDC, 2011)[12].
Despite the low number of human cases, the continued incidence in Europe indicates the need for maintaining the effort to monitor the disease. According to Directive 64/432/EC[13] rabies is notifiable in bovine animals and pigs in all MS.

3.7.2. Disease situation

In the 1980s, wildlife rabies was present in most countries of eastern and central Europe and was expanding westwards. Towards the end of that decade, within the EU15, the Netherlands, Luxembourg, France, Austria, Italy and Germany were infected from the disease. At the time, a number of MS started using wildlife oral vaccination to control the epidemic.

In 1989, the EU started providing financial support to MS wildlife oral vaccination programmes against rabies. This contributed to the expansion of the use of oral vaccination, which led to the gradual eradication of the disease from several MS in the following years.

With the new wave of EU accessions (2004: NMS-10; 2007: Romania and Bulgaria), the focus of the fight against classical rabies shifted towards new areas in the enlarged EU-27 where the disease has been most prevalent. This resulted in a significant increase in the funds devoted to rabies control and eradication in these EU regions.

By 2009, Slovakia and the Czech Republic became free of rabies cases, Estonia, Poland, Hungary and Slovenia detected cases only in areas bordering rabies infected countries where no oral vaccination has been applied, and Latvia and Lithuania reported a significant drop in their number of rabies cases.

When comparing 2010 results with 2005 results, the total number of rabies cases shows a decrease of more than 73%. In particular, there was a marked decrease in the number of rabies positive

[11] WHO Rabies Bulletin Europe

[12] EFSA and ECDC (2011) -Union Summary Report on Trends and Sources of Zoonoses, Zoonotic Agents and Food-borne Outbreaks in 2009

[13] Council Directive of 26 June 1964 on animal health problems affecting intra-Community trade in bovine animals and swine OJ L 120, 13.5.1975, p. 13–13

raccoon dogs reflecting the effectiveness of the eradication programmes in the countries where this species is abundant.
Lithuania, Latvia, Estonia and Poland have reported a considerable decrease in the number of rabies positive animals during this period, especially in foxes and raccoon dogs. These four MS have implemented oral vaccination programmes in the wildlife with EU co-financing, and the results achieved by the programmes are monitored in the wildlife population. The observed reductions are therefore the direct result of these successful oral vaccination campaigns[14].

In 2008, an increase in the number of rabies positive foxes and other wildlife was reported in Slovenia, and Italy reported rabies cases for the first time in many years. This indicates a high infection pressure coming from the Western Balkan region. In 2011 however, after the introduction of the EU (Instrument for Pre-accession assistance -IPA) funded oral vaccination in Croatia, the situation in the above mentioned MS improved significantly, with Slovenia finding no cases for the first time in several years and Italy detecting only one case.

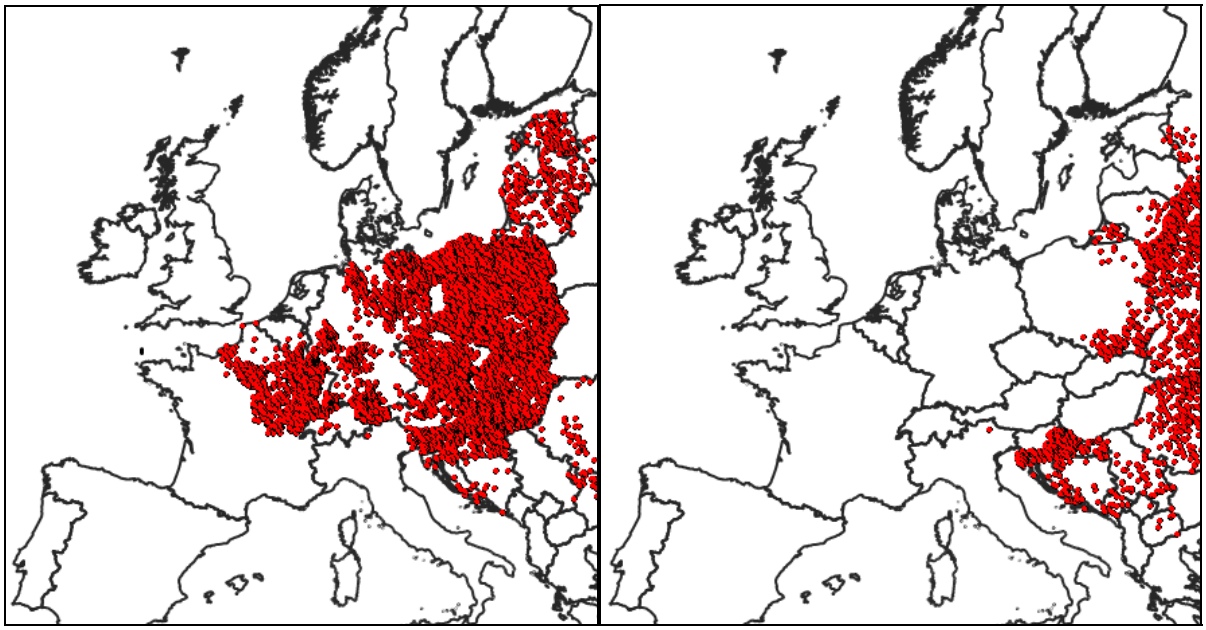
During the past decade, an increasing number of MS reported cases of rabies in illegally imported dogs. Therefore, information campaigns for the public on the risk of importing pets without the proper rabies vaccination are also important in preventing the introduction of the disease in the EU. Some MS have carried out such campaigns regularly, such as France and Spain.

As **Map 5** indicates, the disease has now been confined to the east of the EU and the rabies eradication programme has, therefore, progressively shifted from "old" EU Member States that have attained the objective of eradication, to eastern European Member States and cooperation with neighbouring non-EU countries. An EU financed plan on rabies vaccination has been running in Kaliningrad since 2007 and is planned to continue until at least 2014. The Commission is funding for the creation of vaccination belts through bilateral agreements between interested Member States with their respective neighbours where rabies is still a threat. Third Countries under this plan include Russia, Ukraine, and Belarus. The EU is also financing cooperation activities on rabies (and CSF) with Western Balkan countries within the Instrument for Pre-accession Assistance (IPA).

[14] As also noted in the TF rabies subgroup conclusions of October 2009 (DG SANCO 2009f.) and November 2010 (DG SANCO 2011b.).

Map 5. Evolution of rabies cases in wildlife in the EU, 1992 and 2011

1992 **2011**



Source: WHO-Rabies Bulletin Europe

The reported cases of classical rabies that occurred in the EU in the period 2005-2009 were concentrated in a few Member States, predominantly the Baltic and Poland.

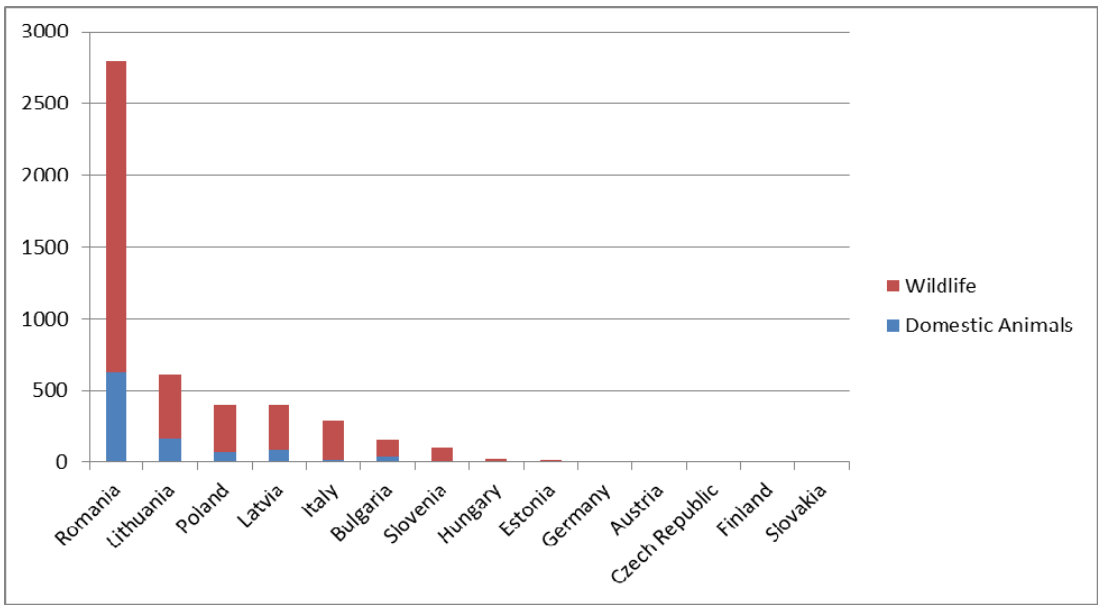
Nonetheless, since 2005, the total number of positive rabies cases at EU level has decreased very significantly from 2,575 in 2005 to 518 in 2011. This is due to the success of the programmes in the high risk areas of the Baltic MS mainly as noted in several TF subgroup reports (2008, 2009, and 2010): in Estonia, the oral vaccination for the elimination of rabies in wildlife has been effectively implemented and the monitoring and surveillance activities have been correctly carried out (DG SANCO. 2008)[15]. The oral vaccination programme in Lithuania has proven useful and successful in controlling the disease in this area, as demonstrated by the decrease in the number of positive cases; hence, the TF mission reports recommend that, due to the continuous threat of the disease from non-EU neighbouring countries in this very vulnerable zone, the oral vaccination programme needs to be maintained (DG SANCO 2009)[16]. In Latvia a well-defined rabies eradication programme has been introduced in 2005 and vaccination campaigns resulted in a significant reduction of rabies cases between 2006 and 2008. It is also noted that an excellent exchange of information with the three neighbouring MS on the rabies situation and oral vaccination programmes implemented has been established. (DG SANCO, 2010)[17].

[15] Report on the Task Force Meeting of the "Rabies" Sub-Group. Latvia, Riga, 26-27 November 2008

[16] Report on the Task Force Meeting of the "Rabies" Sub-Group. Vilnius, Lithuania, 27-28 October 2009

[17] Report of the "Foodborne Zoonoes-Salmonellosis" Sub-Group Task Force. Belgium, 31 May 2009

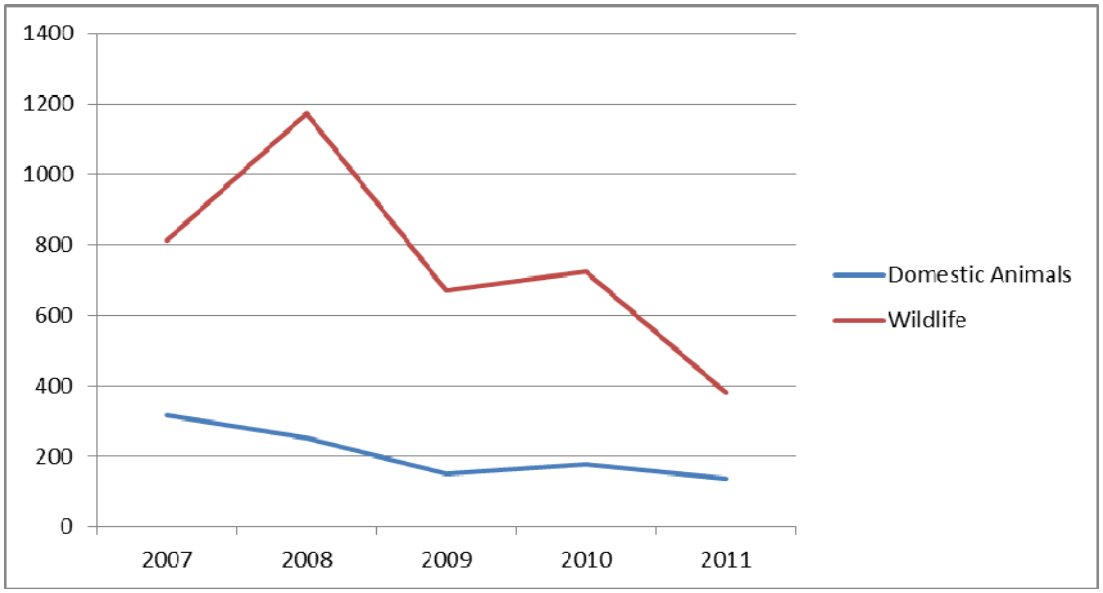
Figure 23: Reported cases of classical rabies by co-funded MS, 2007-2011*



**Note: In Finland and Czech Republic no reported cases between 2005 and 2011; Austria and Slovakia have no reported cases between 2007 and 2011.*

Source: WHO- Rabies Bulletin Europe 2007-2011

Figure 24: Number of Rabies Outbreaks in the EU 2007-2011



Source: WHO- Rabies Bulletin Europe 2007-2011

3.7.3. Funding

The EC started funding oral vaccination in 1989. The EU-financed rabies eradication programmes are composed of three elements: oral wildlife vaccination, monitoring of the effectiveness of vaccination, and surveillance for the disease.

- Oral vaccination (OV) of wildlife is performed through the distribution of baits (containing live vaccines). The target species is fox and in some MS also the raccoon dog.
- To monitor the effectiveness of oral vaccination a sufficient number of samples from target wildlife species is tested for the presence of antibodies against rabies virus, thus measuring the level of immunity in vaccinated animal populations from areas where the oral vaccination is carried out and for the presence of biomarker to measure the uptake of the baits (i.e. the percentage of tested animals that have consumed baits and thus have traces of the biomarker contained therein).
- In the framework of rabies surveillance, samples from suspect animals of all species (i.e. wildlife, pets, and farm animals) are tested for the presence of rabies infection. The aim is to detect any cases of rabies introduction in new areas as well as the evolution of the disease situation in the infected areas.

The distribution of the baits and collection of the samples to test the effectiveness of the vaccination is a particularly costly exercise. Distribution is mostly done by aircraft. In some areas manual distribution is also used, particularly where distribution by air is not possible such as in no-fly zones or in wildlife habitats located closely to inhabited areas.
It is to be noted that distribution and sampling costs can vary greatly between MS due to geographic factors (e.g. access is more difficult in mountainous areas).

The EU financial support covered 50% of costs incurred for the purchase and distribution of vaccines and for carrying out laboratory tests. In 2010 and 2011, the co-funding rate was increased to 75%. Since 2011, the oral vaccination activities in border areas with neighbouring third countries included in the approved programmes submitted by MS, is financed at 100%.
Following EU enlargement in 2005 and 2007, the funding has progressively shifted from the "old" EU Member States that were at that time close to reaching the objective of complete eradication, to "new" Member States in Eastern Europe where rabies in wildlife has been greatly present and most of which are also bordering third countries.

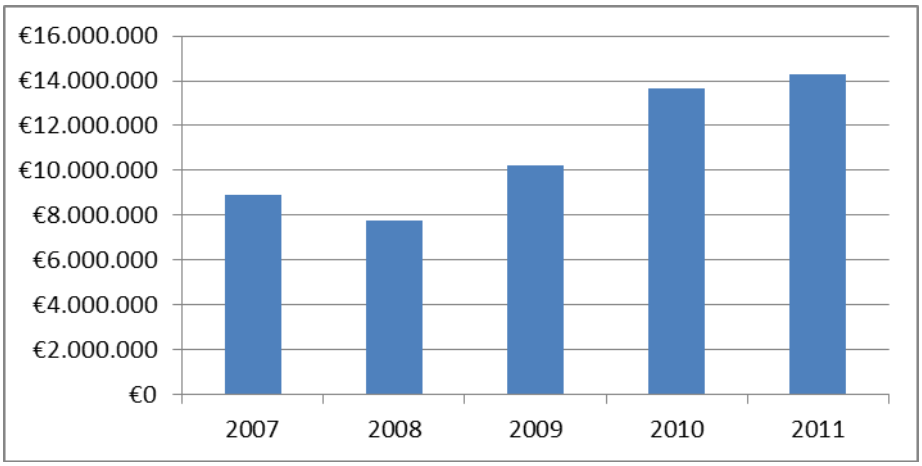
The last rabies infected Member States to launch EU co-funded oral vaccination were Bulgaria and Romania which started implementing oral vaccination in 2009 and 2011, respectively.

Since 2009, all Member States – except Romania - with classical rabies cases in their territory or close to it have implemented rabies eradication programmes.

Figure 25 shows a consistent upward trend in funding between 2005 and 2009. This increase can be attributed to the extension of the annual wildlife vaccination coverage area in co-funded MS, from a

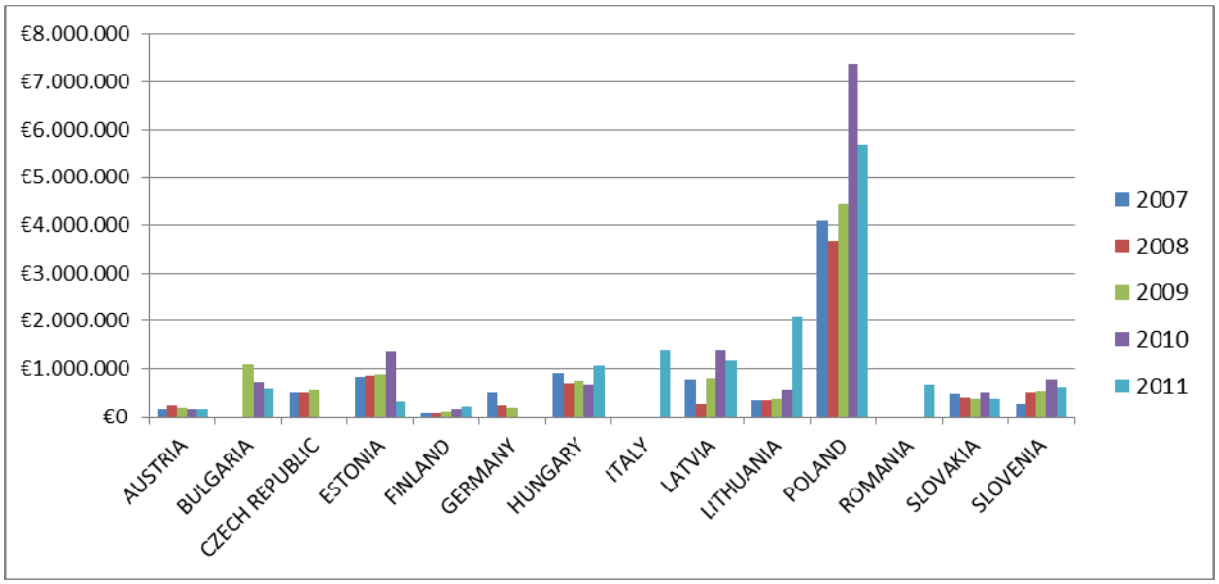
total 837,000 km^2 to 1,314,794 km^2 - as well as to the increase in the number of doses administered[18] from 18,944,629 doses to 27,980,549 over the period.

Figure 25: Rabies EU Contribution (Payments) 2007-2011



Over the period under review, 12 Member States have benefited from the funding **(Figure**). The total amount of funding during the period varies between Member States, according to the size of the area covered by the vaccination programme in each Member State. Poland, the recipient of the largest amount of funding (€16,642.604), has carried out vaccination campaigns twice per year covering the whole territory of the country (around 282,000 km^2), while Finland, which received relatively small amounts (€442,356), has regularly implemented oral vaccination programmes in a focused area of 4000 Km^2 area along the Finnish-Russian south east border.

Figure 26: Rabies EU Contribution by Member State, 2007-2011

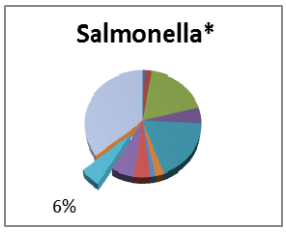


Source: DG SANCO-based on financial decision 2007-2011

[18] The number of doses represents the total number of doses distributed over a year. Typically, there are two rabies vaccination campaigns per year in each Member State.

3.8. Zoonotic Salmonellosis

3.8.1. Description



*Percentage of EU Co-Funding 2007-11

Salmonellosis is caused by various salmonella species that not always result in clinical disease in infected animals. Salmonellosis is an important zoonosis , as it can cause regular outbreaks with significant morbidity and mortality.

The main *salmonella* subtypes (named 'serovars') causing human infection are *salmonella* serovar *Enteriditis* and *Typhimurium*, *Infantis*, *Virchow*. *S. Enteritidis* cases are most commonly associated with the consumption of contaminated eggs and poultry meat, while *S. Typhimurium* cases are mostly associated with the consumption of contaminated pig meat, poultry meat and beef. In 2009, zoonotic salmonellosis was the second most commonly reported zoonosis in humans in the EU, with 108,614 confirmed cases reported or 23.7 cases per 100,000 individuals (Lahuerta et al, 2011[19]).

The prevalence of the various *salmonella* serovars requires adequate surveillance, in order to detect changes in serovars, hence to be able to take targeted measures against the attributed sources of infection.

The common reservoir of *salmonella* is the intestinal tract of a wide range of animals, which result in a variety of foodstuffs covering both food of animal and plant origin as sources of infections. It is a foodborne disease, transmitted mostly by contaminated poultry products, such as poultry meat and eggs, and other recognised sources such as pig meat, milk and dairy products, and also fish and fish products; fruit and vegetables can also be contaminated, usually through the use of contaminated fertilising or irrigation processes. Transmission usually occurs when organisms are introduced in food preparation areas and are able to multiply in food, e.g. due to inadequate storage temperatures, inadequate cooking or cross contamination of food. The organism may also be transmitted through direct contact with infected animals or humans or faecally contaminated environment. So far, eggs and poultry meat have been most associated with human infection.

Human salmonellosis is usually characterised by the acute onset of fever, abdominal pain, nausea, and vomiting. Symptoms are often mild and most infections are self-limiting, lasting a few days. However, there are also fatal cases when the infection reaches the bloodstream and the associated dehydration can be life threatening.

[19] Lahuerta A., Westrell T, Takkinen J, Boelaert F, Rizzi V, Helwigh B, Borck B, Korsgaard H, Ammon A, Mäkelä P. 2011. *Zoonoses in the European Union: origin, distribution and dynamics - the EFSA-ECDC summary report 2009*;

3.8.2. Disease situation

The EU general policy for salmonellosis is to reduce the prevalence in animals through the implementation of harmonised measures with increasingly stringent and targeted measures following new scientific insights in the epidemiology of the disease and risks for transmission to humans.

Council Directive 92/117/EEC[20] specified minimum levels for salmonellosis control in poultry for EU Member States mainly focusing on the monitoring and control of *S*. *Enteritidis* and *S*. *Typhimurium* in breeding flocks. These measures were already in place between 1993 and 2004, after which specific *salmonella* prevalence reduction targets were set in accordance with Regulation (EC) No 2160/2003[21]. Gradually targets for reduction of the prevalence, national control programmes were introduced for:

- Breeding hens (2007)
- Laying hens (2008)
- Broilers (2009)
- Turkeys (2010)

Vaccination against salmonellosis was also used as an additional tool. Provisions on the use of vaccines as specific control methods under the control programmes are laid down in Commission Regulation (EC) No 1177/2006[22]. Live or inactivated vaccines against *salmonella Enteritidis* were implemented in Member States with a high prevalence in order to protect public health. The prevalence of *salmonella Enteritidis* demonstrated during a baseline survey carried out in laying hens and in the frame of the testing schemes in accordance with Article 4(2)(d) of Regulation (EC) No 2160/2003, was used as a threshold for mandatory vaccination.

In breeders, since 2007, Member States have been obliged to implement the *salmonella* control programmes aiming to meet the *salmonella* reduction target set by Commission Regulation (EC) No 1003/2005 and cover the following serovars: S. *Enteritidis*, S. *Typhimurium*, S. *Infantis*, S. *Virchow* and S. *Hadar*. Data from EFSA indicate that, in 2009, 18 Member States managed to reduce the prevalence under 1% level of the targeted serovars (*S. Enteritidis*, *S. Typhimurium*, S. *Infantis*, S. *Virchow* and S. *Hadar*)

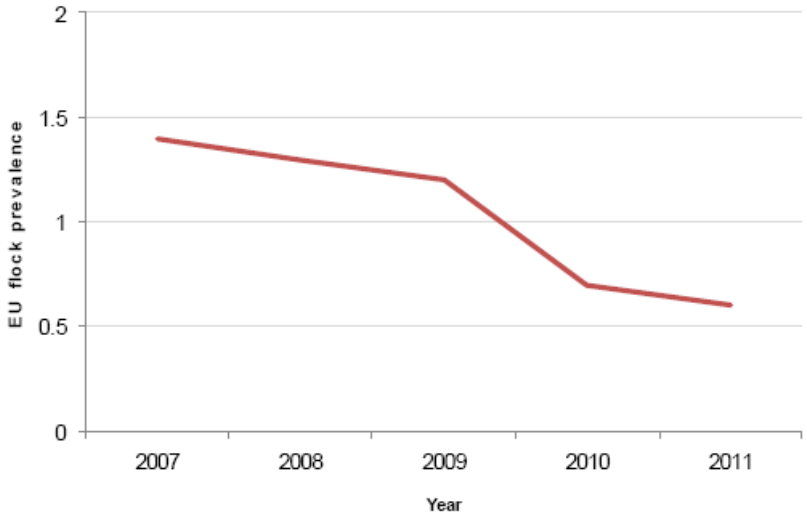
Although occasional increases in prevalence are observed, the overall evolution of declining *salmonella* prevalence in breeding flocks is remarkable. During 2009, *salmonella* was found in 2.7 % of breeding flocks in the EU at some stage during the production period, i.e. at the same proportion as in 2008. The average percentage of positive breeding flocks has moved towards 1% (**Figure 27**).

[20] Council Directive 92/117/EEC of 17 December 1992 concerning measures for protection against specified zoonoses and specified zoonotic agents in animals and products of animal origin in order to prevent outbreaks of food-borne infections and intoxications OJ L 62, 15.3.1993, p. 38–48

[21] Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified food-borne zoonotic agents OJ L 325, 12.12.2003, p.1.

[22] Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry**.** *OJ L 212, 2.8.2006, p. 3–5*

Figure 27: Evolution of prevalence of five targeted serovars in breeding flocks during the production period in the EU 2007-2011



Source: EFSA and ECDC -The EU Summary Report on Trends and Sources of Zoonoses, Zoonotic Agents and Food-borne Outbreaks in 2011

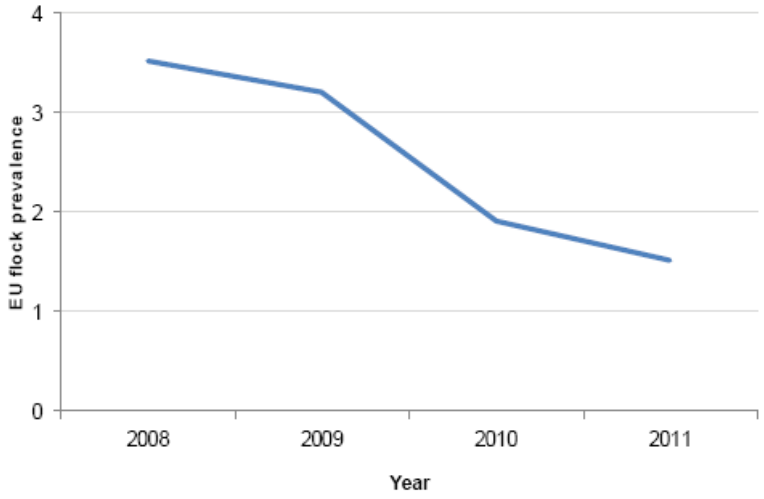
In laying hen flocks, since 2008, Member States implemented new *salmonell*a control programmes providing eggs intended for human consumption in accordance with Commission Regulation (EC) No 2160/2003. The control programmes consist of proper and effective measures of prevention, detection, and control of *salmonella* at all relevant stages of the egg production line, particularly at the level of primary production, in order to reduce *salmonella* prevalence and the risk to public health.

The legislation foresaw that an EU target for the reduction of the prevalence of *S. Enteritidis* and *S. Typhimurium* in laying hens was established for a three-year period commencing in 2008. The progress in achieving these targets could only be correctly evaluated by assessing the prevalence of the two targeted serovars at the starting point, by means of an EU-wide baseline survey in the EU (Decision2004/665/EC[23]). The Member State prevalence assessed in this EU-wide baseline survey in laying hens 2004-2005 was the reference prevalence for the 2008 targets.

Data from EFSA indicate that the *S. Enteritidis* and *S. Typhimurium* prevalence had declined in most Member States between 2008 and 2009 with the exception of 8 Member States (Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Germany and Lithuania), which reported an increase in prevalence (higher than 0.1%). This indicates that continuous progress is being made in combating these salmonella serovars, and the control of these serovars in laying hen flocks is a challenge requiring time and resources (**Figure 28**).

[23] Commission Decision of 22 September 2004 concerning a baseline study on the prevalence of salmonella in laying flocks of Gallus gallus. *OJ L 303, 30.9.2004, p. 30–34*

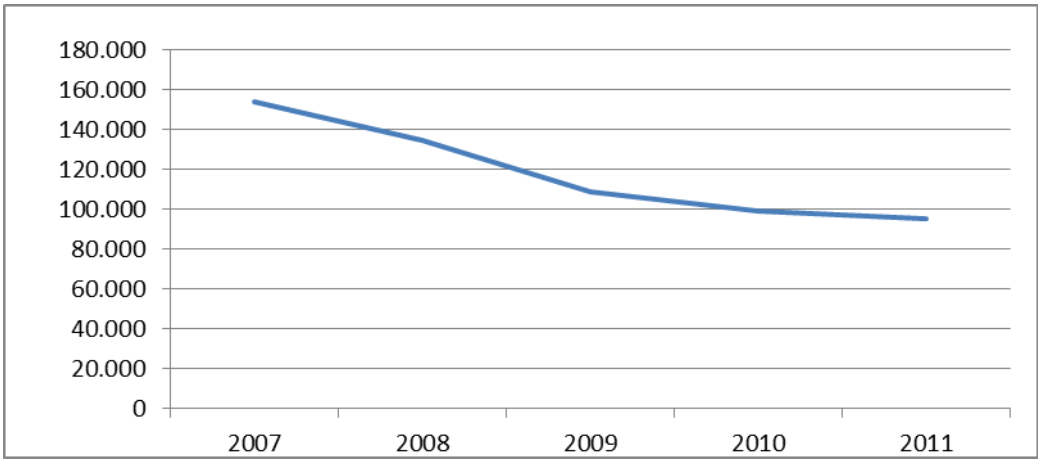
Figure 28: Prevalence of the two targeted serovars in laying hen flocks during the production period (flock-based data) in the EU, 2008-2011



Source: EFSA and ECDC -The EU Summary Report on Trends and Sources of Zoonoses, Zoonotic Agents and Food-borne Outbreaks in 2011

In **humans**, the incidence of *salmonella* has decreased annually since 2004 from about 195,947 cases in 2004 to 133,258 cases in 2008, and further down to 108,614 cases in 2009 (a decrease of 17% compared to the previous year). At the EU level, the decreasing trend between 2005 and 2009 was statistically significant, with a mean annual reduction of 12%.
The decrease has been particularly evident for S*. Enteritidis*, with a reduction of reported cases of 24% from 2008 to 2009; the second most common serovar, S. *Typhimurium*, showed a reduction of reported cases of 10% in the same period. **(Figure 29)**

Figure 29: Number of Reported Confirmed Cases of Human Salmonella in the EU, 2007-2011



Source: EFSA and ECDC – The EU Summary Report on Trends and Sources of Zoonoses, Zoonotic Agents and Food-borne Outbreaks in 2011

Although the EU trend shows a gradual decrease of salmonella cases, there are considerable differences between Member States.

3.8.3. Funding

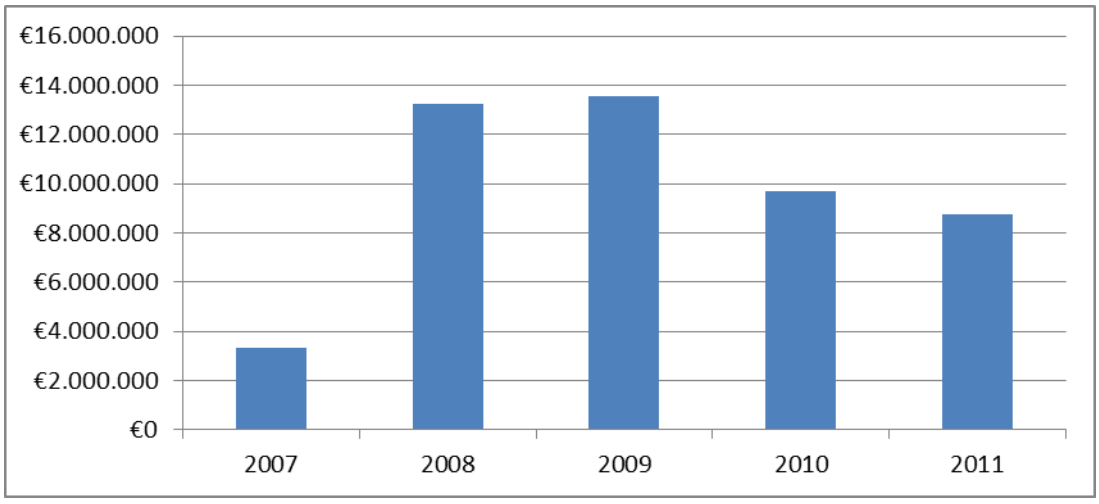
In the poultry sector, Member States should establish national salmonellosis control programmes (NSCP) for breeding flocks, laying hens, broilers and turkeys.

The EU financial contribution is at the rate of 50% of the cost incurred by Member States to implement the following measures up to a maximum amount:

- the cost of carrying out bacteriological and serotyping tests in the framework of official sampling;
- the compensation to owners for their losses due to the culling of birds and destruction of eggs;
- the purchase of vaccine doses;
- the cost of carrying out laboratory tests to verify the efficiency of disinfection;
- the cost of carrying out tests for the detection of antimicrobials or bacterial growth inhibitory effect in tissues from birds from flocks tested for Salmonella.

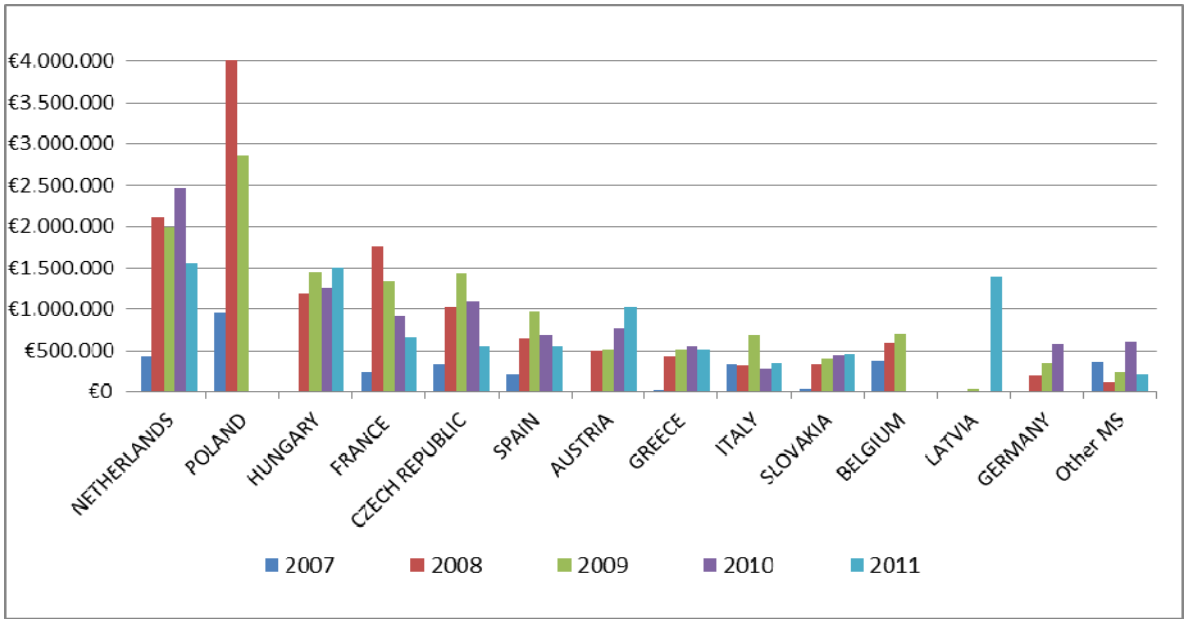
The co-financing for salmonellosis control has gradually increased since 1994, more noticeably between 2008 and 2009 when the implementation of control programmes became mandatory including harmonised testing scheme with intensified monitoring. The goal is to achieve the EU prevalence reduction targets. Between 2007 and 2011, 23 Member States have benefited from the co-funding.

Figure 30: Salmonellosis EU Contribution (Payments) 2007-2011



When comparing funding between EU Member States, there are significant differences. As can be expected, Member States with an intensive poultry industry have generally more programmes for *salmonella* control. **Figure 24** presents the Member States that have received co-financing in 2007-2011.

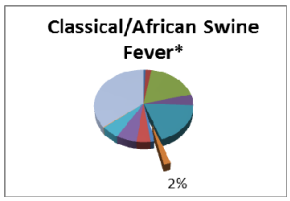
Figure 31: Salmonellosis EU Contribution by Member State, 2007-2011



Source: DG SANCO based on financial decisions from 2007-2011

3.9. Classical Swine Fever

3.9.1. Description



*Percentage of EU Co-Funding 2007-11

Classical swine fever (CSF) virus is a disease affecting pigs and wild boars of all breeds and ages produced by an RNA virus, belonging to the family of *Flaviviridae*, genus *Pestivirus*. The virus is closely related to bovine viral diarrhoea viruses (BVDV) in cattle and border diseases virus (BDV) in sheep.

It is a highly contagious infection, easily transmitted by direct and indirect contact between pigs, and by materials, swill feeding, trucks, instruments, and humans carrying the virus. CSF does not infect humans. However, it can cause very significant losses to pig holdings, both due to morbidity and mortality, and trade restrictions. It is a transboundary disease and the epidemiological situation in one country can affect neighbouring countries, therefore national measures tend not to be sufficient to control its spread, especially when outbreaks occur near borders.

Laboratory diagnosis is necessary to differentiate CSF from African swine fever (ASF). Clinical symptoms and post-mortem findings alone are not sufficient to diagnose CSF with certainty.

Effective vaccines are available for CSF since the 1980s. Attenuated live vaccines have been proven to be the most effective in reducing disease prevalence by providing quick, long lasting and complete protection. These vaccines are mostly based on C- (Chinese) strain analogues of the virus. However, subunit vaccines have also become available, that allowed differentiation between infected and vaccinated animals, so-called DIVA (Differentiating Infected from Vaccinated Animals) or 'marker' vaccines.
Vaccination of wild boar is a key tool for the control of this disease and can be done by distributing baits containing vaccines in the environment. This has proven to be a tool of increasing importance to control CSF in the environment in Europe in the last 20 years.

Movement control is crucial in the control of CSF outbreaks, and forms an important element in the contingency plans that all EU Member States have prepared in the event of an outbreak.

CSF is an example of a highly contagious disease that has been eradicated from most of the EU MS due to stringent vaccination and subsequent prevention and control measures.

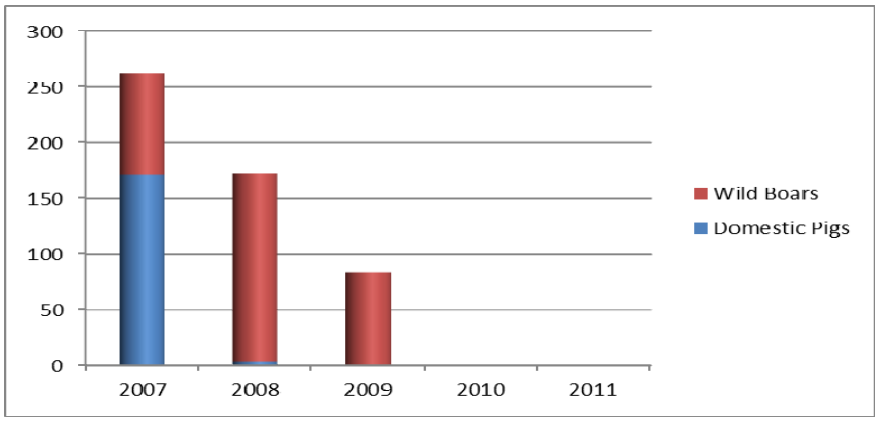
Because CSF affects only pigs, effective vaccines are available, and the environmental reservoir is limited to wild boar, eradication has proven to be possible in many countries. When the pig sector developed in large scale farming in the 1960s-1980s, vaccination against CSF became a routine practice in many countries. The use of vaccines contributed significantly to the success in controlling the disease, because they were highly effective in reducing excretion of virus and thereby the

transmission of the disease between pigs. However, when countries free of CSF joined the EU in 1973 (UK, Ireland and Denmark) the need for a free market within the EU led to the development of an EU non-vaccination policy. In 1980, EU legislation was adopted, aiming to achieve CSF-free status for all EU Member States. Subsequent to the adoption of the non-vaccination policy, countries with CSF started implementing eradication programmes.

3.9.2. Disease situation

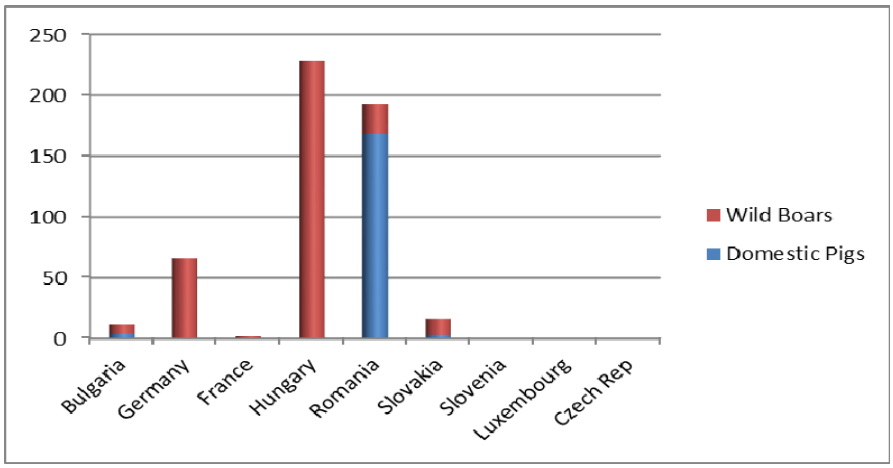
CSF had been eradicated in most EU15 Member States by 2004, except for certain areas in Germany, Luxemburg and France where the disease still occurred in wild boar. The enlargement of the EU has led to increased risks, due to CSF reservoirs in the central Balkan region, and an endemic situation of CSF in Bulgaria and Romania at the time of EU accession. This led to a very substantial increase in the financial support to control and eradicate CSF. Following the increase in funding, in recent years, in these regions good progress in CSF eradication can be observed due to the on-going control measures. The largest outbreaks during this period were in domestic pigs in Romania between 2006 and 2007 and in wild boar in Hungary in 2008. In 2009 no outbreak in domestic pigs occurred and in 2010, no outbreaks in both domestic and wild animals were reported.

Figure 32: CSF Number of Outbreaks, 2007 -2011



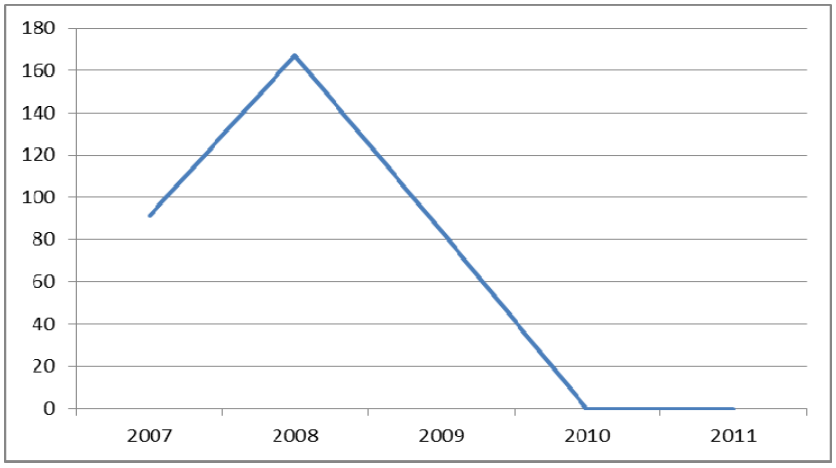
Source: Animal Disease Notification System (ADNS)

Figure 33: CSF Number of Outbreaks by Member State, 2007 -2011



Source: Animal Disease Notification System (ADNS)

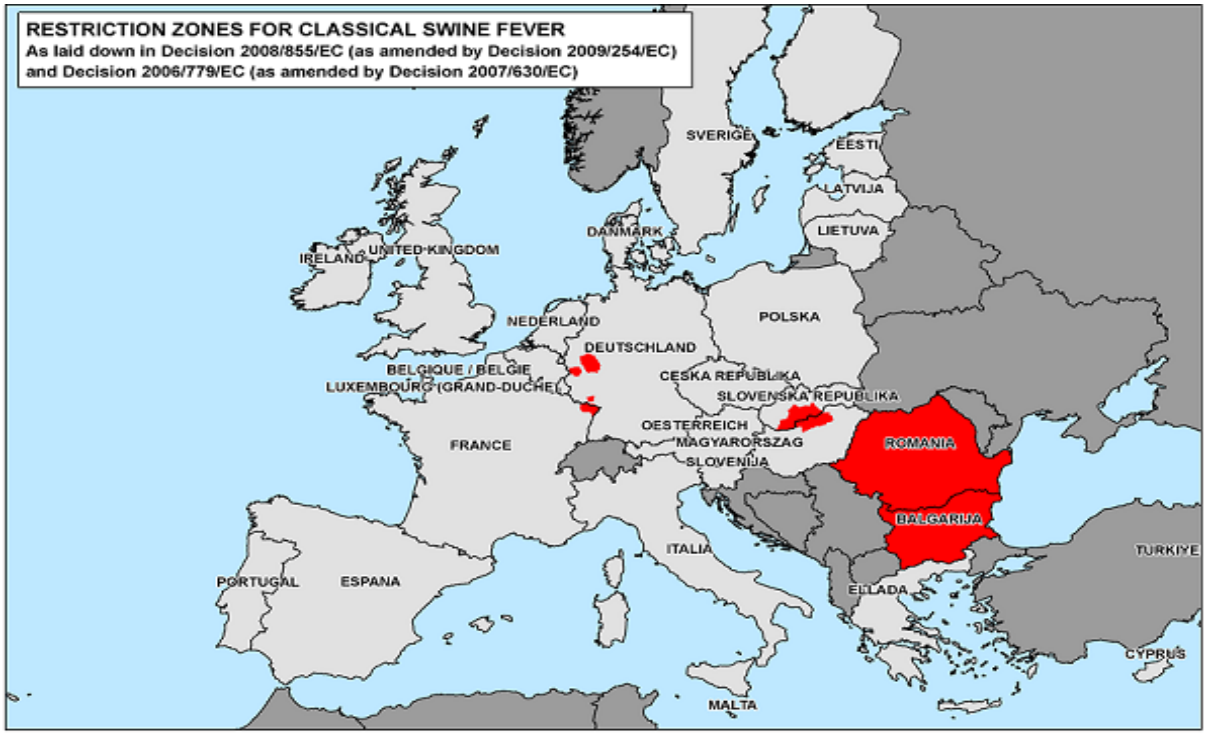
Figure 34: Number of CSF Outbreaks in Wild Boar (in EU) 2007-2011



Source: Animal Disease Notification System (ADNS)

During 2011 the restrictions were lifted for some areas in Hungary (Heves and certain areas of the county Borsod-Abauj-Zemplen) and the whole Slovakia (Commission Decision 2011/360/EU of 20 June 2011) and the remaining restricted areas in France (October 2011). In May-July 2011 CSF outbreaks were reported in 5 commercial pigs in Lithuania in the district of Jonava, in the central part of the country. Investigations proved that the strain was the same genotype of the one isolated in Lithuania in 2009, in both cases the source of the infection remained unknown.

Map 6. Restriction Zones for Classical Swine Fever in 2010



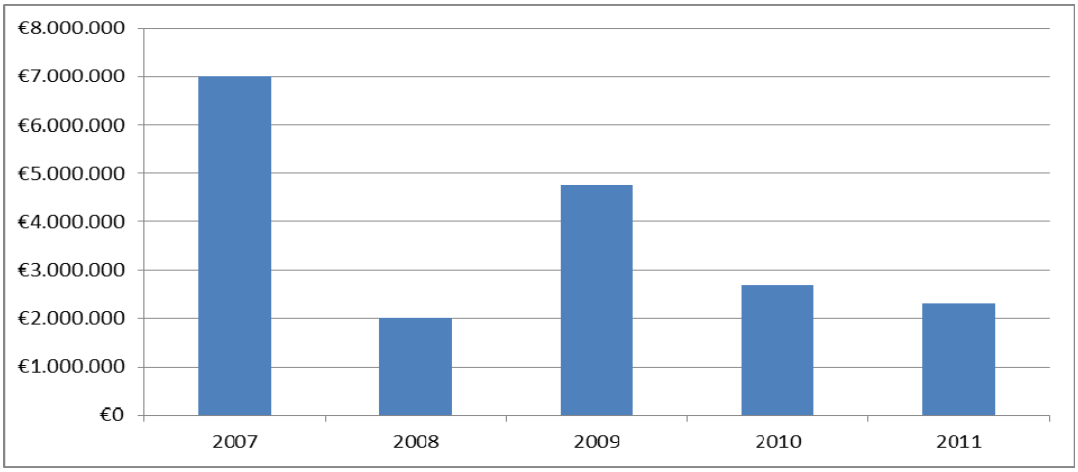
Source: Animal Disease Notification System (ADNS)

3.9.3. Funding

EU measures to combat CSF were put in place effectively starting in 1977 through Council Directive 77/391/EC, which lays down the basic framework for animal disease eradication and EU co-financing. Current EU legislation for control and eradication of CSF is laid down in Council Directive 2001/89/EC[24] and Commission Decision 2002/106/EC[25]. Measures include stamping-out in case CSF is suspected and confirmed on pig farms, emergency vaccination with a modified live vaccine or with a marker vaccine, and emergency vaccination with baits containing a live attenuated vaccine to control the disease in feral pigs.

The disease has been subject to EU financial measures since 1980 to support Member States in their efforts to eradicate the disease. The financial contribution by the EU within the framework of the eradication programmes is at the rate of 50% within a ceiling, per country and per year, as specified in the annual Commission's Decision approving the programme, of the costs incurred by each Member State for monitoring and surveillance (sample collection), virological, histological and serological tests of domestic pigs and wild boar and oral vaccination of wild boar: purchase and distribution of baits containing the vaccine.
The EU funding for the eradication of CSF over the period since 1995 has amounted to €30,2007,724. **Figure 35** shows a steady distribution throughout the period with the exception of 2007 and 2009. This increase in these years was due to the fact that, since 2007, the EU started funding the newest MS, Romania and Bulgaria, where the disease was still endemic mainly in the backyard pig population.

Figure 35: Classical Swine Fever EU Contribution (Payments) 2007-2011

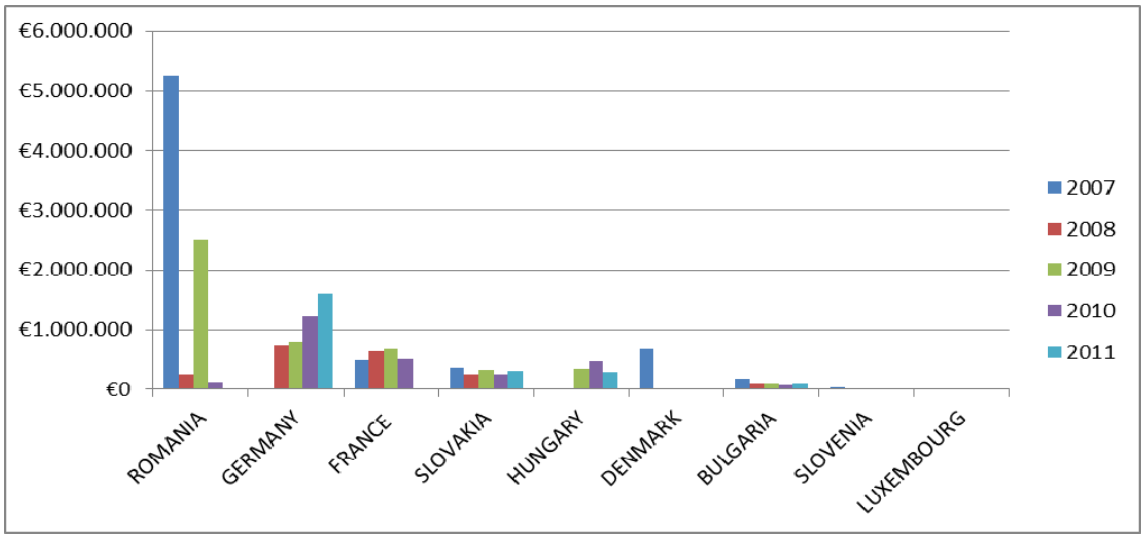


Over the years 2007 to 2011, the total amount of funding has varied greatly between Member States. The recipients of the largest amounts of funding for CSF during this period were: Romania (€8 million); Germany (€4.3 million), France (€2.1 million), and Slovakia (€1.5 million).

[24] Council Directive 2001/89/EC of 23 October 2001 on Community measures for the control of classical swine fever OJ L 316 of 1.12.2001

[25] Commission Decision of 1 February 2002 approving a Diagnostic Manual establishing diagnostic procedures, sampling methods and criteria for evaluation of the laboratory tests for the confirmation of classical swine fever OJ L 39, 9.2.2002, p. 71–88

Figure 36: CSF EU Contribution by Member State, 2007-2011



Source: DG SANCO- based on financial decisions from 2007-2011

3.10. African Swine Fever

3.10.1. Description

African swine fever (ASF) is an animal disease (not harmful to humans) caused by an enveloped DNA virus, named Asfivirus, that affects domestic pigs and wild boars of all breeds and ages. ASF is contagious and can be transmitted by direct contact with an infected animal, ingestion of contaminated feed such as swill, and soft ticks belonging to the Ornitodorus genus.

ASF can cause considerable damage to all kinds of pig holdings and due to its transboundary nature it can easily be extended to neighbouring countries.

There is no available vaccine for ASF; control measures are limited to bio-security and hygienic measures as well as the culling of infected animals and animals at risk in the case of an outbreak. Nonetheless, ASF eradication has proven to be successful when stringent measures are implemented: Spain and Portugal, for example, successfully controlled and eradicated ASF after a large number of outbreaks.

Incidental outbreaks of ASF were reported in a number of other Member States, including France (1964, 1967, and 1977), Malta (1978), Belgium (1985) and the Netherlands in 1986.

3.10.2. Disease situation

In the EU, ASF now only still persists in one region of Italy (Sardinia), where since 1994 outbreaks have been reported every year (except in 2006). The disease has remained endemic in Sardinia since its introduction in 1978.

Eradication is not progressing in Sardinia in spite of EU funding every year. The presence of unlicensed, free-ranging pig herds that roam communal pastures in the interior of the island are the source of infection. From time to time, such herds infect small and medium non-commercial pig farms located outside the High-Risk Area through direct or indirect contact. Furthermore, in Sardinia and inside the High-Risk Area in particular, there are vast non-farmed areas of public land known as "communal areas" that have traditionally been used to rear free-range pigs that eat acorns and roots in a habitat they share with wild pig populations (boars). The health of these wild boar populations is currently unknown, because they are not registered in the National Data Base.

During the second half of 2011, there was a serious recrudescence of the disease, leading the EU to adopt decision number 2011/852/EU designating the whole of Sardinia as a high risk area for ASF, with restrictions on exports of pig meat and pig meat products from Sardinia.

The Caucasian region has severely been affected by outbreaks of ASF. In 2007-2010 outbreaks occurred in Georgia, Armenia, Azerbaijan and Russia. The EU policy is to strengthen the bio-security for prevention of re-introduction of ASF along its eastern borders, to limit the risk from spreading from that region further into the EU territory.

3.10.3. Funding

The financial contribution by the EU within the framework of the eradication programmes is at the rate of 50% up to a ceiling, by country and by year, as specified in the annual Commission's Decision approving the programme, of the costs incurred by the Member State for Virological and serological tests of domestic pigs and wild boars.
Co-funding was considerable between 1994 and 2004, but later declined as the disease was successfully eradicated in almost all Member States. The only remaining infected area in the EU 27 since 2005 is the island of Sardinia.

Figure 37: African Swine Fever EU Contribution (Payments) 2007-2011

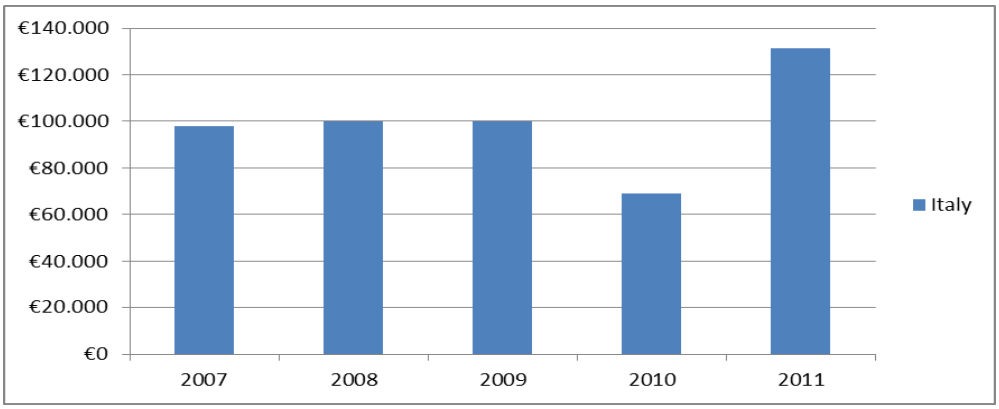
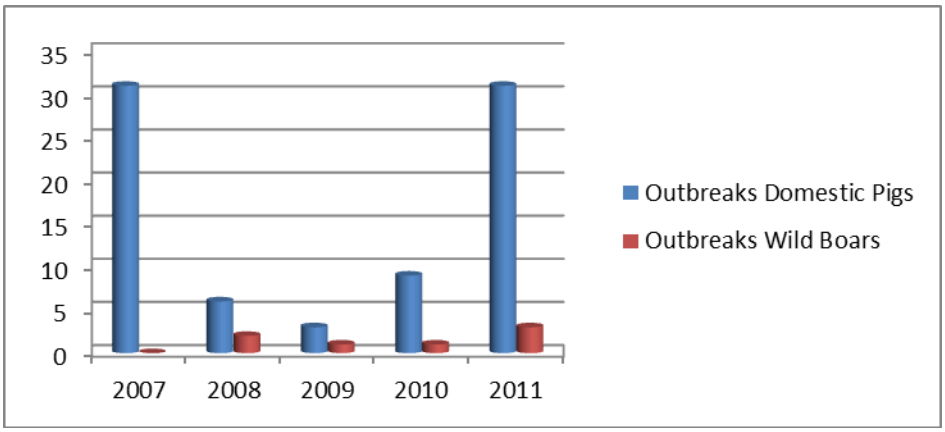


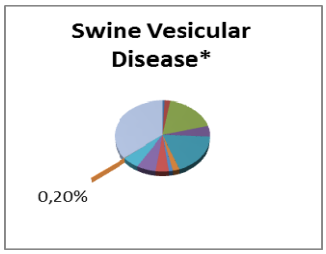
Figure 38: African Swine Fever Outbreaks 2007-2011



Source: Animal Disease Notification System

The objective is to achieve complete eradication of the disease in the EU. In 2010, Sardinia was divided into a high risk and low risk area and as most cases occurred in the Region of Nuoro most support measures were focused here. However, in 2011 outbreaks occurred across the whole island and thus the entire territory was declared a high risk area.

3.11. Swine Vesicular Disease



*Percentage of EU Co-Funding 2007-11

3.11.1. Description

Swine vesicular disease (SVD) is a viral disease of pigs (not affecting humans) caused by an RNA virus member of the genus *enterovirus* in the family *picornaviridae*.

3.11.2. Disease situation

It can cause vesicles on the feet and mouth and therefore discriminatory diagnosis is needed to distinguish it from foot-and-mouth disease. In recent years, most SVD infections are subclinical. The virus is transmitted by direct and indirect contact between pigs, frequently by urine and faeces, facilitated by skin lesions. The virus is extremely persistent in the environment making eradication difficult.

In pigs the clinical relevance is limited as it seldom causes mortality and the disease usually runs a mild clinical course. Transport of pigs poses the highest risk for spreading the disease between regions and countries, and thus the epidemiological situation in one country can affect neighbouring countries.

There is no vaccine against SVD and furthermore vaccination is not an option for SVD control, because of its similarity with FMD. Hence, SVD must be eradicated promptly upon detection by culling of infected pigs, and sanitation and bio-security measures.

The first outbreak of the disease occurred in 1966 in Italy. It then spread to other EU countries but was eradicated in all Member States but Italy. The last reported cases were in Poland (1972), Malta (1978), UK (1982), France (1983), Germany (1985), Romania (1985), Belgium (1993), Spain (1993), Netherlands (1994), Austria (1997), Greece (1997) and Portugal (2007).

Italy is still affected in two southern regions, Campania and Calabria. Central and northern Italy are designated SVD free areas since 1997. Lombardia (northern region) suffered from incidental outbreaks in 2006 but a successful eradication programme meant the region was SVD free again in 2007. The aim is to continue until complete eradication is achieved.

Map 7. SVD Infected Area in 2011

EU measures to combat SVD are in place since 1992 through Council Directive 92/119/EC[26], as amended by Commission Directive 2007/10/EC[27], stipulating that a protection zone of 3km radius from the infected holding, and a surveillance zone of at least 10 km radius will be set up

3.11.3. Funding

The co-funding of SVD eradication and monitoring was initiated in 1995 The financial contribution by the EU within the framework of the eradication programmes is at the rate of 50% within a ceiling, per country and per year, as specified in the annual Commission's Decision approving the programme, of the costs incurred by each MS for monitoring and surveillance (sample collection) and virological, histological and serological tests of pigs .

[26] Council Directive 92/119/EEC of 17 December 1992 introducing general Community measures for the control of certain animal diseases and specific measures relating to swine vesicular disease OJ L 62, 15.3.1993, p. 69–8

[27] Commission Directive 2007/10/EC of 21 February 2007 amending Annex II to Council Directive 92/119/EEC as regards the measures to be taken within a protection zone following an outbreak of swine vesicular disease OJ L 63, 1.3.2007, p. 24–25

Between 2007 and 2011, EU contribution went solely to Italy amounting to a total of € 1.7 million. The increase in 2011 is due to a change in co-financing rules where additional funds were linked to the cost of sampling.

Figure 39: EU Contribution (Payments) for Swine Vesicular Disease 2007-2011

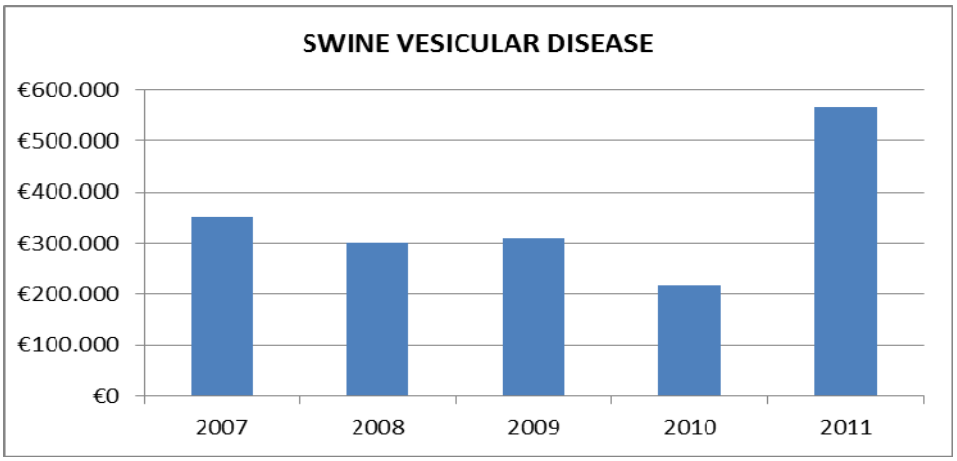
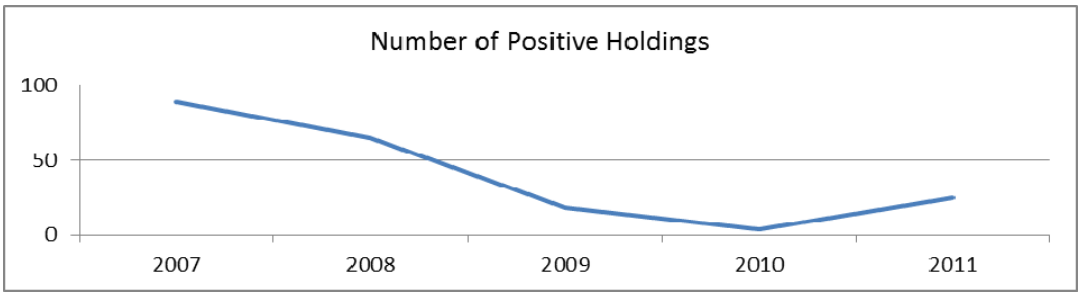


Figure 40: Outbreaks of Swine Vesicular Disease 2007-2011



Source: Final Reports submitted by the Member State

3.12. Aujeszky's Disease

3.12.1. Description

Aujeszky's disease (AD)[28] is a viral animal disease caused by an enveloped DNA virus, named porcine herpesvirus-1 which belongs to the *Alphaherpesvirinae* subfamily, *Herpesviridae* family. It affects mostly pigs, but is known to occur occasionally also in cattle, sheep, goats, horses, dogs and cats. However, pigs are the natural reservoir of the virus and the disease is self-limiting in species other than pigs. It is a contagious infection and is mainly transmitted by direct and indirect contact between pigs but it is not very resistant in the environment.

Aujeszky's disease is not harmful to humans. It can be very severe, however, in pigs and is of economic importance. Typical signs in young piglets are neurological signs, and in weaned pigs and

[28] Also called "Pseudorabies"

older pigs the appearance of a respiratory disease. In gilts and sows the infection may in addition cause abortion, stillbirth and mummified foetuses.

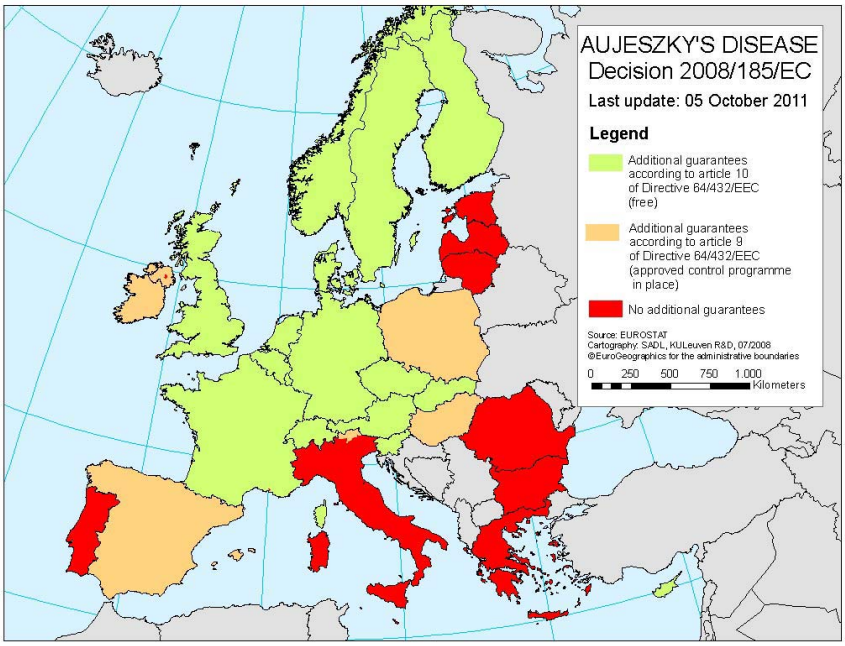
There are many safe and effective vaccines available for Aujeszky's disease. An important tool in the eradication of the disease was the use of DIVA (Differentiating Infected from Vaccinated Animals) or 'marker' vaccines that were developed in the 1980s-1990s. A stamping out policy of infected animals was not possible in many counties due to the high prevalence of the disease but in the end stage of the eradication a test and slaughter policy could be applied, removing the last infected animals.

3.12.2. Disease situation

The general policy is to eradicate Aujeszky's disease (AD) in order to support free intra-EU trade. According to Commission Decision 2008/185/EC, MS are classified into (1) free MS or regions where vaccination is prohibited, (2) MS or regions where control programmes are in place and close to eradication and (3) all the others.

For Aujeszky's disease the trend is positive, and an increasing number of EU MS have become free of AD in this period. In 2008, the European Commission listed France and the Netherlands with disease free status and Hungary with approved control programme status. Northern Ireland submitted an application for EU co-funding in 2009 for approval of their eradication plan. The Republic of Ireland also intends to seek EU approval for their eradication plan from the Commission. In 2010, surveillance programmes were also in place in Northern Italy (region of Bolzano)[29], regions of Northern Spain, Hungary and Belgium. To date, 20 of 27 EU MS are free or applying eradication programmes that show progress, suggesting that eradication of Aujeszky's disease in the EU is possible, provided stringent sanitation and biosecurity measures are implemented (**map 8**).

Map 8. Aujeszky's disease status in EU



Source: DG SANCO - 2011 Annual report on notifiable diseases of bovine animals and swine

[29] Italy has not been receiving co-funding for AD

3.12.3. Funding

The EU co-financed the AD eradication programmes since 1996 and in the period 2007-2011 the programmes from Belgium, Hungary, Poland and Spain. The successful control makes the diseases less important as a mutual risk for EU MS, also in comparison with other emerging diseases. Hence, co-funding has ceased in 2010[30].

Figure 41: Aujeszky's disease EU Contribution (Payments) 2007-2011

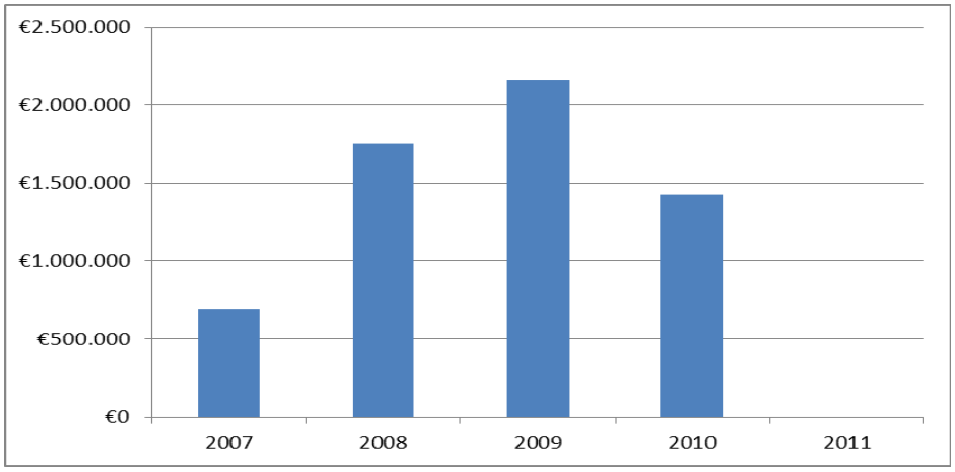
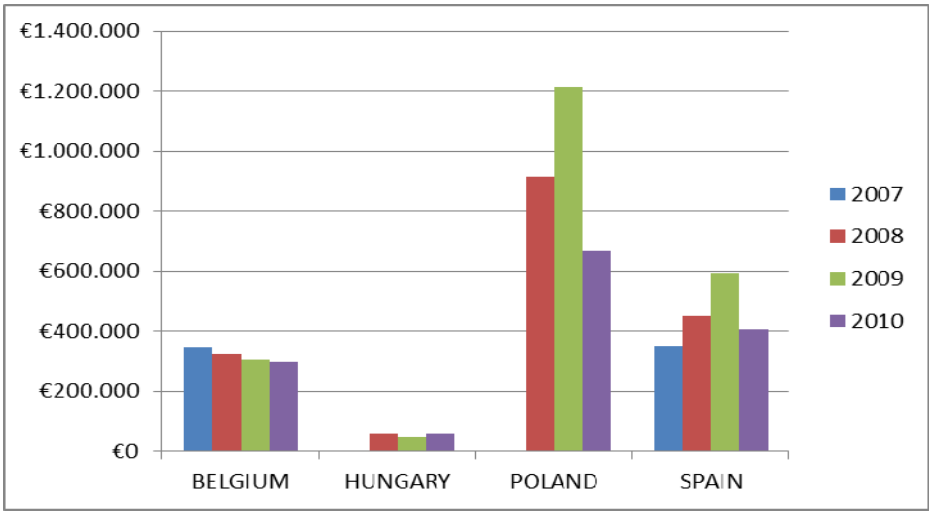


Figure 42: Aujesky's disease, EU Contribution by MS, 2007-2010



Source: SANCO based on financial decisions from 2007-2010

[30] Council Decision 2006/965/EC

3.13 Enzootic Bovine Leucosis (EBL)

3.13.1. Description

Enzootic Bovine Leucosis (EBL) is an animal disease affecting mainly adult cattle. The causative pathogen is a retrovirus, the enzootic bovine leukaemia virus (EBLV). It is a contagious infection and can affect animals at any age, even at the embryonic stage; however, clinical disease usually occurs when animals are over 3 years of age.

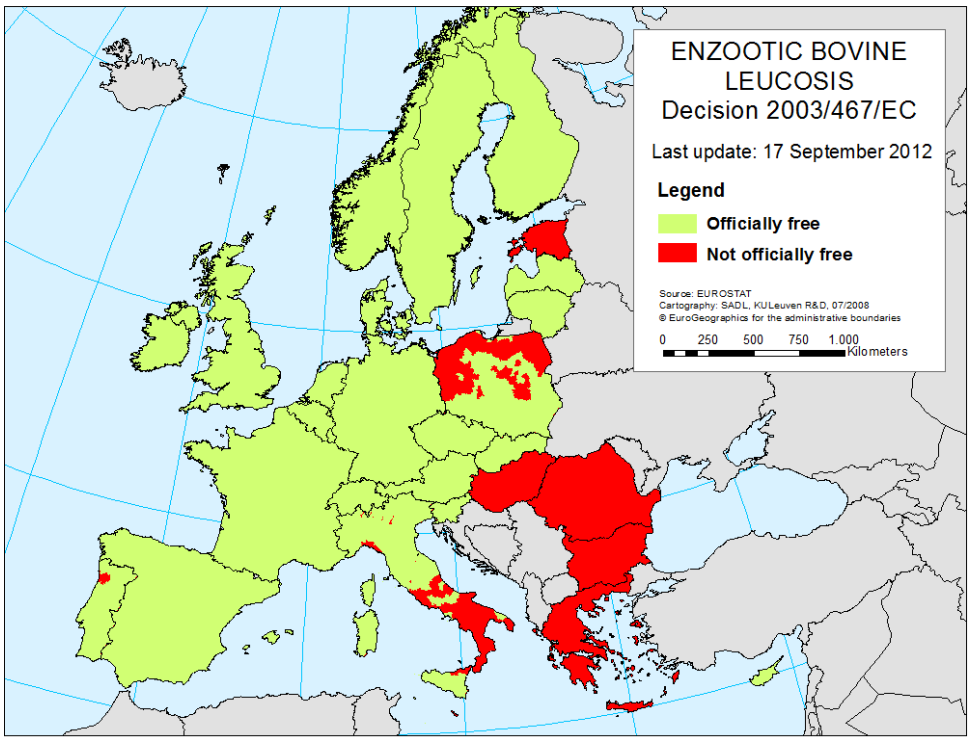
EBL is not harmful to humans. In most cases animal infection is subclinical, but a proportion of infected cattle develop tumours of the lymphnodes (lymphosarcoma's), and in internal organs, which may run a fatal course.

There is no vaccine available for EBL. Control measures are focused on detection of the disease and slaughtering of infected cattle, as well as implementation of stringent sanitation and bio-security measures to prevent re-introduction. The aim is to be able to trade cattle, and milk and dairy products free from EBLV.

3.13.2. Disease situation

Enzootic bovine leucosis has been eradicated from most EU MS. In 2010, the disease still occurred in Portugal, Eastern European countries, and specific regions in Italy and Poland, and the Baltic States. The policy is to continue with the eradication in affected countries until the European territory is completely free of EBL.

Map 9. Member States and regions officially free of EBL



Source: DG SANCO - 2011 Annual report on notifiable diseases of bovine animals and swine

3.13.3. Funding

The EU has co-financed eradication of EBL since 1993. The successful control makes the diseases less important as a mutual risk for EU MS, also in comparison with other emerging diseases. Hence, co-funding has ceased in 2010 like for AD[31].

During the years 2007-2008 the co-funding for EBL eradication increased significantly, due to new or intensified programmes in Italy, Latvia, Lithuania, Portugal, with a multi-annual eradication programme, and Poland. The major effects of the programme have been that whereas in the 1990s EBL was still present in many EU MS, in 2009 the disease has been removed from most of the countries, and is confined to risk region at its borders.

Figure 43: EBL EU Contribution (Payments) 2007-2011

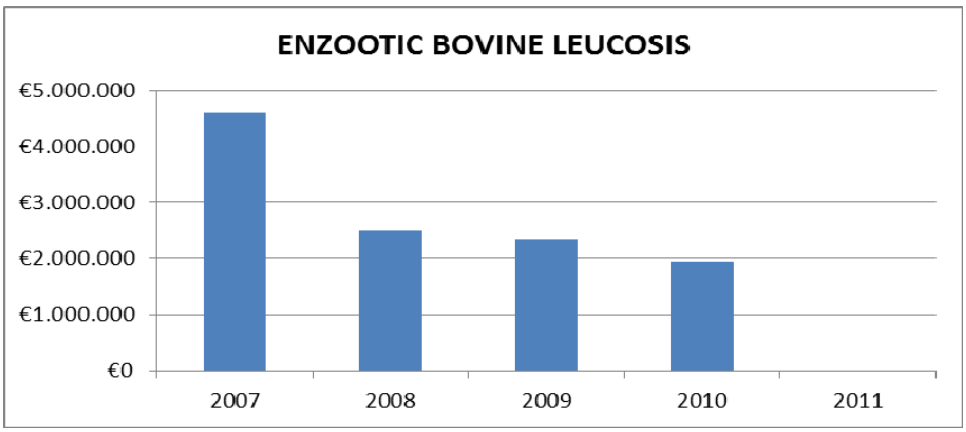
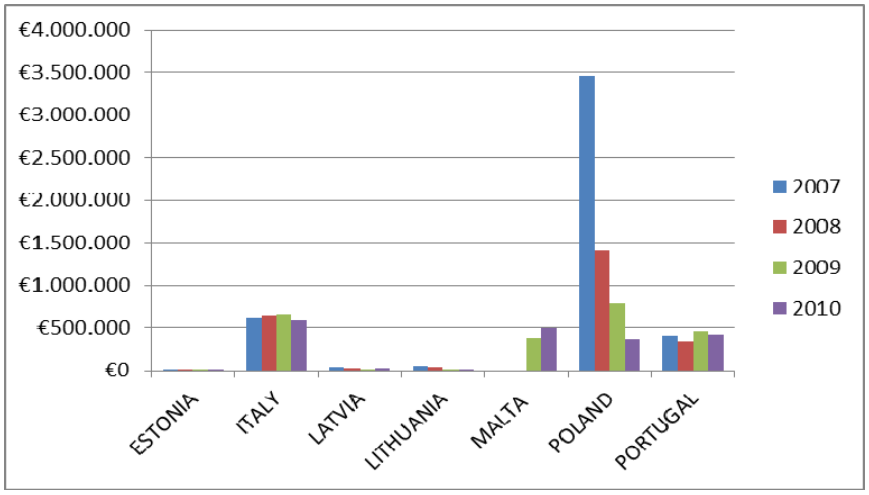


Figure 44: EBL EU co-funding by MS, 2007-2010



Source: SANCO based on financial decisions from 2007-2010

[31] Council Decision 2006/965/EC

4. Conclusions

This report from 2007-2011 comes to confirm the positive trend presented in the 2011 report on the outcome of the EU co-financed animal disease eradication and monitoring programmes for the period 2005-2009.

In most cases, the progression of eradication of the diseases targeted is evidenced by the continuous expansion in disease free zones in the EU during this period (such as for B**ovine Tuberculosis, Bovine Brucellosis, Bluetongue, Enzootic Bovine Leucosis, Aujeszky's Disease and Classical Swine Fever**). The implementation of **BSE monitoring and eradication programmes** led to a dramatic drop in the detected BSE cases within the period. In the case of **Rabies**, the co-funded oral vaccination programmes, have proved very successful, as they have **led to its steady eradication in several Member States**. Between 2007and 2011, the total number of positive rabies cases at EU level has decreased very significantly from 2,575 cases to 695. The eradication of rabies from Europe is now in sight. This is a unique situation in the world as the EU has achieved a level of rabies eradication that has never been experienced anywhere else before.
Classical Swine Fever (CSF) in **domestic pigs has been eradicated** all over Europe. In wild boar, the restricted zones were lifted in Slovakia and part of the territories in France and Hungary in 2011.
Avian Influenza (AI) surveillance programmes have been another success. Surveillance programmes for the disease have proven effective in providing early warning for the timely detection of outbreaks of both high and low pathogenic strains.
Salmonellosis programmes have led to a notable improvement of the situation both in poultry and in the number of reported human cases.

The main areas of concern during this period were:

Bovine Tuberculosis in the UK: The epidemiological situation was a cause for concern during the studied period and continues to require careful attention, particularly in England. In addition, programmes were not fully implemented in 2010 and 2011. Progress is being made to ensure efficient implementation of programmes.

Bovine Brucellosis and Ovine and Caprine Brucellosis in Southern Italy, where the approved programmes were not implemented as required.
Ovine and Caprine Brucellosis in **Greece** due to very poor implementation of the eradication programmes in 2007, 2009 and 2011.

African Swine Fever (ASF) in **Sardinia**: In spite of the favourable decline in the previous years, there was a serious resurgence of the disease during the second half of 2011 and throughout 2012.

END

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