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HEALTH & FOOD SAFETY DIRECTORATE-GENERAL

Directorate G – Veterinary and International Affairs
Unit G5 – Animal health and food chain expenditure

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SUMMARY REPORT ON THE OUTCOME OF EU CO-FINANCED VETERINARY PROGRAMMES - PERIOD 2007-2013 –

Executive Summary

The present report provides a summary on the outcome of the implementation of the EU co-financed programmes for the eradication, control and monitoring of animal diseases and zoonosis (hereinafter "veterinary programmes") for the period 2007-2013 (previous report published in 2012)[1].

The veterinary programmes represent by far the largest amount of expenditure under the EU food safety budget. Over the period under evaluation, more than EUR € 1.18 billion were spent by the EU for co-funding the implementation of programmes targeting thirteen diseases before 2010 and eleven diseases since 2011. During these 6 years, all Member States could benefit from EU contribution for the programmes they submitted.

Over the period analysed, the progressive eradication of the diseases targeted shows a positive trend and is evidenced by the continuous expansion in disease free zones in the EU for bovine Tuberculosis and bovine, ovine and caprine Brucellosis. In addition, the implementation of Brucellosis eradication programmes had an indirect effect on human health, as the number of human cases has been decreasing in recent years - only 542 human confirmed cases in 2007, compared to 357 cases in 2013. The implementation of BSE monitoring and eradication programmes led to a dramatic drop in the detected BSE cases within the period: from 175 in 2007 to 7 in 2013 which hada very positive impact on consumer confidence.
The co-funded oral vaccination against rabies programmes in wild animals have proved to be very successful as rabies has been eradicated in several Member States. Between 2007 and 2013, the total number of rabies cases at EU level in wild animals decreased significantly- from 814 cases to 588 cases.
This is unique in the world as the EU has achieved a level of Rabies eradication that has never been experienced anywhere else before. As a consequence, very few cases of rabies in humans were reported in the EU in the last years (1 case in 2013).
In 2007, EU started to co-finance the oral vaccination against rabies activities in border areas with neighbouring third countries to protect the EU from the risk of introduction of the disease fromthose countries. Classical Swine Fever (CSF) in domestic pigs has been eradicated all over EU as well as in wild boar, except for one Member State were CSF outbreaks occurred in wild boards in specific regions, in the years 2012 and 2013.

[1] : http://ec.europa.eu/dgs/health_food-safety/funding/cff/animal_health/vet_progs_en.htm

African Swine fever (ASF) has been eradicated in domestic pigs and wild boards in all Member States except for one region of Italy (Sardinia) where the disease has remained endemic since its introduction in 1978. However, in the last years, several outbreaks occurred in the Caucasian region (Georgia, Armenia, Russia, Belorussia etc.) and in spite of the measures implemented by EU neighbouring Member States to avoid the introduction of the disease in the EU, ASF outbreaks have been notified in four Eastern MSs in 2014.

Swine vesicular disease (SVD) has been eradicated all over EU, except for one Southern region of Italy where one outbreak occurred in 2013.

The Bluetongue (BT) programmes have played an important role in the control and eradication of this viral disease, as bluetongue has effectively been brought under control with certain serotypes virtually eliminated from all over Europe: the most effective measure implemented was vaccination. The spread of the disease has been dramatically limited and a sharp reduction in the number of outbreaks was observed in the period before 2013. Nevertheless, the evolution of BT in south east part of the EU required particular attention starting July 2014, when BT outbreaks were notified by some Member States (Greece, Bulgaria and Romania).

Although Avian Influenza (AI) has made increasing incursions into the EU in recent years, mostly through wild bird spread, it has been successfully contained with the support of the compulsory surveillance programmes in domestic and wild birds. The implementation of such programmes has proven effective in providing early warning for the timely detection of outbreaks of both high and low pathogenic strains, reducing the risk of economic losses to farmers, and also the emergence of a zoonotic strain dangerous for humans, restoring consumer confidence. Following crises, AI surveillance programmes have proven effective also in providing early warning for the timely detection of outbreaks of high pathogenic strains in wild birds, therefore preventing further spread in commercial flocks and reducing risk of exposure to humans. From 2007, a decreased number of outbreaks in domestic birds are indicating that surveillance programmes are runned in an efficient and uniform manner.

The implementation of Salmonellosis control programmes, which have been implemented step-by-step since 2007, has led to a notable improvement of the situation both in poultry and in the number of reported human cases.
The reduction of prevalence of Salmonella serovars of public health relevance has been made through the effective and coordinated implementation of national salmonellosis control programmes (including, *inter alia*, routine monitoring programmes by both the farmer and the competent authority) in

specified poultry populations targeting those serovars most responsible for human infections.
Overall, Member States met their 2013 reduction targets, as set by EU legislation for the different poultry categories. This indicates that continuous progress is being made in tackling salmonella in poultry. As a consequence, in humans, the incidence of salmonella has decreased annually from about 151.292 cases in 2007 to 85.268 cases in 2013, proving that the implementation of control programmes has a positive impact in human health.

Due to the favourable epidemiological situation across the EU, the Enzootic Bovine Leucosis and Aujeszky's Diseases have been withdrawn from the list of eligible diseases for EU financial contribution from 2010 (Annex to Council Decision 2009/470/EU).

Some areas of concern are still present in EU: there is still a high prevalence of brucellosis in ovine and caprine in Greece and in some Southern regions of Italy, bovine tuberculosis in the United Kingdom and Ireland. The Commission is working very closely with the concerned Member States to address and solve those issues.

In conclusion, the implementation of the veterinary programmes continues to play a crucial role in tackling the targeted animal diseases, by ensuring disease surveillance and eradication, control of trans-boundary diseases of high EU relevance (e.g.: Rabies, Avian influenza) as well as prevention and rapid reaction to emerging and re-emerging animal diseases (e.g.: Bluetongue). This, in turn, offers clear net economic benefits to the relevant sectors of the EU economy and to the smooth functioning of the single market, as well as the protection of consumers and public health (in the case of zoonosis like salmonellosis, brucellosis, Rabies), which represent key public goods for EU society.

In addition, as already mentioned previously, EU is under permanent risk of introduction from neighbouring third countries of trans-boundary diseases such as ASF and Rabies.

Contents

1. Introduction and background

The aim of this summary report is to provide an update of the previous one (covering the period from 2007 to 2011)[2] and to include the most recent data, giving a deeper insight into the EU financial support to the eradication of the following diseases in the period of 2007 to 2013: **Bovine Tuberculosis, Bovine Brucellosis, Ovine and Caprine Brucellosis, Bluetongue, TSEs (BSE and Scrapie), Avian Influenza, Rabies, Zoonotic Salmonellosis, Classical Swine Fever, African Swine Fever and Swine Vesicular Disease**. All of them are notifiable to the OIE.

In the framework of article 41 of former Council Decision 2009/470/EC[3], a detailed report was issued by the Commission for the European Parliament and for the Council regarding the animal health situation and cost-effectiveness of the implementation of the EU co-financed veterinary programmes, *inter-alia*, in order to identify 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[4], covering the period of 2007-2011.
In 2014 the financial framework for EU co-financed veterinary programmes has changed: Council Decision 2009/470/EC has been repealed by Regulation (EU) No 652/2014(entered in force on 30 June 2014)

The list of diseases for which EU financial contribution can be allocated through a Grant Decision, was laid down in the Annex to the former Council Decision 2009/470/EC and the same list is laid down in the Annex II to the Regulation (EU) No 652/2014.

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

[3] *OLJ L155, 18.6.2009, pp. 30-44*

[4] *Commission staff working document, technical details on the outcome of the EU co-financed programmes for the eradication, control and monitoring of animal diseases and zoonosis over the period of 2005-2011, swd/2014/055 final*

Specific and operational objectives, aimed at controlling, preventing and eradicating animal diseases and zoonoses, have been identified for the EU co-financed veterinary programmes to be implemented by Member States.

The specific objectives are:

• To contribute to a high level of food safety and safety in food production systems and of other products which may affect the safety of food, while improving the sustainability of food production AND
• To contribute to improving the animal health status in the Union and to support the improvement of the welfare of animals.

The **operational** objectives are:

• The reduction of the number of cases of diseases in humans in the Union which are linked to food safety or zoonoses (rabies, brucellosis, tuberculosis, salmonellosis);
• An overall reduction of disease parameters such as incidence, prevalence and number of outbreaks or cases (bovine tuberculosis, bovine, ovine and caprine brucellosis, bluetongue, classical and African swine fever, rabies, transmissible spongiform encephalopathies);
• The increase of the number of Member States or regions thereof which are free from animal diseases for which a financial contribution is granted (bovine tuberculosis, bovine, ovine and caprine brucellosis, bluetongue, classical and African swine fever, rabies);
• The prevention of introduction of trans-boundary diseases in the EU territory (rabies, classical and African swine fever);
• The achievement of targets fixed by the Union legislation as regards the reduction of prevalence of zoonotic *Salmonella* in certain poultry populations (breeders, layers, broilers of *Gallus gallus*, breeding and fattening turkeys);
• The increase of the number of Member States with a negligible BSE risk;
• Early detection of the presence of high and low pathogenic strains of avian influenza viruses in order to prevent further contamination of domestic poultry populations.

For the sake of clarity, here is the definition as in Annex I to Decision 2008/341/EC that applies to an eradication, control or surveillance programme:

• **Eradication programme:**
Programme to result in biological extinction of an animal disease or zoonosis. The final target of an eradication programme shall be to obtain the free or

officially free-status of the territory according to Union legislation, where such possibility exists.

• **Control programme:**
Programme to obtain or maintain the prevalence of an animal disease or zoonosis below a sanitary acceptable level.

• **Surveillance programme:**
Surveillance programme refers to activities to collect and record data on specific diseases in defined populations over a period of time, in order to assess the epidemiological evolution of the diseases and the ability to take targeted measures for control and eradication.

Veterinary programmes have been co-financed by the EU for many years and have unequivocally contributed to the improvement of both animal and human health (as programmes against zoonoses are also covered) within the EU. To obtain co-financing, Member States must submit their programmes targeting the eradication, the control or the surveillance of animal diseases or zoonoses to the Commission for prior approval. Once approved, the Member States shall implement their programmes. During the course of each implementing year the Member State is required to submit an intermediate report with the results of the first semester and the updated plans for the second semester, and by the end of April of the subsequent year, a final technical and financial report and claim for reimbursement of eligible expenses.

To evaluate the implementation of veterinary programmes, the effectiveness of the measures implemented and to measure progress, quantifiable and objective measurements (**indicators**[5]) have been developed. Those indicators are specific for each disease and divided into two main categories:
a. Activities (AI): to verify if the measures planned in the approved programmes are implemented as foreseen e.g. number of test in line with the approved programme, number of animals vaccinated.
b. Progress (PI): to measure the progress towards achievement of the objectives of the approved programme (eradication/control/surveillance) in relation to the evolution of the disease in previous years e.g. prevalence and incidence, evolution of free areas, number of outbreaks, and number of animals affected, costs.
The indicators have been obtained from different sources:

[5] Working document SANCO/12915/2012 Rev.2 under http://ec.europa.eu/dgs/health_food-safety/funding/cff/animal_health/vet_progs_en.htm

- the annual final reports sent by the Member states to the Commission providing financial and technical information on the implementation of the co-financed programmes (Commission Decision 2008/940/EC, repealed by Commission Implementing Decision 2014/288/EU from 1st January 2015);
- "*The European Union Summary Report on Trends and Sources of Zoonoses, Zoonotic Agents and Food-borne Outbreaks*" drafted every year by European Food Safety Authority (EFSA) and European Centre for Disease Prevention and Control (ECDC) thereafter called EFSA/ECDC zoonoses report;
- Other Commission data submitted by the Member States according to EU requirements.

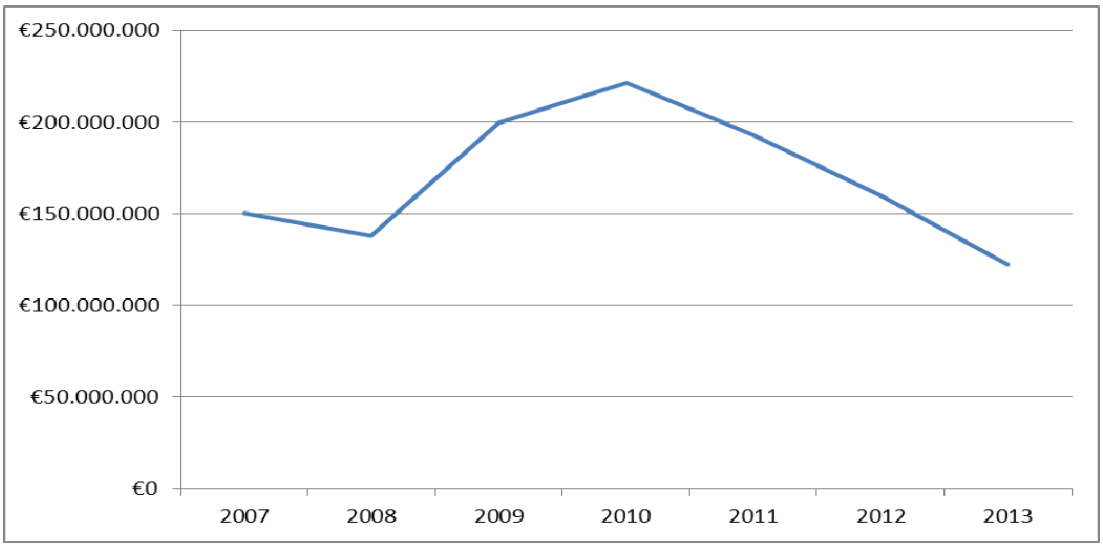
The EU contribution to eradication and control veterinary programmes is part of a wider spectrum of financial tools used to support Member States in their fight against animal diseases like the emergency fund (used to fund emergency measures to be implemented in the case of an outbreak) and the Common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

2. Overview of EU expenditure for veterinary programmes 2007-2013

Generally, the financial contribution is at the rate of 50% of the costs incurred by Member States to implement specific measures up to a pre-set 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% from 2009 in Member States and at the rate of 100% in neighbouring Third Countries.

Between 2007 and 2013 annual funding varied between the years going from **€ 150 M** in **2007**, peaking in 2009 and 2010 at €200 M and €220 M, respectively, and then decreasing to **€ 122 M** in **2013 (see Figure 1)**. This peak in 2009 and 2010 was caused mainly by the implementation of the intensive vaccination campaign to fight the spread of bluetongue, particularly in France and Spain, and by the implementation of tuberculosis programmes in Ireland and the United Kingdom in 2009 and 2010, respectively.

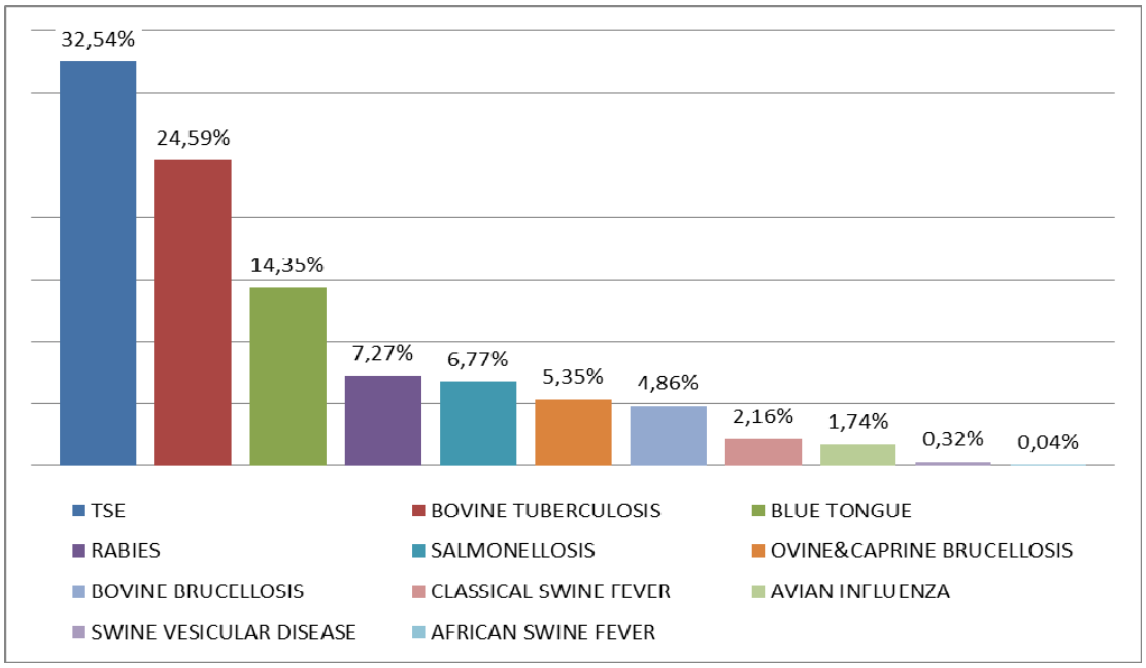
Figure 1: Evolution of EU financial contribution (payments) to veterinary programmes 2007-2013



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

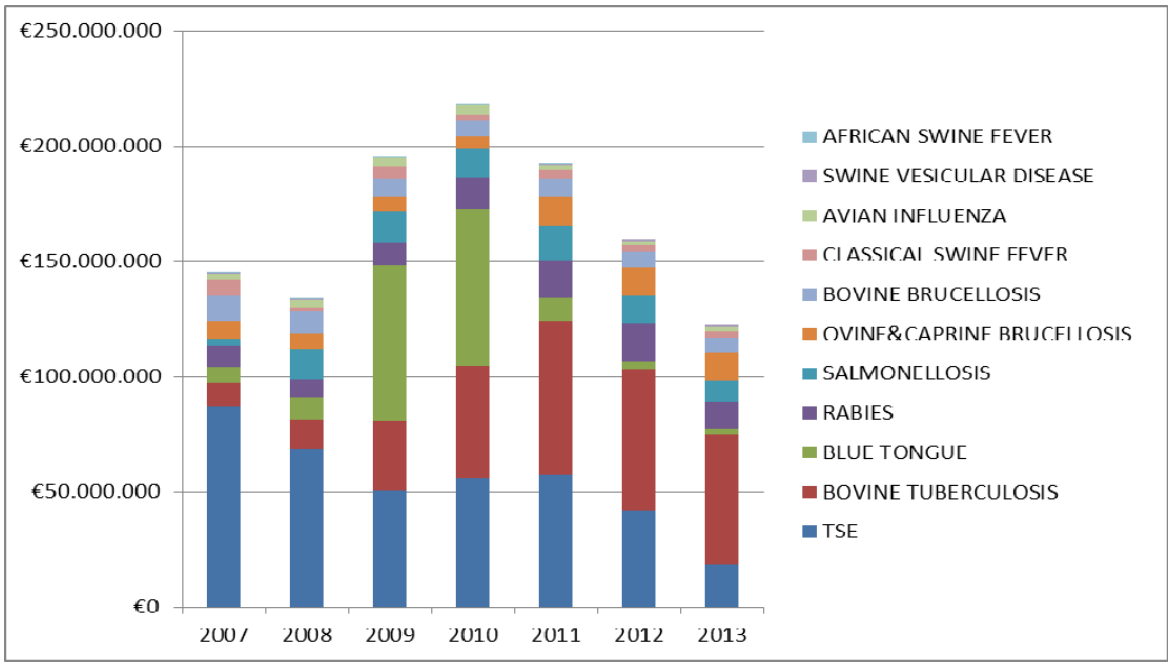
The level of EU-funding varies greatly between diseases depending on the size of the individual programmes as well as on the number of programmes approved for each disease: the largest amount spent during the studied period was € 380 M for TSE programmes (32% of overall spending during this period), followed by bovine tuberculosis with an EU contribution of €287 M (24%) and bluetongue with € 167.5 M (14%). Other large recipients are the rabies programmes accounting for 7% of EU co-funding with € 85 M, salmonellosis (6.67%) with €79 M and sheep and goat brucellosis (5.27%) with €62.5 M (**Figure 2).**

Figure 2: Distribution of total EU financial contribution (payments) 2007-2013



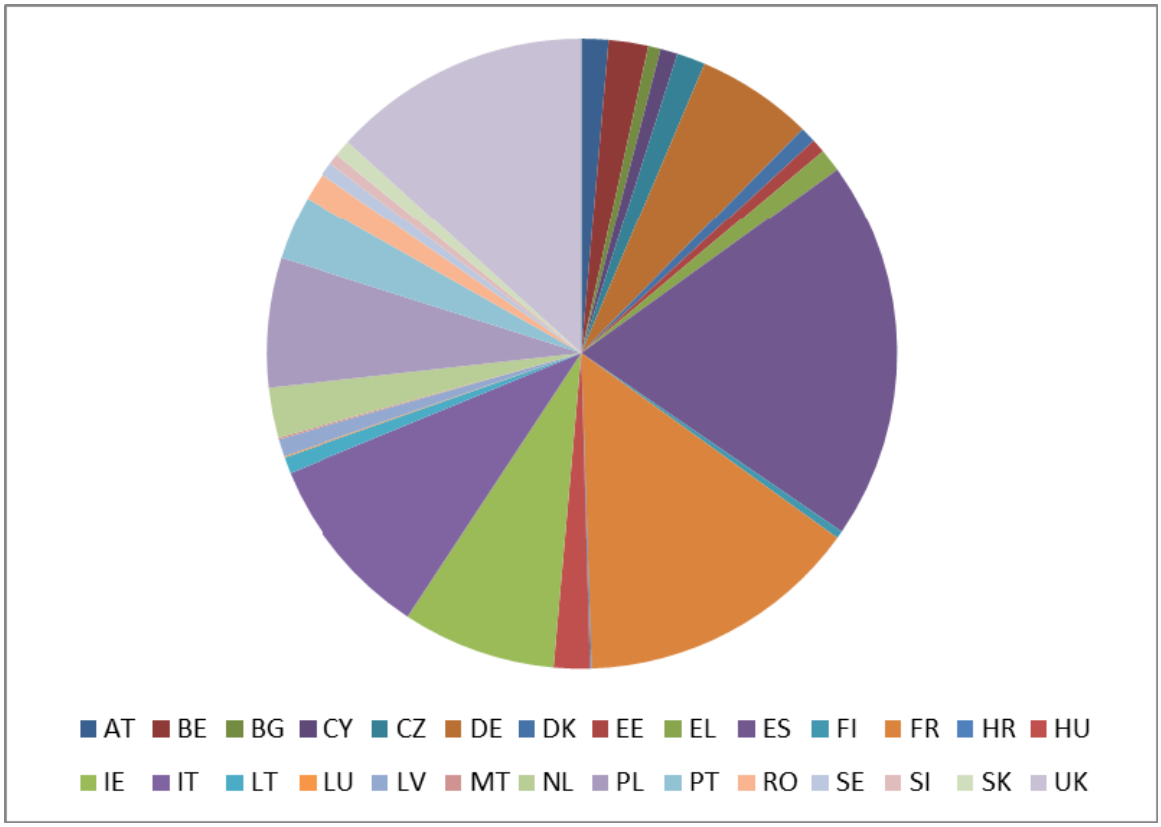
Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Figure 3: Evolution of EU financial contribution (payments) to veterinary programmes by disease 2007-2013 per year



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Figure 4: Evolution of EU financial contribution (payments) to veterinary programmes by Member State 2007-2013



3. Description by Disease

This chapter provides a brief insight into each animal disease for which EU co-funded programmes were implemented between 2007 and 2013:

1. Short description of the disease.
2. Description of the epidemiological evolution in the period 2007-2013.
3. Funding: Description of measures co-funded, amounts paid and the member state recipients.

Bovine Tuberculosis (bTB)

Description of the disease

Tuberculosis is a disease that affects both humans and animals. It is caused by the bacterial species of the family *Mycobacteriacea.* Almost all warm blooded animals are susceptible to the infection and some wildlife animals such as deer and badgers, act as reservoir for the disease, complicating the eradication of bovine tuberculosis. Bovine Tuberculosis is an infection in cattle (including all Bos species, and Bubalus bubalus) and bison (Bison bison) caused by *Mycobacterium bovis*.

Mycobacterium bovis can also infect humans mainly through contaminated food (e.g. raw non-pasteurized milk and milk products) or through direct contact with infected animals (farmers and abattoir workers). However, it is a rare infection in humans in the EU, with 134 confirmed human cases reported in 2013 whilst in 2009 the human cases reported were 139. The case numbers in the EU have been quite stable in the period under study.

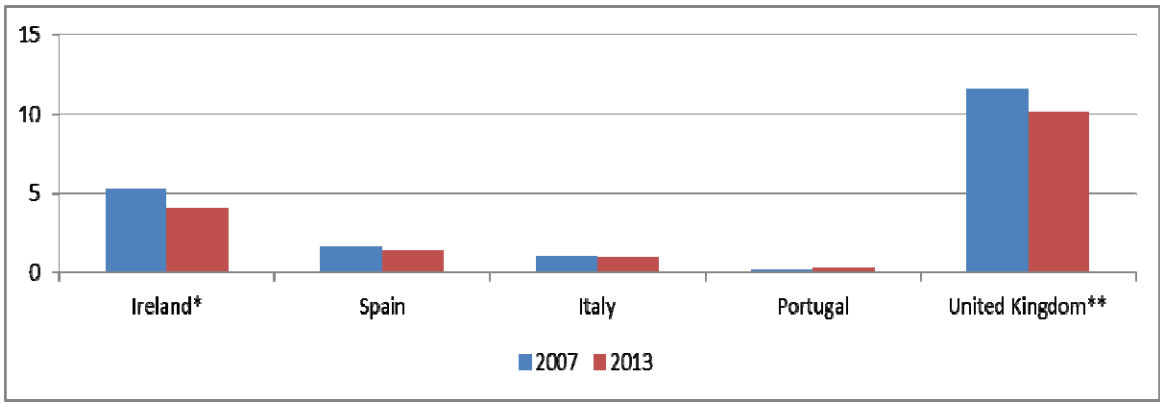
Epidemiological evolution 2007-2013

15 Member States (MSs) and regions from additional 3 member states have Officially Tuberculosis Free (OTF) status in 2013. In 2007 four MS had co-funded programmes: Poland, Spain, Italy, and Portugal. In 2013, six MSs (Spain, Ireland, Italy, Portugal, the United Kingdom and Croatia) had co-funded programmes as Ireland and the United Kingdom started in 2009 and 2010, respectively and Croatia joined in July 2013. Following the successful

implementation of the programmes, Poland became OTF in 2009 as well as several regions of Italy (see map 1).

Epidemiological data for co-funded Member States indicate that between 2007 and 2013 progress has been made in the eradication of bovine tuberculosis (**Figure 5**). In general, there was a clear decrease of prevalence at animal and herd level.

Figure 5: evolution of bovine tuberculosis herd prevalence (%) in Member States with co-funded programmes, 2007-2013 (except Croatia, joined in July 2013)

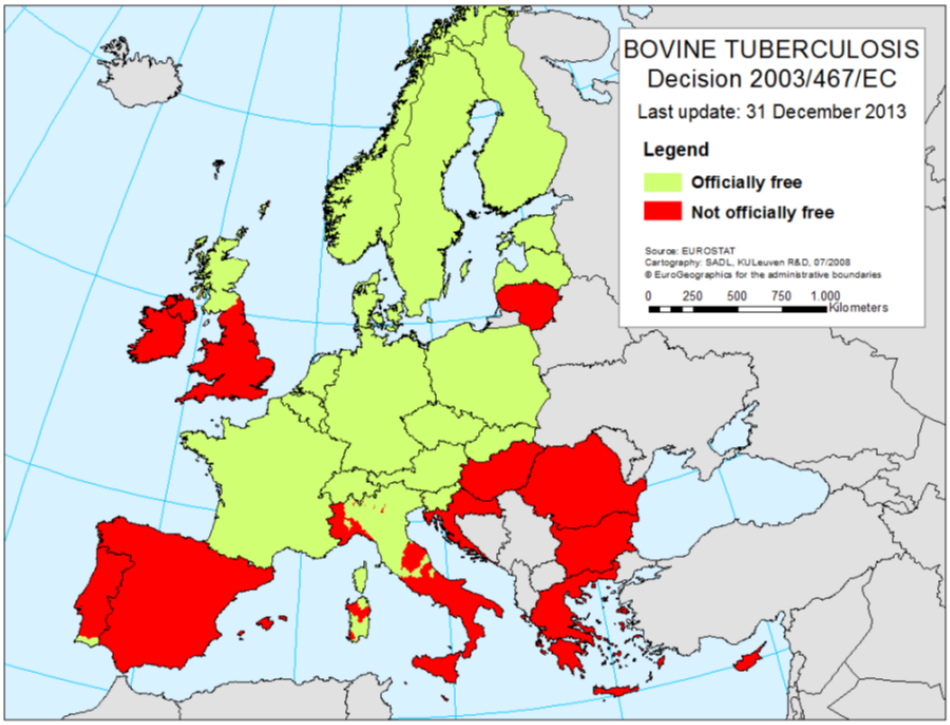


*Ireland had co-funded programmes from 2009

**United Kingdom had co-funded programmes from 2010

Source: DG SANTE G5 technical data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Map 1: Bovine Tuberculosis officially free zones December 2013



Source: DG SANTE, 2013 annual report on bovine and swine diseases[6]

In Ireland and United Kingdom the animal and herd prevalence of bTB is high during this period. Some moderate improvements can nonetheless be noted: in United Kingdom (except Scotland already OTF in 2009), herd prevalence has been slightly decreased from 11.6% in 2010 to 10.1% in 2013. In Ireland the rate decreased from 5.27% in 2009 to 4.07% in 2013.

[6] http://ec.europa.eu/food/animal/liveanimals/bovine/docs/final_report_2013_en.pdf)

Funding

Co-funding for bTB programmes[7,8] between 2007 and 2013 accounts for almost a quarter of the total EU contribution to veterinary programmes, amounting to €287 million. Member states receive financial support towards the cost of tuberculin tests, other diagnostic tests, and compensation to farmers for slaughtered animals.

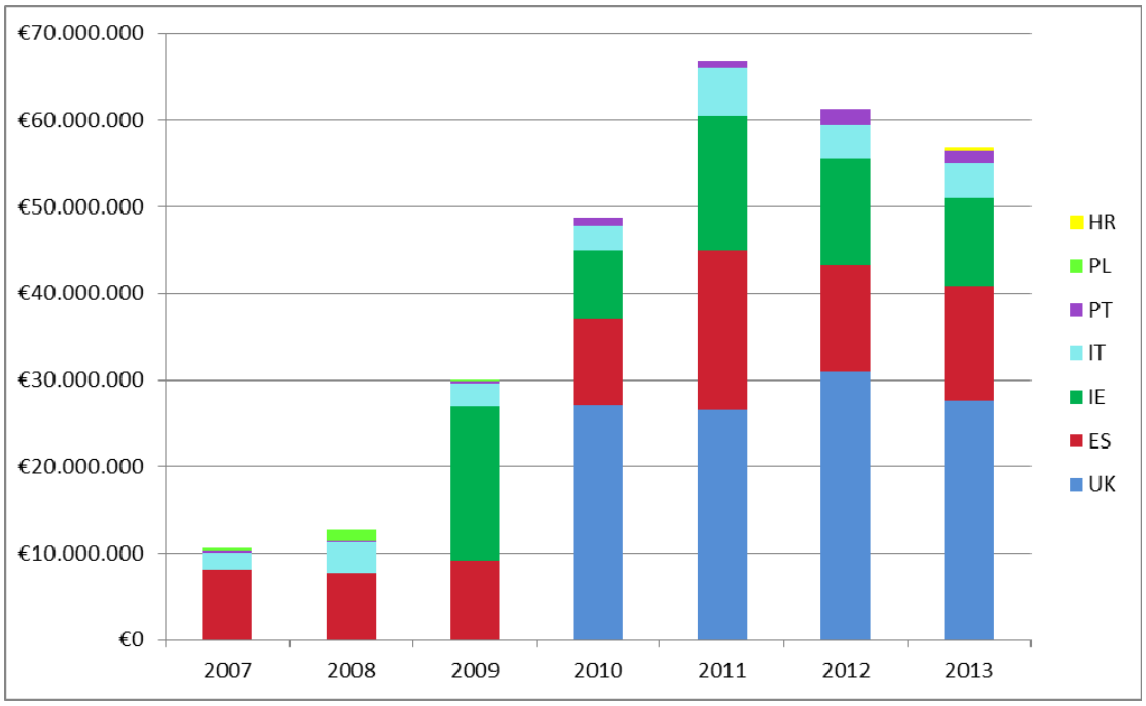
There is a marked upwards slope in EU contributions between 2008 and 2011, slowly receding again in 2012 and 2013. This upward trend is in part due to the allocation of funding to Ireland in 2009 and the United Kingdom in 2010. In addition, the co-funding rate was exceptionally increased to 60% for eligible measures (from 50%) in 2011, following a request by the concerned MSs (as by article 28 of Council decision 2009/470/EU) of additional financial support to ensure the continuity of the EU co-financed veterinary programmes, in order to maintain the positive trend regarding the different diseases. that was considered appropriate by the Commission.

A slight decrease of 15% between 2011 and 2013 is thanks to a gradual improvement in the epidemiological situation of the disease and veterinary programmes bearing fruit.

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

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

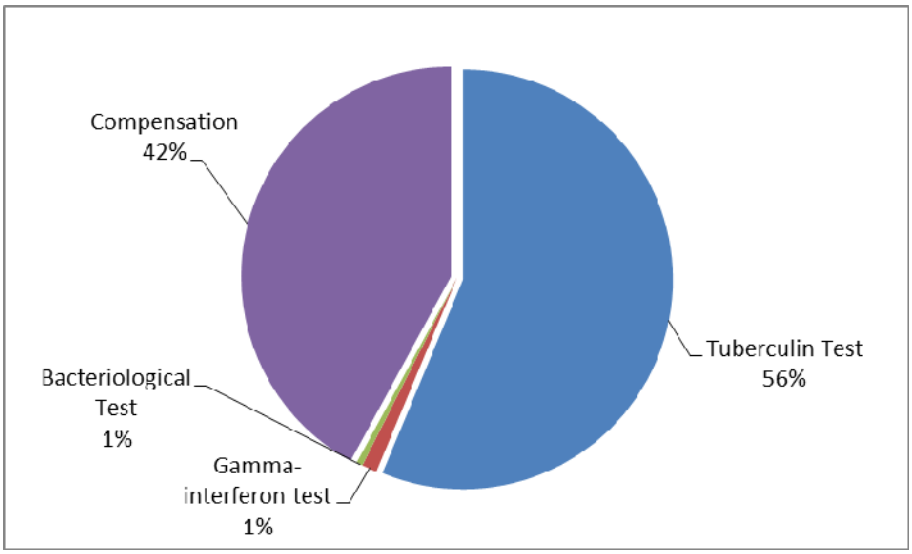
Figure 6: EU financial contribution (payments) 2007-2013 to bovine tuberculosis programmes



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

The main beneficiaries are the United Kingdom (€ 112.1M over four years), Spain (€79M over seven years) and Ireland (€64 M over five years), making up almost 90% of the bTB payments made during this period. Poland received co-funding up until 2009 (when it obtained OTF status) and Croatia received its first EU contribution in 2013 of €252,000. As shown in **figure 6**, the expenditure trend recedes in the latter phase of the studied period, due to successfully implemented programmes bearing fruit.

Figure 7: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Bovine, ovine and caprine Brucellosis

Description of the disease

Brucellosis is an infectious and contagious disease caused by the bacterial species of Brucella. It is a major zoonosis with an important social and economic impact (direct and indirect losses).

There are six species of *Brucella* known to potentially cause human disease and each of these has preferred animal hosts: B. melitensis in ovine and caprine, B. abortus in cattle and buffalo, B. suis in pigs, B. canis in dogs and B. ceti and B. pinnipedialis in marine animals. B. microti and B. neotomae occur in wild rodents but have not been implicated in human infection.

Clinically, the disease is characterised by one or more of the following signs: abortion, retained placenta, orchitis, epididymitis and, rarely, arthritis, with excretion of the organisms in uterine discharges and in milk. Diagnosis depends on the isolation of *Brucella* from abortion material, udder secretions or from tissues removed at post-mortem. Presumptive diagnosis can be made by assessing specific cell-mediated or serological responses to Brucella antigens.

The main economic damage in livestock is caused by fertility problems in both female and male of cattle, sheep, and goats.

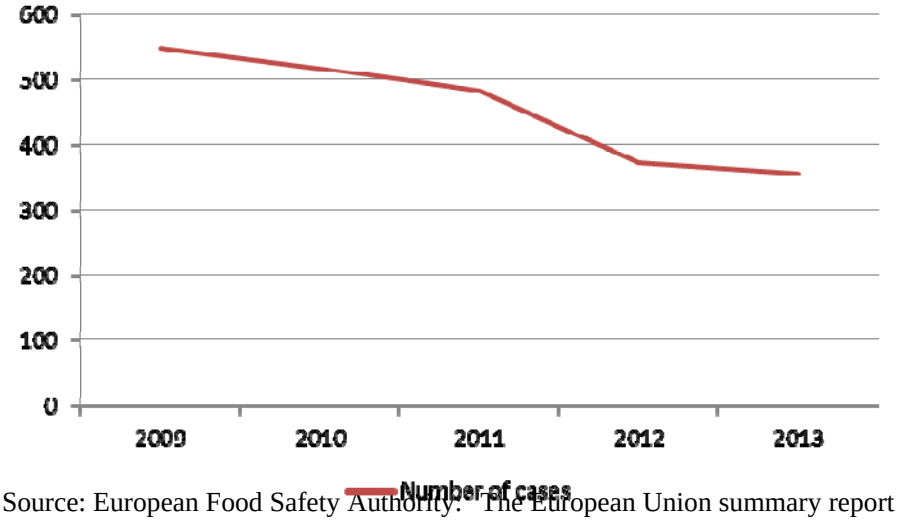
Brucella is easily transmitted among susceptible animals in particular after abortion which results in large amounts of bacteria being released to the environment. In humans, it occurs mostly as an occupational infection in persons exposed to infectious materials from the animals and can also be food-borne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

Brucella melitensis is endemic in the Mediterranean region, but infection is widespread world-wide.

Brucellosis in humans.

The implementation of Brucellosis eradication programmes has an indirect effect on human health, as the number of human cases had been decreasing in recent years (see **figure 8**). The long term trend is shown where a decreasing trend of reported confirmed cases of human brucellosis in the EU, In 2009 human cases were 548 whilst in 2013 they were 357. The figure shows a constant decrease of human cases, demonstrating the importance of the achievements of the co-funded programmes.

Figure 8: Number of cases of brucellosis in humans in the EU



Source: European Food Safety Authority: "The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2013".

Bovine brucellosis: epidemiological evolution 2007-2013

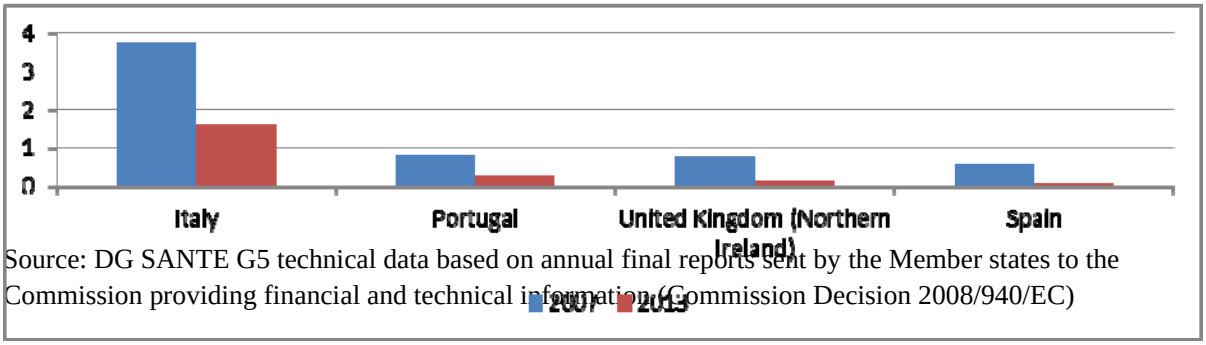
There are 16 MSs "officially brucellosis free" (OBF) and regions from additional 4 MS in 2013 (see **map 2**). The disease is mainly concentrated in: Italy, Portugal and Spain. In 2007, six MSs received co-funding: Italy, Cyprus, Ireland, Portugal, United Kingdom (Northern Ireland), Spain. In 2013, five MSs had eradication programmes: Spain, Italy, United Kingdom (Northern Ireland), Portugal, Croatia (from July 2013).

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 Spain, such as the Islas Canarias, the Autonomous Community of the Islas Baleares, Pais Vasco, Murcia and La Rioja as well as some of Azores Island and Algarve in Portugal. Moreover, the overall situation in all affected Member States has improved: as can be seen in **figure 9**, there is a downward trend in herd prevalence between 2007 and 2013.

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.

In the southern regions of Italy (Puglia, Calabria, Campania and Sicilia) the prevalence and the incidence of the disease are still high in bovines and buffaloes (herd prevalence being 4,62 in 2007 compared to 1,80 in 2013) 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 really good improvements. In Spain, four new regions in 2013 were declared brucellosis officially free.

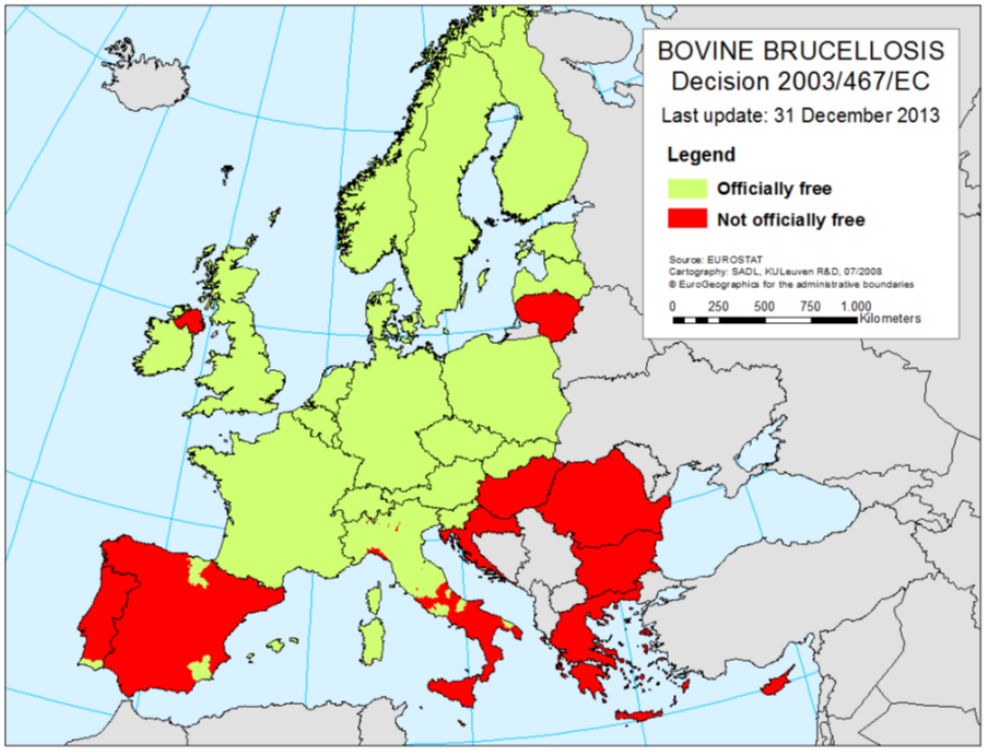
Figure 9: evolution of bovine brucellosis herd prevalence rate (%) in Member States with co-funded programmes for the entire period 2007-2013[9] (except Croatia, joined in July 2013)



Source: DG SANTE G5 technical data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

[9] *Ireland until 2009, Cyprus until 2010 and Malta for 2009 and 2010

Map 2: Bovine Brucellosis officially free zones December 2013



Source: European Food Safety Authority. "The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2013".

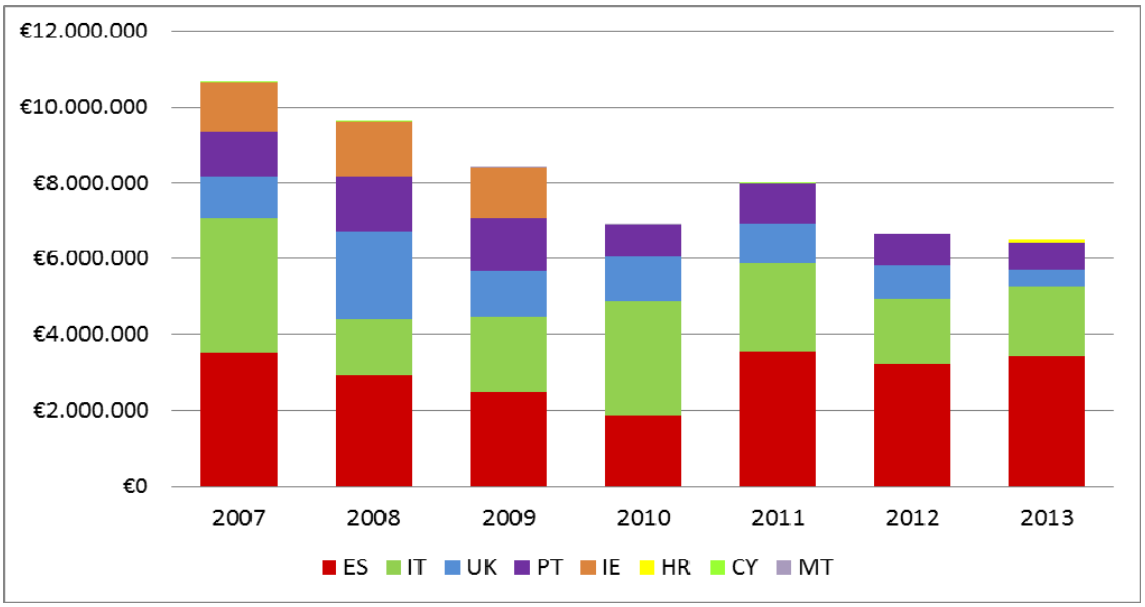
Funding

Over the period 2007-2013, a total of €56.75M was paid for bovine brucellosis eradication programmes, making up 4.8% of veterinary programme spending in this period. The EU co-financed programmes in Spain, Italy, the United Kingdom (Northern Ireland), Portugal, Ireland (until 2009), Croatia (half of 2013), Cyprus (until 2010) and Malta in 2009 and 2010. Measures co-funded include sampling, laboratory tests, compensation for slaughtered animals and the purchase of vaccine doses.

As seen in **figure 10**, there is a gradual decline in the level of co-funding until 2010, with a slight increase in 2011 due to the higher co-funding rate of 60% applied that year for testing, compensation and vaccines see under point 3.1.1). Overall there has been a decline of almost 40% in Union co-funding for bovine

brucellosis programmes, moving from €10.7 million to just over €6.5 million in 2013 due to a positive epidemiological trend.

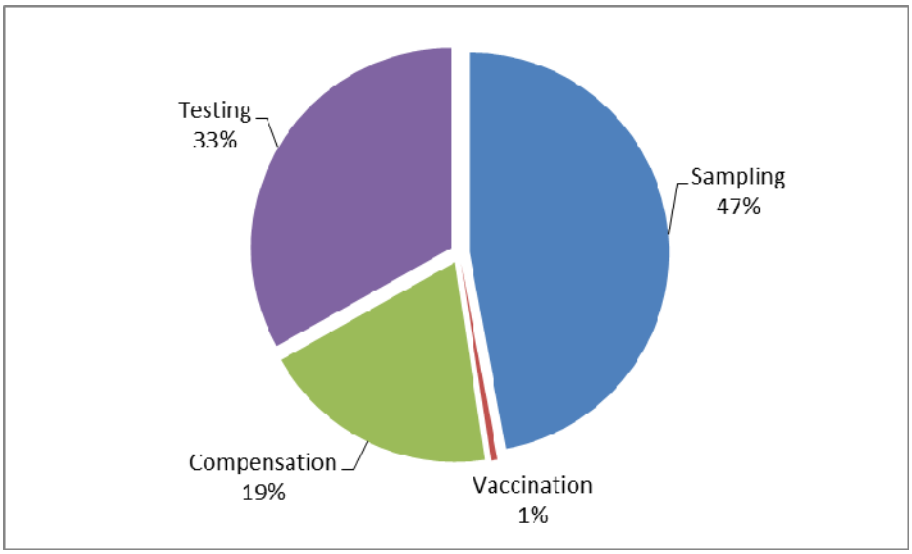
Figure 10: EU financial contribution (payments) 2007-2013 to bovine brucellosis programmes



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

The main beneficiaries during the covered period were those member states with a higher prevalence of the disease and a higher degree of cattle production: Spain (€21M), Italy (€16M), United Kingdom (€8.2M) and Portugal (€ 7.4M). Ireland received Union co-funding for its programmes until 2009 for a total of €4.2M, and Croatia received funding in its first year of membership 2013 of €100,000. Between 2007 and 2011 Cyprus had a co-funded programme receiving a total contribution of €11,195 over that period, and two payments were made to Malta in 2009 and 2010 for a total of €1,205 (not shown in the figure above). Overall a downward trend can be noted in the level of co-funding in all affected member states, with only Spain remaining high due to high cattle production and more cost intensive programmes as it approaches eradication.

Figure 11: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Ovine and Caprine Brucellosis

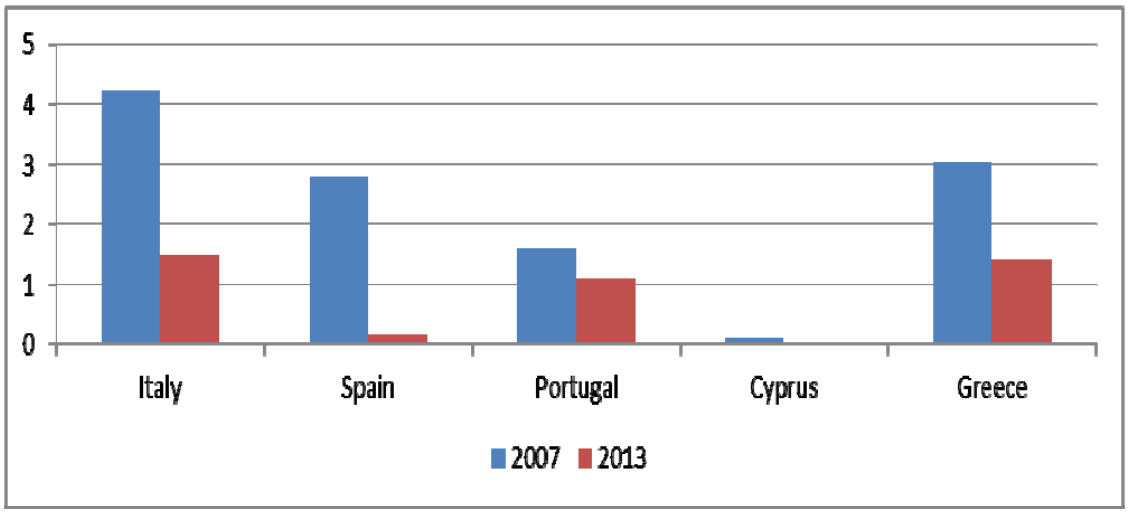
Epidemiological evolution 2007-2013

There are 19 MSs "officially brucellosis (*B. melitensis*) free" and regions from additional 4 MS in 2013[10]. The disease is mainly concentrated in: Italy, Portugal, and Spain. In 2007, six MSs received co-funding: Greece, Italy, Cyprus, Portugal, Spain and France. In 2013, six MSs had eradication programmes: Spain, Italy, Portugal, Greece, Cyprus and Croatia (from July 2013). In the case of Greece, the Commission approved programmes in 2007, 2009, 2011, 2012, 2013 (no brucellosis eradication programmes for sheep and goats was submitted in 2008 and 2010). However, the poor implementation of the co-funded programme led the Commission to apply financial correction to the amount originally allocated or even not to reimburse the expense in the worst case. The Commission always provided to Greece technical support (in addition to the financial) in order to reach satisfactory standard of good health and food safety; however, until 2013 the general situation remained unchanged. Some improvement should be noted starting from current year.

[10] Commission decision of 21 December 1992 recording the compliance by certain Member States or regions with the requirements relating to brucellosis (B. Melitensis) and according them the status of a Member State or region officially free of the disease (consolidated version of 18.02.2014)

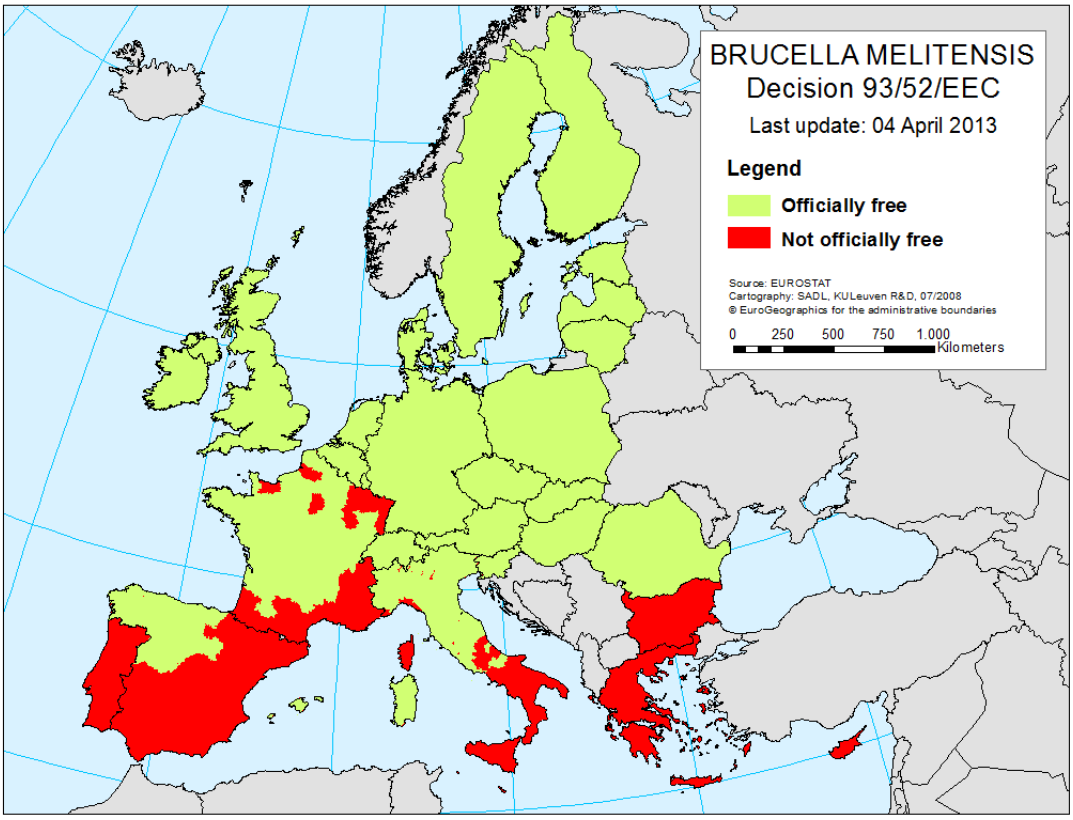
The disease is mainly concentrated in the South of Europe. The implementation of the eradication programmes in Italy, Spain and Cyprus made excellent progress in eradicating the disease. This is clearly indicated by Figure 12, showing the same trend of continuous decline in herd prevalence in all affected Member States between 2007 and 2013 except for Greece (where herd prevalence was 3,04 in 2007 compared to 1,41 in 2013, still high) and some regions of southern Italy. However, even if the prevalence is still high in the south of Italy (Calabria, Campania, Puglia and Sicilia), nonetheless the trend predicts that the efforts are going in the good direction with good results, herd prevalence being 4.23% in 2007 compared to 1,50% in 2013. **Map 3** shows the situation of the disease in the EU at the end of December 2013.

Figure 12: Evolution of ovine and caprine brucellosis herd prevalence in Member States with co-funded programmes, 2007-2013



Source: DG SANTE G5 technical data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Map 3: Ovine and Caprine Brucellosis officially free zones December 2013



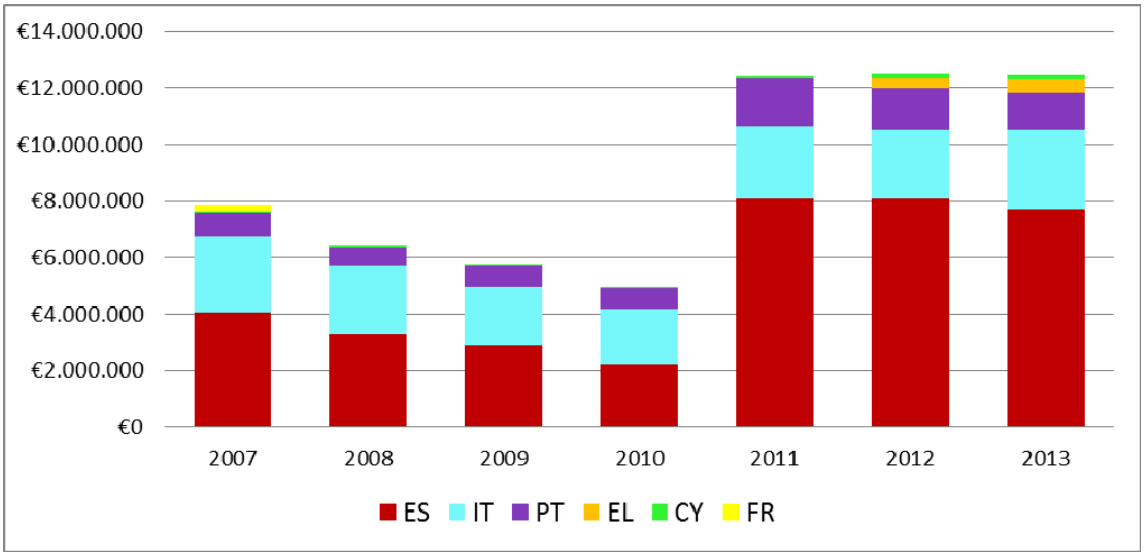
Source: : European Food Safety Authority. "The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2013".

Funding

Ovine and caprine brucellosis programmes make up around 5.3% of the total EU payments to veterinary programmes in the studied period, amounting to almost €62.5M. EU co-funding goes towards the cost of sampling, laboratory tests and compensation for animals slaughtered.

Between 2007 and 2010 a downward trend can be noted, with a surge in funding in 2011 and remaining level for 2012 and 2013. Between 2011 and 2013 funding remained steady at around €12.5M. The significant increase in funding from 2011 is due a highly cost intensive programme implemented in Spain as it approaches eradication.

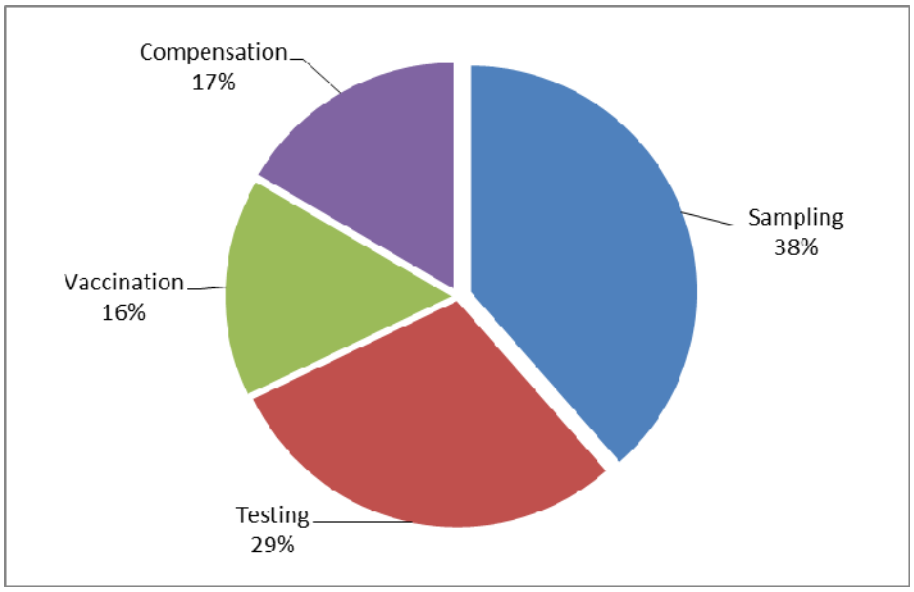
Figure 13: EU financial contribution (payments) 2007-2013 to ovine and caprine brucellosis programmes



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Between 2007 and 2013, the largest recipients of EU funding for ovine and caprine brucellosis eradication programmes were Spain with €36.3M and Italy with almost €17M. About 60% of the total EU sheep population and 36% of the EU goat population are concentrated in this region. Portugal follows with a contribution of €7.5M over the studied period and Cyprus with €610,000. Greece received funding for programmes in 2012 and 2013, and France in 2007.

Figure 14: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Bluetongue

Description of the disease

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.

Epidemiological evolution 2007-2013

Until 2006, bluetongue (BT) 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, BTV 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.

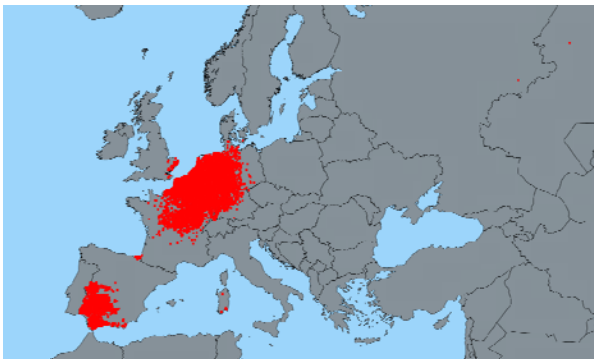
Bluetongue is not controlled by depopulating infected farms or those at risk. The principal, most effective veterinary measure in response to bluetongue is vaccination accompanied by additional measures such as movement restrictions and surveillance. Vaccination using all available vaccines helps to 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 in 2007 and 2008, the EU mobilised significant financial resources which allowed Member States to launch a coordinated vaccination campaign across all infected areas. 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.

The Bluetongue control and eradication 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.

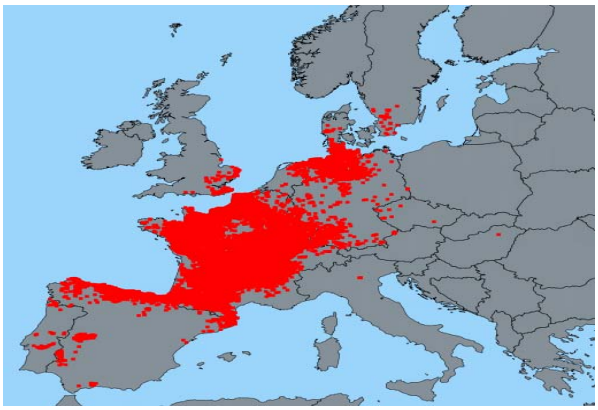
The sequence below shows the drastic reduction of number of outbreaks between 2008 and 2013 due to the implementation of vaccination.

Bluetongue outbreaks in the EU, 2007



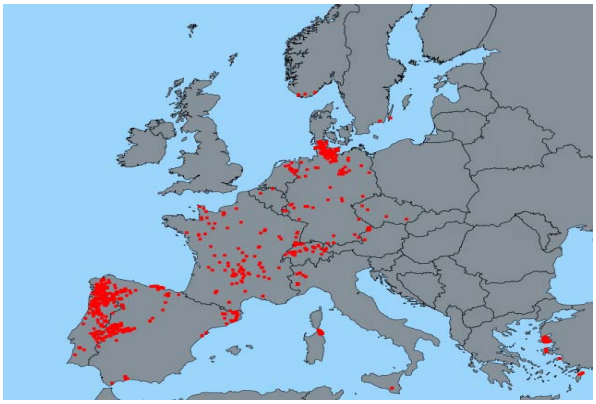
Situation worsening in Europe

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, 2013

Situation in 2013 after years of vaccination and funding

Source: Animal Disease Notification Service (ADNS)

Funding

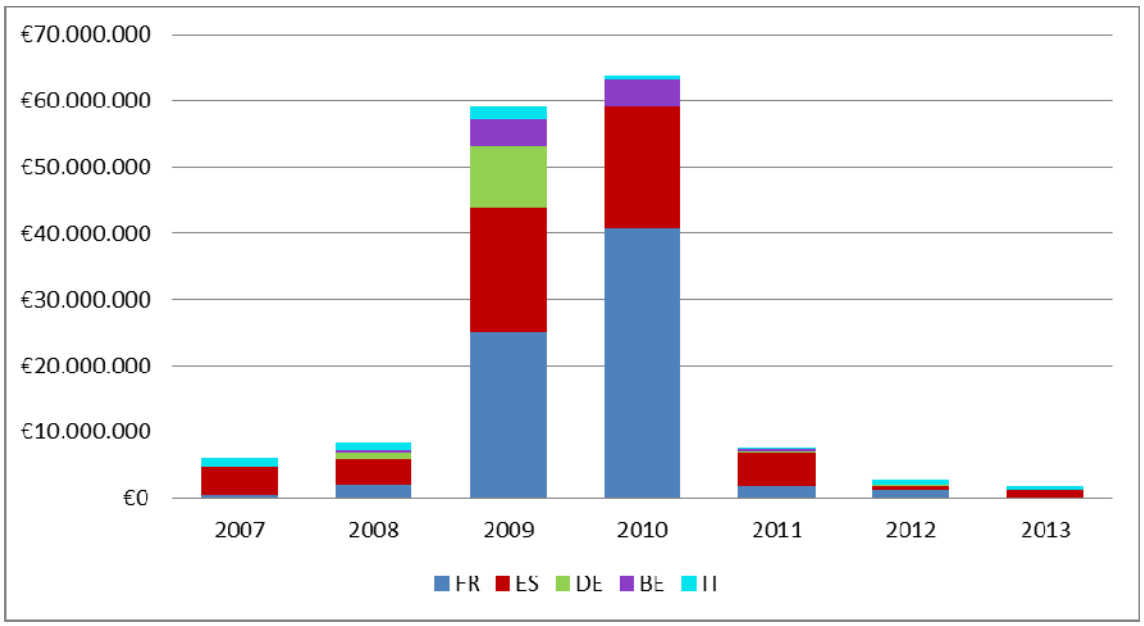
Bluetongue programmes make up just fewer than 15% of EU spending on veterinary programmes in the seven year period between 2007 and 2013, with 25 MSs benefiting from funding during this time. Member States receive co-funding towards sampling, laboratory testing, vaccines, and up until 2012 towards the cost of entomological surveillance.

In 2007, following the first occurrence of serotype BTV-8, some MSs received financing for the monitoring and surveillance programmes. However, 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), as well as 50% of the costs of the administration of the vaccine. Around € 165 million where allocated for the 2008 emergency vaccination plans and the surveillance programmes.

After 2008, the emergency fund was shifted to eradication funds: Commission Decision 2009/560/CE was adopted in mid-2009 adding vaccine administration as an eligible measure in the programmes and allocating additional funds for this purpose.

In 2009 and 2010, a large scale vaccination programme against BTV-8 and BTV-1 was launched causing a surge in EU contributions during those years. Vaccination campaigns then became voluntary measures in most MSs in 2011, due to the favourable epidemiological situation.

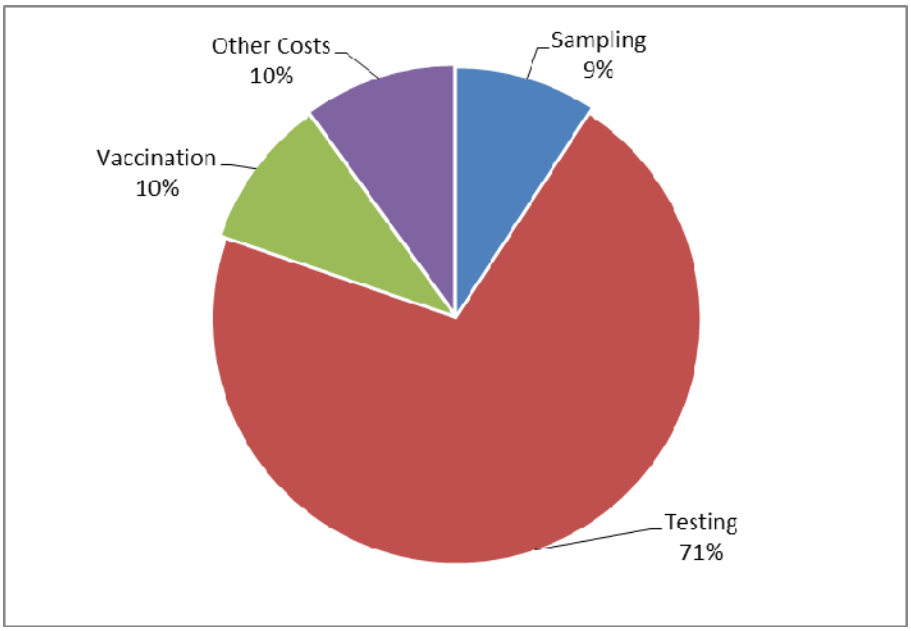
Figure 15: EU financial contribution (payments) 2007-2013 to bluetongue programmes for largest recipients



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Almost 90% of the €167.5 million spent during the seven year period went to five member states: France (€ 71.2M), Spain (€ 52.8M), Germany (€ 10.5M), Belgium (€ 8.9M), and Italy (€6.5M), followed closely by Portugal (€5.9M), Czech Republic (€4M), Austria (€3.7M), and Sweden (€2M).

Figure 16: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Transmissible Spongiform Encephalopathies (BSE and Scrapie)

Description of the disease

Transmissible Spongiform Encephalopathies (TSEs) are a family of diseases caused by a transmissible agent called prion (PrPres), which is an abnormal form of a protein, that occur in animals as well as humans and are characterised by a degeneration of the brain tissue giving it a sponge-like appearance, ultimately leading to death.

TSEs includes diseases such as *Bovine Spongiform Encephalopathy* (BSE) in cattle, scrapie in small ruminants (sheep and goats), *Chronic Wasting Disease* (CWD) in cervids (deer) and Creutzfeldt Jakob's Disease (CJD) in humans.
BSE is a TSE disease of cattle considered to be transmissible to humans (Variant CJD: vCJD). BSE was first diagnosed in United Kingdom 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 17**. Between 2007 and 2013 the number of cases has reduced by 96%.

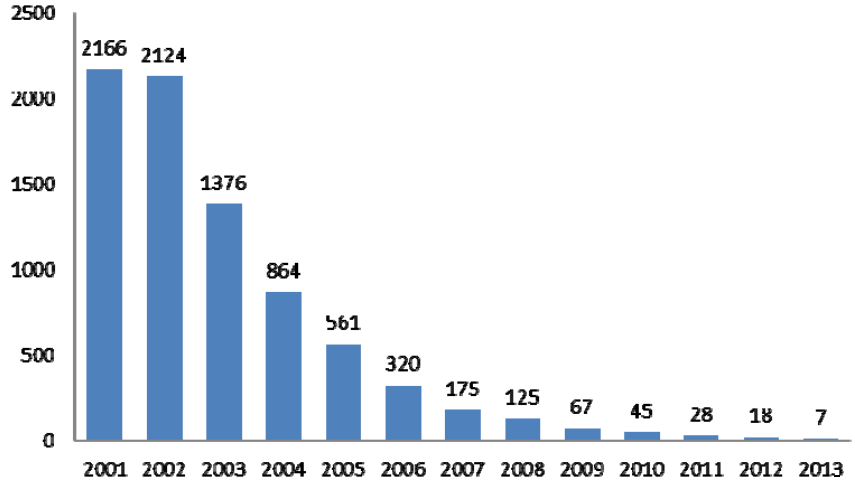
Scrapie is a TSE in small ruminants (sheep and goats) not considered to be transmissible to humans and can be divided into classical (typical) scrapie and atypical scrapie. The disease has been known for centuries. It is assumed that scrapie can both be transmitted horizontally, from one animal to another or via environmental routes, and vertically, from ewe to lamb / from goat to kid. Atypical scrapie is distinguished from classical scrapie by clinical and epidemiological as well as by molecular and histopathological features. It is not rare compared to classical scrapie in most countries and found worldwide at a comparable incidence rate, which is indicative for a different, perhaps non-infectious aetiology.

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.

Epidemiological evolution 2007-2013

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 in cattle has declined steadily in the EU, with figures falling from 2124 BSE cases in the EU-15 to 7 in the EU-28 in 2013. The number of positive BSE cases is very low in all Member States as seen in the figure 17 below.

Figure 17: BSE positive cases in EU28, 2001-2013

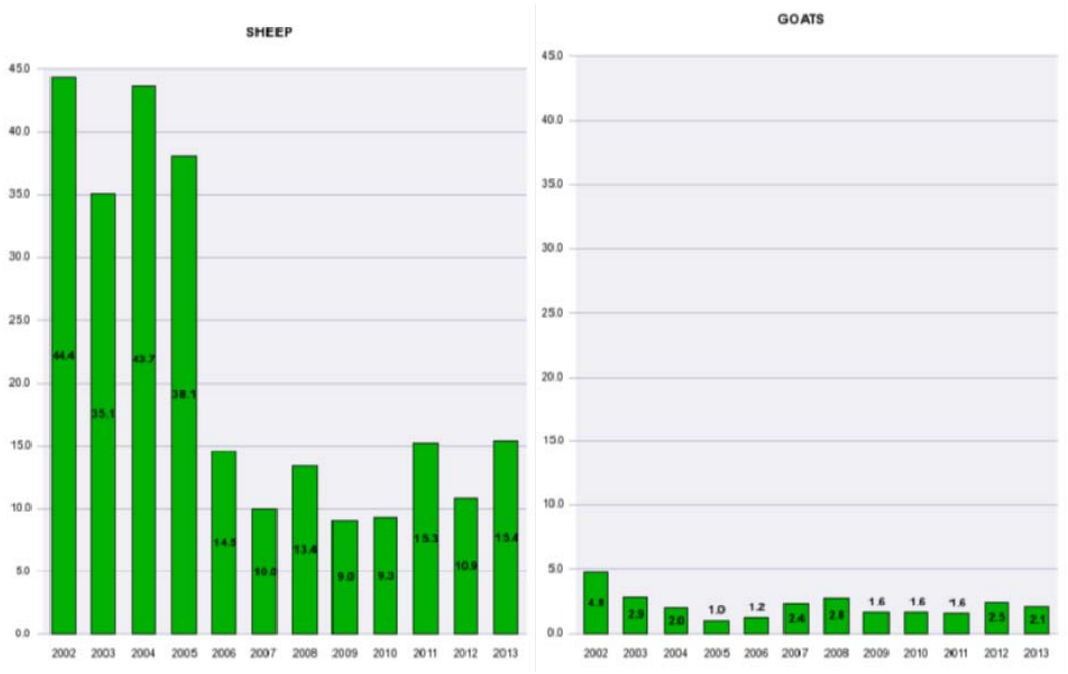


Source: DG SANTE, Report on the monitoring of ruminants for the presence of Transmissible Spongiform Encephalopathies (TSEs) in the EU in 2013[11]

Figure 18 shows the decreasing of the overall prevalence of scrapie in sheep and goats in the EU. From 2002 to 2013 the prevalence in sheep has been reduced to one third, thanks to the proper implementation of the EU co-funded programmes. Prevalence of scrapie in goats remains constant during the years and at low level.

[11] http://ec.europa.eu/food/food/biosafety/tse_bse/monitoring_annual_reports_en.htm)

Figure 18: Prevalence of Scrapie in small ruminants in EU28,



Source: DG SANTE, Report on the monitoring of ruminants for the presence of Transmissible Spongiform Encephalopathies (TSEs) in the EU in 2013[12]

[12] http://ec.europa.eu/food/food/biosafety/tse_bse/monitoring_annual_reports_en.htm)

Funding

Co-funding was introduced in 2001 when monitoring of TSEs was made compulsory under (EU) Regulation No 999/2001/EC. The Union co-funds programmes for the monitoring (sampling, testing) for BSE and for scrapie, compensation to farmers for culling of infected animals and genotyping of sheep for scrapie.

Genotyping is assumed to confer resistance to BSE and classic scrapie under natural exposure conditions. Hence, to exclude prions from the human food chain, massive breeding efforts have been undertaken in the European Union to amplify some specific genes.

MS may use genotyping 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 programmes are implemented and co-funded in all 28 MSs.

TSE programmes received the largest part of EU funding for veterinary programmes during the studied period, making up 32% of payments amounting to €380M.

There is a steep decline of 80% in TSE spending over the seven years, from €86.8M in 2007 down to €18.3M in 2013, thanks to a very positive epidemiological trend in recent years (see figure 19).

Figure 20 shows the payment trend for the largest recipients between 2007 and 2013: France (€90.6M), Germany (€48.5M), United Kingdom (€ 35.5M), Spain (€35.2), Italy (€30.1) and Ireland (€24.8M). The trend is markedly declining across all EU MSs.

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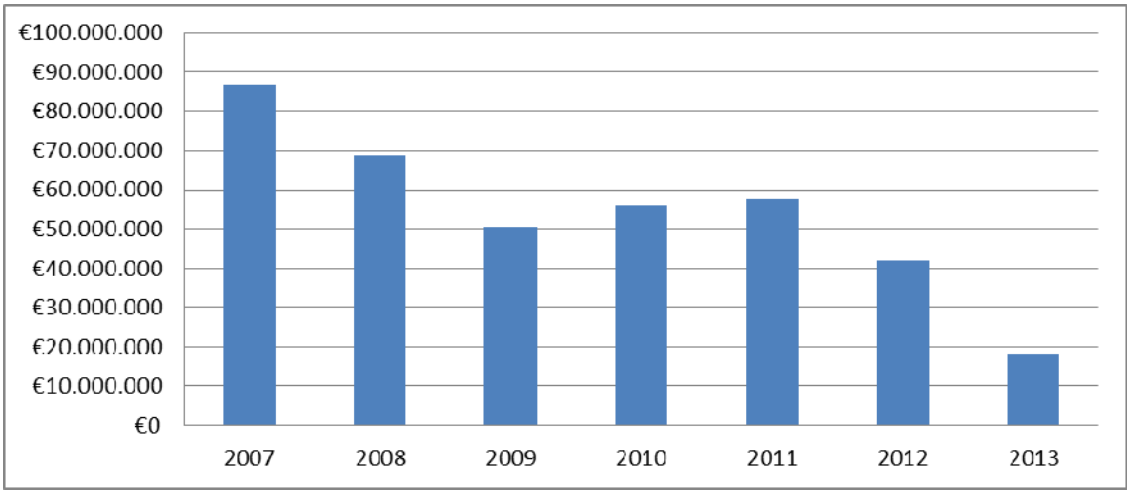
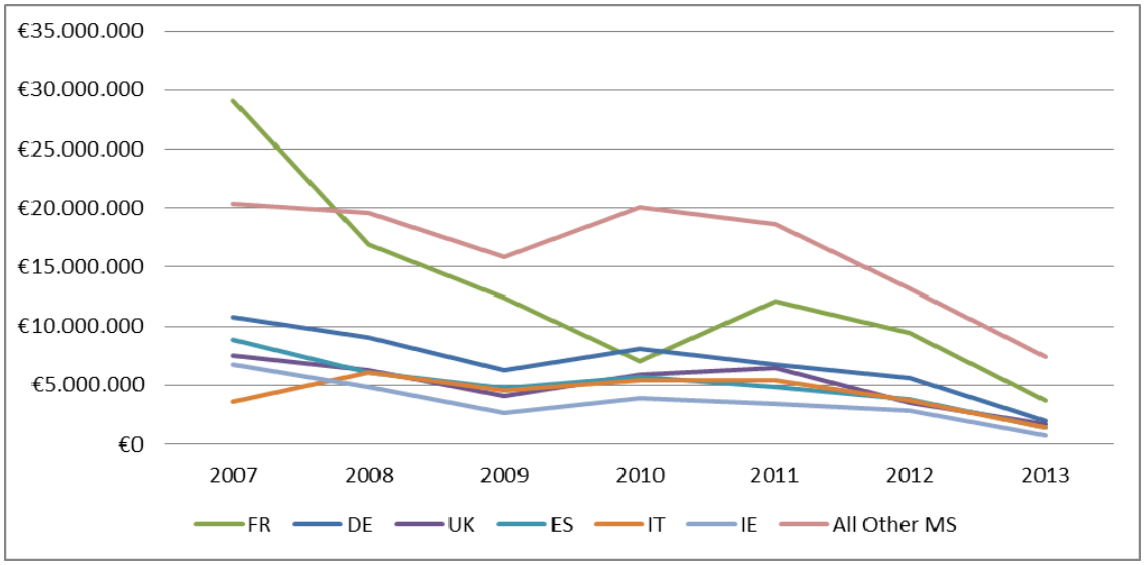
Figure 19: EU financial contribution (payments) 2007-2013 to TSE programmes



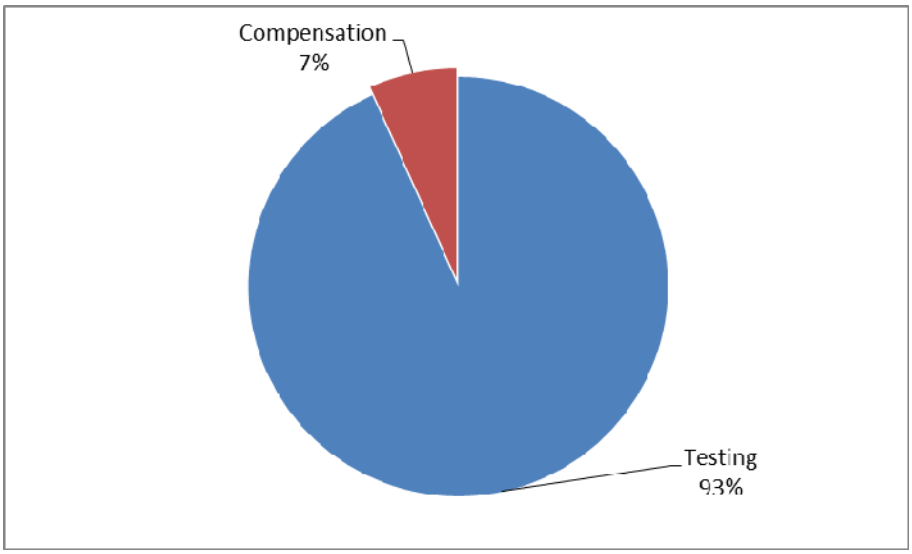
Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Figure 20: EU contribution (payments) 2007-2013 to TSE programmes by MS



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Figure 21: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Avian Influenza

Description of the disease

Avian influenza is an infectious viral disease affecting domestic and wild birds. 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 mainly 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.

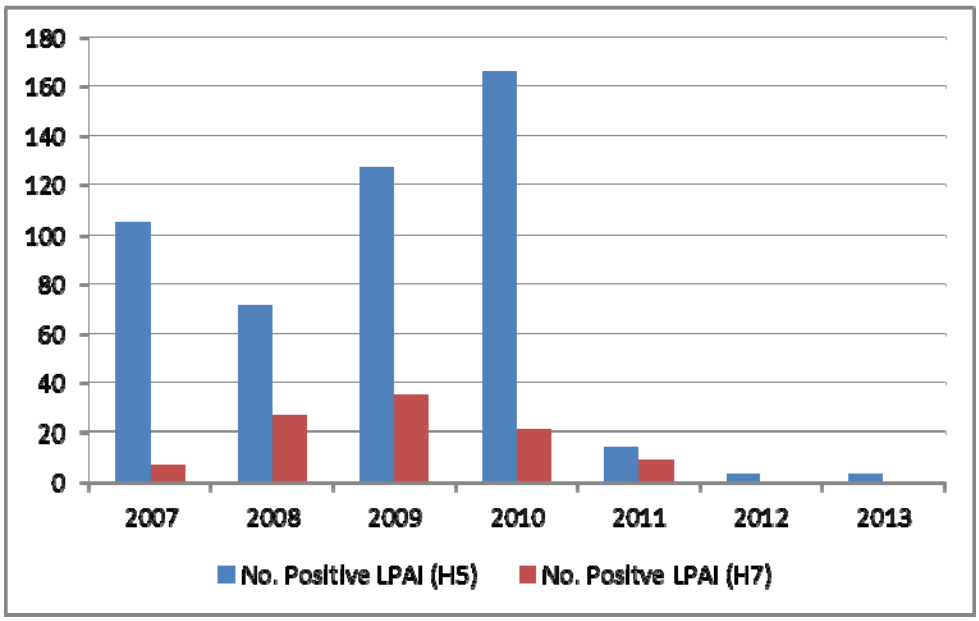
Epidemiological evolution 2007-2013

Overall, the implementation of avian influenza (AI) surveillance programmes in domestic poultry and wild birds (for the latest mainly passive surveillance), 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 in domestic poultry and to prevent further spread to commercial flocks and to humans. The decreasing trend during the period under study in the number of both, wild and domestic birds, under surveillance programme is due to a reduced number of outbreaks occurring since 2007, both in domestic poultry and wild birds. From 2007 to 2013 the number of outbreaks in domestic bird decreased from 288 in 2007 to 33 in 2013: this is indicating that surveillance programmes are runned in an efficient and uniform manner.

In relation to the implementation of surveillance programmes in wild birds, figure 22 shows that the number of infected wild birds found each year during the survey for the period 2007 and 2013[13].has been decreased.
Figure 23 shows that in domestic poultry the number of LPAI outbreaks has remained steady in the years 2007-2013 compared to the number of HPAI.

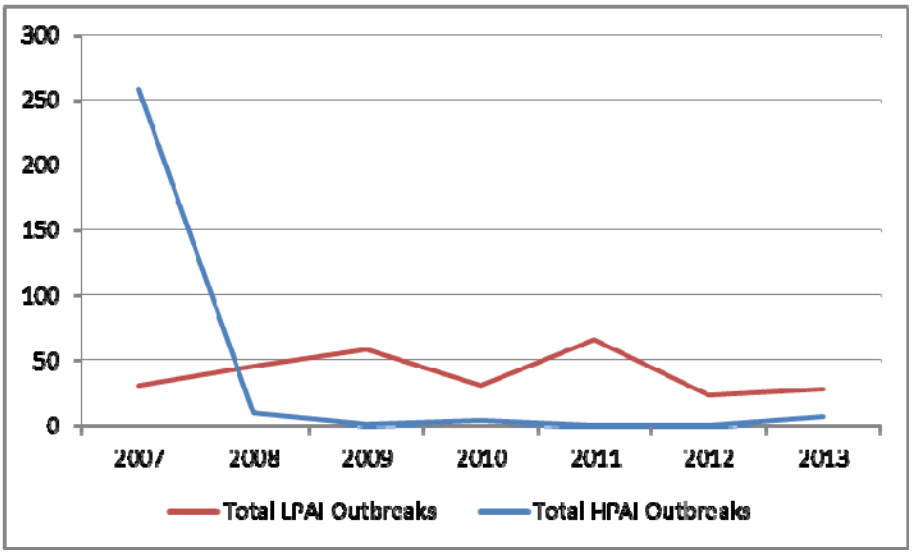
[13] It should be noted that the figures here are the findings resulting directly from the survey, and not the number of outbreaks reported in ADNS.

Figure 22. Number of infected wild birds found in surveys 2007-2013



Source: Annual report on surveillance for avian influenza in poultry and in wild birds in Member States of the European Union in 2009, 2010, 2011, 2012, 2013.

Figure 23: Avian influenza outbreaks in domestic poultry, 2007-2013



Source: Animal Disease Notification System (ADNS)

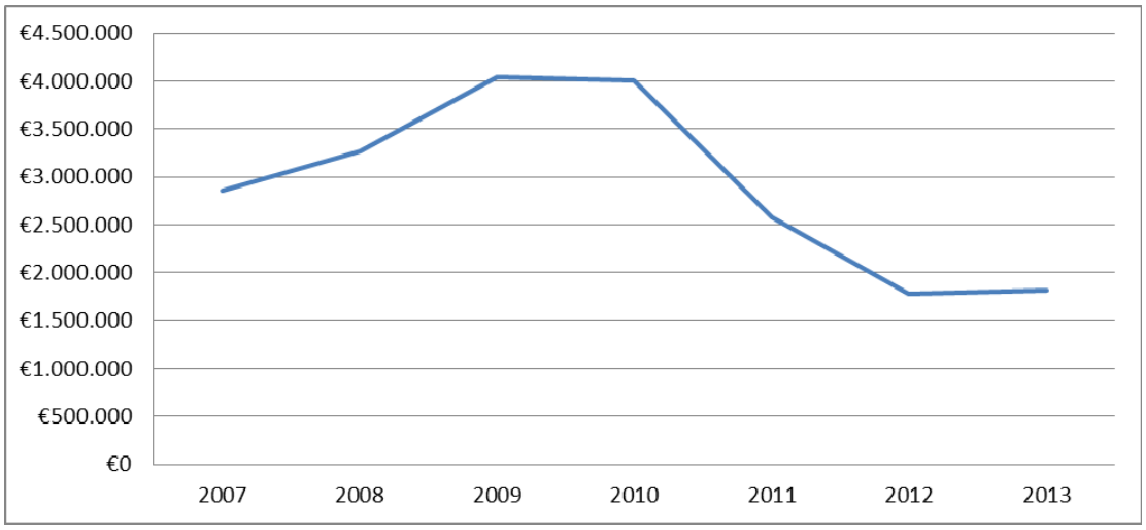
Funding

Avian influenza surveillance programmes received almost €20.4M in EU funding during the seven year period. Co-funded measures include sampling of domestic and wild birds and laboratory tests.

From 2007 to 2013, EU expenditure for avian influenza programmes went down from €2.8M in 2007 to €1.8M in 2013. An increase in 2009 and 2010 was due to a higher number of outbreaks in wild birds during these years, followed by a marked decrease during the following years due to positive epidemiological trends.

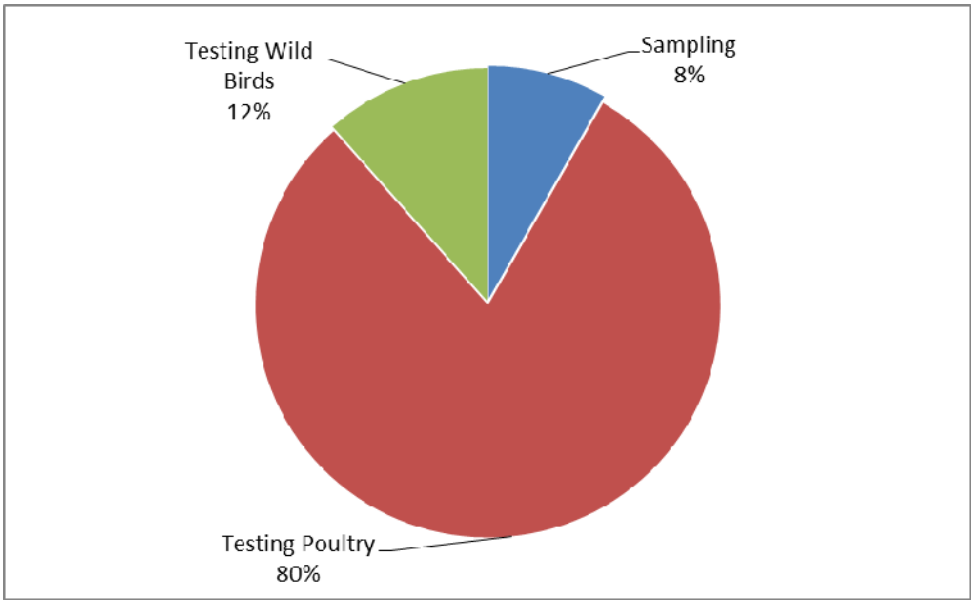
All Member States benefited from EU funding during the studied period. However, due to a high population density of domestic poultry, the largest recipients of EU funding were: Italy (€6.2M), the Netherlands (€2.1M), Germany (€1.7M), Spain (€1.4M), and the United Kingdom (€1.2M).

Figure 24: EU financial contribution (payments) 2007-2013 to avian influenza programmes



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Figure 25: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Rabies

Description of the disease

Rabies is a serious zoonoses 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.

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.

In Europe and Asia the role of rabies reservoir is played mainly by red foxes (*Vulpes vulpes*) and raccoon dogs (*Nyctereutes procyonoides*), a novel invasive species which was originally introduced as hunting game to the European part of the former Soviet Union in the 1920s and has colonised large parts of Eastern and Central Europe .

Oral rabies vaccination (ORV) of foxes and/or raccoon dogs is the most effective method to eliminate terrestrial rabies in wildlife. Proper planning, design and implementation of vaccination programmes as well as coordination of programmes between neighbouring regions or countries are important to their success. Large scale and long-lasting ORV strategies are needed for eradication of rabies.

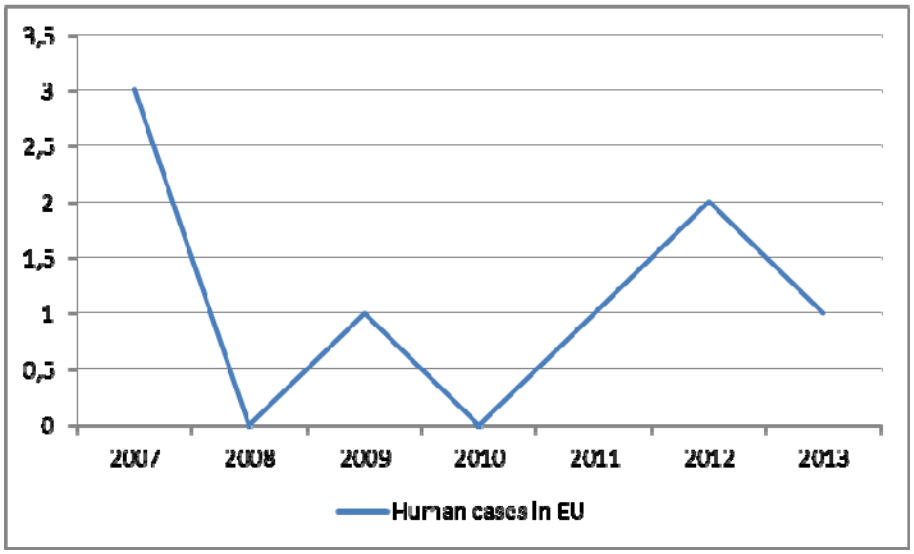
An appropriate Rabies programme is composed of three elements: ORV of wildlife, monitoring of the effectiveness of the ORV and surveillance that is the key parameter for assessing the rabies situation within the country and for planning, implementing, improving the performance and evaluating the success of any rabies eradication programme. Surveillance and monitoring are both key elements of ORV programmes

Rabies in human

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 big 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 (1 case in 2013) and most MSs have not had any indigenous cases for decades (Figure 26). Autochthonous human cases are still reported in neighbouring countries, such as Belarus, Russia, Ukraina, Turkey, and Georgia.

Figure 26: Human cases of Rabies in EU, 2007-2013



Source: WHO-Rabies Bulletin Europe

Epidemiological evolution 2007-2013

Situation in EU

In the 1980s, wildlife rabies was present in most countries of eastern and central Europe and was expanding westwards. At the time, a number of MSs started to implement wildlife OVR to control the epidemic.

The ORV was proven to be the most effective tool to eradicate the disease (in domestic and wildlife) and in 1989, the EU started providing financial support to MSs wildlife oral vaccination programmes against rabies. This further contributed to the expansion of the implementation of oral vaccination, which led to the gradual eradication of the disease from several MSs in the following years .

With the new wave of EU accessions (2004: NMS-10; 2007: Romania and Bulgaria; 2013: Croatia), the focus of the fight against classical rabies shifted towards new areas in the enlarged EU-28 where the disease has been most prevalent (Figure 29). This resulted in a significant increase in the funds devoted to rabies control and eradication in these EU regions.

By 2009, 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.

Between 2007 and 2013, the total number of rabies cases at EU level in wild animals decreased significantly, from 814 cases to 588 cases (548 of which were reported in foxes) in the EU-28 countries (Rabies Bulletin Europe, WHO).

Endemic rabies still occurs in foxes, raccoon dogs and other wildlife species in certain eastern parts of the EU, in particular in Romania, with sporadic spillover to domestic animals, mainly dogs and cats and ruminants, in Poland and in Slovakia in an area bordering Poland, and recurrence has recently been reported in Greece and Hungary.

Figure 27 shows, the number of cases of rabies in wildlife and domestic animals reported by Member State for the period 2007-2013[14]:
The number of Rabies outbreaks in domestic animals in the EU shows a long-term decrease trend till 2011. In 2012 and 2013 there is a slight recrudescence of cases in domestic animals also linked to the wildlife increase. In fact, in 2012 there was an epidemic of Rabies in Poland, immediately kept under control by the affected Member State in coordination with the EU. The situation in Poland became much better in 2013, but an increase of rabies outbreaks in wildlife was observed in Greece, Romania and Hungary still determining an overall increase, as shown in figure 28.

Map 4 indicates that 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.

The Commission started in 2007 to provide for financial support to Third countries neighbouring MSs for the creation of vaccination belts, through bilateral agreements between interested Member States with their respective neighbours where rabies is still a threat, in order to prevent the introduction of the disease in EU, EU financial contribution to third countries, through the programmes of the neighbouring Member States, is up 100% of the cost for vaccines and their distribution. In addition, EU provide for technical assistance to design the Rabies programme to be implemented

Third Countries under this plan include Russia, Ukraine, and Belarus.

Situation in the neighbouring countries[15]

A rabies programme co-financed by the EU has been implemented in the entire territory of Kaliningrad since autumn 2007, through Lithuania and from 2009

[14] WHO Rabies Bulletin Europe

[15] European Food Safety Authority. "The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2013".

with direct funding. In years 2007-2009 ORV was implemented once a year. Since 2010, ORV campaigns have been conducted in spring and autumn.

Russian Federation (areas bordering s. Finland)

Rabies is endemic throughout great parts of the Russian Federation (RF). For the past 30 years the number of rabies cases has been increasing. During the past ten years between 1406 and 5503 rabies cases per year were reported mostly in the European part of the RF. In 2011 six human deaths were recorded. In Kaliningrad Region of the RF the main reservoir of rabies is the red fox, in recent years 25-70 cases of rabies are registered annually. Vaccination of pet animals against rabies is compulsory, to prevent spread of the disease to humans and domestic animals. Since the year 2010, the number of infected animals is decreasing, being 43 in 2010 and 21 in 2011; in 2012 11 cases have been diagnosed. In Leningrad Region of the RF the last case of rabies in wild animals was recorded in 1987. The Karelia Republic of the RF has been free from rabies infection in period 1954-2010. In the Leningrad region, to prevent the introduction of rabies from infected bordering RF regions, ORV is conducted in zones along the administrative borders. In addition, ORV is implemented along the Finnish border since 2003.

Belarus (areas bordering Lithuania and Latvia)

Within the past ten years an average of one thousand rabies cases have been diagnosed annually in Belarus, with peaks in years 2006 (1587 cases) and 2011 (1372 cases). The majority (~70%) of cases is diagnosed in foxes. These cases are distributed uniformly in the territory, with exception of eastern areas, where infection pressure seems lower. A five year plan (2012-2016) for rabies control has been elaborated and approved by the Belarusian government. The plan includes ORV, systematic preventive vaccination of pet animals, wild carnivore and stray animal population control, assuring emergency post-exposure prophylaxis for humans involved in animal bite accidents and enhancing awareness among the population. ORV in wildlife started to be implemented in 2011 with EU financial support provided through the Lithuanian rabies programme. In 2012, 58,890 km2 of Belarusian territory bordering EU Member States (Latvia, Lithuania) was covered by the aerial distribution of 1.4 million vaccine baits.

Ukraine (areas bordering Poland)

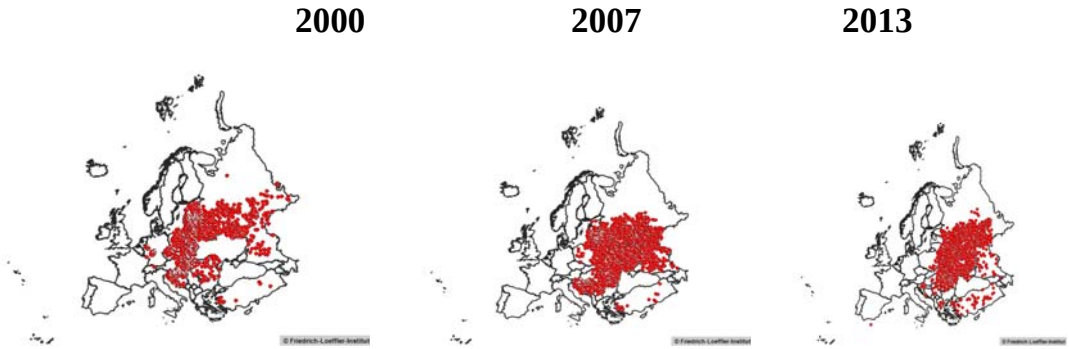
The analysis of disease dynamics in Ukraine during last 15 years shows that the number of reported cases has increased up to ten times. More than half of all

diagnosed cases are found in domestic animals (mainly cats and dogs). It is obligatory to immunize the dog population whereas cats are vaccinated in endangered areas. Livestock is vaccinated in areas surrounding in outbreak sites. The majority of cases in wildlife occur in foxes. ORV has been conducted twice a year since 2006 in limited areas, where pressure of infection is higher. In June 2012 an agreement was signed between Poland and Ukraine on the implementation of ORV along the border, funded under the EU approved Polish programme.

Areas likely to be vaccinated in a close future with EU financial contribution are:

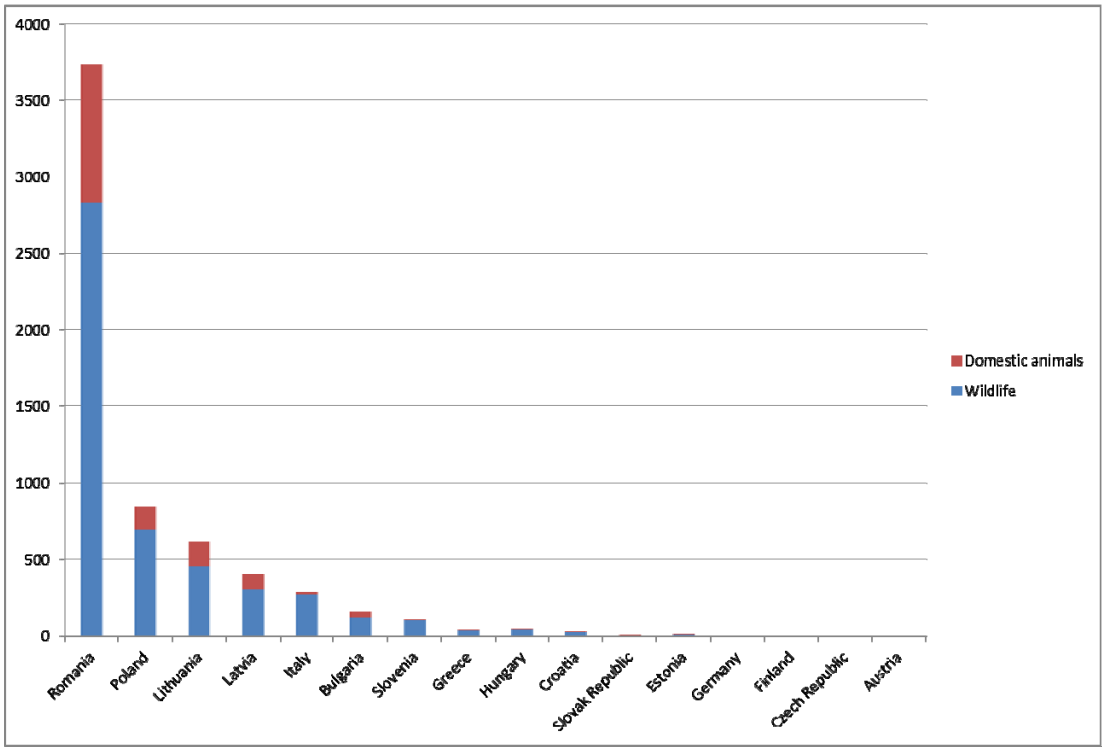
- Belarus: areas bordering Poland
- Ukraine: areas bordering Hungary
- Moldova: areas bordering Romania
- Bosnia i Herzegovina: areas bordering Croatia

Map 4. Rabies cases in wildlife in the EU: 2000, 2007 and 2013.



Source: WHO-Rabies Bulletin Europe

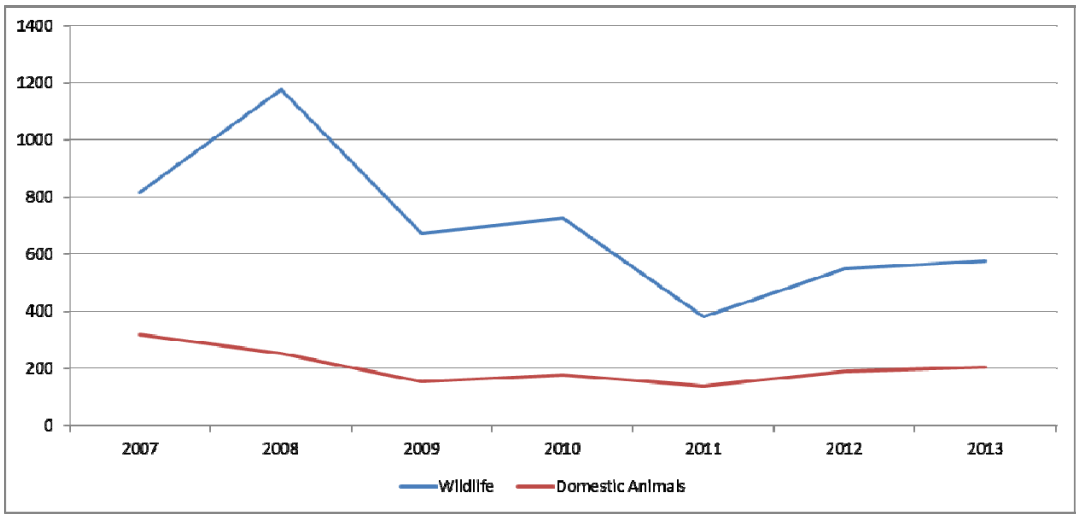
Figure 27: Reported cases of classical rabies by co-funded MSs, 2007-2013*



*For 2013 data from second semester of Croatia is included

Source: WHO- Rabies Bulletin Europe 2007-2013

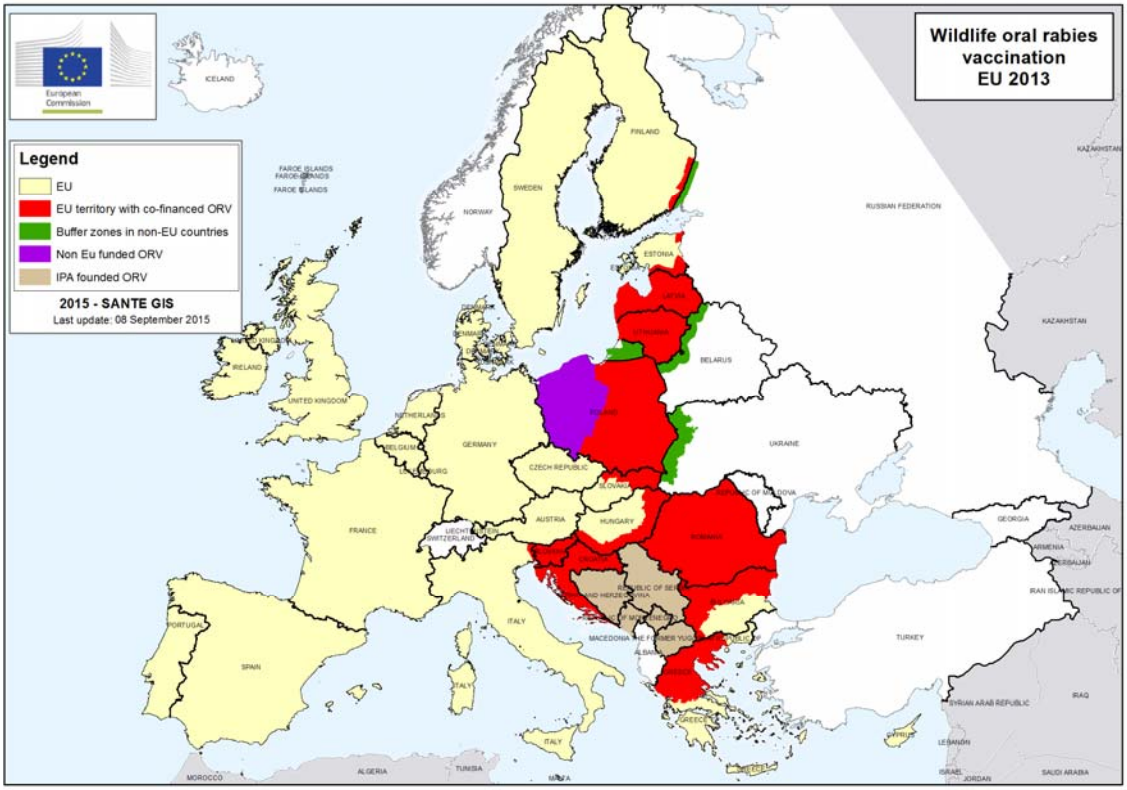
Figure 28: Number of Rabies cases in the EU 2007-2013*



*For 2013 data from second semester of Croatia is included

Source: WHO- Rabies Bulletin Europe

Figure 29: Wildlife EU oral Rabies vaccination in 2013



Source: DG SANTE G5 technical data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Funding

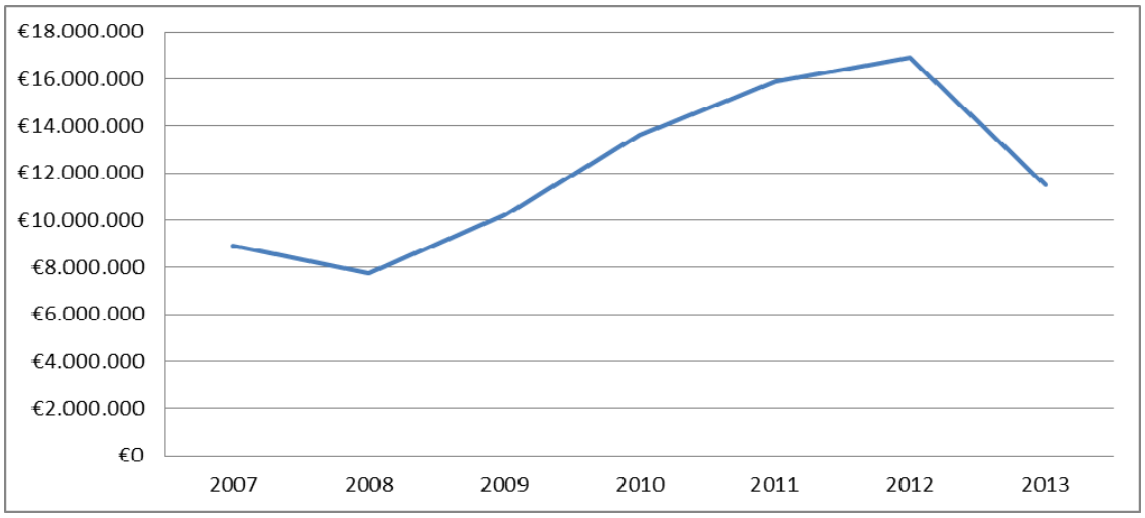
Rabies programmes make up over 7% of the EU funding for veterinary programmes in the studied period receiving €84.8M over the seven years.

Co-funded measures include: oral vaccination campaigns via distribution of baits on the territory of the MS, vaccination campaigns in neighbouring third countries, testing to monitor the effectiveness of vaccination and level of immunity in target species, and sampling of animals (surveillance).

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 from MS to MS due to geographic factors (e.g. access is more difficult in mountainous areas).
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%.

Figure 30 shows a steady upward trend in funding between 2008 and 2012, with a decline in 2013. The increased funding after 2008 is due to the vaccination campaigns introduced in Bulgaria and Romania (2009 and 2011, respectively) after their accession to the EU, and due to the increased co-funding rate of 75% from 2009. In 2013, some MSs carried out only one vaccination campaign per year (instead of two campaigns), thus lowering the level of EU funding required.

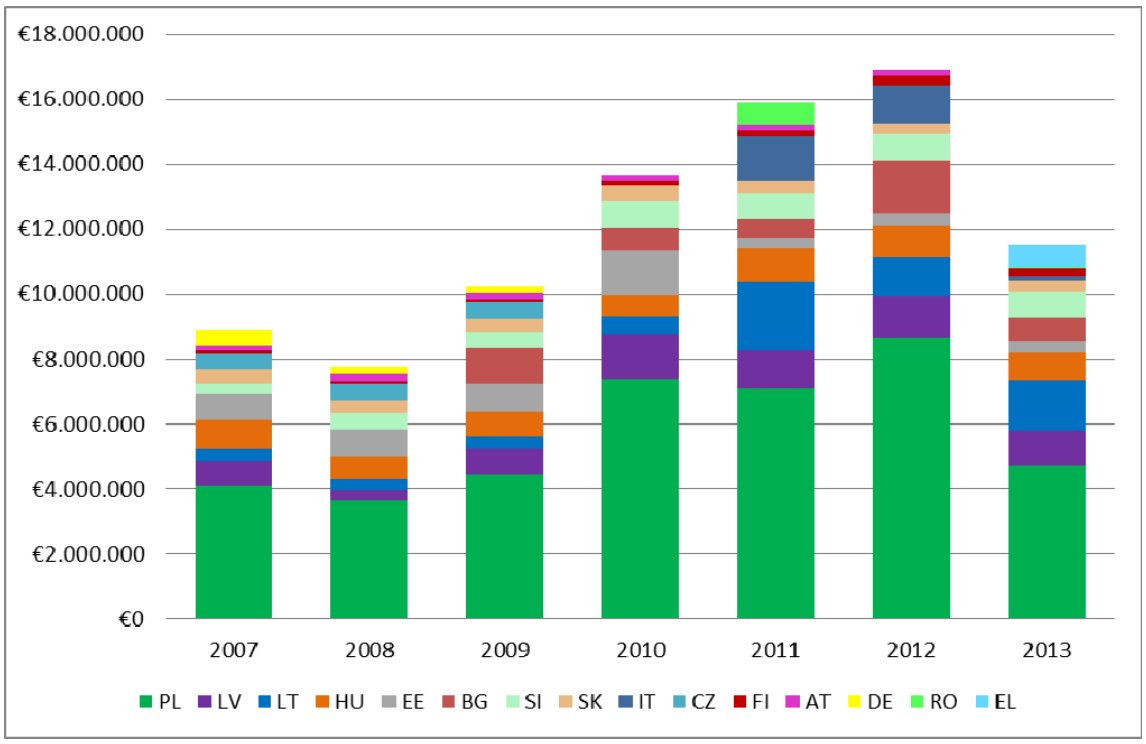
Figure 30: EU financial contribution (payments) 2007-2013 to rabies programmes



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

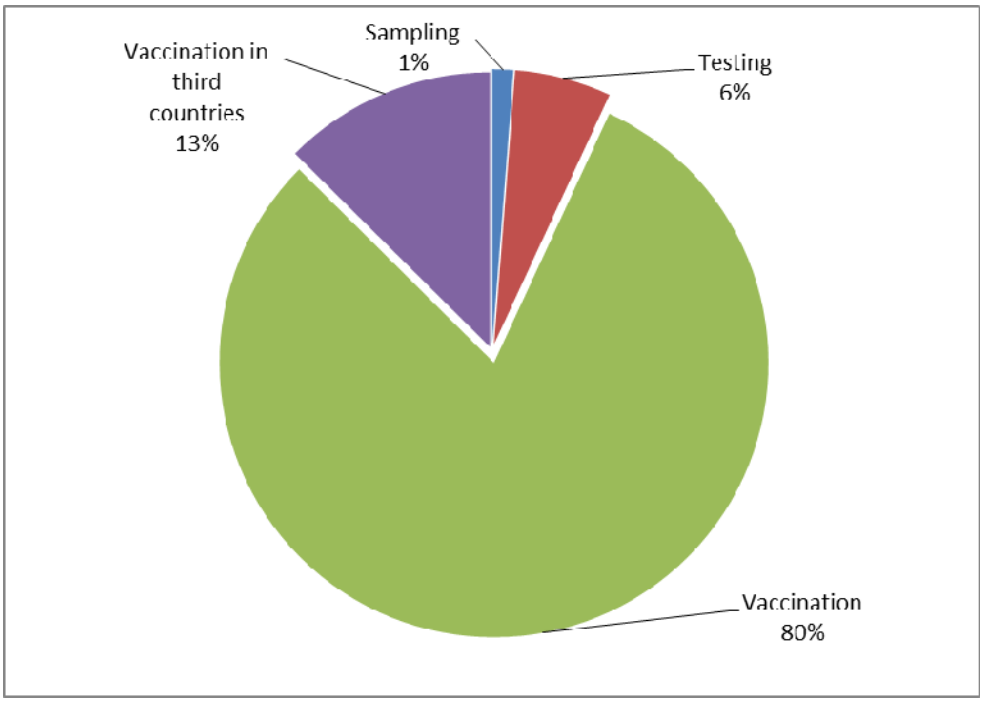
Over the period under review, 15 MSs benefited from funding for rabies programmes. The total amount of funding during the period varies between member states, according to the size of the area covered by the vaccination programme. The largest recipient is Poland with €40.1M over seven years, followed by Latvia (€6.7M), Lithuania (€6.4M), Hungary (€5.9M), Estonia (€4.9M), Bulgaria (€4.8M from 2009-2013) Slovenia (€4.5M), Slovakia (€2.7M) and Finland (€1.2M), together making up over 90% of EU contribution to rabies programmes. The Czech Republic and Germany had co-funded programmes until 2009 and Austria until 2012. Italy received co-funding from 2011, Romania in 2011 and 2013, and Greece received EU funds in 2013.

Figure 31: Evolution of EU contribution (payments) 2007-2013 to rabies programmes by member state



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Figure 32: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Zoonotic Salmonellosis

Description of the disease

Salmonellosis is caused by various *salmonella spp.* The *Salmonella* consist of a range of very closely related bacteria, capable of infecting cold and warm blooded animals as well as humans: it is an important zoonoses.
Salmonellosis not always result in clinical disease in infected animals. Infections are usually contracted from sources such as:

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.

The prevalence of the various *salmonella* subtype (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.

Salmonellosis in humans

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.

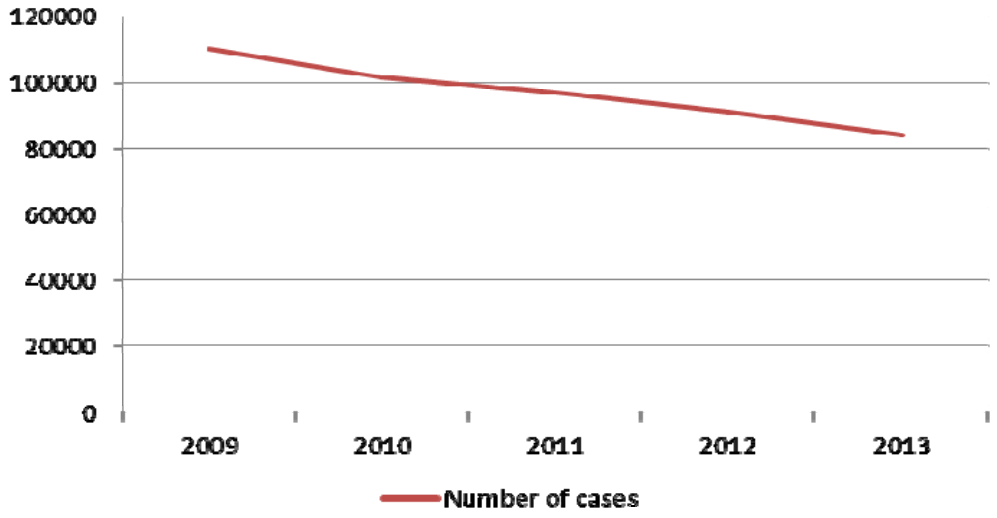
The main salmonella serovars causing human infection are: salmonella *Enteriditis*, *Typhimurium*, *Infantis* and *Virchow*. *S. Enteritidis* cases are most commonly associated with the consumption of contaminated eggs and poultry meat, while *S. Typhimurium* cases are mostly associated with the consumption 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[16]).

In **humans**, the incidence of *salmonella* has decreased annually since 2008 from about 133,258 cases to 82,694 cases in 2013. Fifty-nine fatal cases were reported by 9 MS among the 14 MSs that provided data on the outcome of their cases. This gives an EU case-fatality rate of 0.14 % among the 40,976 confirmed cases for which this information was available.

[16] 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

The decrease has been particularly evident for *S. Enteritidis*, with a reduction of reported cases of 14.1 % from 2012 to 2013; the second most common serovar, S. *Typhimurium*, showed a reduction of reported cases of 11.1 % from 2011 to 2013 **(Figure 33).**

Figure 33: Number of confirmed cases of salmonella in humans in the EU MSs (2009-2013)



European Food Safety Authority, European Centre for Disease Prevention and Control, 2015. The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2013

Epidemiological evolution 2007-2013

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/EEC20 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 2160/200321. Gradually targets for reduction of the prevalence national control programmes were introduced for different categories:

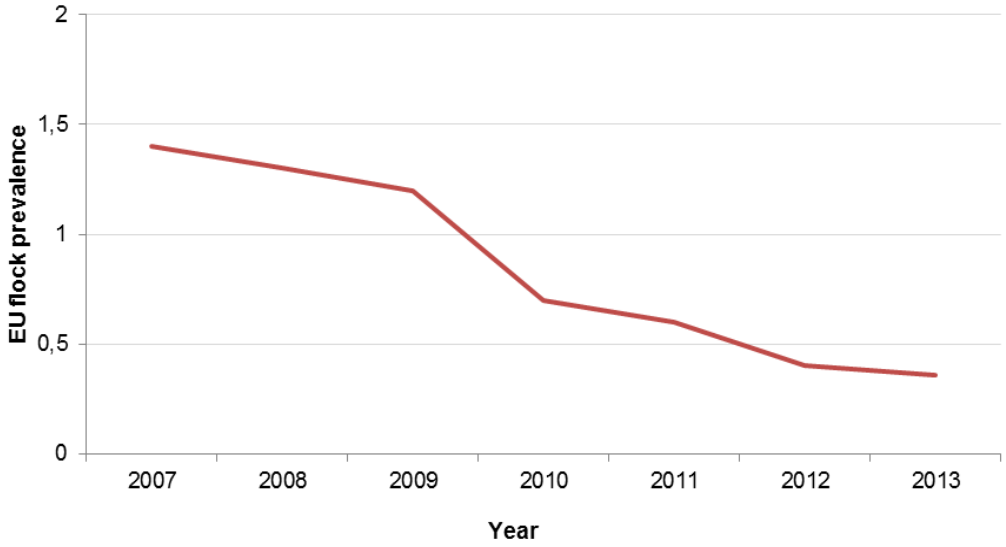
- Breeders (2007)
- Laying hens (2008)
- Broilers (2009)
- Turkeys (2010)

Vaccination against salmonellosis was also used as an additional tool. Vaccination against *Salmonella Enteritidis* was implemented in Member States with a high prevalence, in order to protect public health.

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 2013, 22 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 2013, *salmonella* was found in 1.1 % of breeding flocks in the EU at some stage during the production period, 1.6 % less than 2009. The average percentage of positive breeding flocks has moved towards 1% (**Figure 34**).

Figure 34: Evolution of prevalence of five targeted serovars in breeding flocks during the production period in the EU 2007-2013



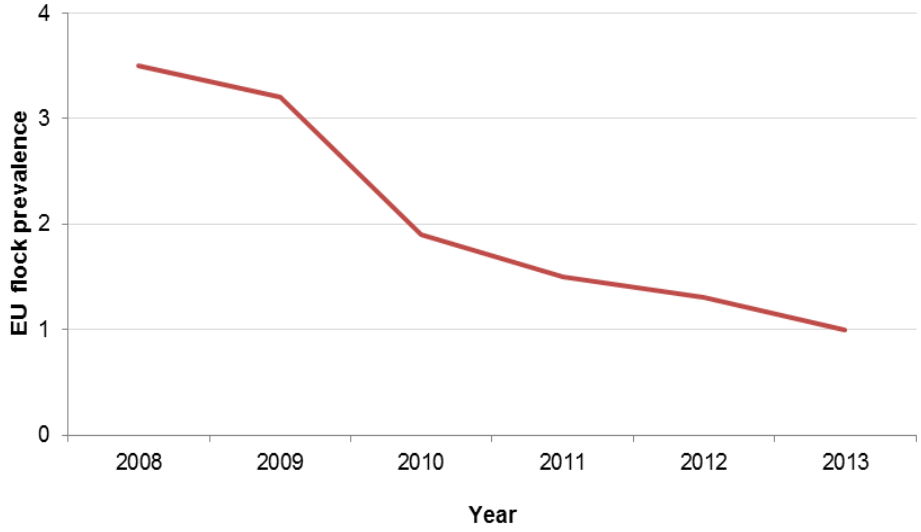
European Food Safety Authority, European Centre for Disease Prevention and Control, 2015. The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2013

In laying hen flocks (providing eggs intended for human consumption**),** since 2008, Member States implemented new *salmonell*a control programmes, in accordance with Regulation (EC) No 517/2011.

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.

Data from EFSA indicate that *Salmonella* prevalence had declined in most Member States between 2007 and 2013 (prevalence being 4,3 in 2007 and 2,6 in 2013). Overall, 27 MS and met their 2013 reduction targets. 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 35**).

Figure 35: Prevalence of the two targeted serovars in laying hen flocks during the production period (flock-based data) in the EU, 2008-2013



European Food Safety Authority, European Centre for Disease Prevention and Control, 2015. The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2013

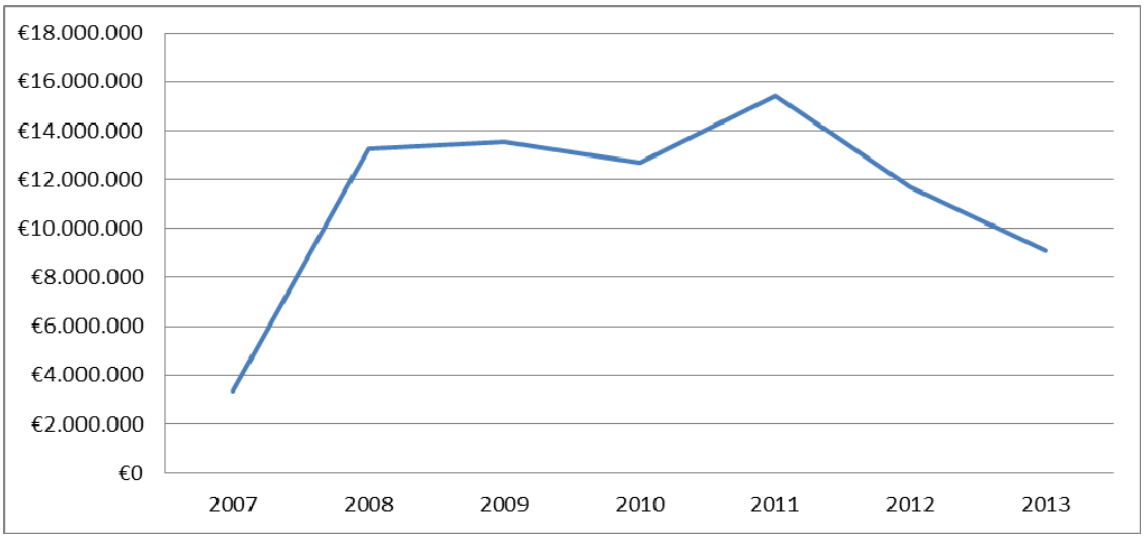
Funding

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

Salmonella programmes received just under 7% of the funds spent between 2007 and 2013, amounting to a total of €79.1M.

Co-funded measures include: bacteriological and serotyping tests in the framework of official sampling, the compensation for the culling of birds and destruction of eggs, the purchase of vaccine doses, laboratory tests to verify the efficiency of disinfection and tests for the detection of antimicrobials or bacterial growth inhibitory effect in tissues from birds from flocks tested for Salmonella.

Figure 36: EU Financial contribution (payments) 2007-2013 to salmonella programmes

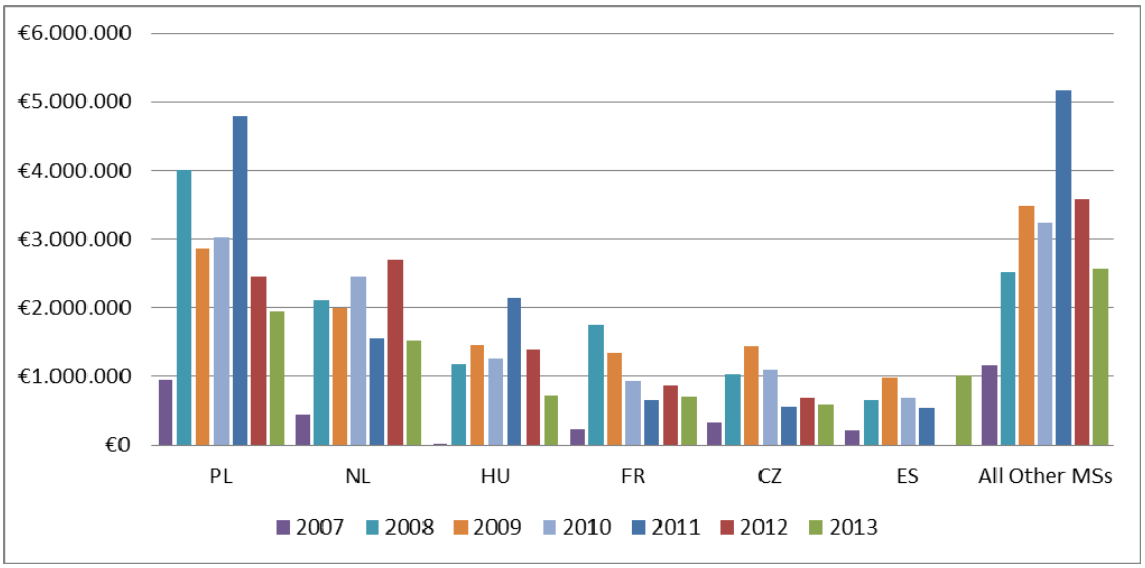


Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Over the seven year period, 26 Member States benefited from co-funding for *salmonella* programmes.

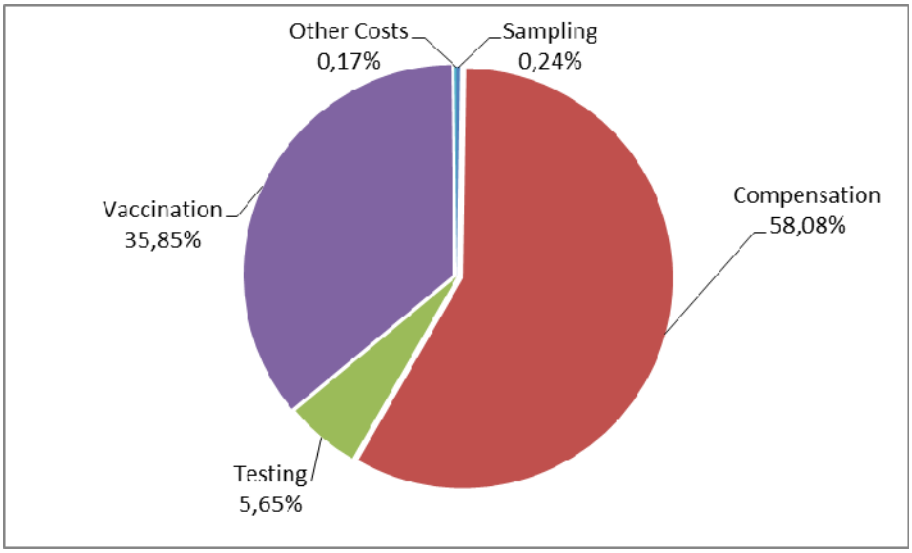
When comparing funding between EU Member States, there are significant differences. As can be expected, Member States with an intensive poultry industry have generally programmes for *salmonella* control for all poultry categories and they are the main beneficiary. **Figure 37** shows the payment trend to the main beneficiaries: Poland (€20 million), Netherlands (€13 million), Hungary (€8.2 million), France (€6.5 million), Czech Republic (€5.7 million) and Spain (€4.1 million), making up almost 75% of the total EU contribution to *salmonella* programmes in the period studied.

Figure 37: Evolution of EU contribution 2007-2013 to *Salmonella* programmes by Member State



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Figure 38: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Classical Swine Fever

Description of the disease

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, swills feeding, trucks, instruments, and humans carrying the virus. CSF does not infect humans.
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.

Classical swine fever can cause very significant losses to pig holdings, both due to morbidity and mortality as well as 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, particularly when outbreaks occur close to borders.

Effective vaccines are available for CSF since the 1980s. Vaccination was a key tool for controlling CSF in domestic pigs. As well as for wild boar by distributing vaccine baits 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 Member States due to stringent vaccination and subsequent prevention and control measures.

Because CSF affects only pigs and the environmental reservoir is limited to wild boar effective vaccines are available and eradication has proven to be possible in

many countries. When the pig sector developed into large scale farming between the 1960s and 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 and control programmes.

Epidemiological evolution 2007-2013

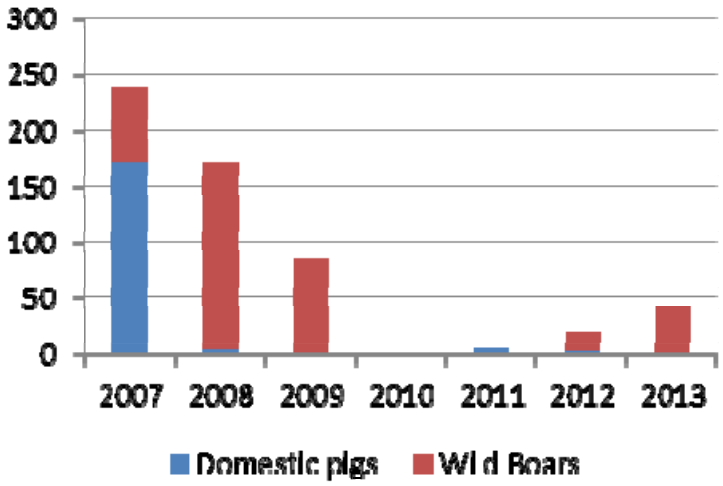
CSF had been eradicated in most EU15 Member States by 2004, except for certain areas in Germany, Luxemburg and France where the disease still occurred in wild boar. The enlargement of the EU has led to increased risks, due to CSF reservoirs in the central Balkan region, and an endemic situation of CSF 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.

Vaccination of domestic pigs was carried out for the last time in Romania in 2008.

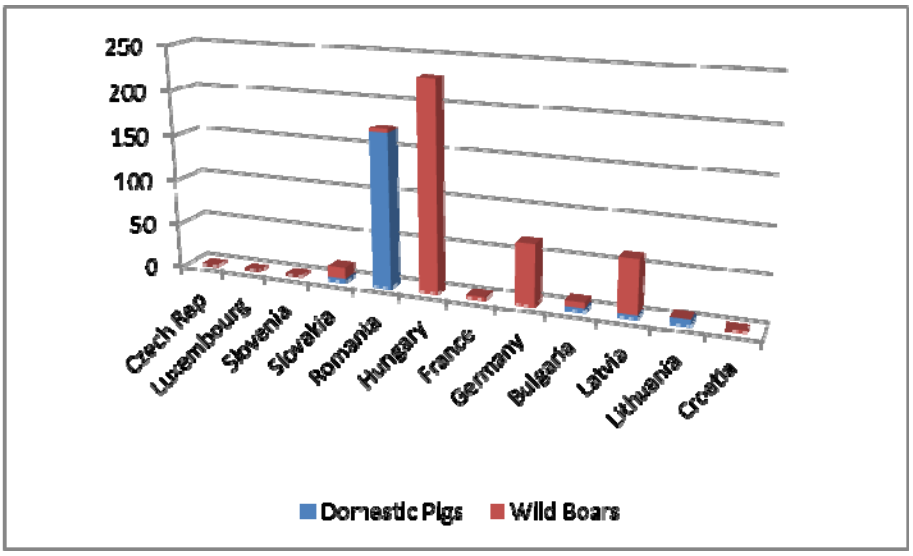
In 2009 and 2010 no outbreak in domestic pigs occurred. In May-July 2011 CSF outbreaks were reported in 5 commercial pigs in Lithuania. In 2012, three outbreaks in domestic pigs were declared by Latvia. In 2013, no case in domestic pigs was observed in the EU.

Figure 39: CSF number of outbreaks/cases, 2007 -2013



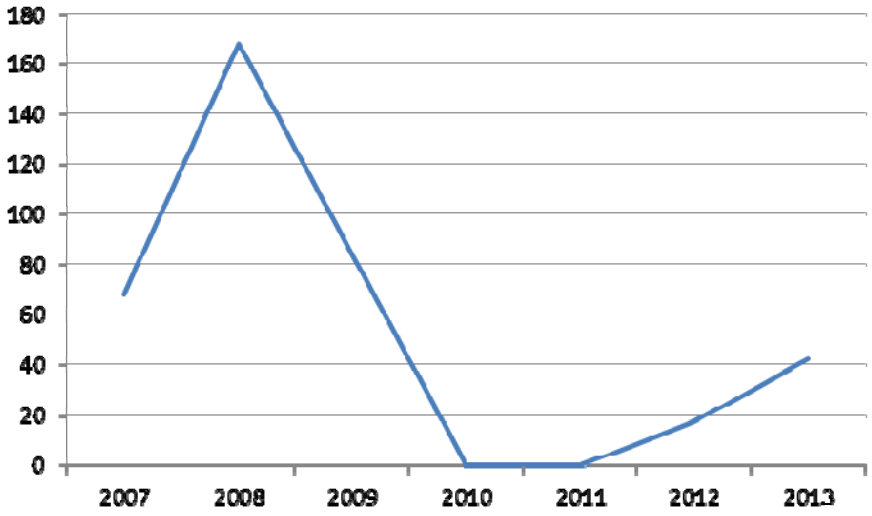
Source: Animal Disease Notification System (ADNS)

Figure 40: CSF number of outbreaks/cases by Member State, 2007 -2013



Source: Animal Disease Notification System (ADNS)

Figure 41: Number of CSF cases in wild boar (in EU) 2007-2013



Source: Animal Disease Notification System (ADNS)

The only Member State where the disease is still present in wild boards is Latvia where 17 cases occurred in 2012 and 42 in 2013, mainly concentrated in two regions

Map 5. Infected areas for Classical Swine Fever in wild boar in 2007 and 2013

2007

2013

Source: Animal Disease Notification System (ADNS)

The Commission started in 2013 to provide for financial support to Third countries neighbouring MSs for the creation of vaccination belts, through bilateral agreements between interested Member State with its respective neighbours where CSF is still a threat, in order to prevent the introduction of the disease in EU. Co-operation between Latvia and Belarus to implemt oral vaccination in wild boars started in 2013 and Belarus implemented one vaccination campaign (8 500 km2 vaccinated in the Latvian-Belarussian border).

EU financial contribution to third countries, through the programmes of the neighbouring Member States, is up 100% of the cost for vaccines and their distribution.

Funding

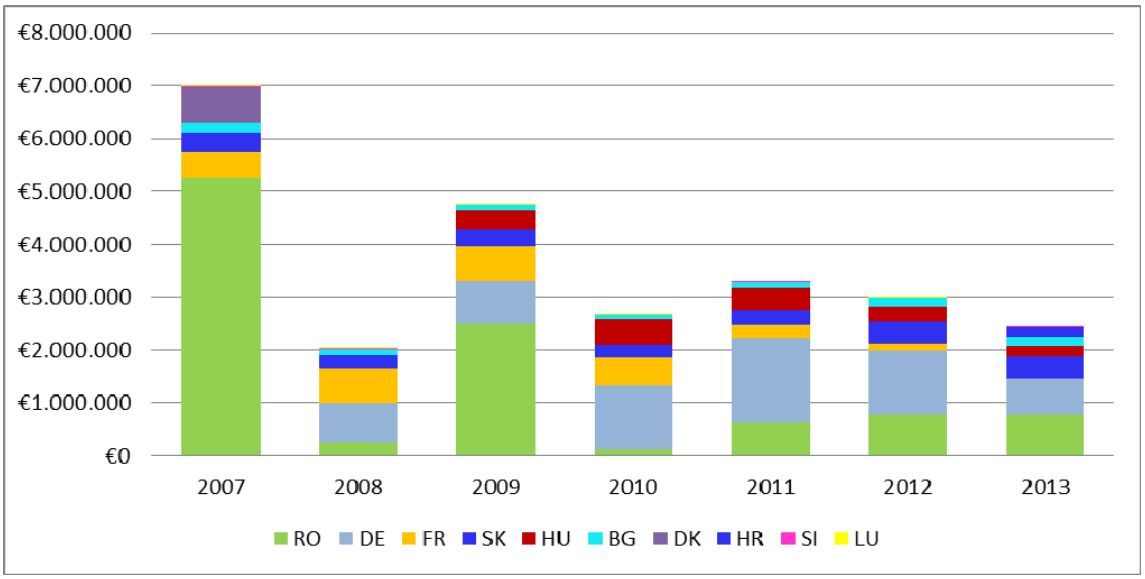
EU funding support to Member States on Classical Swine Fever

1. Annual programmes (disease present or high risk of occurrence)
    a) Sampling and testing
    b) Oral vaccination of wild boar
    c) Vaccination of domestic pigs (last in RO in 2008)

EU funding for the eradication of CSF over the studied period amounted to €25.3M. The financial contribution by the EU within the framework of the control and eradication programmes of the costs incurred by each Member State for sampling, testing (serological tests of domestic pigs and wild boar) and oral vaccination of wild boar (purchase and distribution of baits containing the vaccine).

Figure 42 shows a steady trend except in the years 2007 and 2009: From 2007, the EU started funding the newest member states, Romania and Bulgaria, where the disease was endemic mainly in the backyard pig population. In 2007 and 2009, Romania had very cost intensive programmes to control the disease.

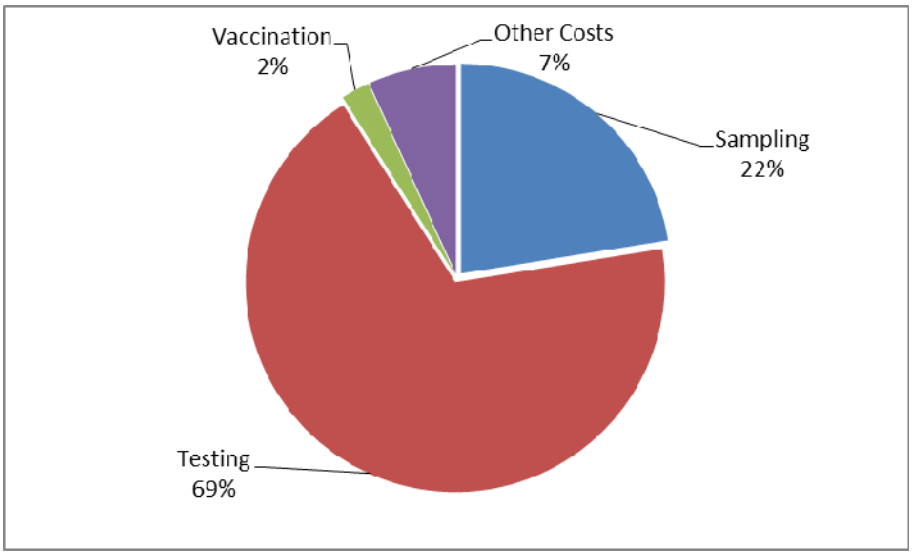
Figure 42: Evolution of EU contribution (payments) 2007-2013 to classical swine fever programmes by member state



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

The total amount of funding varied greatly between Member states due to the varying size of pig populations. The recipients of the largest amounts of funding for CSF include: Romania (€10.3M), Germany (€6.3M from 2008-2013), France (€2.7M until 2012), Slovakia (€2.3 million) and Hungary (€1.7M from 2009), making up over 90% of the CSF eradication contribution by the EU. Bulgaria and Slovenia received co-funding over the seven year period of €927,000 and €122,000, respectively. Denmark had a co-funded programme in 2007, Croatia in 2013 (first year of EU membership) and Luxembourg from 2007-2010 and in 2012.

Figure 43: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

African Swine Fever

Description of the disease

African swine fever (ASF) is a disease (not harmful to humans) caused by an enveloped DNA virus 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.

Epidemiological evolution 2007-2013

In the EU, under the period covered by this report, ASF 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. In Sardinia 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 populations (boars).

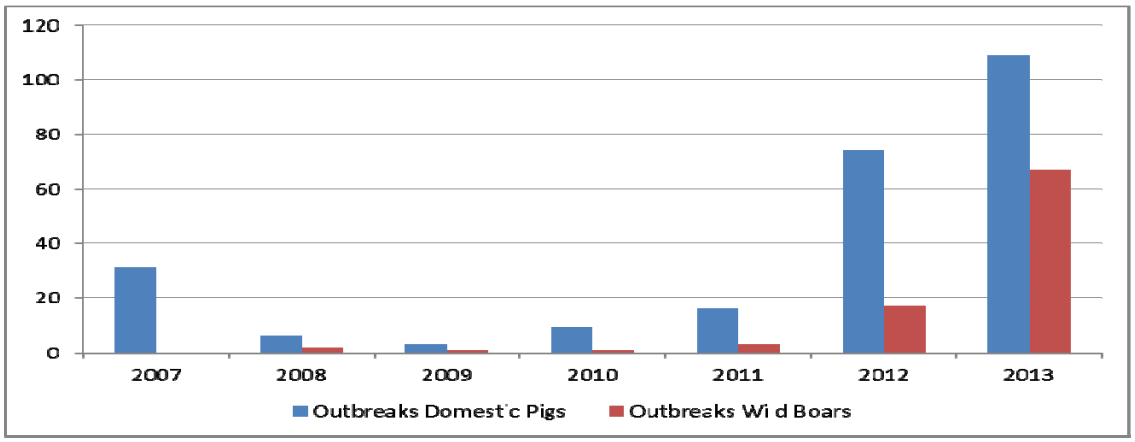
During the second half of 2011, there was a serious recrudescence of the disease, leading the EU to adopt decision number 2011/852/EU designating the whole of Sardinia as a high risk area for ASF, with restrictions on exports of pig meat and pig meat products from Sardinia.

In 2007 Sardinia had 31 outbreaks in domestic pigs and zero in wild boars while in 2013 the situation is furtherly worsened with 109 and 67 outbreaks in domestic pigs and wild boars respectively (figure 44). As shown, the situation in Sardinia is worsening, this induced the regional authority to establish special measures to defeat the disease. The reason of the worsening of the situation is due to the poor implementation of the EU co-finaced programme.

The Caucasian region has severely been affected by outbreaks of ASF. In 2007-2010 outbreaks occurred in Georgia, Armenia, Azerbaijan and Russia. During the period covered by this report, 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.

By mid-2013, following the outbreaks of ASF in Eastern neighbouring third countries bordering the EU, even stringent measures were put in place to prevent the spread and the introduction in EU. In spite of that, ASF outbreaks have been notified in 4 Eastern MS in 2014.

Figure 44: African Swine Fever outbreaks 2007-2013

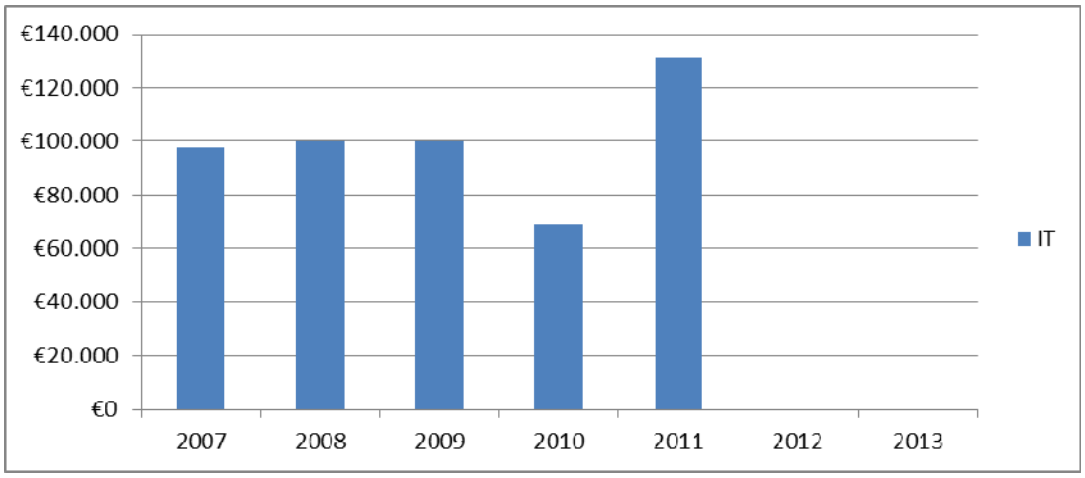


Source: Animal disease notification system (ADNS)

Funding

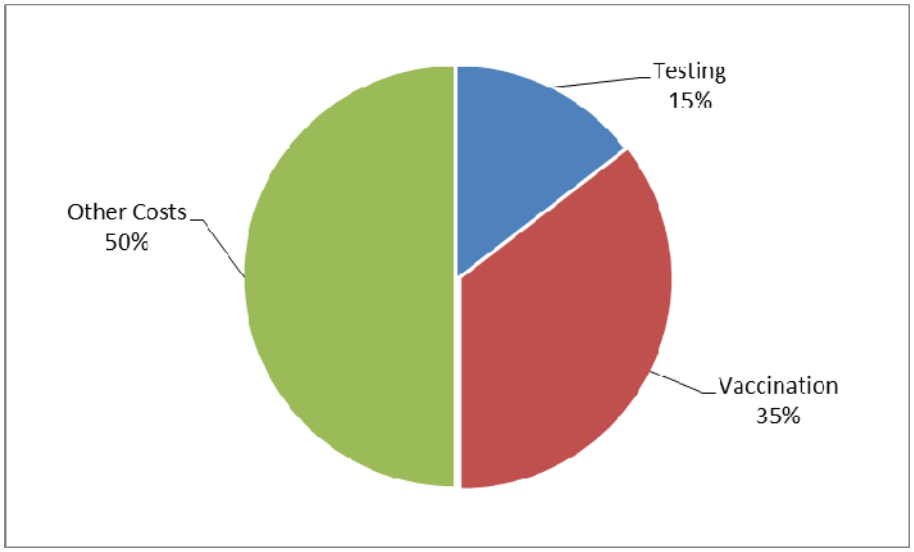
ASF programmes have been implemented in only one member state during the studied period, namely Italy. From 2007 to 2011, Italy received a total of almost €500,000 towards the cost of sampling domestic pigs and wild boar and laboratory testing. The increase in 2011 is due to the higher co-funding rate of 60% for testing. In 2012 and 2013, Italy did submit a programme for co-funding. However, the implementation of the programme was found to be inadequate and thus no EU funds were provided.

Figure 45: EU financial contribution (payments) 2007-2013 to African Swine Fever programmes



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Figure 46: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Swine Vesicular Disease

Description of the disease

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

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 SVD seldom causes mortality and usually runs a mild clinical course. Transportation 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. Moreover, vaccination is not an option for SVD control because of its similarity with foot-and-mouth disease. Hence, SVD must be eradicated promptly upon detection by culling infected pigs and the implementation of sanitation and bio-security measures.

Epidemiological evolution 2007-2013

Italy is the only EU Member State still affected, with only one outbreak in Calabria in 2013 (compared to 89 outbreaks in several regions in 2007). Central and northern Italy is 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 efforts of the programmes are bringing results as the disease has almost disappeared from the EU.

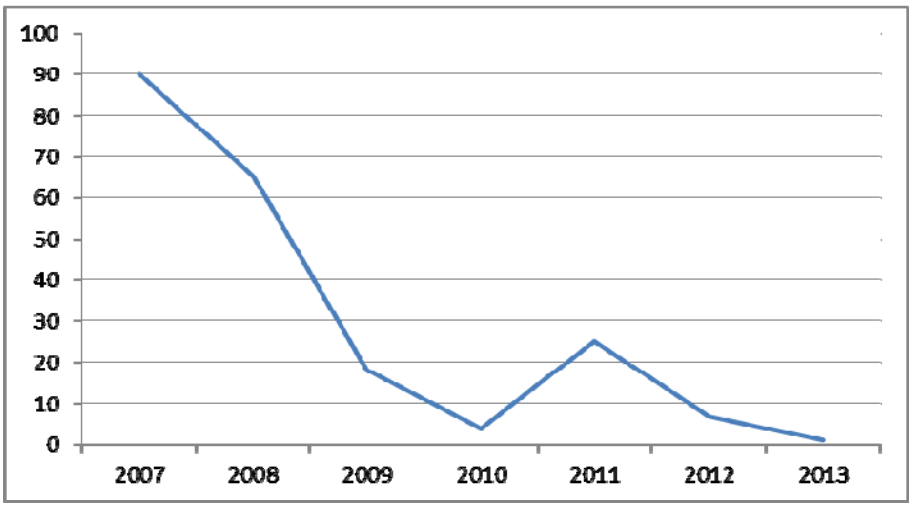
Map 6. SVD infected area in 2007 and 2013

2007

2013

Source: Animal Disease Notification Service (ADNS)

Figure 47: Outbreaks of Swine Vesicular Disease 2007-2013

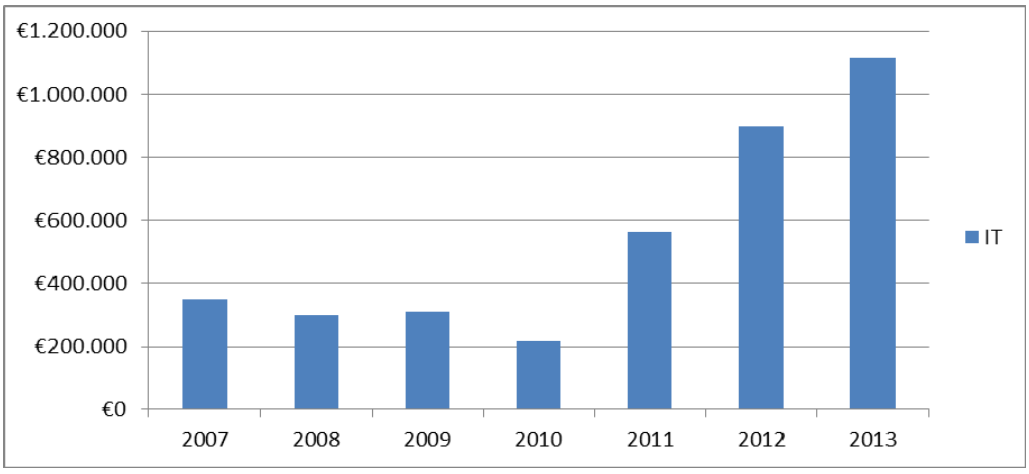


Source: Animal Disease Notification Service (ADNS)

Funding

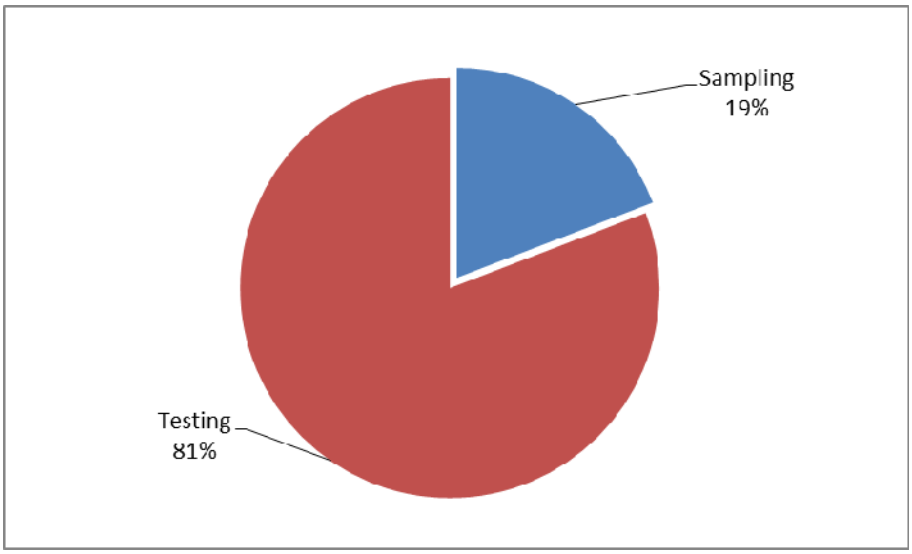
Italy is the only member state with SVD eradication and monitoring programmes co-funded by the EU in the seven year period under examination. Just under €3.8M was paid from EU funds for the costs incurred for monitoring and surveillance (sample collection) and virological, histological and serological tests. The collection of samples was added to the measures eligible for co-funding in 2011, causing the sudden increase in payments that year. The continued rise in 2012 and 2013 is explained as the EU decided to give a final financial support to get rid of the disease to Italy. This contribution should bring to an end the fight against this disease in Europe and to achieve the eradication for all the EU territory. After 2015, no further contribution will be granted for SVD.

Figure 48: EU financial contribution (payments) 2007-2013 to swine vesicular disease programmes



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

Figure 49: Breakdown of EU contribution based on 2013 allocation of funds



Source: DG SANTE G5 financial data based on annual final reports sent by the Member states to the Commission providing financial and technical information (Commission Decision 2008/940/EC)

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