



Coordinated European Animal Welfare Network (EUWelNet)

Deliverable 6

Title

Recommendations for the establishment of a coordinated European network for animal welfare

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1. Introduction

The creation of a European Centre or Laboratory for the protection and welfare of animals was first suggested in the Community Action Plan on the Protection and Welfare of Animals 2006-2010¹. The idea was further elaborated in 2009 in a report² from the European Commission to the Parliament, the Council and the European Economic and Social Committee (EESC). Accompanying this report was an Impact Assessment Report³, in which the Commission explained that the creation of a large additional independent body, like a Commission agency, would not find the necessary support from the Parliament, the EESC or Member States. In the report, the Commission therefore explored other options utilising existing bodies in order to minimise the administrative costs and consequently proposed a European Network of Reference Centres for Animal Protection and Welfare (ENRC).

The European Parliament⁴ considered that a European coordinated network for animal welfare should be set up under the existing Community or Member State institutions and that the network should designate one institution as the coordinating body.

Recently the Commission adopted a proposal to revise Regulation (EC) No 882/2004 which establishes a legislative framework for the organisation of official controls. In this proposal 'reference centres for animal welfare' are defined to support the activities of the Commission and of the Member States in relation to the application of the rules laying down welfare requirements for animals. The proposed Regulation does not specifically describe or define a coordinative structure for the reference centres for animal welfare.

In March 2010, the European Commission launched a call (SANCO 2012/10293) to support a pilot project to study the feasibility and usefulness of a network of technical resources in order to assist the competent authorities and the stakeholders in improving the implementation of the EU legislation on animal welfare through knowledge strategies.

The EUWelNet project was granted and carried out during 2013. The present text corresponds to Deliverable 6 of EUWelNet. Section 2 summarises the main achievements and lessons learned in this pilot project and Section 3 presents the consortium's recommendations for the establishment of a coordinated European network for animal welfare, henceforth called the Network. Final recommendations are then presented in Section 4.

2. Achievements and lessons learned

This section includes reflections on:

- the establishment and way of working of the EUWelNet consortium;
- the identification of bottlenecks to the implementation of EU legislation on animal welfare;
- the design and evaluation of knowledge strategies to overcome specific bottlenecks.

The consortium also outlined the role of knowledge creators⁵ in the implementation process as well

¹ Communication from the Commission to the European Parliament and Council on a Community Action Plan on the Protection and Welfare of Animals 2006-2010 (COM(2006) 13)

² Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions: Options for animal welfare labelling and the establishment of a European Network of Reference Centres for the protection and welfare of animals. COM (2009) 584 final.

³ Commission staff working document impact assessment report accompanying the report from the commission to the European Parliament, the Council, the European Economic and Social committee and the committee of the regions: Options for animal welfare labelling and the establishment of a European Network of Reference Centres for the protection and welfare of animals.

⁴ European Parliament on evaluation and assessment of the Animal Welfare Action Plan 2006-2010 (2009/2202(INI)). Committee on Agriculture and Rural Development. Rapporteur: Marit Paulsen

⁵ Knowledge creators are universities or research institutes that produce scientific or technical knowledge.

as their existing links with each other and with other important players; analysed the structure of existing European networks; and appraised the possible position of a future Network in relation to other organisations working on animal welfare (e.g. World Organization for Animal Health (**OIE**, <u>http://www.oie.int/en/</u>), the European Food Safety Authority (**EFSA**, <u>http://www.efsa.europa.eu/</u>), and the European Forum for Animal Welfare Councils (**EuroFAWC**, <u>http://www.eurofawc.com/home/1</u>)).

2.1. Establishment of an effective Network and Advisory Board

EUWelNet was built on two existing knowledge networks: the Welfare Quality Network (<u>www.welfarequalitynetwork.net</u>) and the AWARE project (<u>www.aware-welfare.eu</u>). The resultant consortium of 16 Universities and 10 research and technical Institutes from 16 different EU countries was thus based on established scientific expertise in relevant and complementary disciplines (ethology, veterinary medicine, animal production, sociology etc.), experience in knowledge transfer in education and science-society dialogue, geographical spread and a history of effective collaboration⁶. The excellent communication and collaboration between partners can be illustrated by the timely delivery of results where all tasks involved partners from at least 3 countries but often as many as 8-15 countries. Ongoing discussion and communication between partners as well as document archiving were facilitated by the use of a web-based management tool. A Coordination Team (including the work package leaders) managed progress and quality and met 5 times face-to-face as well as every 3 weeks through Skype. A General Assembly of all partners gathered twice during the lifetime of EUWelNet to inform all partners and to discuss progress.

An essential complementary component of the EUWelNet knowledge network was the Advisory Board⁷. This independent body consisted of relevant stakeholders (farmers, retailers, industry groups, competent authorities, non-governmental organisations etc.) and met twice. There was also frequent interaction and consultation between consortium partners and members of the Board, e.g. email, webtool, face-to-face. The Advisory Board enabled receipt of opinions from this wide range of stakeholders and supported the consortium in gathering necessary information and feedback. It also served to inform stakeholders about the network's activities and outputs.

2.2. Identification of difficulties and bottlenecks in the implementation of EU animal welfare legislation⁸

The process of implementation of EU legislation including animal welfare is differently organised across Member States. Consequently, national and regional laws covering the EU directives may vary considerably. Member States differ also in how they organise the enforcement and monitoring of legislation. National compliance data are not equally accessible across Europe and are difficult to compare. Also, audits performed by experts from the European Commission (Food and Veterinary Office) are only partly comparable between countries as they take place in different years. Other reports related to farm animal welfare are available in some countries. These include reports by the responsible ministry on the result of national animal welfare policies, by national animal welfare councils and animal welfare NGO's, as well as scientific reports. However, cross-border comparison remains difficult.

Stakeholder interviews conducted in EUWelNet revealed their perceptions of the main problem

⁶See EUWelNet-Deliverable 1, Section 3 and Annex 2 for a list of partners

⁷See for the Composition of the Advisory Board and code of practice in EUWelNet-Deliverable 1, Annexes 3 and 4; Reports of the two meetings between partners of EUWelNet and the Advisory Board in EUWelNet-Deliverables 2 and 3

⁸A more detailed analysis of difficulties and bottlenecks in implementation is provided in EUWelNet-Deliverable 4

areas regarding the three pieces of legislation, and where they observed knowledge gaps and problems in knowledge transfer. They repeatedly underlined the importance of collaboration between private and public actors (including knowledge creators) to facilitate implementation and enforcement. They also believe that public-private collaboration plays a crucial role in the development of other supporting practices, such as applied research, a broad dissemination of knowledge, and the provision of tailor-made information and training of target groups.

2.3. Development and evaluation of knowledge strategies to overcome specific bottlenecks in implementation⁹

The development of networks and teams of scientists and stakeholders in the various tasks of EUWelNet contributed to the establishment of a firm platform upon which a future Network can be built. EUWelNet demonstrated the value of developing different types of knowledge strategy resources (including web based tools, fact sheets, scientific networks and standard operating procedures) and the benefit of producing them in different languages. They were aimed at competent authorities, producers, veterinarians, animal welfare officers, and food business operators (see Deliverable 5). These knowledge transfer strategies were generally very well received by members of the Advisory Board and other stakeholders. Many practical solutions were provided that could support farmers to comply with legislation. Indeed the target audiences reported that the material improved their knowledge on each of the welfare issues. However, within the time frame of EUWelNet, the benefits of knowledge strategies for farmers' community in terms of the uptake of such solutions and their actual effect on animal welfare could not be addressed. Encouragingly too, the results of tests carried out during EUWelNet revealed the likely future effectiveness of the knowledge strategies. For instance, the work on the development of Standard Operating Procedures at slaughter (for the stunning of animal and the checking of their unconsciousness) suggest that practices of end users can be improved thanks to appropriate knowledge strategies.

2.4. Identification of future members and their present links

During the first meeting of the Advisory Board, it became clear that the core members of a future Network should be knowledge creators or transferors (together called knowledge providers, see box below). EUWelNet therefore surveyed knowledge providers in 16 EU countries (Annex 1) and it appeared that there is relatively strong exchange of information with end users (farmers, abattoirs) and competent authorities. Therefore, a Network of knowledge providers is likely to have great impact. There are, however, considerable differences in the strength of the links that knowledge providers maintain with end users and competent authorities. These links are generally up to four times weaker in countries with a lower Gross Domestic Product (GDP) compared to countries with a higher GDP, which may have to do with differences in resources available for collaboration. The interest in the future network is high among the knowledge providers (86%) across all 16 EU countries, independent of the average Gross Domestic Product. In general, the knowledge providers expect that a Network will importantly support knowledge creation and transfer. Given the differences in the interrelations between knowledge providers, end users and competent authorities, the Network could play a particularly important role in the countries with a lower GDP. These differences should be taken into account during the establishment of a future Network, and resources (human, financial) should be allocated according to regional needs.

⁹Extensive information on knowledge strategies tested and their evaluation is available in EUWelNet-Deliverable 5

	Definition	Examples		
Knowledge	Actors that produce scientific or	Universities, research institutes		
creators	technical knowledge			
Knowledge	Actors that transfer the knowledge to end	Extension services, training		
transferors	users	institutions		
In some cases, knowledge creators can also be knowledge transferors (e.g. scientists carrying out				
research and disseminating outcomes, technical institutes producing technical knowledge and				
running training courses)				

2.5. Analysis of existing European networks

Position of a future Network in relation to existing organisations

Interviews were carried out with key representatives of OIE, EFSA, and EuroFAWC in order to identify and thus avoid any possible duplication of effort between their activities and those of a future Network (Annex 2).

- EFSA provides scientific advice to support informed risk management decisions regarding policies and legislation. The Network could support these policies and legislation especially in the steps of implementation and monitoring of impact as well as by helping to identify hazards (Fig 1). EFSA proposes to develop procedures to monitor hazards which could in turn inform the Network's activities.
- The OIE is the WTO reference organisation for standards relating to animal health and zoonoses to be used in their 178 member countries. Furthermore in 2003 non-binding animal welfare recommendations were adopted. The OIE Guiding Principles on Animal Welfare were included in the Terrestrial Code in 2004. OIE perceives that it can benefit from the combined European expertise and knowledge. In turn, the OIE can expand European initiatives at a global level (amplification role). EUWelNet envisages a valuable exchange of knowledge between the European Commission, Member States, the OIE and a future Network.
- EuroFAWC provides a platform for informed debate on animal welfare issues, for sharing information and views, and providing a network for members of the Animal Welfare Councils throughout Europe. A future Network could contribute importantly to the transfer and exchange of knowledge.

The efforts of a future Network could complement those of the organisations mentioned above. Its position with regard to these organisations is summarised on Figure 1.



Figure 1: Position of the Network in relation to other actors in the animal welfare field

Analysis of the structure and functioning of existing European networks

Twelve international networks in Europe (or further afield) were studied to gain inspiration for the organisation of a future Network. Their remit regarding animal welfare issues was assessed using 7 criteria and their structure and functioning was evaluated using 15 criteria (see Annex 3 for a description of the process and the criteria). The highest scores were given to the European Network for Rural Development (ENRD, <u>http://enrd.ec.europa.eu/</u>), the Network for the Implementation of Environment Policy (IMPEL, <u>http://impel.eu/</u>), the OIE, the European Centre for Disease Prevention and Control (ECDC, <u>http://www.ecdc.europa.eu/en/Pages/home.aspx</u>)), EFSA (<u>http://www.efsa.europa.eu/</u>), and the European Innovation Partnership (EIP, <u>http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=eip</u>). These organisations served as inspiration to build scenarios for a future animal welfare Network (see Section 3.4).

3. Recommendations for a future Network

This section outlines the recommendations that EUWelNet formulated for the mission and objectives, operational principles, activities, membership and organisational structure of a future Network. The recommendations are founded on the outcomes of specific tasks carried out in EUWelNet, discussions with the Advisory Board, and intensive exchanges within the Coordination Team and with main project partners.

3.1. Mission, ways of working and operational principles of the future Network

Mission

The responses to the knowledge strategies developed within the EUWelNet project, and directed

at competent authorities and other stakeholders, suggest that such strategies could play a significant role in overcoming difficulties and bottlenecks in the implementation of EU animal welfare legislation. It also provided proof of principle that the efforts of a pan European Network of knowledge providers (see 2.4) can be successfully coordinated to share knowledge and technical expertise and to provide effective knowledge strategies.

Clearly, the goal of EU animal welfare legislation is to safeguard the welfare of animals, to ensure a level playing field between business operators and to create confidence for EU consumers concerning the welfare standards implemented. Thus the mission of a future Coordinated European Animal Welfare Network should be to contribute to safeguarding the welfare of animals in Europe by supporting competent authorities and other stakeholders in the implementation of EU legislation.

More specific objectives can be described as follows:

- 1- To facilitate the consistent implementation of EU legislation by:
 - identifying difficulties and bottlenecks as well as related risks for animal welfare;
 - developing knowledge strategies to overcome difficulties and bottlenecks and to assist Member States with implementation of legislation;
 - assisting Member States' competent authorities in developing harmonised tools to implement animal welfare legislation;
 - designing and conducting training courses for staff of competent authorities and experts from third countries.
- 2- To conduct and/or coordinate studies on the welfare status of animals, on methods and indicators to assess welfare and on welfare improvement strategies.
- 3- To transfer the knowledge to stakeholders by:
 - increasing stakeholders' awareness, engagement and collaboration in addressing animal welfare issues, with particular focus on primary stakeholders (e.g., farmers in the case of farm animals);
 - building structures and processes to actively share knowledge and expertise related to the implementation of EU legislation;
 - providing scientific and technical advice to national support bodies on animal welfare risks and indicators as well as on best practices to alleviate or resolve welfare problems;
 - disseminating research findings and technical innovations.

Ways of working

- A future Network would stimulate an open and collaborative attitude between members towards realising common aims rather than members striving independently, competing (possibly unnecessarily) with each other, duplicating research and making inefficient use of resources. In this context the role of a 'General Assembly' where all partners meet could be further formalised as a platform for discussion and strategic decision making.
- The integral application, use and maintenance of a web based communication and management platform is essential.
- Procedures and structures for prioritisation and distribution of efforts as well as accountability and reporting have to be clearly defined for a future Network.
- An external, complementary Advisory Board should be included in a future Network.
- A future Network must establish a communication/dissemination system that ensures the effective flow of information between the European Commission, the Network and other stakeholders. Innovative strategies developed by users can thus also be taken on board.

Operational principles

In achieving its objectives, it is recommended that a future Network should be guided by the following operational principles:

- The activities of the Network should take an evidence based approach and build on scientific and technical expertise on animal welfare, taking account of political, economic, social and cultural factors as well the structure and nature of the related industry and markets.
- The activities of the Network should be timely, e.g. already during the preparation of new legislation the Network provides information and strategies to facilitate the smooth implementation of the legislation.
- The Network should preferably take a bottom-up approach especially by facilitating the collection and dissemination of information from farmers on existing and proposed welfare legislation.
- The Network should encourage public private collaboration as a major component of successful implementation.
- The Network should ensure that mechanisms (moderation, audit and validation) are in place to assure the quality and credibility of outcomes.
- The resources available to the Network should be allocated according to current and foreseen needs (i.e. targeted at the resolution of specific problems in implementation of legislation).
- In its operations the Network should take account of the diversity of organisational structures and management styles of competent authorities and show respect for the methods they use to implement and enforce legislation.
- The Network should understand the different approaches used by existing organisations (e.g. knowledge transfer organisations, organisations promoting animal welfare) in order to support the improvement of their effectiveness where necessary.
- Particular attention should be given to reaching small scale producers who might otherwise find it difficult to access information.
- The coordination and management of the Network should facilitate its activities and provide services for its members to help improve the overall efficiency of the Network.

3.2. Membership of a Coordinated European Animal Welfare Network

Core members of the Network should be impartial knowledge providers because they have a central role in the flow of information within the Member States, i.e. with the different animal welfare actors (competent authorities, producers, NGOs etc.) and there are already functioning networks (both formal and informal) nationally, within regions and across Europe. Two-way dialogue between knowledge providers and all animal welfare actors should be encouraged.

The membership of the Network should be flexible in order to:

- take into account new topics (the Network should be able to include new members and establish working groups to address specific tasks);
- optimise the use of expertise available throughout the Union and take account of developments of new centres of expertise;
- channel resources where they are needed according to the severity, scope and urgency of welfare issues, regional differences in implementation etc.

The European Commission adopted a proposal to revise Regulation (EC) No 882/2004 on official controls to ensure the application of food and feed law, rules on animal health and welfare. This proposal defines reference centres for animal welfare. Such reference centres would form the logical building blocks for a future animal welfare Network. The reference centres should possess a high level of scientific and technical expertise in animal welfare, including knowledge of the most recent developments in science, and international standards and practices. The reference centres

must also have appropriate resources in terms of qualified staff (in relation to animal welfare and ethics), support staff, infrastructures and equipment.

Addressing animal welfare issues requires multidisciplinary skills: veterinary sciences, epidemiology, animal welfare, social sciences, economics, ethics etc. It is not always possible for an existing organisation to provide all these skills. It is therefore suggested that a reference centre should either possess expertise in all these areas or demonstrate that it is able to mobilise related partners to collectively provide the necessary qualifications.

The future Network could then be organised around three sets of entities: a Coordinating Body, the Reference Centres and their related partners, and dedicated Working Groups. The next section proposes possible ways to organise these structures.

3.3. Scenarios proposed for the organization of a future Network

The six networks that ranked highest in the earlier analysis (see Section 2.5) were used as templates to build six scenarios for the organisation of a future Network. An additional scenario was built from discussions with the Advisory Board. These scenarios propose various organisations that include a coordinating body and reference centres (as defined in the proposal to revise Regulation (EC) No 882/2004).

For present purposes, four scenarios (1, 2, 4 and 7) and their analyses will be briefly reported here. A more extensive description of the scenario exercise is provided in Annex 4.

The four scenarios are summarised in the following table:

Scenario	Inspiring model	Organisation	Decision process
1 Central	EFSA	The coordinating body is an EU agency. There is one reference centre in each Member State, they all cover all topics.	The coordinating body leads the network. It identifies priorities and formulates strategies. It may install dedicated Working Groups for specific topics/issues. The reference centres apply the strategies.
2 Specialised	EIP	The coordinating body is a service of the Commission. There are few Reference Centres, each being specialised e.g. on a species (e.g. cattle, pigs) or on a (multi-) species issue (e.g. slaughter). Each Member State has, for each topic, a contact member that interacts with the corresponding reference centre.	The reference centres have a role in priority setting. The coordinating body has mainly a coordinating role. Contact members in Member States may perceive the decision process as steered by the Commission.
ECDC The coordinating body is a service of the Commission. There is one reference centre in each Member State, they all cover all topics.		There are a lot of exchanges between the coordinating body and reference centres so that each national reference centre has a role in priority setting. The coordinating body has a policy advisory and coordinating role. The decision process is shared between the coordinating body and the reference centres.	
7 Regional	From discussion with Advisory board	There are few regionally based reference centres (4-5 regional centres, e.g. 1 East, 1 North, 1 South, 1 West, 1 Central Europe). They work with regional partners. The coordinating body includes representatives of the Commission and each reference centre.	Priorities and strategies are decided within the coordinating body and thus shared between the Commission and the reference centres.

A cost/benefit-type analysis of each scenario was carried out, where costs and benefits were expressed in terms of weaknesses and strengths. Using this approach the strengths and weaknesses of each structure were assessed for each of five evaluation criteria: Economic, Political, Social, Organisational, and Technical. The full analysis of each scenario's strengths and weaknesses for the five evaluation criteria is provided in Annex 4.

The annual budget necessary to run the Network was then calculated for each scenario. We used working hypotheses for the cost of staff, meetings etc. These are detailed in annex 4, Table 6. Then for each scenario costs were estimated for the activities of the coordinating body, for running the network (including travels of people from reference centres), and for specific tasks to be addressed by the network (e.g. in case of a new problem for the implementation of a directive, a specific task can be decided) (see detailed descriptions of the costs of each scenario in annex 4). The major annual costs associated with each of these scenarios were then estimated as follows:

	Scenario 1	Scenario 2	Scenario 4	Scenario 7
	central	specialised	distributed	regional
Coordination	5,046,500	1,037,500	1,205,500	1,037,500
Network (reference centres)	0	4,660,000	3,490,000	4,544,500
Tasks	1,600,000	1,600,000	1,600,000	1,600,000
TOTAL	6,646,500	7,297,500	6,295,500	7,182,000

Each scenario has its advantages and limitations:

- Scenario 1 (central) describes a centralised organisation that aims for a high level of harmonisation between Member States in their identification of compliance problems and sharing of knowledge. However, national reference centres would have limited involvement and this would not favour the ownership of animal welfare legislation by national stakeholders. Scenario 1 offers strength (high harmonisation) and also a large weakness (low ownership by actors in Member States) which made us attributing a low rank to this scenario.
- Scenario 2 (specialised) would certainly be efficient in terms of centralising and disseminating the knowledge regarding specific topics. However this scenario is again rather centralised as reference centres may be perceived as direct arms of the Commission, with little involvement of contact members in Member States and stakeholders. In addition, this organisation is not flexible since a new topic would require a new reference centre to be established. For its overall efficiency, Scenario 2 was preferred to Scenario 1.
- In Scenario 4 (distributed) National reference centres play a major role. This is likely to improve local ownership of activities. However, the high number of reference centres (28) will make the coordination rather difficult. There is a risk that, ultimately, each national reference centre develops its own strategy with little exchange with the others. Then the benefits of the network may be limited. The strengths and weaknesses of this scenario are opposite to those of Scenario 1 (high harmonisation, low ownership of actors in Member States). We thus attributed the same rank to these two scenarios.
- Scenario 7 (regional) offers the potential for national partners to contribute to the Network through the regional reference centres. Although it will still be a challenge to effectively transfer knowledge to and from all 28 Member States, it reduces the difficulties associated with coordination seen in Scenario 4. This scenario seems to offer a good balance between local initiatives (based around regional reference centres) and the needs of coordination. Networking within regions would facilitate a good level of trust and confidence from users of the Network and the engagement of national stakeholders. Collaborations between regional reference centres is essential to help capacity building in regions that at present do not have a lot of expertise on animal welfare. Scenario 7 seems to offer the best compromise between harmonization / trust and confidence / capacity building. It was thus ranked highest.

The costs of establishing and maintaining Scenarios 2 and 7 would be higher than those needed for Scenarios 1 and 4. The costs of Scenarios 1 and 2 should be covered essentially by the EU because they are very much centralised whereas those of Scenarios 4 and 7 could be partly covered by Member States, since these would play a more active role in the organisation.

In conclusion, the above scenarios were ranked according to their perceived strengths and weaknesses (see above). The lowest ranks were attributed to Scenarios 1 (central) and 4 (distributed) and the highest ranks to Scenarios 2 (specialised) and 7 (regional). Scenario 2 is likely to be the most efficient but Scenario 7 offers the best compromise between harmonisation and trust, and confidence and capacity building. Scenario 7 may also prove to be less expensive for the EU. In order to combine the advantages of scenarios 2 and 7 we recommend the adoption of Scenario 7 (regional) as a basic structure but with the incorporation of a more specialised approach. In this case, while each regional reference centre would cover all subjects, they could each also specialise in a specific topic.

3.4. Activities

The EUWelNet pilot project identified three key types of activity for a future Network. These are briefly described below.

Gathering information to identify problem areas and propose work plans

In order to direct and prioritise the activities of the Network a key requirement is the identification of specific bottlenecks and difficulties in the different animal sectors that hamper the implementation of legislation.. This information should be placed in the context of the diversity among producers and regions.

The coordinating body of the Network will direct the gathering and analysis of information collected at national or regional level as well as information produced by the Commission and/or communicated by the Advisory Board of the Network or other actors. Thus, several sources of information will be used for the continuous surveillance of implementation bottlenecks and welfare status, including national inspection reports and European FVO audits as well as other reports on the state of animal welfare that may be produced in some Member States by responsible ministries, NGOs, animal welfare councils and scientists. Regular contact with the above actors in the Member States will improve overall understanding of their perceived bottlenecks and knowledge gaps. Furthermore, dedicated surveys, questionnaires and interviews conducted by the Network will greatly help to understand the problem areas at grass roots level. Blending the collection of existing information with proactive inventorisation of bottlenecks and problems experienced by end users (farmers, abattoirs, transporters, competent authorities) is especially important in countries with few networks of public-private collaboration and where knowledge institutes have weaker relations with the end users (see Annex 5 for the definition of the most efficient ways to identify and monitor difficulties and bottlenecks in the implementation of EU animal welfare legislation).

The coordinating body will use the gathered information to make proposals as to what problem areas should be prioritised and propose related dedicated work plans for the Network. A work plan may include further action to gather more detailed information regarding the problem and its possible mitigation through tailored knowledge strategies as well as their dissemination and evaluation (see next section). For example, a strategy could be developed to facilitate the implementation of a specific directive or proposed legislation. Dedicated Working Groups (with members chosen according to expertise and regional balance) may be involved in specific tasks in the work plan.

Apart from guiding Network activities, the production of descriptive statistics at EU level could be used to benchmark regional, national or farm levels of specific welfare problems. Thus, if the prevalence of a particular problem in Europe is for instance 10% then areas where it exceeds this level may be targeted for specific action to reduce the problem.

The Network should also work towards an optimisation and harmonisation of data collection across Member States, and the inclusion of other issues such as sustainability, production costs, profitability etc. in order to allow consideration of animal welfare in a broader techno-economic context, and thereby facilitate the implementation of welfare measures.

Sharing knowledge and producing education and information materials to overcome identified problems

The knowledge transfer strategies developed in EUWelNet (e-learning, webtool, standard operating procedures, training, fact sheets) were well received by end users and by the project's Advisory Board. Their successful development by an extensive network of knowledge providers demonstrates proof of principle for the value of a network in sharing knowledge and helping to solve specific problems. This achievement provides a firm platform for a very important activity of a future Network; this involves extending the range of knowledge strategies used as well as the numbers of problems and species addressed.

Using processes and formats like the ones developed and validated in EUWelNet the Network will collect and share available knowledge and expertise regarding for instance: a) why a particular piece of legislation is likely to improve the animals' welfare (e.g. why group housing is better for sow welfare), b) how it might be best implemented in practice (e.g. type of manipulable material for pigs) and c) the link between the welfare improvements and likely economic, husbandry and other benefits of implementation (e.g. reduced veterinary costs, increased product quality).

More specifically, knowledge will be gathered through literature reviews, expert meetings, workshops and group discussions, regular contact with other knowledge networks, authorities, relevant organisations, stakeholders and the Network's Advisory Board. In addition to scientific knowledge examples of other material include best practices, training formulas and material, guidelines for implementation of specific legislation, photographs, audio-visual resources etc.

The gathered knowledge will be synthesised into clear, easily understandable formats for end users like, but not limited to, the ones used in EUWelNet (see 2.3). All material will need to be updated on a regular basis and preferably made available in a variety of languages.

Of course, this knowledge must be easily accessible to stakeholders so the future Network must also focus on its effective dissemination (see below).

Ensuring dissemination and exchange of knowledge

The Network will make its gathered collective knowledge and expertise available in two main ways. Firstly, the Network will develop a database (warehouse) of information on bottlenecks, welfare status and problems (see previous section) and knowledge transfer material that can be easily accessed by stakeholders. The availability of this material will be widely publicised through the Network dissemination activities (e.g. website, press releases, mail shots to relevant end users such as competent authorities, farmers, NGOs etc.). This dissemination effort will be further broadened through liaison with initiatives that are already in place. These include, for example, online teaching material about animal welfare at slaughter produced by the Swedish Agricultural University, a webpage on enrichment materials (Finland), guidelines for implementing the killing regulation for cattle (France), guidelines for animals in transport by Eurogroup for Animals, a website with scientific information on how to prevent feather pecking (Lower Saxony, Germany) etc.

Secondly, using dedicated knowledge strategies the Network will proactively disseminate expert knowledge to end users and intermediates such as veterinarians, auditors and other advisors. The strategies include a range of formats appropriate to specific target audiences, e.g. interactive website, e-learning tool, training programmes to enable end users to take ownership of the knowledge, dedicated workshops to facilitate dialogue and the exchange of knowledge and practices, fact sheets, submission of articles to the farming press and industry journals etc. In addition, the Advisory Board could use their organisations and network to pass on information. Particular attention should be given to reaching small scale producers who might otherwise find it difficult to access information (Annex 6).

Knowledge transfer strategies are more likely to be appreciated and used if they increase efficiency.

For instance, mechanisms (e.g. joint training of inspectors) enabling competent authorities to share knowledge and material are seen as likely to reduce their work load and improve harmonization. Similarly, joint efforts directed at farmers, veterinarians, assessors etc. will facilitate the exchange and uptake of best practices across animal production chains in different Member States.

Subsequently, the impact of the various knowledge strategies will be evaluated at four different levels: end users' reactions, their gain in knowledge, their change in behaviour and the effects on their animals' welfare.

Responsibilities for these various activities would be shared between the coordinating body, the reference centres, and the working groups (Annex 7).

4. Final conclusions and recommendations

The sustainable development of animal production requires the industry to address societal, economic and environmental concerns. In this context societal concerns about animal welfare and the demand for the correct implementation and enforcement of existing EU animal welfare legislation are important and have to be realised within economically viable and environmentally friendly production systems. Effective knowledge transfer and innovation are essential to satisfy the welfare requirements under these constraints.

EUWelNet demonstrated that a coordinated network of knowledge providers can work successfully together and deliver useful support for the implementation of European legislation on animal welfare. It proved possible to effectively identify difficulties and bottlenecks that obstruct implementation of specific pieces of legislation and to create innovative knowledge strategies to overcome them. In short, the results of this pilot project provided proof of principle for a functional Coordinated European Animal Welfare Network.

A future Network based on this concept could fulfil a wider role supporting knowledge exchange and common investment in knowledge production among key actors and agencies across the European food-chain (e.g. knowledge providers, governmental authorities, industry, NGOs etc.). Such a Network could also fulfil the role of a think tank and facilitator of collaboration where the inclusion of state of the art technical and scientific expertise functions as a catalyst for innovation. This might not only improve animal welfare but could also enhance performance and product quality in certain situations (e.g. through lowering stress and strengthening immune competence), thereby increasing the competitiveness of European animal producers.

In view of the outcomes of the EUWelNet project and the additional advantages outlined here, the consortium and its Advisory Board recommend that such a Network should be established with a mission to contribute to safeguarding the welfare of animals in Europe by supporting competent authorities and other stakeholders in the implementation of EU legislation.

Some conclusions, considerations and recommendations for a future Network are briefly presented below.

An organisation that encourages trust and confidence

Effective collaboration and knowledge sharing requires trust and confidence. A regional structure of the Network (regional reference centres and associated partners) would reduce language barriers, and enable regional and cultural differences to be taken into account thereby supporting the development of trust among relevant actors and agencies in each region. Regional reference centres should cover all topics (species or issues) but may be specialised in a given topic due to regional circumstances. A regional organisation runs the risk of fragmentation and isolation so inter-regional communication and collaboration will be essential.

The Network must be seen by stakeholders to be independent and impartial before it can gain their trust and confidence. Therefore, partners must demonstrate high competence in animal welfare (e.g. publication record, research impact, educational performance, evidence of networking and

leadership) and impartiality. Partners should also have no conflicts of interest but should demonstrate awareness of industry problems and requirements.

Regular interaction with the Advisory Board and intensive participation of other stakeholders in the Network's activities would help ensure transparency in its organisation and operations.

Knowledge exchange: understanding the why and how

The implementation and enforcement of EU animal welfare legislation would be improved through the dissemination of technical and scientific knowledge that elucidates the purpose of legislation and also gives insight into the benefits it produces for animals and producers as well as clearly explaining how to implement it. Knowledge strategies should ideally encourage two-way dialogue (between competent authorities and producers) and the exchange of practices and experiences.

Cross-border exchange of knowledge on the why and how of official inspection practices (such as indicators used, measurements, thresholds for compliance) would help to guarantee a uniform understanding of the legislation, harmonise monitoring and enforcement and also increase the comparability of inspection data across Europe.

Knowledge exchange: top-down, bottom up and horizontal

While focusing on knowledge exchange and dissemination the Network should also support the development of links between all actors and agencies engaged in animal welfare at all levels. For this purpose the Network needs to encourage and maintain multiple flows of communication such as:

- Bottom-up communication: the Network needs to actively engage stakeholders (such as farmers, inspectors, competent authorities) to inform the Network about the problems they experience in practice.
- Top-down communication: the Network will provide stakeholders with dedicated knowledge strategies such as training programmes and materials, best practice tools etc.
- Horizontal communication: this refers to collaboration within the Network and includes not only knowledge providers but also stakeholders participating in specific Network tasks.

5. Annex 1: Identification of 'animal welfare players', their links and their level of interest in a Coordinated European Animal Welfare Network (Task 4.1)

Task 4.1 of the EUWelNet project aimed at:

- Identifying the key actors in the field of animal welfare legislation in a number of Member States;
- Assessing the links between these actors and farm animal welfare players (and hence between knowledge institutes, Competent Authorities and the farming community);
- Recommending possible members of a Coordinated European Animal Welfare Network as well as the difficulties the Commission may face when establishing such a network (e.g. lack of partners in some member states).

Task 4.1 made use of the information collected in Task 2.1. It then focused on assessing the strength of the information flow between farm animal welfare actors in the 16 countries of the EUWelNet consortium. In doing so it considered five categories of actors:

- A- Competent Authorities;
- B- Controlling agencies and bodies;
- C- Organisations providing training, advice, knowledge transfer;
- D- Research organizations that generate knowledge;
- E- Farmers and slaughterhouses.

A questionnaire was sent to knowledge providers (C and D actors) in the same 16 countries, including members of the EUWelNet team and organisations engaged in the AWARE project (<u>http://www.aware-eu.net/</u>, coord. M. Spinka).

Data collection was organized as follows:

- Data were collected using an electronic questionnaire (Monkey survey);
- The questionnaire included questions on the exchange of information about the three pieces of EU legislation studied in EUWelNet as well as general collaboration on farm animal welfare;
- The questionnaire addressed knowledge providers, (i.e. universities and research institutions active in the field of farm animal welfare), in the 16 EU countries;
- The answers were compiled at country and institutional level, differentiating between the three pieces of legislation.

One hundred and thirty three responses were received from 81 organisations in the 16 countries (Table below).

The results can be summarised as follows:

- 87% of respondents were very interested in participating in the future Network.
- Knowledge providers maintained active and passive relations with knowledge transferors, Competent Authorities, and the farming community. Knowledge creators were actively engaged with the farming community, a bit less with Competent Authorities and least with knowledge transferors
- The strength of links between the actors is positively related to the Gross Domestic Product (GDP) of a country; there is no relation with the size of a country (Figure below).
- Of the three pieces of legislation , information flow was weakest for the broiler directive.

Table: List of respondents

No.	Country	website_unified	Institution
1	Austria	www.boku.ac.at	University of Natural Resources and Life Sciences
2	Austria	www.raumberg-gumpenstein.at	LFZ Raumberg-Gumpenstein
3	Austria	www.vetmeduni.ac.at	Vetmeduni Vienna
4	Belgium	www.hub-kaho.be	KAHO Sint-Lieven
5	Belgium	www.ilvo.vlaanderen.be	Institute for Agriculture and Fisheries
6	Belgium	www.kuleuven.be	Thomas More/KU Leuven
7	Belgium	www.ugent.be	University of Gent
8	Czechia	www.czu.cz	Czech University of Life Sciences in Prague
9	Czechia	www.vfu.cz	University of Veterinary and Pharmaceutical
			Sciences in Brno
10	Czechia	www.vuzv.cz	Institute of Animal Science Prague
11	Estonia	www.agri.ee	Estonian Ministry of Agriculture
12	Estonia	www.emu.ee	Estonian University of Life Sciences
13	France	www.agroparistech.fr	AgroParisTech
14	France	www.ifip.asso.fr	IFIP Institut du Porc
15	France	www.inra.fr	Institut National de la Recherche Agronomique
17	France	www.isa-lille.fr	Groupe ISA Lille
18	France	www.itavi.asso.fr	Institute Technique d'Aviculture
19	France	www.vetagro-sup.fr	VetAgro Sup
20	Germany	www.agrar.hu-berlin.de	Humboldt Universität Berlin
21	Germany	www.auf.uni-rostock.de	University Rostock, Faculty of Agriculture
22	Germany	www.fbn-dummerstorf.de	Leibniz-Institute for Farm-Animal Biology
23	Germany	www.fli.bund.de	Friedrich-Loeffler-Institute
24	Germany	www.uni-hohenheim.de	Universität Hohenheim
25	Germany	www.uni-kassel.de	University of Kassel
26	Greece	www.aua.gr	Agricultural University of Athens
27	Greece	www.hva.gr	Hellenic Veterinary Assosiation
28	Greece	www.hvms.gr	Hellenic Veterinary Medical Society
29	Greece	www.uth.gr	University of Thessaly
30	Hungary	www.atk.hu	Research Institute for Animal Breeding
31	Hungary	www.genmegorzes.hu	Centre for Farm Animal Gene Conservation
32	Hungary	www.ke.hu	Kaposvár University
33	Hungary	www.mgk.u-szeged.hu	University of Szeged
34	Hungary	www.mkk.szie.hu	Szent István University
35	Hungary	www.szie.hu	Szent István University
36	Hungary	www.unideb.hu	University of Debrecen
37	Hungary	www.univet.hu	Faculty of Veterinary Science, Budapest University
38	Italy	www.agraria.unina.it	Universita degli Studii di Napoli
39	Italy	www.crpa.it	Centro Ricerche Produzioni Animali CRPA
40	Italy	www.entecra.it	Consiglio per la Ricerca e la Sperimenta
41	Italy	www.izs.it	Istituto Zooprofilattico Sperimentale
42	Italy	www.unibo.it	Universita di Bologna
43	Italy	www.unimi.it	Universita degli Studi di Milano
44	Italy	www.unipr.it	University of Parma
45	Netherlands	www.hashogeschool.nl	HAS University of Applied Sciences

No.	Country	website_unified	Institution
46	Netherlands	www.uu.nl	Utrecht University
47	Netherlands	www.wageningenur.nl	Wageningen University
48	Netherlands	www.wur.nl	Wageningen University
49	Poland	www.polsus.pl	Polish Pig Breeders and Producers Association
50	Poland	www.psych.pan.pl	Institute of Psychology, Polish Academy of Sciences
51	Poland	www.sggw.pl	Warsaw University of Life Sciences
52	Poland	www.up.wroc.pl	Wroclaw University of Environmental and Life Sciences
53	Poland	www.ur.krakow.pl	University of Agriculture in Krakow
54	Poland	www.uwm.edu.pl	University of Warmia and Mazury in Olsztyn
55	Romania	http://geneticabovine-ar.ro	Research and Development Station for Bovines in Arad
56	Romania	http://scdcoc.ro	Sheep and Goats Research and Development Station,
			Caras - Severin
57	Romania	http://usab-tm.ro/	Banat's University of Agricultural Sciences
58	Romania	www.spiruharet.ro	Faculty of Veterinary Medicine, Spiru Haret University
59	Romania	www.usamvbt.ro	Banat's University of Agricultural Sciences
60	Romania	www.usamvcluj.ro	University of Agricultural Sciences Cluj
61	Slovakia	www.cvzv.sk	Animal Production Research Centre Nitra
62	Slovakia	www.spu.sk	Slovak University of Agriculture
			Institute of Animal Biochemistry and Genetics, Slovak
63	Slovakia	www.ubgz.sav.sk	Academy of Sciences
64	Slovakia	www.uniag.sk	Slovak University of Agriculture in Nitra
65	Spain	www.irta.es	
66	Spain	www.neiker-techalia.net	Neiker-Techalia
67	Spain	www.uab.es	Universitat Autonoma de Barcelona
68	Spain	www.unizar.es	University of Zaragoza
69	Sweden	www.liu.se	Linköping University
70	Sweden	www.lnu.se	Linnaeus University
71	Sweden	www.slu.se	Swedish University of Agricultural Sciences
72	UK	www.adas.co.uk	ADAS
73	UK	www.bristol.ac.uk	University of Bristol
74	UK	www.gla.ac.uk	University of Glasgow
75	UK	www.harper-adams.ac.uk	Harper Adams University
76	UK	www.ncl.ac.uk	Newcastle University
77	UK	www.nottingham.ac.uk	University of Nottingham
78	UK	www.rspca.org.uk	Royal society for the Prevention of Cruelty on Animals
79	UK	www.ruralbusinessschool.org	Duchy College
80	UK	www.rvc.ac.uk	Royal Veterinary College
81	UK	www.sruc.ac.uk	Scotlands Rural College (SRUC)
			Centre for Animal Welfare and Anthrozoology,
82	UK	www.vet.cam.ac.uk	Cambridge University

Interest in joining a future Network is clearly high. It is also evident that links between knowledge creators and transferors have to be strengthened considerably in some countries. There is also a need to develop better links between actors across countries and production sectors (animal species). There is a clear indication the ability to maintain strong links between knowledge

institutes, Competent Authorities and farmers is influenced by the GDP of Member States. It is, hence, important to allocate resources within the network accordingly, and to ensure the establishment and consolidation of collaborative relationships between animal welfare actors where they are weak or absent.



Figure: Relation between the intensity of information transfer on animal welfare and the Gross domestic Product (GDP). AW = animal welfare

6. Annex 2: Interviews with organisations related to animal welfare

It was determined if there was potential overlap in activities between existing organisations and the future network, by interviewing key persons at OIE, EFSA, JReference Centre and EuroFAWC. A summary of these discussions is shown below.

EFSA provides independent scientific advice and technical assistance for supporting informed risk management decisions. Firstly, EFSA receives external requests from risk managers, transforms them into risk questions, and provides responses in the form of scientific advice. Secondly, it develops and implements methodologies for conducting the analysis needed for formulating scientific advice. Thirdly, EFSA provides evidence, such as data, expert opinion and published scientific information, to support the analysis. This applies to all areas of relevance for EFSA including animal welfare. The scientific advice given by EFSA supports the development of policies and legislation. The future Network could put into practice and help support the risk assessment and scientific advice provided by EFSA. For instance, regarding the implementation of Council Regulation 1099/2009, it is important to take EFSA's consideration of monitoring procedures at slaughterhouses into account in the Standard Operating Procedures to be developed by the Network (as done in EUWelNet). Extensive communication between EFSA and the future Network is thus of great importance.

OIE adopts standards to be used in the 178 member states, including standards on animal welfare. OIE benefits from the expertise available in Europe (in Member States, European Commission, EFSA, OIE Collaborating Centres). OIE requests feedback from European initiatives as that would help OIE to define standards and develop actions. In turn, the EU may benefit from the opportunity that OIE offers for expanding initiatives at the global level (amplification role). Knowledge could be exchanged between Member States, the European Commission, OIE Collaborating Centres and 'the rest of OIE'. A future Network would need to either interact with these three entities (Member States, European Commission, and OIE Collaborating centres) or include them in its network.

EuroFAWC is an association of animal welfare councils installed by national governments to give them advise. They sometimes play a more formal role in supporting implementation. EuroFAWC sees a role for a future Network on animal welfare, especially in the transfer and exchange of knowledge within a much wider and complete network than encompassed in EuroFAWC.

7. Annex 3: Analysis of existing European networks (Task 4.2)

Twelve transnational European networks were studied as models for the organisation of the Network on animal welfare. These were: the European Network for Rural Development (ENRD), the Network for the Implementation of Environment Policy (IMPEL), OIE, the <u>European Centre for</u> <u>Disease Prevention and Control (ECDC)</u>, EFSA, the European Innovation Partnership (EIP), FVO (UE), the Community Reference Laboratories, the European Labour Law Network (ELLN), the International Federation of Organic Agriculture Movements (IFOAM), the Animal Welfare Lawyers network, Better Training for Safer food (BTSF), and COST actions.

They were ranked according to 22 criteria: 7 regarding their missions (related or not to animal welfare), 15 regarding their organisation (Table below). Each criterion was attributed a certain weight based on the importance attributed to them by the EUWelNet coordination team: 8 for very important, 4 for important, 2 for moderately important and 1 for not important (but still relevant).

Criterion	Weight	
Lead institution has solely a co-ordinating role. It is not a Competent Authority	8	
Avoids duplication of work/roles (e.g. between Competent Authorities, DG-SANCO,)	4	
Networks all national and transnational organisations and stakeholder groups	4	
Cost of running the network (Upper budget limit of €5.8 million)	2	
Several sources of financial support	2	
Organisational structure can cope with the addition of new stakeholder organisations	1	
Organisational structure can cope with the addition of new members	8	
Network/organisation is capable of broadening its scope in future (e.g. future inclusion of		
zoo, companion and laboratory animals etc.)		
Organisation structure allows collaboration with non-EU members	4	
Organisation structure allows integration of private and public stakeholder groups	1	
Network can be proactive as well as reactive	8	
Monitors efficiency and efficacy of own knowledge transfer activities	4	
Relatively low administrative burden (on all parties)	2	
High level of reactivity of the network (e.g. non-compliance is rapidly detected and the	4	
network can propose and put in place a strategy to overcome the problem)		
Stimulates knowledge exchanges on the issue of animal welfare, leading to innovation	4	

 Table: Criteria to assess the functioning of existing models of pan European networks

The sum of points obtained by each model was used for ranking the models (Table below). ENRD, IMPEL, OIE, ECDC, EFSA, FVO all scored over 75 points. After a further analysis, FVO (Switzerland) was excluded because it offers services only to the Federal Department of Home Affairs of the Swiss Confederation; moreover, its structure is not adaptable for the purpose of the future Network The models provided by ENRD, IMPEL, OIE, ECDC, EFSA were chosen for elaboration of scenarios for a future Network.

Table: Sum of scores obtained by each existing model

Network	Sum of points
ENRD	106
IMPEL	101
OIE	100
ECDC	96
EFSA	76
FVO (CH)	75
EIP	74
Community Reference Laboratories	71
FVO (UE)	68
ELLN	66
IFOAM	64
Animal Welfare Lawyers	62
BTSF	62
COST	56
EuroFAWC	56

8. Annex 4: Construction and assessment of scenarios (Task 4.2)

Methods

Six existing networks were used as models to build (six) scenarios for the organisation of a future network: the European Network for Rural Development (ENRD), the Network for the Implementation of Environment Policy (IMPEL), OIE, the European Food Safety Authority (EFSA), the European Innovation Partnership (EIP), and the European Centre for disease Prevention and control (ECDC) (see Annex 3). An additional scenario based on discussion with the Advisory Board during the second Advisory Board meeting was also built. Thus, a total of 7 scenarios were designed along two main lines:

- Bottom-up versus top-down decision making on welfare problems (the approach is defined as top-down: when the coordinating body at EU level decides on priorities and strategies; the approach is defined as bottom-up when the members of the Network decide priorities and strategies).
- Organisation by species and issues versus countries and regions.

In all scenarios a Coordinating Body is defined at EU level and Reference Centres may be located in the different Member States.

A method for a cost/benefit analysis of scenarios was designed. Costs and benefits were expressed in terms of weaknesses and strengths, respectively and assessed along five criteria: Economic, Political, Social, Organisational, and Technical (Table below). This method, adapted from the PEST method¹⁰, is shown as a SWEPSOT analysis (Strengths, Weaknesses, Economic, Political, Social, Organisational, Technical) in this document.

Criterion	Meaning		
Political	Legal status of the Coordinating Body (independent/EU service) Strategy setting (centralized /decentralized) Coordinating Body/Management Board location Top-down/bottom-up decision-making approaches Direct/indirect involvement of national actors		
Economic	Cost of the Network Funding (EU/Member States)		
Social	Enabling stakeholders' trust Direct/Indirect engagement of national representatives in decision making Ability to capture cultural differences and to tailor training and information to local conditions Active/reactive engagement of national actors Emphasis on social concerns		
Organisational	Flexibility (in terms of composition, functioning, and theme covered) Effectiveness		
Technical	Level of scientific expertise Exchange of knowledge between actors		

Table: Assessment criteria for a future network on animal welfare

¹⁰ Kotler, P. (1998) Marketing Management – Analysis, Planning, Implementation, and Control, 9th Edition, Englewood Cliffs: Prentice-Hall.

Pearce, J. and Robinson, R (2005) Strategic Management, 9th Edition, New York: McGraw-Hill. Porter, M. (1985) Competitive Advantage, New York: Free Press

The annual budget necessary to run the Network was calculated for each scenario. Costs were estimated based on Civic consulting¹¹ (2009) (Table below).

1. Staff (gross salary)	Unit	Cost per unit (€)
1.1. Board Member/Senior researcher	year	100.000
1.2. Administrative staff / technician	year	50.000
1.3. Chairman / Director	year	150.000
2. Costs running network		
2.1. Travel to meetings	person / meeting	500
2.2. Subsistence & accommodation at meetings	person / meeting	500
2.3. Organisation costs of meetings		
2.3.1. Small meeting (<10 persons)	meeting	1.000
2.3.2. Medium meeting (10-40 persons)	meeting	3.000
2.3.3. Large meeting (> 40 persons)	meeting	5.000
2.4. Publication, dissemination		
2.4.1. Webtool	web	20.000
2.4.2. Brochures, printing etc	paper	20.000
2.4.3. Communication, training material	paper	15.000
3. Other costs		
3.1. Rental of offices	month	30€/m2
3.2. Overhead for rental of offices	month	500
3.3. Costs of offices / equipment	year	8.000
3.4. Consumables (PC, other)	year	500
3.5. Overall overhead (3.1, 3.2, 3.3, 3.4)	person / year	10.000
3.6. Auditing fee (e.g. KPMG)	once / year	2.500
4. Costs of specific tasks		
4.1. Socio-economic studies		300.000
4.2. Animal welfare related research		1.000.000
4.3. Education/ training dissemination activities		300.000

 Table 6: Work hypotheses for evaluating the cost of running the Network

¹¹ Food Chain Evaluation Consortium (FCEC) (2009). Feasibility study on animal welfare labeling and establishing a Community Reference Centre for Animal Protection and Welfare, Final Report, European Commission, DG SANCO

Results

Four scenarios were chosen and their descriptions, structure and attributes are summarised below.



Scenario 1 based on the EFSA model

Main features

- Coordinating Body is an agency that centralises all animal welfare related questions, develops strategies, writes reports etc.
- A Steering board guides the Network
- There is one Reference Centre in each Member State. A Reference Centre is either an existing body designated by the national authorities or it can be created according to guidelines given by the EU. All Reference Centres cover all topics and network within their Member States.
- The Coordinating Body deals with each Reference Centre (= 28) for all animal welfare related questions and may also set up temporary Working Groups.

Main strengths and weaknesses

- The Coordinating Body guides the Network as an independent network. It has strong statutory powers. It provides independent scientific advice based on inputs from the Network. It centralises all animal welfare related questions and develops strategies.
- Member State Reference Centres may be pre-existing organisations and will be funded from national sources (e.g. national food safety authorities /NCP).
- The coordination is relatively expensive due to the heavy structure of the Coordinating Body.
- A top-down decision-making and advisory process lacks direct involvement of Member State actors that may then not have a clear idea of the network's priorities and work plans.
- Limited involvement of Member States and little opportunity for nationally-based members to effectively influence or share their opinions with the Coordinating Body.

The full analysis of Scenario 1 is shown in the Table below.

Table: SWEPSOT analysis of Scenario 1					
	Strengths		Weaknesses		
Political	 The Network has official legal status allowing animal welfare to be seen as an important political and social issue. The steering board guides the Network as an independent network; it does not represent any government, organisation or sector but acts in the public interest and operates separately from EU institutions. The Coordinating Body has some statutory powers, It provides independent scientific advice, which can be reflected in European policies and legislations. 	Political	 As a wholly independent and centralised network, it may inhibit communication with stakeholders. Top-down decision-making and advisory process (Coordinating Body centralises all animal welfare related questions and Member State Reference Centres havre a consultative role and mainly carry out knowledge transfer and communication activities). A Coordinating Body headquarters distant from Brussels might reduce effectiveness of the network, lead to a breakdown in communication and place a heavy burden on logistics (money and time spent to travel) and problems for recruitment of staff. 		
Economic	 Member State Reference Centres may be pre- existing organisations and will be funded from national sources (e.g. national food safety authorities /NCP) Most dissemination and training is carried out by Reference Centres and therefore funded by national (non-EU) sources . 	Economic	 Relatively expensive structure due to requirement to centrally fund the Coordinating Body. Coordinating Body depends solely on EU funding. Budget constraints against more requests / activities. Budget constraints in different Member States limiting the capacity of their Reference Centres. 		
Social	 Great weight of scientific input from Scientific Panels and Directorates with procedures to respond to social concerns and urgent requests related to animal welfare. Legal structure allowing credibility therefore raising stakeholders' trust and awareness of public opinion on animal welfare and related issues. National representation on Management Board facilitates the capture of cultural differences in priorities. National Reference Centres tailor training and information, provided by Coordinating Body to local conditions. 	Social	• Top down decision-making and advisory process, may lack direct involvement of Member State actors that do not have a clear idea of the network's priorities and work plans.		
Organisational	 Links with (EU and non-EU) official organizations (OIE, FVO, BTSF etc) in the same area – better co-ordination and reduced risks of overlap of activities. Each Member State has its own Reference Centre. 	Organisational	 Coordinating Body headquarter distant from Brussels is a burden on members who wish to hold meetings or engage in the network's activities. Limited involvement of Member States and little opportunity for nationally-based members to effectively influence or provide Coordinating Body with opinions. Dependent on the capacity and efficiency of Member State Reference Centres to provide accurate compliance data in a timely way. 		
Technical	 Delivers a high level of scientific expertise through a number of Scientific Panels and Directorates. Decentralisation of certain activities such as dissemination and knowledge transfer is possible through Reference Centres. 	Technical	• Locating centres of expertise in a single Member State can lead to bias in focus of activities based on interests of that Member State.		

Basis for the calculation of the necessary budget

Steering board

- ⇒ Composed of 1 chairman 4 scientists (2 animal welfare, 1 sociology, 1 economics), plus 1 representative of DG-Sanco, 3 stakeholders (farmer, industry, NGO), 2 members of the Coordinating Body
- ⇒ 2 meetings per year; organized at head office of Coordinating Body
- ⇒ 0.5 month equivalent salary costs for 8 persons out of 11 (costs of members of the Coordinating Body and DG-Sanco already covered)

Coordinating Body

- \Rightarrow Composed of: 1 general director, 5 units with 8 to 10 persons each
- \Rightarrow Total staff: 50 persons
- ⇒ Units: 1) science and strategy, 2) compliance and implementation, 3) knowledge transfer and training, 4) communication, 5) services and support (IT, finance etc)
- \Rightarrow Rental of offices (15m²/person + 250m² common areas: toilets, meeting room etc.) = 1000m²; cost used is 30 ϵ /m2/month (average Paris)
- ⇒ Overhead offices (heating, electricity, water, telephone, internet): 500€/month
- ⇒ Costs of offices / equipment (computers, desks, paper, videoconference equipment etc.): initial acquisition to be spread out over 5 years
- \Rightarrow Costs offices estimated (initial equipment): 60000 \in
 - Total estimated = 10000€ per person
- \Rightarrow 1 meeting / year with a representative of each national Reference Centre at head office
- ⇒ 1 visit per year to half of the member states with 2 representatives of 3 units (science & strategy, compliance & implementation, knowledge transfer & training)
- ⇒ Scientific input is provided by Scientific Panels, Experts
- ⇒ Scientific panels, experts are paid and might meet once per mission at head office
- \Rightarrow 5 scientific panels / expert missions per year

Reference centers in each Member State

- ⇒ Each member state has to finance the actions, provide information on compliance to Coordinating Body, organize translation of material, organize trainings etc.
- \Rightarrow Some funding from EU might be needed for certain Member States

1. <u>St</u>	eering board		
1.1	Costs of core activities	N. units x	€
		Cost per Unit	
1.1.1	Staff costs:		
	Chairman	1 x 0.1 x €100,000	10,000
	Board members	4 x 0.1 x €100,000	40,000
1.1.2	Meetings and travel	2x5x€1,000	10,000
	(missions and per diems)		
2. <u>Co</u>	p-ordinating Body		
2.1	Costs of core activities	N. units x	Cost
		Cost per Unit	
2.1.1	Staff costs:		
	Director	1 x €150,000	150,000
	Other professionals	35 x €100,000	3,500,000
	IT & admin staff	14 x €50,000	700,000
2.1.2	Overheads (and other office costs)	50 x €10,000	500,000
2.1.3	Meetings and travel	€84,000	84,000
	(missions for staff and per diems)		
2.1.4	Organisation meetings	€12,500	€12,500
2.1.5	Webtool, communication	2 x €20,000	€40,000
3.2.	Costs of work performed		
3.2.1	Socio-economic studies	€300,000	300,000
3.2.2	Animal welfare related research	€1,000,000	1,000,000
3.2.3	Education/ training dissemination activities	€300,000	300,000
		TOTAL	6,646,500

Calculation of the budget for running the Network

Scenario 2 based on the EIP model

U Commission DG Sanco	e → Steering Board	EFSA FVO
	Coordinating body	OIE,
RC SP (pigs)	RC SP (cattle) RC SP (poultry)	RC.SP.
MS1	M\$2M\$	MS28
Member 1 SP	Member 2 SP Member SP	Member 28 SP
Member 1 I	Member 2 I Member I	Member 28 I
Member 1 IxSP	Member 2 IXSP	Member 28 IXSE
	Networking	

Main features

- The Coordinating Body has decentralised the scientific questions and strategies to dedicated Reference Centre.
- A Steering Board guides the Network.
- A Reference Centre is focused on a topic (e.g. cattle, pigs, slaughter etc.). It can be an existing body designated / chosen based on its competencies, a group of experts from different Member States working together, or a group of experts based in one Member State that will be the reference for all other Member States.
- Each Member State has for each species a major member (Member S), which is in contact with the Reference Centre SP. There are interactions between SP members of each Member State.

Strengths and weaknesses

- Coordinating Body has few statutory powers and mainly a coordination role.
- Flexibility for Reference Centres in terms of composition, functioning and theme covered.
- Exchange of knowledge and experience gained from innovation actions (bridge between research and farming practice).
- Reference Centres are EU funded.
- Network is not seen as wholly independent, i.e. seen as an arm of EU enforcement and may be seen as not neutral by stakeholders.
- Decentralisation of Reference Centres could lead to bias in focusing on activities based on local Member State interests.
- Top down approach.

The full analysis of the scenario is shown in Table below.

Table: SV	VEPSOT	analysis	of Scenario 2	2
		Strength	S	

	Strengths		Weaknesses
Political	 The Network has official legal status allowing for animal welfare to be seen as an important political and social issue. A Steering Board guides the Network. As an EU Service, the Commission has a major influence on strategy and policy. 	Political	 Network not seen as wholly independent, i.e. seen as an arm of EU enforcement and may be seen as not neutral by stakeholders. Coordinating Body has no statutory powers but just a coordination role.
Economic	 Reference Centres may be pre-existing organisations situated in Member States – this allows for economies of scales in terms of management tasks, office space and administrative services. 	Economic	 Relatively expensive structure due to requirement to fund both the Coordinating Body and functioning of Reference Centres by EU budget. High administrative burden due to decentralised structure of the network and high number of organizations involved.
Social	 As under EU DG, the stakeholders' trust is potentially higher improving effectiveness of communication. 	Social	• A decentralised approach may have less influence especially on Member State actors
Organisational	 The Network uses existing mechanisms for reporting to and interacting with Member States. Flexibility for Reference Centres in terms of composition, functioning and theme covered. Reference Centres act as mediators in enhancing communication and cooperation between all relevant members. 	Organisational	 Decentralisation of Reference Centres could lead to bias in focusing on activities based on local Member State interests. Dependence on the capacity and efficiency of major national members to actively be involved in cross-border networks. Dependence on the capacity and efficiency of Reference Centres to detect non-compliance, transfer knowledge to Member State members and stakeholders and conduct training courses.
Technical	 Exchange of knowledge and experience gained from innovation actions (bridge between research and farming practice). Decentralisation of knowledge transfer, training activities performed by Reference Centres and members at national levels. 	Technical	• Locating centres of expertise in a single Member State can lead to bias in focus of activities based on interests of that Member State.

Basis for the calculation of the necessary budget

Steering board

- \Rightarrow Composed of 1 chairman 4 scientists (2 animal welfare, 1 sociology, 1 economics).
- ⇒ 2 meetings per year; organised at head office of Coordinating Body. Invited people are 1 representative of DG SANCO and potentially 3 stakeholders (farmer, industry, NGO).
- \Rightarrow 0.5 month equivalent salary costs for 5 persons.

Coordinating Body

- ⇒ Composed of: 1 general director, 3 scientific experts, 1 rep. knowledge strategies / transfer, 1 communication officer, 1 IT, 2 administrative persons (secretary, financial)
- ⇒ Total staff: 6 senior, 3 administrative/IT
- \Rightarrow Rental of offices (15m²/person + 65m² common areas: toilets, meeting room etc.) = 200m²; cost used is 30 \in /m2/month (average Paris)
- ⇒ Overhead offices (heating, electricity, water, telephone, internet): 500€/month
- ⇒ Costs offices / equipment (computers, desks, paper, videoconference equipment etc.): initial acquisition to be spread out over 5 years
- \Rightarrow Costs offices estimated (initial equipment): 60000 \in
 - Average overhead per person = 10000€

⇒ 1 meeting / year with each Reference Centre at head office; 1 meeting per year at each Reference Centre ==> 5 meetings at Reference Centre X 6 persons

Reference centers (5 in total)

- \Rightarrow Based on species: cattle, small ruminants, pigs, poultry, other.
- A Reference Centre is not a necessarily a physical place but a can be a group of experts in different countries working together. However, salary and overhead should be covered for each person involved.
- ⇒ Each Reference Centre is composed of 7 scientists, 0.5 IT and 0.5 administration staff.
- \Rightarrow Time dedicated by each scientist to Reference Centre = 100% annually.
- ⇒ Each Reference Centre meets 4 times per year physically; plus 2 meetings per year with Coordinating Body.
- ⇒ Research conducted is supposed to be financed externally or financed specifically by EU (see option).

Calculation of the budget for running the Network

1. <u>St</u>	eering committee		
1.1	Costs of core activities	N. units x	Cost
		Cost per Unit	€
1.1.1	Staff costs:	_	
	Chairman	1 x 0.1 x €100,000	10,000
	Board members	4 x 0.1 x €100,000	40,000
1.1.2	Meetings and travel	2x5x€1,000	10,000
	(missions and per diems)		
			L
2. <u>Co</u>	o-ordinating Body		
2.1	Costs of core activities	N. units x	Cost
	о С	Cost per Unit	
2.1.1	Staff costs:	•	
	Director	1 x €150,000	150,000
	Other professionals	5 x €100,000	500,000
	IT & admin staff	3 x €50,000	150,000
2.1.2	Overheads (and other office costs)	9 x €10,000	90,000
2.1.3	Meetings and travel	€30,000	30,000
	(missions for staff and per diems)	,	
2.1.4	Organisation meetings	7 x €2,500	€17,500
2.1.5	Webtool, communication	2 x €20,000	€40,000
		· · · ·	. ,
3. Re	ference Centres		
3.1	Costs of core activities	N. units x	Cost
		Cost per Unit	
3.1.1	Staff costs:		
	Scientists	35 x €100,000	3,500,000
	IT & admin staff	5 x €50,000	250,000
3.1.2	Overheads (and other office costs)	40 x €10,000	400,000
3.1.3	Meetings and travel	6 x 35 x €1,000	210,000
	(missions for staff and per diems)		
3.1.4	Organisation meetings	4 x 5 x €2,500	50,000
3.1.5	Accountancy checks	5 x 4 x €2,500	50,000
3.1.6	Webtool, communication	5 x €40,000	200,000
3.2.	Costs of work performed		
3.2.1	Socio-economic studies	€300,000	300,000
3.2.2	Animal welfare related research	€1,000,000	1,000,000
3.2.3	Education/ training dissemination activities	€300,000	300,000
		TOTAL	7,297,500

Scenario 4 based on the ECDC model



Main features

- The Coordinating Body is a service of the commission. It centralises all animal welfare related questions and develops strategies. It receives scientific input from a scientific (advisory) committee and external experts.
- Each Member State has a reference centre which can be a national authority or other organisation related to animal welfare.
- The European Network does not enter organisational issues inside the Member States.
- There are no (formal) interactions between actors between different Member States.

Main strengths and weaknesses

- Each Member State has a role in priorities setting.
- Coordinating Body has a policy advising and coordinating role.
- National Reference Centres tailor information provided by Coordinating Body to local conditions.
- Member State Reference Centres will be funded from national sources.
- Location of Coordinating Body in one country might be divisive, i.e. seen as conferring national advantage.
- Top down approach with strong coordination but low ownership between actors.
- Location of Coordinating Body could be divisive.
- Difficult to co-ordinate.
- Dissemination and training activities might be patchy across 28 Centres.
- Governance and reporting complicated with 28 Reference Centres.
- Some Reference Centres will not have legal/official powers or status.
- National actors' influence will be diluted.

The full analysis of the scenario is shown in Table below.

Table: SWEPSOT analysis of Scenario 4

	Strengths		Weaknesses
Political	 Coordinating Body has official legal status allowing for animal welfare to be seen as an important political and social issue. Management Board guiding Coordinating Body. As an EU Service, the Commission has a major influence on strategy and policy. Coordinating Body has a policy advising and coordinating role 	Political	• Location of Coordinating Body in one country might be divisive, i.e. seen as conferring national advantage.
Economic	 Member State Reference Centres may be pre- existing organisations and will be funded from national sources. Bulk of dissemination and training carried out by Reference Centres and therefore funded by non- EU (national) sources. Coordinating Body administrative costs low due to limited role in monitoring and guidance activities. 	Economic	 Relatively expensive structure due to requirement to centrally fund the Coordinating Body, Scientific Advisory Committee, i.e. solely from EU funding. Budget constraints in different Member States limiting the capacity of national Reference Centres (Member States do not have a level playing field).
Social	 Legal structure allowing for credibility therefore improving effectiveness of communication. National representation on Management Board facilitates the capture of cultural differences in priorities. National Reference Centres tailor information provided by Coordinating Body to local conditions. 	Social	Top down decision-making approach.
Organisational	 Legal structure allowing for credibility therefore improving effectiveness of communication. Management Board guiding Coordinating Body. Links with (EU and non-EU) official organizations in same area – better co-ordination and reduced risks of overlap of activities. Each Member State has its own Reference Centre. 	Organisational	 Networking of welfare actors takes place largely at the national level by Reference Centres but this activity is not part of the Network. Little opportunity for nationally-based stakeholders to directly influence or provide Coordinating Body with opinions. Dependent on the capacity and efficiency of Member State Reference Centres to provide accurate compliance data in a timely way. Coordinating Body and some national Reference Centres may not have legal powers to enforce compliance with welfare legislation.
Technical	• Coordinating Body advised by both Scientific Advisory Committee and a panel of external experts.	Technical	• Less new scientific data generated due to lack of specialist centres.

Basis for the calculation of the necessary budget

Advisory committee / Steering Board

- \Rightarrow Composed of 1 chairman 4 scientists (2 animal welfare, 1 sociology, 1 economy).
- ⇒ 2 meetings per year; organised at head office Coordinating Body. Invited people are 1 representative of DG SANCO and potentially 3 stakeholders (farmer, industry, NGO).
- \Rightarrow 0.5 month equivalent salary costs for 5 persons.

Coordinating Body

- ⇒ Composed of: 1 director, 5 professionals, 1 IT, 2 administrative person (secretary, financial)
- \Rightarrow Rental of offices (15m²/person + 65m² common areas: toilets, meeting room etc.) = 200m²; cost used is 30 \in /m2/month (average Paris)
- ⇒ Overhead offices (heating, electricity, water, telephone, internet): 500€/month
- ⇒ Costs offices / equipment (computers, desks, paper, videoconference equipment etc.): initial acquisition to be spread out over 5 years
- Costs offices estimated (initial equipment): 60000€
 Average overhead per person = 10000€
- ⇒ 2 meetings each year at each Reference Centre

Reference centers: 28 in total

Scientific Advisory Committee and External Experts

<u>2 meetings a year for 10 people</u>; each meeting 2 days; preparation time 3 days each.

1. Management Board 1.1 Costs of core activities N. units x Cost € Cost per Unit Staff costs: 1.1.1 1 x 0.1 x €100,000 10,000 Chairman 4 x 0.1 x €100,000 Board members 40.000 1.1.2 2x5x€1,000 10,000 Meetings and travel (missions and per diems) 2. Co-ordinating Body 2.1 Costs of core activities N. units x Cost Cost per Unit Staff costs: 2.1.1 Director 1 x €150,000 150,000 Other professionals 5 x €100,000 500,000 IT & admin staff 3 x €50,000 150,000 9 x €10,000 Overheads (and other office costs) 90,000 2.1.2 2.1.3 Meetings and travel €30,000 30,000 (missions for staff and per diems) 2.1.4 Organisation meetings 7 x €2,500 €17,500 Webtool, communication 2 x €20,000 €40,000 2.1.5 2x3x28x€1,000 Meetings and travel to Reference 2.1.6 Centres 168,000 (missions for staff and per diems) 3. Scientific Advisory Committee and External Experts 20x€500 Travel 10,000 40x€500 20,000 Subsistence Preparation time per diems 60x€500 30,000 4. Reference Centres 4.1 Costs of core activities 4.1.1 Professionals 1,400,000 0.5 x 28 x €100,000 0.25 x 28 x €50,000 350,000 Admin 4.1.2 Overhead costs Nil as paid for by 0 Member States 0 4.1.3 | Meetings and travel } Network function costs 4.2 4.2.1 Workshops 28 x 2 x €20,000 1,120,000 Dissemination material 28 x €20,000 560,000 4.2.2 5.1. Costs of work performed Socio-economic studies €300,000 300,000 5.1.1 5.1.2 Animal welfare related research €1,000,000 1,000,000 Education/ training dissemination €300,000 300,000 5.1.3 activities TOTAL: 6,295,500

Calculation of the budget for running the Network

Scenario 7 built from the 2nd Advisory Board meeting



Main features

- There would be 4-5 regionally-based Reference Centres (e.g. 1 East, 1 North, 1 South, 1 West, 1 Central Europe).
- The Coordinating Body is composed of representatives of each Reference Centre and of the Commission.
- The Coordinating Body receives priorities from DG-Sanco, and scientific input from EFSA or other. It is in contact with representatives of stakeholders (e.g. through an Advisory Committee).
- A Reference Centre can be a pre-existing organisation or be created if necessary. Each Reference Centre covers all topics but can be specialised in one topic (animal type or issue). Reference Centre are connected to each other (inner network).
- In each region, Reference Centre works with a number of members (M) that provide all necessary expertise. Members from different regions can work together on a specific topic.

Main Strengths and weaknesses

- The regional Reference Centres will give good coverage of farming systems, infrastructure and consumer views/practice.
- Knowledge transfer between Reference Centres and Coordinating Body should be smooth.
- The 5 Reference Centres may not effectively transfer knowledge at the 28 Member State level.
- The network of Reference Centres might seem divorced from individual Member States.
- Member State actors may not want to engage fully in this regional activity.
- Knowledge and information transfer between members from the regional to the Member State level should be facilitated.
- As the Coordinating Body does not have statutory powers, its co-ordinating and facilitating role could be negated.

The full analysis of the scenario is shown in Table below.

Table: SWEPSOT analysis of Scenario 7

	Strengths		Weaknesses
Political	 7 year rotation of Reference Centres allows for involvement of many members of the Network as Reference Centres. As an EU Service, the Commission (DG-Sanco) has a major influence on strategy and policy. 	Political	 Network not seen as wholly independent, i.e. seen as an arm of EU enforcement and may be seen as not neutral by stakeholders. Coordinating Body has no statutory powers but just a coordination proposing role.
Economic	 Reference Centres and national partner institutes may be pre- existing organisations situated in Member States – this allows for economies of scales in terms of management tasks, office space and administrative services. Bulk of dissemination and training carried out by national partner institutes and therefore funded by non-EU (national) sources. Low administrative burden and low organisational costs. 	Economic	
Social	 As under EU DG SANCO the stakeholders' trust is potentially high. Active engagement of national stakeholders providing input through their national partner institutes. 	Social	
Organisational	 The weaknesses of both the centralised and decentralised approach are minimised by a mixed approach based on regional sub-networks. While the Network has a centralised strategic approach it also ensures a wide spread coverage of local peculiarities and issues through the 5 region-based Reference Centres (sub-networks). The organisational structure allows for high level of reactivity in finding technical solutions. 	Organisatonal	
Technical	 Quick and simple exchange of knowledge and information among members in each sub network and among sub-networks enables effective knowledge transfer and innovation within the Network and towards national partner institutes. Decentralisation of knowledge transfer and training activities performed by national partner institutes can capture local peculiarities. Rotation of Reference Centres stimulates scientific excellence and efficiency. 	Technical	Regionally-based Reference Centres might be weak in some specific topics/issues.

Basis for the calculation of the necessary budget

Coordinating Body

- ➡ Composed of: 1 director, 5 professionals, 3 IT & administrative persons (secretary, financial)
- \Rightarrow Rental of offices (15m²/person + 65m² common areas: toilets, meeting room etc.) = 200m²; cost used is 30 \notin /m2/month (average Paris)
- ⇒ Overhead offices (heating, electricity, water, telephone, internet): 500€/month
- ⇒ Costs offices / equipment (computers, desks, paper, videoconference equipment etc.): initial acquisition to be spread out over 5 years
- ⇒ Costs offices estimated (initial equipment): 60000€
 Average overhead per person = 10000€
- \Rightarrow 10 meetings per year; 2 at each Reference Centre.

Advisory committee / Steering Board

- ⇒ Composed of 1 chairman 4 scientists (2 animal welfare, 1 sociology, 1 economics).
- ⇒ 2 meetings per year; organised at head office Coordinating Body. Invited people are 1 representative of DG SANCO and potentially 3 stakeholders (farmer, industry, NGO).
- \Rightarrow 0.5 month equivalent salary costs for 5 persons.

Reference centers (5 in total)

- \Rightarrow A Reference Centre is probably in one of the Member States of each region.
- ⇒ Each Reference Centre is composed of 7 scientists, 0.5 IT and 0.5 administration staff. Salary and overhead should be covered for each person involved.
- \Rightarrow Time dedicated by each scientist to Reference Centre = 100% annually.
- \Rightarrow Two members of each Reference Centre meets 2 times per year with Coordinating Body.
- ⇒ Each Reference Centre organizes 2 meetings per year with 2 representatives of their Member States (5 to 6 Member States per Reference Centre) → 28 Member State x 2 persons x 2 meetings.
- ⇒ Research conducted is supposed to be financed externally or financed specifically by EU (see option).

1. Ac	lvisory committee		
1.1	Costs of core activities	N. units x	€
		Cost per Unit	
1.1.1	Staff costs:		
	Chairman	1 x 0.1 x	10,000
		€100,000	
	Board members	4 x 0.1 x	40,000
		€100,000	
1.1.2	Meetings and travel	2x5x€1,000	10,000
	(missions and per diems)		
2. <u>Co</u>	o-ordinating Body		
2.1	Costs of core activities	N. units x	Cost
		Cost per Unit	€
2.1.1	Staff costs:		
	Director	1 x €150,000	150,000
	Other professionals	5 x €100,000	500,000
	IT & admin staff	3 x €50,000	150,000
2.1.2	Overheads (and other office costs)	9 x €10,000	90,000
2.1.3	Meetings and travel	€30,000	30,000
	(missions for staff and per diems)		
2.1.4	Organisation meetings	7 x €2,500	€17,500
2.1.5	Webtool, communication	2 x €20,000	€40,000
3.1	Costs of core activities	N. units x	Cost
		Cost per Unit	
3.1.1	Staff costs:		
	Scientists	35 x €100,000	3,500,000
	IT & admin staff	5 x €50,000	250,000
3.1.2	Overheads (and other office costs)	40 x €10,000	400,000
3.1.3	Meetings and travel	2 x 2 x 5 x €1,000	20,000
	(missions for staff and per diems)		
3.1.4	Organisation meetings	4 x 5 x €2,500	50,000
3.1.5	Costs per diem representatives	28 x 2 x 2 x	112,000
	Member State	€1000	
3.1.6	Accountancy checks	5 x €2,500	12,500
3.1.7	Webtool, communication	5 x €40,000	200,000
3.2.	Costs of work performed		
3.2.1	Socio-economic studies	€300,000	300,000
3.2.2	Animal welfare related research	€1,000,000	1,000,000
3.2.3	Education/ training dissemination	€300,000	300,000
	activities		
		TOTAL:	7,182,000

Calculation of the budget for running the Network

9. Annex 5: Definition of the most efficient ways to identify and monitor difficulties and bottlenecks in the implementation of EU animal welfare legislation (Task4.3)

The results of WP2 of EUWelNet showed that Member States differ in how compliance data are collected, analysed and stored, and in the extent to which they are made publicly accessible. Public availability of compliance data promotes the identification and monitoring of problem areas. Direct feed-back of data to the industry enables farmers to take immediate action. Automated collection of data at the level of the slaughterhouse (e.g. the meat chicken welfare directive) enables a rapid feedback to farmers as well as Competent Authorities, and allows for a computerized analysis and monitoring over time. There is, however, a significant knowledge gap concerning standardised measures for some of the trigger levels indicated in the meat chicken welfare directive (inter-alia FVO reports). Performance-based inspection promotes and stimulates 'compliance' and reduces the administrative load. Investments in knowledge production regarding monitoring of the implementation of the three pieces of regulations examined vary significantly in the study countries¹², with most investment in Sweden, Denmark, the United Kingdom and significant lower investments in Romania. There are also variations in how Slovenia, Netherlands, Denmark and the United Kingdom monitor the implementation of the meat chicken welfare directive. While some member states rely on random sampling of farms without slaughterhouse monitoring (e.g. France), other member states developed welfare indicators (the United Kingdom, Netherlands, Sweden, Germany) or put into place an automatic system of collecting data in slaughterhouses (e.g. Denmark).

In EUWelNet WP4, Task4.3 aimed to determine best ways to identify and monitor difficulties and bottlenecks in the implementation of EU animal welfare legislation. Information was collected during two workshop sessions at the second meeting of the Advisory Board in Brussels. In addition, a questionnaire was circulated among Advisory Board members requesting more detailed information about the monitoring of the three selected pieces of EU legislation in their country. In particular, the questionnaire included the following questions:

1-Regarding the monitoring (collection of data, i.e. farm visits/ collection of data in slaughterhouses) of the EU Directive 2007/43/EC on the welfare of meat chickens / EU Directive 2008/120/EC on the welfare of pigs / EU Regulation 1099/2009 on the welfare of animals at time of killing, could you please indicate

- How the data are collected, stored, analysed in your country
- What are the main actions envisaged if a case of non-compliance is identified in your country?

2-In your opinion is this method of monitoring generating sufficient and reliable data on the implementation of the EU directives and Regulation?

- If yes, why?
- What are the main advantages?
- If not, why?
- What are the main limitations?

Briefly summarised, the results demonstrate that the monitoring of implementation process is most efficient in those countries that invest in monitoring techniques (automated system of recording chickens' foot lesions in slaughterhouses etc), in the collection of data and in storing electronic records of farm visits (see also table below). This is confirmed by the FVO reports. The results also

¹² Romania, Italy, Sweden, Slovakia, the United Kingdom, the Netherlands, Poland, Spain, France, Denmark

confirm that the lack of specificity in EU directives regarding monitoring methods constitutes a significant bottleneck in the implementation of EU legislation: e.g. for the chicken welfare directive there is no specification on how several body measures should be performed. It is most evident that good monitoring is possible only in countries that have developed methodologies for performing these body measures and can calculate the trigger levels. In addition, when these body measures are considered important for private farm insurance schemes (e.g. are included in these schemes) there is more investment in research.

In conclusion, investments in knowledge production and sharing of best practices are obviously crucial for improving and standardising the monitoring of the implementation of EU directives on animal welfare across Europe.

Country	Monitoring on Farms and at Slaughter for Meat Chicken, Pig and Slaughter Regulations	Positive/Negative Aspects
Sweden Swedish Board of Agriculture / SLU Contacts: Helena Elofsson / Birgitta Staaf Larsson	Sweden has both official controls of animal welfare as well as controls by a stakeholder organisation for meat chickens. The official controls on farms and at slaughterhouses are risk- based and are reported in a computerized system. The data are reported to the national animal welfare control register (Djurskyddskontrollregistret - DSK).	Sweden is typically well rated in FVO audits (DG-SANCO 2003-9210; DG-SANCO 2010- 8391). The main advantage of the Swedish system of monitoring in general is felt to be the combination of public and private controls. The data in the national animal welfare control register (the DSK) provides an overall picture of non-compliance in various areas. Nevertheless, training is still felt to be needed to boost compliance because animal welfare inspectors do not always judge body measures in the same way.
Netherlands Ministry of Economic Affairs Contact: Françoise Divanach	As elsewhere, welfare data on meat chickens are collected by vets at the slaughterhouse in the Netherlands. Only in the case of export, are data collected at the farm. The farmer sends data in to an agency called DR. There are also road checks and data from other member states (complaints). Together with the NVWA (the Netherlands Food and Consumer Products Safety Authority) the data are analysed, used in the risk- based approach to audits and produced in annual reports.	The Netherlands are well rated in FVO audits (DG-SANCO 2006-8041; DG-SANCO 2012- 6376). The monitoring data are regarded within the country as very reliable and cross checks can be performed with industry data (GPS). In the case of suspicion of non-compliance, tough measures can be taken including the production of financial data through a court order. Regarding the slaughter regulation, cross checks with other data may improve compliance. A bottleneck is still felt to exist regarding slaughterhouse data due to manual collection. Also, there may be legal barriers to enforcement attempts when gathering data.
Belgium Health Ministry Contact: Karlien De Paepe	The results of the inspections on farms are stored in a database (FOODNET) and analysed for compliance. Data collected in slaughterhouses is put into another database (Beltrace). In case of animal health or animal welfare problems the producer is notified of the findings and this can lead to further action. Both data types go into Belgium's annual report to the EC.	The use of checklists in Belgium helps make sure that inspections are carried out in a relatively harmonised way. Also, the database system allows viewing of the whole inspection history of a certain slaughterhouse, for example. While there is uniformity and retrievability of monitoring data in Belgium, the system depends on the accuracy with which the information is recorded. As anywhere else, omissions or errors in data input can lead to wrong figures or wrong conclusions.
Czech Republic State Veterinary	Data are stored in the central database after collection by the Regional	The database system of monitoring in the Czech Republic is automated, centralised and quick

Table: Results from the survey on the monitoring of the implementation of EU animal welfare legislation

Administration Contact: Miroslava Lutzova	Veterinary Administration (RVA). Checks are done according to the schedule and multi-annual plan. Next, specialised checks are carried out by inspectors from regional offices.	according to its users. The only downside of the monitoring program is that more details are not included in the database.
UK Defra Contact: Simon Waterfield	Data on meat chickens are collected locally at each plant in the UK and stored centrally in electronic form where the trigger system runs daily generating trigger reports. Each trigger report is regarded as an indicator for follow-up action after a veterinary risk assessment, which includes an assessment of the history of that house. Data is collected by official inspectorate staff from AHVLA (on farm) and FSA (at slaughterhouses). At slaughterhouses the data is stored both at the plant and centrally on an electronic system where reports for analysis can be created. Within AHVLA the data is stored centrally in electronic format.	The UK has a well-developed and generally satisfactory system of compliance (DG-SANCO 2007-7337; DG-SANCO 2009-8268; DG- SANCO 2013-6822). In terms of meat chickens, data collected are robust and collected using condition cards to improve consistency amongst individuals and plants. With slaughter monitoring, limitations include the number of on-farm inspections which provides limited data per establishment. Also, at slaughterhouses not all the information recorded locally is transcribed into the electronic system as there are pre-set fields.
Denmark Ministry of Food, Agriculture and Fisheries Contact: Birte Broberg	Farm inspection data is stored in a Danish Veterinary and Food Administration (DVFA) database. It is used in risk-based selection of farms for inspection. Various data from the slaughterhouse are collected at arrival or after scalding. Data on foot pad dermatitis are systematically collected and analysed for each flock. Data on other indicators of poor welfare conditions on farm (e.g. hock burns, scratches and pecking injuries, dehydration, emaciated birds, ascites etc.) are collected when their occurrence indicates a welfare problem in the farm of origin.	A significant positive in Denmark is that the on- farm inspections are assumed to have a preventative effect, e.g. the electronic scanning system of monitoring foot pad dermatitis in slaughterhouses has led to a substantial improvement in the condition of foot pads, litter quality and indoor climate.
Switzerland Contact: Fran Proscia	In Switzerland, data are collected, stored and analysed on holdings and animals by the OV (slaughterhouse) and FBO Vet (usually employed and responsible for Quality assurance, does visits on contract farm). Official (ground) controls are accomplished at least every four years (note the Swiss Act on the coordination of controls on farms; SR 910.15) by the OV sent by the competent authority. Biolabel- related controls (animal welfare check points) by private accredited label organisations take place once or twice a year.	A big advantage in Switzerland is the existence of specialized animal health services such as the SGD, but they are focussed mainly on animal health. The SGD is very familiar with the situations on the farms and in constant contact with the designated vets.
Romania Contact: Fran Proscia	Data is collected in Romania by some slaughterhouse workers (trained and dedicated for animal welfare); they draw up the welfare records supervised by the OV in the	The FVO has reported a mixed picture from "proactive" with regard to the incoming welfare of pigs legislation (DG-SANCO 2012-6374) to lacking resources and sanctions for meat chickens. A previously unpublished slaughter

	slaughterhouse; all data is transmitted to the animal welfare department of the local Competent Authority; data collected is analysed together with other services and after that is transmitted to the national Competent Authority.	audit expressed concern at the number of small holdings (DG-SANCO 2006-unpublished). Currently, slaughterhouse workers don't collect data in real time. The slaughter house OV cannot supervise the works all the time and data on loading pigs and transport may be missing from the authorities' calculations.
Norway Contact: Maria Været	Since 2009, about 1,000 members of the Norwegian Food Safety	When a non-compliance is registered in MATS this will be linked to the specific requirements in
Veggeland	Authority's (NFSA)knowledge workers (veterinarians, biologists, engineers, other professionals) use its <i>quality</i> control <i>system</i> (MATS) actively as a decision support system for the main bulk of their professional work; to plan, conduct and register audits. All results from both types of controls are reported in MATS and this data is shared with farmers, food production plants, and others who use MATS to view their own case information.	the directive. This makes it possible to count all infringements and to identify problem areas. The system also includes the possibility to make standard check lists including the check points considered most important. The check points in these lists can be made obligatory to make sure that special topics are controlled during all inspections. However, it is also a challenge to ensure that all the inspectors register the information the way they are supposed to. This is one possible source of error.

10. Annex 6: Determination of the effectiveness of knowledge strategies to overcome specific bottlenecks hampering implementation of EU legislation on animal welfare (Task 4.4)

Task 4.4 of EUwelNet aimed at:

- Characterising the types of difficulties and bottlenecks that can be overcome by knowledge strategies.
- Formulating recommendations on the potential use and efficiency of knowledge strategies.

Task4.4 assessed the efficiency of knowledge strategies designed in EUWelNet or from other initiatives in overcoming bottlenecks hampering the implementation of EU legislation on animal welfare. The strategies reviewed were:

from EUWelNet,

- Task 3.1 Develop and evaluate knowledge transfer strategies (e.g. training) to ensure consistent identification of broiler farms with poor welfare, facilitate compliance with legislation and improve welfare in relation to broiler Directive 2007/43/EC.
- Task 3.2 Development of an e-learning programme to facilitate compliance with the environmental enrichment and tail docking requirements for finishing pigs.
- Task 3.3 Developing and testing a knowledge transfer program designed to assist pig producers to make the changes required to house pregnant sows in groups.
- Task 3.4 Setting up a technical network of experts to develop and improve standard operation procedures to implement welfare requirements at slaughter (of poultry, pigs, cattle and sheep). *from other initiatives*,
- Swedish Poultry Meat Association's broiler welfare programme (Sweden).
- IP SIGILL basic pig certification standard (Sweden).
- Swedish Dairy Association's dairy advisory package "Fråga Kon" ('Ask the Cow') (Sweden).
- Training for Animal Welfare Officer at slaughter (France).
- Training courses on how to comply with the legislation (Spain).
- Route plan to harmonise the interpretation of the legislation for the different regional governments and provide guidance to the farmers to implement the legislation (Spain).
- UK Industry certification scheme requirements for pig environmental enrichment (UK).
- UK Industry KT programme on dairy cattle lameness (UK).

A workshop was organized with participants in EUWelNet WP2 and WP3 in order to review the above initiatives and identify key issues for the success of knowledge strategies.

This review showed that the technical effectiveness of knowledge strategies should be assessed along 4 lines:

- the reaction of people to training (or another form of knowledge strategy): did people find the training interesting, relevant, up to date etc.?
- the changes in knowledge: did people learn something?
- the changes in behavior: did people take an action after the training?
- the actual benefit for the animal: was the welfare of animals improved?

There is no unique format for knowledge strategies. Their format needs be adapted to the context and the audience.

The effectiveness of knowledge strategies is dependent upon the following steps:

- Pro-active strategy for dealing with gaps in the implementation of EU legislation. This is a risk management task that is currently outwith the mandate of EFSA and FVO. This could be a key task for a network of reference centres. The EU WelNet pilot has identified 4 technical areas (broiler, enrichment for pigs, sow housing and slaughter) where there is clearly inconsistent implementation. The future Network of Reference Centres could develop a pro-active approach to identify gaps in knowledge that require the development of a knowledge strategy.
- Deliver knowledge strategies that fulfil the features identified above. This usually requires coordination between the various actors including industry groups, welfare charities, certification schemes, Member States and European Commission. The network could have a range of roles here, ranging from technical support to full delivery of the programme.
- Surveillance of the implementation of these knowledge strategies in terms of a) activities undertaken in each member state b) behavioural change within the farming community c) change in welfare outcomes. Again the network could play a range of roles ranging from technical support of evaluation to a full independent evaluation of knowledge initiatives.

Certain 'external' conditions are necessary for knowledge strategies to be effective

- Consistency between member states "level playing field"
 - Clear agreed legislation and guidance from European Commission.
 - Full implementation of EU directives including appropriate process (e.g. inspection and non-compliance procedures) and outcomes (e.g. Welfare Quality[®] parameters).
- National Relevance & Engagement "common understanding"
 - Technical expertise available at national level and able to promote engagement in developing and implementing policy using appropriate language.
 - Research capacity at a national level to ensure research protocols have local relevance to welfare policy but also to communicate at supranational level about the specificity of national systems of production.
- Farmer involvement– "bottom-up approach"
 - Dialogue and active collaboration with existing producers and competent authorities during policy development & implementation to maximise understanding
 - Sufficient technical expertise amongst producer representatives to ensure active participation in developing the knowledge strategy
 - Where training programmes are used, these should ensure optimum educational methods and evaluation techniques are used in order to maximise the educational benefits for producers or other recipients.

In conclusion, policy makers need to share knowledge effectively in order to ensure consistent interpretation of the legislation. Welfare scientists need to work together to ensure technical and research expertise is available at a national level. Producers need to be genuinely involved in a knowledge exchange dialogue during policy development and implementation.

11. Annex 7: Responsibilities within the Network

Regardless of the scenario eventually chosen for the Network, three set of entities will play a major role: the Coordinating Body, Reference Centres, and Working Groups. The Coordinating Body will be in charge of identifying priorities and proposing road maps. The Reference Centres will be in charge of gathering and collating information and knowledge. Working Groups will ensure the dissemination and exchange of knowledge.

<u>Entity</u>	Responsibilities
Coordinating Body	Identifying priorities and proposing road maps:
	 facilitates and oversees the work of Reference Centres, supports communication between Reference Centres
	• identifies priorities and formulates tasks based on problems identified by Reference Centres, based on communications with Advisory board, EC, EFSA and based on the legislation in preparation
	 establishes Working Groups to fulfil the tasks
	• oversees the WGs and communicates the results of WGs to Reference Centres, Advisory Board, EC, EFSA
Reference Centres	Gathering and collating information and knowledge:
	• facilitate regional interactions between stakeholders so that problems are prevented
	• gather information from regional stakeholders
	• collate the regionally acquired information to identify and define problems
	• based on this problem definition: generate solutions at regional level, or request the Coordinating Body to formulate a task and establish a Working Group for the task
	• organise the dissemination of solutions (unless a Working Group is established for this purpose)
	• monitor the effects of solutions
Working Groups	Dissemination and exchange of knowledge:
	• focus on the specific tasks assigned by Coordinating Body
	• will be composed of members of Reference Centres, complemented, if needed, by external experts (including partners related to Reference Centres or Advisory Board members)
	 communicate with Reference Centres on regional aspects of the tasks report the results to Coordinating Body