# Study on the impact of Regulation (EC) N. 1/2005 on the protection of animal during transport

## **Executive Summary**

## **Introduction**

The transport and handling of live animals is a crucial link in the animal production chain involving many different operators (farmers, traders, slaughterhouses, control posts, transport companies). The transport of animals can affect the environment, animal health, animal welfare and the spread of animal diseases.

Since 1991 the EU has provided a harmonized legal framework for animal transport by means of the adoption of Regulation (EC) 1/2005, in order to provide a level playing field for operators while ensuring a sufficient level of protection to the transported animals. Regulation 1/2005 amends Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97.

Article 32 of Regulation 1/2005 foresees that, before January 2011, "the commission shall present a report to the European Parliament and to the Council on the impact of this Regulation on the welfare of animals being transported and on the trade flows of live animals within the enlarged Community. In particular, the report shall take into account scientific evidence on welfare needs of animals, and the report on the implementation of the navigation system, as referred to in Annex I, Chapter VI, paragraph 4.3, as well as the socio-economic implications of this Regulation including regional aspects. [...]".

## **Objective**

The objective was to collect and to analyse data for the preparation of the report referred to in Article 32 of the Regulation (EC) N°1/2005.

It was intended to provide a detailed assessment of the implementation of the regulation on the transported animals and on operators, with special reference to trade flows, navigation systems and the socio-economic and regional implications.

## **Scope of the evaluation**

The scope of the evaluation is limited in several ways: EU member states, species, mode of transport and the type of analysis. All EU Member States are taken into account with respect to the transport from the EU to third countries (export of live animals) and transport to the EU from third countries (import of live animals). However, the evaluation focuses on the 10 EU Member States (DE, DK, ES,FR, IR, IT, NL, PL, RO, UK) that have the largest proportion of the trade in farmed animals. Of all intra community trade of animals these ten countries export and import at least 66% of all animals.

The evaluation was restricted to the following species: horses, cattle, pigs, sheep & goats and poultry. Transport of pets and fish are not explicitly mentioned in the Regulation, however the regulation does apply to transport of other animals. Within this study an inventory is compiled regarding the implementation of the Regulation by Member States with relation to the transport of pets and fish.

Almost all animals within Europe are transported by truck. The evaluation of the Regulation will therefore focus on this mode of transport. For those Member States where the use of livestock vessels is common, this mode of transport will be also assessed. The type of analysis is limited to comparing the impacts on animal welfare during the period before and after introduction of Regulation 1/2005. More specifically the period 2005-2006 will be compared with the period 2007-2009.

### **Key issues**

The key issues for the evaluation of the Regulation 1/2005 were:

- 1. Measuring the impact of the components of the Regulation on welfare of animals being transported;
- 2. Trade flows of live animals within the EU;
- 3. Socio-economic aspects;
- 4. Administrative aspects;
- 5. Regional aspects;
- 6. Implementation of navigation systems;
- 7. Legal aspects and enforcement of the main elements of the regulation by different competent authorities;

#### 8. Guides to good practice.

The study analysed and determined if the Regulation (EC) 1/2005 has been a determining factor driving change in all the key issues given above.

## **Methodology**

Key issue indicators have been identified In addition to the sources for measuring these indicators. For the 8 key issues mentioned above, 55 indicators have been defined. Based on this analysis and the other available sources such as literature, EFSA studies, JRC studies, FVO inspection reports, MS reports of 2007-2009 based on art 27(2) of Regulation 1/2005 and databases such as TRACES and EUROSTAT, a questionnaire for each stakeholder group was developed.

The questionnaires have been performed in three ways: by interviewing the stakeholder while the questionnaire is filled in by the researcher, by sending the questionnaire to the stakeholders who answered the questions and returned the questionnaire and finally by stakeholders downloading the questionnaire from the internet (<a href="http://www.ibf.be/animalstransport/">http://www.ibf.be/animalstransport/</a>) answering the questions and sending it back to the project team.

The stakeholders considered for this study are: farmers, slaughterhouses, trade & transport companies, control posts, National Competent Authorities, animals welfare groups and scientists working in the field of the transport of live animals. For the 10 main EU countries, 2 to 4 members of all stakeholders groups have been asked to answer the questionnaire. Of the other 17 MS only the national Competent Authorities were asked to answer the questionnaire. Also a further 20 organisations operating at the EU level were asked to answer the questionnaire. Of the planned 200 questionnaires 178 were returned. A relative low response was realized for National Competent Authorities (only 8 of the group of 17 'other' MS); transport companies (25 out of the planned 47); control post (9 out of the planned 19). The highest number of responses was realized for farmers (72 responses). The low response rate can be explained by the length of the questionnaire and the difficulty to answer the questionnaire. This response rate was increased by repeated contacts with the stakeholders (especially the national competent authorities) and by extending the period to answer the questionnaire (deadline was postponed from the begin of January to 7<sup>th</sup> of February).

Besides the questionnaire five case studies were executed to gain insight into a number of specific topics such as: type of navigation systems used by transport companies, journey times of horses on

long distance transport, transport costs of main flows of live animals and transport by livestock vessel.

#### 1 Animal welfare

Concerning the issue of animal welfare, 15 indicators have been defined and evaluated with the available information from the questionnaires.

The main findings

After the introduction of the Regulation 1/2005 a slight improvement has been observed regarding:

- The incidence of dead on arrival, unfit for transport;
- Occurrence of lameness, severe injuries, bruises, dehydration and exhaustion;
- Occurrence of animal welfare anomalies;

The occurrence of animal welfare anomalies stayed at the same level or showed a limited decrease after the implementation of Regulation 1/2005 compared to 2005- 2006., A greater relative decrease was noticed for the factor's additional provisions for long journeys for all species.

With regard to the impact of the Regulation 1/2005 on transport quality

- 80% considered that the regulation has improved transport quality as a whole and approximately 90% of the improvements is in long distance and international transport.
- In terms of scoring, the respondents scored the quality of transport after the introduction of regulation at approximately 3.5 out of 5.

The number of installations of ventilation and watering systems has increased continuously from 2005 to 2009, whereas the installation of feeding system have fluctuated and no conclusions can be made regarding this. The improvement of facilities from 2005 to 2009 scored about 4 out 5. The number of approved transport companies, means of transport and drivers increased from 2005 to 2009, with a large number being approved in 2008. The number of approved assembly centres stayed at the same level during the observed period 2005-2009. The number of approved control posts shows a strong increase in 2009 from 11 to 67.

There is no significant difference in the treatment during transport of breeding animals in comparison with animals destined for slaughter. This holds for all species.

No significant improvement has been made regarding feeding facilities. The reason given was that most of the long distance vehicles were already equipped with such facilities prior to the introduction of the regulation.

Unfortunately, insufficient data have been acquired regarding transport documentation from transport companies. The limited responses varied and most of the respondents expressed that the regulation has not improved documentation by transport companies.

Training course have been developed and implemented (90 to 100% of responses) by member states and the effect of the course on reduction of lameness, injuries, dead on arrival improving of careful driving and animal handling scored to average of 3.4 out of 5 (and up to 3.6 for careful handling of animals).

## 2 Navigation systems

Regarding the implementation of navigation systems 12 indicators were identified.

As it can be observed from the responses, more than 40% of the transport companies have acquired the navigation system. The transport companies know, more or less, the benefits of the system. However, the level of utilization of the system is relatively low. About 60 to 70% of the transport companies stated that installation of navigation system has not improved route planning and journey logs. Some companies do not use the system for route planning because the transporters know routes very well and they use the system only in case of employing new drivers. As noted by some transport companies, another reason for not using the navigation system was its complexity.

#### The main findings are:

- It can be observed from the responses that more than 40% of the transport companies have acquired the navigation system;
- The percentage of vehicles equipped with navigation system has been successively increased from 1.8% (year 2005) to 43.75 (2009);
- 71% of the respondents did not feel any improvement of journey log;
- 61% of the respondents sees no improvement of the route planning because of the installation and use of navigation systems;
- 50% of the respondents consider that control mechanism by competent authorities have been improved after installation of navigation system;
- Most of the stakeholders (more than 60%) do not see any improvement in the communication by using navigation systems.

#### 3 Trade flows of live animals

For the issue trade flows six indicators have been identified (see table 3).

Regulation 1/2005 did not have an impact on the international trade flows of live animal in the EU-27. This statement is supported by the following facts:

- Historic increase of international trade of live animals continues after the implementation in
   2007:
- Both intra community trade in meat and intra community trade in live animals increased during this period;
- The enlargement of EU (with Bulgaria and Romania), the outbreak of infectious diseases and changes in self-sufficiency do not play a role in explaining the changing trade flows;
- The regional slaughter capacity in the EU is a main factor explaining the increased international trade of live animals (i.e. increase of slaughter capacity for pigs in Germany and increased exports of piglets and pigs from The Netherlands and Denmark and decreased slaughter capacity in these countries; increased flows of poultry between neighbouring countries like The Netherlands, Belgium, France, Germany and Czech Republic). These changes are not related to the implementation of Regulation 1/2005 but are caused by differences in slaughter costs per animal and policies of slaughterhouse companies
- The main trade flows per species between EU member states did not change. These flows only increased in size.
- The calculated indicators show that trade flows are not developing differently in the period 2005-2006 compared to 2007-2009.

## 4 Socio economic aspects

To evaluate the impact of Regulation 1/2005 on socio economic aspects, three indicators have been identified. From the case studies it may be concluded that transport costs have been increased by Regulation 1/2005. The main increase was caused by mandatory adjustments of the means of transport such as the characteristics of the roof, watering and feeding systems, artificial ventilation, satellite navigation systems and measurement and monitoring system for temperature control. The investment for these adjustments has been estimated at a level of 15100 euro. For horse transport additional investment is required for partitions. This required investment is estimated to cost 20000 euro. This increases the kilometre prices for vehicles transporting cattle, sheep and pigs by 2.2

eurocents. For horses, this increase is 5.5 eurocents. In addition to this investment, the variable costs have increased due to additional administrative costs (see administrative costs).

Despite the increasing costs for transport companies, the market prices for transport have remained the same in the case of pigs transport from Denmark to Germany and sheep from Hungary to Italy or have decreased with 3.7% for cattle from France to Italy and with 8.7% for horses transported from Poland to Italy. These price reactions are because transport companies are still in competition with companies that do not comply with the regulation.

## **5 Regional implications**

To evaluate the impact of Regulation 1/2005 on regional aspects six indicators have been identified (see table 6).

There is no indication that Regulation 1/2005 has affected the competiveness of animal production in the remote areas of the EU-27. The following facts support this conclusion:

- In most of the remote areas, animal production is at the same level before and after the implementation of the Regulation. This is partly caused by quota systems (i.e. milk quota) based on historical production;
- Only one derogation based on Article 30 of the Regulation is reported (in Catalonia, which cannot be regarded as a remote areas);
- Slaughterhouses are available in many of the remote areas.

However, at the time of this study long term impacts of the Regulation are not clear. The competitiveness of the animal production systems in remote areas has not been investigated. If these production chains are suffering at this moment, it is possible that animal production and the number of head will decline in the coming years.

## 6 Administrative aspects

To evaluate the impact of Regulation 1/2005 on administrative aspects, two indicators have been identified (see table 7).

The administrative costs due to the introduction of Regulation (EC) N° 1/2005 are mostly related to the time required to fill the journey log for each delivery, the subsequent submission to the

competent authorities and the time dedicated to get transporter authorization and certificate of approval of means of transport by road. The possible additional costs are summarized below:

- 25 € / journey for filling journey log and submission to the competent authorities;
- 515 € / vehicle for transporter authorization;
- 26 € / vehicle for certificate of approval.

It should be noted that these values are calculated using the average wages within the EU-27. Given the huge variation in labour cost among MS, these additional costs will vary between MS.

## 7 Legal aspects and enforcement

Regarding to the legal aspects and enforcement eight indicators have been identified.

The main findings regarding legal aspects and enforcement are:

- Regulation 1/2005 is still not fully implemented in all MS. Rules regarding the transport of pets and fish (Annex I, chapter V (2) of the Regulation) were not implemented in 2010 in 5 respectively 7 of the 16 MS;
- New administrative measures such as the approval of vehicles, the certification of transport companies and drivers and the introduction of journal logs in Regulation 1/2005 can ensure a more systematic enforcement of the technical rules. However, given the first conclusion and a far from optimal communication between different MS this is still not realised in practice.
- Differences in the way and speed of implementation influence the level playing field of transport companies within the EU and the acceptance of the Regulation by transport companies (i.e. drivers in DK need a training course of 5 days every five years for the certificate while drivers in other MS need a training of only 0.5 days once);
- Differences between MS exists regarding enforcement (number of checks, type of checks, mandate of inspectors) affects animal welfare if longer routes are chosen by transport companies due to stricter enforcement in some transit countries (i.e. Austria), which is as such a violation of Art 3 (a) of the Regulation;
- Enforcement of journey log submissions has started recently (i.e. in Italy in 2009 about half of the infringements dealt with absent, irregular or incomplete journey logs);
- Journey times in journey logs are still not regularly checked. The case of horses,
   transported for between 20 and 24 hours according to the journey log, shows that

- almost half of them should have included a rest stop at a control post. This percentage increased from 2007 to 2009;
- Penalties differ between MS for the same infringement (minimum fines from 75 euro in France to 2000 euro in Austria and maximum fines of 6 months' imprisonment in France and UK). Only for Austria and UK is some insight given of the juridical follow up of the different type of infringements. In both countries between 77 and 83% of the infringements get an oral or written warning and 15 to 20% of the infringements are fined. Withdrawal of approval is an exception and suspension of approval is relatively rare.
- Action plans (Art 27(2)) contain many training programmes, set up of checklists and guides. However, in many cases, the action plan is not based on an analysis of the major deficiencies detected. Further analysis of the major deficiencies is lacking.
- Implementation of Regulation 1/2005 has contributed to the greater awareness of inspectors, drivers and people handling animals during transport. Further the number of unfit animals transported has decreased.

## 8 Guides to good practices

• In eight EU member states (NL, IT, IE, UK, SK, FR, DK and RO) guides to good practice have been developed. Most of these guides have been developed with a strong involvement of the national government. Only in NL and DK were these guides initiated by chain participants.

## **General remarks on data collection**

Data has been collected from intended countries and stakeholders. However, it has not been easy to collect sufficient data within the time scale planned. As the project team we dedicated a significant amount of effort to get answers from National Competent Authorities. In the end after extending the response period by more than one month we managed to get results from 18 out of 27 MS.

Given the fact that implementation and enforcement of Regulation 1/2005 varies among MS and its implementation is still in progress, the impact of the Regulation may not become clear for a number of years, especially in the more remote areas of the Union.

# Better implementation and enforcement versus changing the Regulation

Although not part of this study, many suggestions for changing the present Regulation have been given by respondents. However, given the fact that the Regulation, though published in 2004, is still not fully implemented in 2010 in all MS, it can be questioned if changing part of the Regulation as suggested by EFSA (2011) regarding space allowance per species, journey time for horses and many NGO's (i.e. World Horse Welfare; Dossier of Evidence, November 2008) will improve animal welfare faster than an uniform implementation and enforcement of the present Regulation.

#### **Conclusions**

The following conclusion can be drawn from this study:

- Implementation and enforcement of Regulation 1/2005 is still in progress in many MS (see reports of FVO and annual MS reports);
- Limited progress has been achieved regarding animal welfare aspects by Regulation 1/2005. This holds in particular for the transportation of horses (partitioning) and animals unfit for transport (which is no longer permitted).
- A negative impact of the Regulation 1/2005 on animal welfare is that journeys, in some cases, are extended to take advantage of differences in enforcement and penalties between MS (see the example of Austria).
- For the main groups of animals there are no indications that animal welfare during transport has been improved substantially by Regulation 1/2005;
- Navigation systems are mandatory for all vehicles transporting animals over 8 hours since the beginning of 2009. These systems have been installed however the utilization is relative low although transport companies know the benefits of the systems. The improvement of journey logs is low (journey logs in paper form are still the norm) and only half of the respondent Competent Authorities see improvements in control by using the information from these navigation system. This is still in progress. Also communication between different stakeholders improved only to a limited extent by the use of navigation systems;
- Trade flows of live animals have not seen significant impacts due to Regulation 1/2005. The historic trend of increasing international trade of live animals continued after the implementation of Regulation 1/2005;
- The investments and costs for transport companies increased by the implementation of Regulation 1/2005 due to the necessary adjustment of vehicles with insulated roofs,

drinking devices, systems for heating drinking water, satellite navigation systems and artificial ventilation facilities. The costs for approval, training and administration increased the costs for transport companies. The market prices for transport of animals did not increase which means diminishing margins for transport companies which operate according the rules;

- Administration costs increased for National Competent Authorities and for transport
  companies after the implementation of Regulation 1/2005. For transport companies
  the estimated additional costs are 25 Euro per journey, 515 Euro for transporter
  authorization and 26 euro per certificate of approval for a vehicle. These costs are
  mainly labour costs and thus differ between Member States. No reliable information is
  available on the additional costs for national competent authorities.
- There is no impact of Regulation 1/2005 on the competitiveness of animal production in the remote areas of the EU-27 in the period 2007-2009. As this is a short term study long term impacts cannot be excluded;
- Regulation 1/2005 is not fully implemented in all MS in 2010;
- Regulation 1/2005 is implemented in different ways in different MS. This is harming the level playing field for transport companies;
- There is no uniform enforcement of the Regulation 1/2005 in the different MS;
- Journey times in journey logs are not regularly checked;
- Penalties differ between MS and are, according to the FVO mission in some countries, not dissuasive;
- Action plan of different MS show a huge variation and are often not based on the analysis of the main deficiencies detected;
- Regulation 1/2005 has contributed to a better awareness of animal welfare aspects by different stakeholders involved in transport of live animals;

### **Recommendations**

- a. To increase the impact of Regulation 1/2005, especially with regard to animal welfare during transport the following steps are necessary:
  - An uniform definition and interpretation of all aspects of Regulation 1/2005 i.e.
     training, equipment, checks, infringement and action plans;
  - An uniform way of enforcement within the EU MS including checks on journal logs and journey times;

- Improved communication between MS (art 26) and uniform reaction on notifications of other MS;
- More uniform level of penalties in the different MS and at least a level which is dissuasive.

By harmonizing the Regulation and enforcement and by improving the communication the following impacts can be expected:

- A level playing field for transport companies and control posts;
- Positive selection of organisations especially transport companies and control posts willing to operate according to the rules;
- Long distance transport of live animals will become more expensive and trade flows may partly shift to the transport of meat;
- Animal welfare will increase;
- b. Better implementation and enforcement of the existing regulation should be preferred to changing the present Regulation. The present progress and developments, which are evolving slowly, will slow down if discussion starts on changing the Regulation. Exceptions could be made for parts of the Regulation which could lead to poor animal welfare. These exceptions should be scientifically based (i.e. the maximum journey travel of horses).
- c. Good guides to practices should be supported because organisations in the total supply chain are more likely to follow the rules and standards set by themselves. In most cases these guides to good practice are privately checked and can reduce checks by Competent Authorities in the long run or make it easier to perform more checks on companies not participating certain certification schemes. This holds for all participants in the supply chain (farmers, transport companies, control posts and slaughterhouses). Incentives could be given to quality systems of transported and slaughtered animals carried out by the final users i.e. retailers. Within such quality system certified means of transport, certified control post and certified slaughterhouses should be mandatory.