



64th

EAAP 2013

AUGUST 26TH - 30TH, 2013
NANTES, FRANCE

ANNUAL MEETING
OF THE EUROPEAN FEDERATION OF ANIMAL SCIENCE



Assessment Protocol for Measuring and Monitoring Sheep Welfare in Long Distance Transportation

Sossidou, E.N., Messori, S., Mounaix, B., Ouweltjes, W., Pedernera, C., Vousdouka, V., Spoolder, H.



HELLENIC AGRICULTURAL ORGANIZATION - DEMETER
DIRECTORATE GENERAL OF AGRICULTURAL RESEARCH



N.A.G.RE.F.
NATIONAL AGRICULTURAL
RESEARCH FOUNDATION



IZSAM C. CAPORALE
TERAMO



INSTITUT DE
L'ÉLEVAGE



RESEARCH & TECHNOLOGY
FOOD & AGRICULTURE

Veterinary Research Institute, GREECE
sossidou.arig@nagref.gr



LIVESTOCK RESEARCH
WAGENINGEN UR



Why develop this protocol?

Each year thousands live sheep are transported huge distances across Europe on journeys lasting anything from **30-90 hours**.

With increasing duration of journey, **the welfare of animals** generally gets worse.



Total number of live animals transported (intra Union trade and import to/export from EU)

	2005	2007	2009	% change 2005-2009
Sheep	4,209,196	9,112,233	4,335,078	+3%
Cattle	3,973,008	4,222,859	4,299,255	+8%
Pigs	16,438,637	21,696,563	27,802,500	+70%
Horses	176,348	224,449	147,122	-17%

Source: EC Report, 2011, using data from Traces





www.controlpost.eu

Project COORDINATOR:
Dr Kees de ROEST, CRPA, Italy



The Project: SANCO/2011/GR/CRPA/SI2.610274

‘Development of an EU wide animal transport certification system and renovation of Control Posts in the European Union’

The project foresees :

- ❑ Renovation of Control Posts, located on important flows of animals in the EU, using high quality criteria;
- ❑ Elaboration of a scientifically based animal transport certification scheme of animals transported over long journeys.



HELLENIC AGRICULTURAL ORGANIZATION - DEMETER

DIRECTORATE GENERAL OF AGRICULTURAL RESEARCH



Sossidou *et al.*, 27 August 2013



64th

EAAP 2013

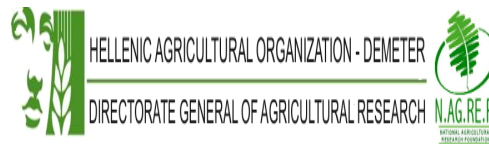
ANNUAL MEETING
OF THE EUROPEAN FEDERATION OF ANIMAL SCIENCE

AUGUST 26th - 30th, 2013
NANTES, FRANCE



WP2

LEADER: Dr Hans Spoolder
Wageningen UR Livestock Research



- To list potential criteria to assess compliance to legislation;
- To develop animal welfare assessment protocols for cattle, pigs, horses and sheep during transport (assessed shortly after transport);
- To train assessors in the use of these protocols;
- To develop animal welfare monitoring systems for drivers and third parties;
- To provide a checklist addressing animal welfare and compliance to legislation and that can be used for certification of transporters.



Base references

□ Research papers

□ EFSA Scientific Opinion, 2011

□ EC Regulations

EC Regulation 1/2005

EU Council DIRECTIVE 98/58

Council Regulation 1255/97

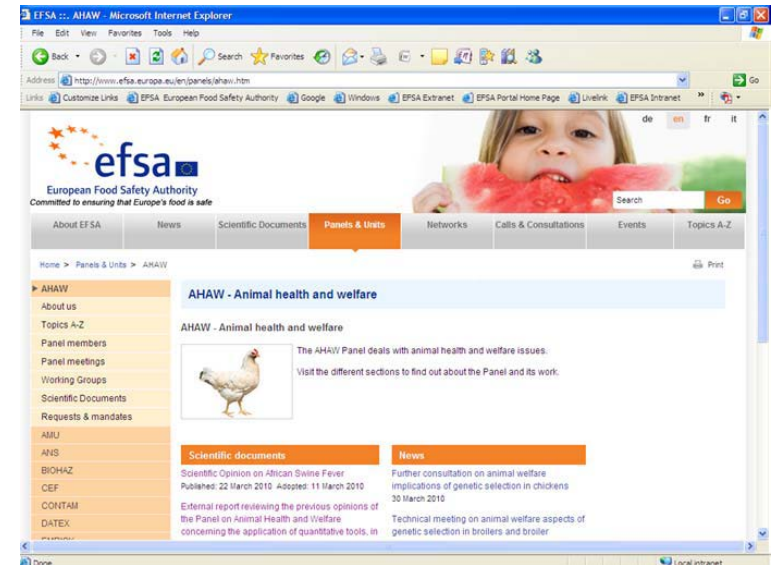
□ Existing Welfare Assessment Protocols

SANCO/D5/2010/CRPA/SI2.578062

Welfare Quality®

Institut de l'Elevage

□ Literature Study



Welfare Criteria

Animal and Management based Measures

1	Absence of prolonged hunger	
2	Absence of prolonged thirst	
3	Comfort around resting	
4	Thermal comfort	Panting
5	Ease of movement	Slipping, falling, reluctance to move
6	Absence of injuries	Dead on arrival, non-ambulatory, injuries Dead in resting pens
7	Absence of disease	Coughing Hampered respiration, exhaustion
8	Absence of pain	Handler performing forbidden practices, handler slapping
9	Expression of social behaviours	
10	Expression of other behaviours	
11	Good human-animal relationship	Handler moving excitedly, handler making loud noises, appropriate handling
12	Positive emotional state	



Welfare Criteria

Resource and Transport based Measures

1	Absence of prolonged hunger	
2	Absence of prolonged thirst	
3	Comfort around resting	Unloading duration, density, low deck height, bedding
4	Thermal comfort	
5	Ease of movement	Bedding on the ramps, gaps or steps before the ramps, gaps between truck and lateral protections, gaps or steps after the ramps, blocking zones, ramp slope, slipping zones
6	Absence of injuries	Hollow walls, sharp edges, lighting for animals, lighting for handlers
7	Absence of disease	
8	Absence of pain	
9	Expression of social behaviours	
10	Expression of other behaviours	
9	Good human-animal relationship	
12	Positive emotional state	



Protocol tested in practice in Greece and in Italy

50 transports were assessed (October 2012 - June 2013)

Country of departure:

France (n=4)

Greece (n=7)

Hungary (n=14)

Poland (n=1)

Romania (n=18)

Spain (n=6)

Country of destination:

Greece (n=25)

Italy (n=25)



Animal based and management based measures AT ARRIVAL AND DURING UNLOADING

Animals

- Dead on arrival
- Non-ambulatory (downer)
- Coughing
- Injuries
- Falling
- Reluctance to move
- Slipping

Handlers

- Moving excitedly
- Making loud noise
- Slapping/ hitting
- Forbidden practices
- Appropriate handling



Animal based and management based measures in the RESTING PEN

Animals

- Dead in resting pen
- Exhaustion
- Panting
- Hampered respiration



Resource based and transport based measures **BEFORE UNLOADING STARTS**

- Check with driver
- Type of truck



- Weather



Resource based and transport based measures

DURING UNLOADING

- ❑ Duration of unloading
- ❑ Ramp covering
- ❑ Ramp flooring
- ❑ Ramp floor conditions
- ❑ Ramp lateral protections
- ❑ Gaps or steps before the ramp
- ❑ Gaps between lorry doors and lateral protections
- ❑ Gaps or steps after the ramp
- ❑ Ramp slope
- ❑ Blocking zones
- ❑ Lighting for orientation
- ❑ Lighting for handling





Ramps: flooring, lateral protections, gaps between lorry doors and lateral protections, covering, gaps after the ramp

Ramp slope



Resource based and transport based measures **AFTER UNLOADING**

- Sheep density
- Bedding
- Deck height adequacy
- Sharp edges
- Water supply
- Temperature monitoring and control systems



Preliminary results from assessments (I)

- ❑ Facilities, hygiene etc, were in most of the cases at acceptable levels;
- ❑ Overcrowding: there was not sufficient space in 58% of the transports with unshorn sheep and in 38% of transports with shorn sheep;



Preliminary results from assessments (II)

□ 12% of the trucks **deck height** was not adequate;



□ In 8% of the trucks there were **sharp edges**;



Preliminary results from assessments (III)

- ❑ Trucks often did not have digital tachographs;
- ❑ Trucks often had **GPS** that were out of order;
- ❑ In approximately 50% of the trucks, **drinking points** were not working and in 42% of the trucks there was no water available.



Preliminary results from assessments (IV)

□ During unloading the percentage of falling animals and flocks were animals were observed slipping and reluctant to move were considerable (up to 100% of the flocks during unloading).

This might be related to a too steep ramp slope (in 20% of the trucks) and handlers behaviour during unloading (in approx. 40% this was inappropriately).



Ordinary problems for the assessors

- ❑ No reservation in CPs or last moment reservations;
- ❑ Non stop long distance transports of animals although in the transport documents it was declared a stop in a CP;
- ❑ Late arrivals on purpose aiming at avoiding the veterinary inspection;
- ❑ Vagueness in regards of estimated travel times and real travel times;
- ❑ Lack of communication between vet and transporter;
- ❑ Long distance transport of assesor to reach the place of animals' unloading;
- ❑ Difficult access to the places of animals' unloading;



Ordinary problems for the assessors

- ❑ **‘Slipping’** and **‘Slapping’** sometimes occur after the 3-meter assessing area, thus, these parameters should not be taken into account, no matter how intense they are;
- ❑ Mixing of unloaded animals with others from different trucks in resting pens was making the observations in ‘impossible’;
- ❑ Sometimes farmers were really suspicious about the activity.



CONCLUSIONS

□ Preliminary results indicated that the main parameters affecting sheep welfare are overcrowding, handler's behaviour and deficiencies of truck equipment.



Acknowledgements



Project
PARTNERS
&
'SILENT'
PARTNERS



Merci pour votre attention!!!