# Results of the study on Intra-European animal health certification of certain live animals

19 September 2017, Dr. Coen van Wagenberg, Wageningen Economic Research





#### **Study objectives**

To estimate economic consequences of a potential derogation from animal health certification requirements for operators and Competent Authorities (CAs) for movements of cattle, pigs, sheep, goats, equidae, and poultry for direct slaughter and for day-old chicks between MSs in the EU. Specific objectives are to estimate:

- 1. Intra-EU movements of live animals of these species;
- 2. Costs of private stakeholders and CAs in selected case studies;
- 3. Scale of economic impact of a derogation on EU28 level.

This study did not analyse animal welfare, animal health, or public health risks related to the movements of animals with or without this potential derogation from animal health certification requirements.



#### Methodology and data

- Methodology
  - Partial budgeting: only benefits/costs related to animal health certification and notification considered
  - Estimation by a deterministic calculation model
  - First order impact on benefits and costs of a potential derogation from animal health certification requirements
  - Case studies
- Data
  - Databases TRACES, Eurostat, FAO
  - Surveys to CAs, operators, and EU branch organisations



#### **Case studies**

			Animal spec				
Member State	Cattle for slaughter	Pigs for slaughter	Sheep for slaughter	Goats for slaughter	Equidae for slaughter	Poultry for slaughter	Day-old chicks
France	X	X	X	X	X	X	X
The Netherlands	X	X	X	X		X	X
Republic of Ireland	X					X	
Spain		X	X	X	X		
Romania			X	X		X	
Hungary			X	X	X		X
Czech Republic	X					X	X



### Methodology for estimation of costs

Collection of data for notification of Notification  Application for notification  Reception by CA of movement request from applicant  Putting data in TRACES  Notification  Verification of movement request from Notification  Verification of movement request from Notification  CA (other)  CA (other)  CA (other)  CA (A (other)  CA (other)  CA (CA (other)  CA (other)	Activities in the derogation situation	Activity group	Who perfo	rms activity
movement  Application for notification  Reception by CA of movement request from applicant  Putting data in TRACES  Verification of movement request from applicant  Verification of movement request from Notification  CA (other)  CA (other)  CA (other)  CA (other)  Validation of application  Notification  CA  CA  CA  Animal loading time without the animal  Loading of animals  Consignor (e-application)  CA (other)  CA (other)  CA  CA  CA  CA  Transporter, consignor, transporter,			Animals for slaughter	Day-old chicks
Reception by CA of movement request from applicant  Putting data in TRACES  Notification  CA (other)  CA (other)  Verification of movement request from applicant  Validation of application  Notification  CA (other)  CA (other)  CA (other)  CA (other)  CA (other)  Animal loading time without the animal  Loading of animals  CA CA (other)  CA (other)		Notification	Consignor, dispatcher	Consignor, dispatcher
applicant  Putting data in TRACES  Notification  Consignor (e-application)  CA (other)  Verification of movement request from applicant  Validation of application  Notification  CA  CA  CA  CA  Animal loading time without the animal  Loading of animals  Consignor (e-application)  CA  CA  CA  CA  CA  CA  CA  CA  CA  C	Application for notification	Notification	Consignor	Consignor
Verification of movement request from Notification CA CA  Applicant  Validation of application  Notification  CA  CA  CA  CA  CA  CA  Animal loading time without the animal  Loading of animals consignor, transporter, consignor, transporter,	·	Notification	CA	CA
Verification of movement request from Notification CA CA  Validation of application Notification CA CA  Animal loading time without the animal Loading of animals consignor, transporter, consignor, transporter,	Putting data in TRACES	Notification	Consignor (e-application)	Consignor (e-application)
applicant  Validation of application  Notification  CA  CA  Animal loading time without the animal  Loading of animals  Consignor, transporter, consignor, transporter,			CA (other)	CA (other)
Animal loading time without the animal Loading of animals consignor, transporter, consignor, transporter,		Notification	CA	CA
	Validation of application	Notification	CA	CA
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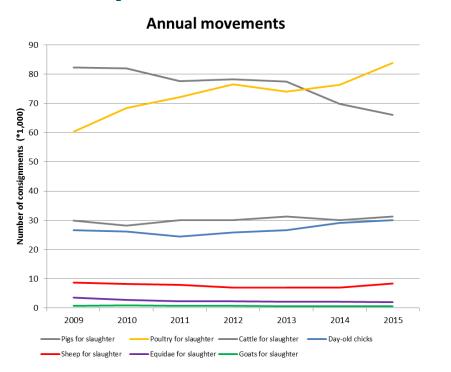


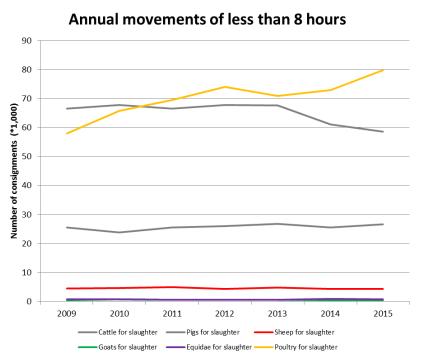
#### Results

- Number of consignments of selected animal species in the EU
- Costs in current situation in case studies
- Benefits of the derogation in case studies
- EU28 benefits of the derogation



### Number of consignments of animals for slaughter and day-old chicks within the EU28





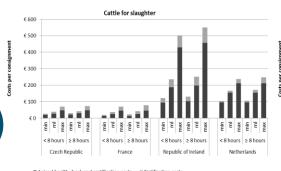
- Consignments 2009->2015: total 212,000 to 220,000; <8 hours 155,000 to 170,000</li>
- <8 hours: Equidae 20-35% of total for slaughter, sheep 50-70%, goats 75-80%, other >85%
- Slaughter: Equidae <10% of total for all purposes, cattle ±25%, goats ±50%, pigs/sheep ±60%, poultry ±92%</li>
- <0.02% of animals for slaughter refused at origin, <0.002% rejected at destination (animal identification, diseased animals, incorrect health certificate)</li>

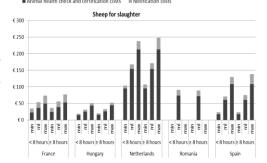


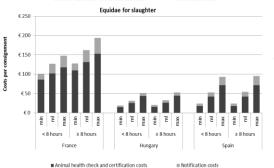
### Costs CAs in current situation (€/consignment)

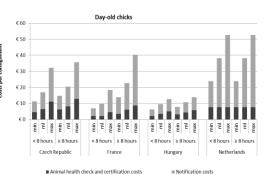
- Large variation between MSs and animal species
- <8 hours and >8 hours similar
- Animals for slaughter: €50-€200
- Animal health check and certification 80-90% of costs
- Day-old chicks: €10-€20
- Animal health check and certification 10-20% of costs
- IE and NL highest costs
- HU, FR, and RO lowest costs

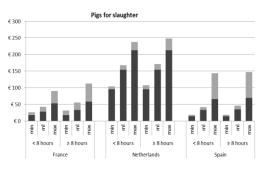


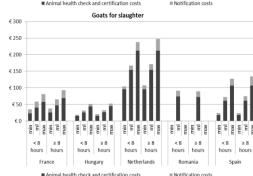


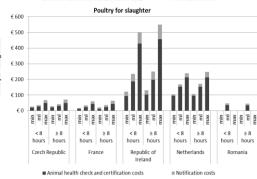












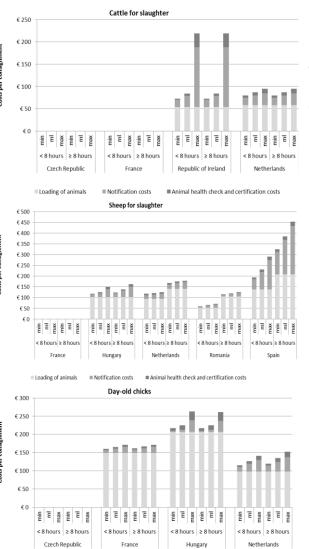
min = minimum estimate, ml = most likely estimate, max = maximum estimate.

The CA of France only provided minimum and maximum time estimates for the activities. The most likely estimate for France is the average value of the minimum and maximum values.

The CA of Romania did not provide minimum and maximum time estimates for the activities.

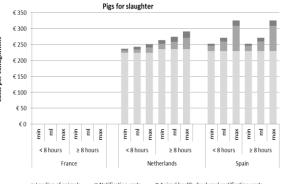
#### **Costs operators in current situation (€/consignment)**

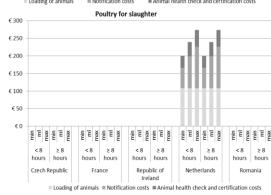
- Large variation between
   MSs and animal species
- >8 hours slightly more than <8 hours</li>
- Cattle ±€75, sheep & day-old chicks €100-200, poultry €200-250, pigs ±€250
- Animal health check and certification costs ±€10 (poultry for slaughter ±€40)



■ Notification costs

■ Animal health check and certification costs





min = minimum estimate, ml = most likely estimate, max = maximum estimate.

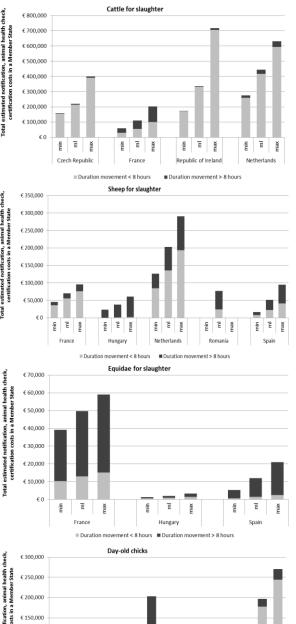
For the Member State – animal species combinations without graphs, no responses were received on the survey.

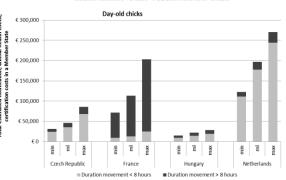


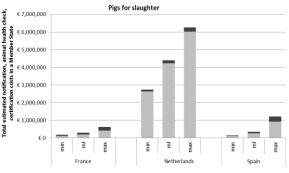
# Costs CAs in current situation (€/year)

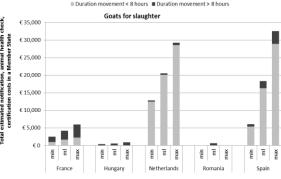
- Total costs
  - Pigs and poultry for slaughter highest costs
  - Equidae and goats for slaughter lowest costs
- <8 and >8 hours
  - Most costs <8 hours</li>
  - Equidae more than 50% >8 hours, sheep for some MSs as well
  - FR higher costs >8 hours than other MSs

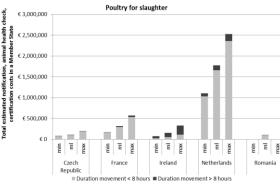












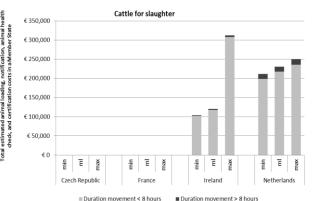
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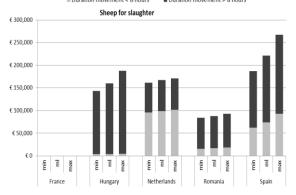
The CA of France only provided minimum and maximum time estimates for the activities. The most likely estimate for France is the average value of the minimum and maximum values.

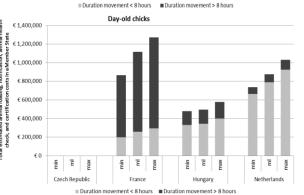
The CA of Romania did not provide minimum and maximum time estimates for the activities.

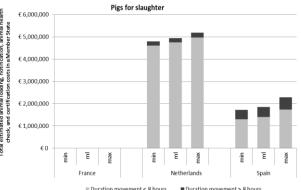
#### **Costs operators in current situation (€/year)**

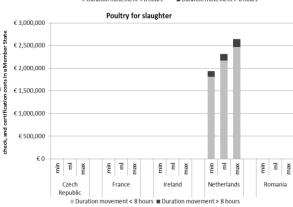
- Total costs
  - Pigs and poultry for slaughter highest costs
- <8 and >8 hours
  - Most costs <8 hours</li>
  - Sheep and day-old chicks in France high costs >8 hours











min = minimum estimate, ml = most likely estimate, max = maximum estimate.

For the Member State – animal species combinations without graphs, no responses were received on the survey.



# Direct benefit and costs of derogation from animal health certification requirements

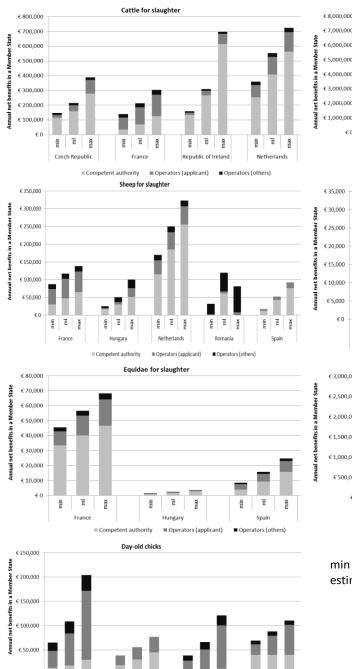
- CA
  - Direct benefits: less labour animal health check and certification
  - Direct costs: lower fees
- Operators
  - Direct benefits: less labour application for certification, shorter animal loading time, lower fees
  - Direct costs: none
- Fees are not included in benefits, because the CAs indicated not to change the fee or did not yet know new fee

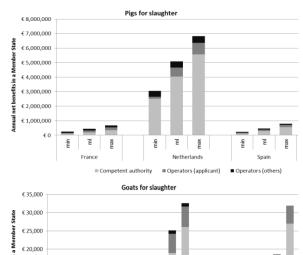


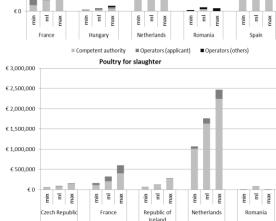
# Net direct benefits per MS (€/year)

- Most net direct benefits for pigs and poultry for slaughter
- Small net direct benefits for equidae and goats for slaughter
- CAs 75% of net direct benefits, operators 25%
- Applicants 80-90% of net direct benefits operators, other operators 10-20%
- Variation due to activity time and number of consignments









■ Operators (applicant)

min = minimum estimate, ml = most likely estimate, max = maximum estimate.

# EU28 net direct benefits of derogation per animal species and movement duration

Net direct benefits	Total			<8 hours			>8 hours		
(Million €)	Most likely	Minimum	Maximum	Most likely	Minimum	Maximum	Most likely	Minimum	Maximum
Cattle for slaughter	2.9	1.8	4.9	2.4	1.5	4.0	0.4	0.2	0.9
Pigs for slaughter	8.9	5.3	12.4	8.1	4.8	11.2	0.8	0.5	1.2
Sheep for slaughter	0.8	0.4	1.1	0.5	0.3	0.7	0.3	0.2	0.4
Goats for slaughter	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
<b>Equidae for slaughter</b>	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2
Poultry for slaughter	8.9	5.3	13.1	8.6	5.1	12.4	0.4	0.2	0.6
Day-old chicks	0.7	0.4	1.1	0.5	0.3	0.8	0.2	0.1	0.3
Total	22.4	13.3	32.9	20.2	12.0	29.3	2.2	1.3	3.6

- Estimated net direct benefits €22 million/year (range €13-33)
- Highest benefits €9 million for pigs and poultry for slaughter
- Low benefits (<€0.2 million) for goats and equidae for slaughter</li>
- 90% benefits (€20 million) for consignments of <8 hours duration
- Differences in net direct benefits between animal species and duration mostly related to number of consignments



### EU28 net direct benefits of derogation per MS

Member State Net direct benefits (million €)	Cattle for slaughter	Pigs for slaughter	Sheep for slaughter	Goats for slaughter	Equidae for slaughter	Poultry for slaughter	Day-old chicks	Total
Netherlands	0.6	5.1	0.2	0.0	0.0	1.8	0.1	7.8
Germany	0.2	1.6	0.0	0.0	0.0	5.8	0.1	7.6
France	0.2	0.4	0.1	0.0	0.1	0.3	0.1	1.2
Spain	0.4	0.5	0.1	0.0	0.0	0.1	0.1	1.1
Republic of Ireland	0.3	0.5	0.0	0.0	0.0	0.1	0.0	1.0
Belgium	0.2	0.4	0.0	0.0	0.0	0.1	0.0	0.8
Czech Republic	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.5
United Kingdom	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Slovakia	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.3
Denmark	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.3
Portugal	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2
Austria	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Hungary	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2
Romania	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.2
Luxembourg	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Slovenia	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Italy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Bulgaria, Croatia, Cyprus, Estonia, Finland, Greece, Latvia, Lithuania, Malta, Sweden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.9	8.9	0.8	0.1	0.2	8.9	0.7	22.4

- Netherlands and Germany ±35% of het direct benefits
- France, Spain, Republic of Ireland, and Belgium ±5%



#### **Indirect benefits**

- Competent authorities
  - No indirect benefits and costs expected
- Operators
  - Easier planning of departure time of a consignment
  - Avoid unfavourable temperatures in a day, avoid traffic jams, shorter duration of movements
  - Better compliance with customer demanded arrival time
  - Net indirect benefits range from €1/consignment (Hungary) to €150-300/consignment (France, Netherlands)
  - Unclear to what extent these net indirect benefits/consignment can be reached by all private operators for each consignment



### EU28 net indirect benefits of derogation for operators per animal species

	Scenario 1:	Scenario 2:
Net indirect benefits	Net indirect benefit = equivalent of	Net indirect benefit = equivalent of
(million €)	€1/consignment in Hungary	€200/consignment in the Netherlands
Cattle for slaughter	0.1	3.9
pigs for slaughter	0.3	12.1
sheep for slaughter	0.0	1.0
goats for slaughter	0.0	0.1
equidae for slaughter	0.0	0.2
poultry for slaughter	0.3	13.5
day-old chicks	0.1	4.5
total	0.8	35.3

- Estimated net indirect benefits between €1 million/year (at 1
   €/consignment) and €35 million/year (at €200/consignment)
- Highest net indirect benefits for pigs and poultry for slaughter, lowest for goats and equidae for slaughter



#### **Conclusions**

- Estimated net direct benefits of €22 million/year (range €13-33)
- 70% of net direct benefits in Netherlands and Germany (€8 million/year each)
- Net direct benefits of €9 million/year for pigs and poultry each
- Net direct and net indirect benefits mostly related to number of consignments per animal species and MS
- CAs 75% of net direct benefits and private operators 25%
- Net direct benefits/consignment independent of duration of movement
- Net direct benefits per consignment €50-€200 for animals for slaughter and €5-€40 for day-old chicks (0.5-1.5% of estimated value of a consignment for all animal species; up to 8.0% for goats for slaughter)
- Net direct and indirect benefits very small if animal welfare check by OV at moment of departure at the location of origin of movements remains
- Most CAs do not expect indirect benefits and costs due to a derogation from animal health certification requirements



### Thank you

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