

Post Implementation Review of the Pigs (Records, Identification and Movement) Order 2011

November 2016

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Introduction

1. This document provides an overview of the Post Implementation Review (PIR) of the Pigs (Records, Identification and Movement) Order 2011.
2. The Order (which applies in England) sets out the requirements for the registration of pig holdings, pig identification, record keeping, movement recording and reporting to a central database. It implements EU Council Directive 2008 / 71 on the identification and registration of pigs.
3. The purpose of this PIR is to fulfil a statutory review provision to establish whether, and to what extent, the Order has achieved its original objectives. Given that it is an EU derived measure, the review has focused on the domestic implementation and enforcement of the Directive, to ensure businesses are not put at a competitive disadvantage.
4. For disease control purpose, it is vital to have an up to date record of the location of pigs and their movement history. Infectious notifiable diseases can quickly spread from the original source and infect larger animal populations. Movement of infected but undiagnosed animals is a negative externality as it imposes costs on unwitting third parties. Effective disease control requires information on animal movements to enable traceability.
5. On 23 June, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. Until exit negotiations are concluded, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation. This also includes the review of such legislation. The outcome of these negotiations will determine what arrangements apply in relation to EU legislation in future once the UK has left the EU.
6. The outputs from this review may shape the UK's position during discussions on the detailed rules and procedures that will be drawn up over the next three years, under the overarching framework of the new Animal Health Regulation (AHR). The framework and tertiary legislation will apply in EU member states from April 2021.
7. The review also assesses whether the original policy objectives are still valid, whether the measure is still required and the best option for achieving those objectives, and if so whether it can be improved to reduce burdens on business.
8. We have concluded that the Directive – or its successor should be amended. Although the review revealed high levels of compliance, lower than expected costs and did not identify unintended consequences, we have identified two

areas where the regulation can be improved in order to reduce costs to business.

9. We intend in due course to remove the requirement for a paper document to accompany pigs being moved and we intend to allow temporary identification marks for piglets travelling to shows with sows. As this measure implements an EU measure, these amendments have been considered in the context of what is in scope of the underlying EU Directive.
10. We have taken a proportional approach to the PIR in line with better regulation guidance. As the Directive is low impact, low risk and is not high profile or contentious, a substantial review was not deemed necessary.

Background

11. In 2011, the Order was revised to allow for the introduction of electronic movement reporting. The intention was to reduce reporting costs for the industry and Government and to provide a more up to date record of where pigs have moved to and from to be used in the event an endemic or exotic disease outbreak. The review, therefore, has focused heavily on the evaluation of electronic reporting.
12. The previous method of reporting pig movements was via a paper system in which paper records of pig movements were sent to local authorities after the movement had taken place to input the data onto a central database. All sectors of the industry – pig keepers, markets, and abattoirs - found it time consuming to complete movement documents by hand. There was also a time lag - often 10-15 days - before the movement data was manually uploaded to that Government' central database - the Animal Movement Licensing System (AMLS).
13. The implementation of an electronic system of pig movement reporting - eAML2 - coupled with a pre-movement notification process has provided more accurate and timely data location data. This will support the control of endemic and exotic pig diseases during an outbreak.
14. Before implementation in 2011, a consultation sought views from industry. Full agreement was received to introduce electronic reporting. The proposal was viewed as a logical progression in the use of accessible technology to enhance the effectiveness and traceability of pig movements in England.

Current system

15. All movements are reported to eAML2. It is operated by the British Pig Executive – BPEX (now AHDB-Pork) which uploads data to AMLS daily. This ensures the Government can access an up to date set of pig movements.
16. Keepers are able to report movements electronically via a home computer or by writing or telephoning details to a free bureau service operated by MLS Services Ltd (part of AHDB-Pork). The bureau service was included so that non-IT enabled keepers were not obliged to buy computers.
17. Electronic and non-electronic movements must be notified in advance of the movement taking place. An exception can be a move to a market or a collection centre where that business agrees to notify the whole move to eAML2 electronically on the day the pigs move on to their premises.
18. To offset potential problems from moving from the paper system to the electronic system, there was a 6-month transitional period to allow non-IT enabled keepers to adapt to the new arrangements. During this period, keepers could continue to use the previous paper movement documents.

Pig industry

19. The changes affected all pig keepers and pig movements. The majority of pig keepers farm their pigs indoors in highly controlled environments. Pig farming is concentrated in the east of the country, predominantly East Anglia and Yorkshire. The industry is very intensive. 90% of sows reside on less than 1000 farms, which each house more than 100 sows. The supply chain is dominated by a few large processors and has become increasingly vertically integrated over the past decade. A quarter of domestically produced pork is exported, mainly of cuts which are not popular with UK consumers.

Economic evaluation

20. The economic evaluation builds on the analysis that supported the original impact assessment in 2011. The price and present value base is 2011 for direct comparison.
21. The costs and benefits of the current e-reporting system are compared to the previous paper system to estimate the net economic impact arising from the 2011 amendment.
22. We also assessed the expected costs and benefits of policy amendments to reduce the burden on business.

23. The number of movement reports is the main factor considered when assessing the benefits of the electronic reporting system¹. The number of pigs moved does not feature in the calculations as the movement report can list e.g. 1 to 500 pigs. Monitoring data provides the number and type of movement reports as well as the method of reporting.

Table 1 – Pig movements

	2012	2013	2014	2015
Farm to slaughter	125940	120755	111597	112952
Farm to farm	36102	34772	32678	32475
Farm to market	18553	17821	16862	17095
Other	1150	1465	2482	1406
Market to farm	4607	4470	4182	4428
Market to slaughter	4399	4552	4679	4930
Export	56	72	73	43
Import	9	9	19	13
Show	1352	1557	1226	1471
Total	192168	185473	173798	174813
Of which				
Bureau	41229	9945	7945	7346
Electronic	150939	175528	165853	167467
% reported electronically	78.55%	94.64%	95.43%	95.80%

Source: eAML2

24. The movement data and proportion of electronic movements allows us to directly compare the actualised benefits of e-reporting to the costs and benefits estimated in the original impact assessment.

¹ We have restricted the analysis to moves between farms, markets / collection centres and slaughterhouses as they account for 99% of movement reports.

25. The industry benefits of the e-reporting system predominantly consist of the reduction in time taken to report movements electronically relative to paper. The original impact assessment estimated that one electronic record takes 1 minute compared to 4.04 minutes using the old paper system, saving 3.04 minutes per move. These assumptions were based on trials conducted before the original IA and were validated by stakeholders in the PIR stakeholder consultation.
26. The total number of hours saved was calculated by combining the actual number of movements with the time savings per movement. The monetised benefit is derived by multiplying the total hours saved by the hourly labour rates for the industry. The hourly rates were taken directly from the original impact assessment so as to enable a direct comparison. Each rate was originally uprated by 30% to account for overheads.

Table 2 - Hourly labour rates

	Farms	Markets	Abattoirs
Hourly labour rate	£10.8	£9.67	£9.48

Source: 2011 IA

27. The industry benefits are greater than those predicted in the IA as the take-up of electronic reporting has been higher than anticipated, allowing further time savings. The IA estimated that the proportion of electronic reporting would increase in 1.5% increments from 70% to 85% over a 10 year period. However, as shown by the data at table 1 above, the proportion of electronic reporting started at 78.5% in 2012 before reaching c.95% the following year where it has remained since.
28. When time savings are monetised, the economic analysis indicates that the industry saved c.£720k between 2012 and 2015. This compares to a saving of c.£640k predicted in the IA for the same time period. The extra proportion of pig keepers using electronic reporting increased the total time savings in comparison to the paper system.
29. The industry benefit also consisted of reduced postage costs as electronic reporting does not require forms to be posted to the Local Authority. However, this saving was reduced by extra printing costs required by the new system.
30. There were also a number of benefits to the policy that have not been possible to quantify. As recognised by the consultation responses, the increased accuracy and timeliness of the movement data would improve the efficacy of disease control measures and hence reduce the risk of disease spread. Fortunately, we have not had a notifiable swine disease since the introduction of the measure to test this assumption.

31. The economic benefit of moving to paper reporting was calculated by combining the cost of printing the document (£0.06) by the number of movements that require printed haulier summaries. Haulier summaries are only required to be printed by the dispatch keeper so the number of printed documents is a subset of the total number of pig movements.
32. The economic benefit of the proposal received during this PIR to change the individual ID requirement for piglets travelling with sows to shows i.e. to allow them to be identified with a temporary pant mark was calculated using monetised time savings. The current method of tagging piglets is estimated to take 30 minutes for two people and the proposed paint mark method is estimated to take 2 minutes for one person. The benefit is derived by multiplying the time savings (52 minutes) by the hourly labour rate for farm workers (£10.8).
33. The costs of the new system have been very similar to those estimated in the impact assessment given that they are based on contracts. The new reporting system costs the Government c.£305k per annum, of which £220k supports IT and system maintenance and £85k supports a helpline and bureau service for receipt of non-electronic movements. Previously, the Government spent c. £20k per annum printing and distributing movement documents and funded Local Authorities c. £400k per annum to manually upload paper records of movements to the central database.

Table 3 - Summary of costs and benefits

2011 prices 2012 – 2015	Impact Assessment 2011	Post-Implementation Review
Industry savings	£651,728	£722, 495
Local authority savings	£1,649,124	£1,649,124
Benefits of new system	£2,300,852	£2,371,619
Cost of new system	£1,220,000	£1,220,000
Net benefit	£1,080,852	£1,151,619

Title: The Pigs (Records, Identification and Movement) Order 2011 - 'PRIMO' PIR No: RPC-3467(1)-DEFRA Original IA/RPC No: RPC-Defra- 0803 Lead department or agency: Defra Other departments or agencies:	Post Implementation Review
	Date: 10/8/2016
	Type of regulation: EU
	Type of review: Statutory
	Date measure came into force: 01/10/2011
	Recommendation: Amend
Contact for enquiries: Patrick Brophy (patrick.brophy@defra.gsi.gov.uk)	RPC Opinion: Green

1. What were the policy objectives of the measure?

The Order sets out the requirements for the registration of pig holding premises, pig identification, record keeping, movement recording and the central database. It is derived from the EU Council Directive 2008 / 71 on the identification and registration of pigs.

In 2011, the Order was amended to provide an electronic system to report pig movements in England. Previously, movements were reported via a paper system whereby records were sent to Local Authorities to upload the data onto a central database.

The measure had four main policy objectives:

- To reduce reporting costs for the industry and Government.
- To reduce the cost and duration of animal diseases, e.g. Foot and Mouth disease, through more accurate and timely pig movement data.
- To protect human health by tracing livestock throughout their lifecycle.
- To enable intra-Community trade and third country exports via a transparent and traceable food chain.

2. What evidence has informed the PIR?

The PIR has been informed by two consultations (1. pig industry representatives and 2. EU member states), the Red Tape Challenge Report, monitoring data and in-house cost-benefit analysis. We believe this evidence is more than sufficient considering the regulation is low impact, low risk and non-high profile or contentious.

Industry consultation

We consulted industry stakeholders via email and the Defra Dialogue app, an online forum. Stakeholders were asked a series of question relating to the transposition of the EU Directive, including whether implementation has achieved the policy objectives and whether there are unintended consequences or requirements that cause concern. We also asked for ideas as to how to improve transposition of the Directive. Responses were received from two pig trade associations and a major ear tag supplier. A summary of industry responses can be found in Annex B.

Member state consultation

We sought information from other European Union member states on how they implement the EU Directive. We received responses from 10 Member States, including Denmark which share similar traits to the English pig industry.

A summary of the responses can be found in Annex C.

Red Tape Challenge

The Order was reviewed as part of the Government's Red Tape Challenge in 2013 which sought to establish which regulations could be improved or removed.

Monitoring data

The Agriculture and Horticulture Development Board (AHDB-Pork) collect pig movement data on behalf of Defra and produce quarterly performance reports. The data includes:

- A summary of the types and volumes of pig movements
- The time taken to report completion of moves
- The method of movement reporting – electronic or via the bureau (a phone and fax service)
- Performance measures for the eAML2 pig movement reporting service bureau.

Local Authorities are responsible for enforcement of the Order and carry out inspections and intelligence driven checks.

The Rural Payment Agency also inspect pig keepers to ensure they are complying with the Order and therefore eligible for CAP payments. Annual inspection data, which includes a summary of the number of breaches, was available.

Economic evaluation

We undertook an economic evaluation to assess the costs and benefits of the policy and to establish whether the benefits of the policy justified the cost. The monitoring data was used to compare the ex-post costs and benefits of the policy to the ex-ante costs and benefits set out in the 2011 Impact Assessment. We also assessed the expected costs and benefits of policy amendments to reduce the burden on business.

3. To what extent have the policy objectives been achieved?

Reduced reporting costs for the industry and Government

The new electronic system has reduced Government spend on pig movement data capture. Previously, the Government spent c. £20k per annum printing and distributing movement documents and funded Local Authorities c. £400k per annum to manually upload paper records of movements to the central database. The new electronic system transferred the responsibility to the British Pig Executive (BPEX) (now AHDB-Pork) which now receives all pig movement data through eAML2. This costs the Government c.£305k per annum, of which £220k supports IT and system maintenance and £85k supports a helpline and bureau service for non-electronic movements. As a result, the Government saves c. £115k per annum, and has saved c. £364k since the introduction of electronic reporting when transition costs (£96k) are included.

The new electronic system has reduced the compliance burden on industry. Given that reporting electronic movements takes less time than completing the paper movement document, the industry has saved costs since the implementation of the electronic system. When time savings are monetised, the economic analysis indicates that the industry has saved c.£720k from 2012-2015. This is greater than the cost-savings predicted in the IA as the take-up of electronic reporting has been higher than expected.

Please see the annex for details on the calculations.

Quicker and more effective traceability of all pigs

The introduction of a new electronic movement reporting system (eAML2) in 2011 (enforced via the Order) has resulted in over 95% of pig moves being captured electronically, which is significantly higher than anticipated in the IA². This availability of electronic data, which is accessible within a day, is a significant improvement to the previous paper based system where moves were manually entered, taking up to 10-14 days for it to be uploaded onto the central tracing system.

Such a delay was a significant risk for Defra and industry as it could slow down effective tracing during a disease outbreak, increasing the disease duration and the number of infected holdings, with costs for industry and Government. Fortunately, the UK has not experienced any swine diseases since the introduction of the order to test the improved tracing system.

Additionally, the streamlined electronic system has facilitated compliance, thereby increasing the available tracing data to government. Monitoring data indicates that >83% of moves are reported in 72 hours, the regulatory requirement, while 93% of moves are reported within a week. This is an improvement on the old system which required movement documents to be sent to Local Authorities by post. Very few movements would be entered onto the old system within 72 hours, with the majority entered within a week to 10 days.

Protect human health by tracing livestock throughout their lifecycle

The transition to the eAML2 system has improved the data we have on holdings where pigs are kept in England. Together with its more accurate and up to date movement data, we are better placed in the event of a public health issue to identify where potentially unfit animals that have entered the food chain have come from and to take prompt action to close down the source. Domestic consumption of pork has been stable since 2000 (earliest year of data), reflecting, among other factors, public confidence in the provenance of the meat.

Enable intra Community trade and third country exports via a transparent and traceable food chain

In the event of a disease outbreak, the movement data available via the eAML2 system ensures that our controls would enable us to manage a disease outbreak more effectively. Although disease outbreaks are never the same, we would expect disease durations to be shorter on average given the better information available to industry and Government. This is beneficial for industry as it allows them to commence normal trading patterns and the reopening up of export markets more quickly.

The tracing system has supported Defra's efforts to maintain the industry's access to its traditional swine meat export markets, such as Ireland and Germany. In 2015, the value of UK fresh / frozen pork exports to the EU, its largest export market, was £138m, a 4% rise on the 2011 level. The tracing system has also supported the industry's access to less established export markets. The volume of offal exports to China, Philippines and South Korea has increased by 645%, 243%, 498% respectively since 2011.

Over the past 10 years, the total export value of swine products has increased

² It was predicted that 70% of moves would be reported electronically, rising to 85% over a 10 year period.

significantly, rising from £38m to £195m in 2015. See Annex A for detailed export statistics of swine products.

Consultation

Responses from our stakeholder consultation indicate that the policy objectives have been achieved. Industry representatives agreed with the following conclusions:

- Movement data is captured more quickly and accurately;
- Government and industry will have a more reliable register of pig keepers;
- Lower cost of movement reporting; and
- Greater disease resilience due to better data.

Compliance

Inspection data from the Rural Payments Agency for cross compliance payment shows that there is a high level of compliance with the Order, indicating that it is designed appropriately. In 2015, 153 pig premises were inspected based on a 1% random sample. Only 12 premises (or 7%) were in breach of the Order. None of the breaches were deemed intentional; all cases were ruled as negligent, i.e. the pig keeper may not have known they were not following the rules correctly. There were no repeated breaches from keepers.

Sign-off For Post Implementation Review: Chief economist/Head of Analysis and Minister

I have read the PIR and I am satisfied that it represents a fair and proportionate assessment of the impact of the measure.

Signed:		Date:	12 th October 2016
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Further Information Sheet

4. What were the original assumptions?

The 2011 [Impact Assessment](#) on the implementation of e-reporting for pigs in England considered three policy options:

- Option 1: do nothing, keep the existing paper method of reporting pig movements,
- Option 2: Mandatory electronic reporting required, i.e. electronic reporting by 100% of pig keepers.
- **Option 3 – the preferred option:** Voluntary electronic reporting - electronic reporting undertaken by between 70% of pig keepers expected to rise to 85% over a ten year period. Pig movements could be entered online via eAML2 or by telephoning/ writing to pre-notify a movement to a free bureau system.

Compared to keeping the paper system, the reduction in industry costs for electronic reporting were greatest for option 2 as there would be 100% electronic reporting as opposed to 70-85% for option 3. However, in order to report 100% electronically, non-IT enabled keepers would have had to purchase a computer and internet access. These transition costs were greater than the additional savings generated from a total electronic system, even when funding for an alternative bureau to receive phoned and written movement details was considered. Consequently, option 3 was the preferred policy, with the highest net benefit. Option 3 expectations have been surpassed as we are now collecting around 95% of pig movement data electronically.

Option 3 (price base = 2011, present value base = 2011, time period = 11 years)

Net benefit (present value) = £2.41m

Costs = £2.84m

During transition, the Government would need to fund both the electronic and existing paper system operated by Local Authorities. This was estimated to cost £0.1m for the 6 month transition period. The cost of running the BPEX e-reporting hub was estimated to be £0.22m per annum and the cost of running the alternative bureau system was estimated to be £0.085m per annum.

Benefit = £5.25m

The reduction in costs for electronic reporting compared to the paper system predominantly consisted in time savings. The benefits were estimated as follows:

Pig keepers = £108k per annum; livestock markets = £12k per annum; and abattoirs = £50k per annum.

Local Authorities were estimated to save £412k per annum as they would no longer need to support the collection of movement data.

For the purposes of comparison with the actualised costs and benefits of the reporting system, we have produced the predicted costs and benefits for the period 2012 – 2015 in 2011 prices.

- Industry savings - £651,728
- Local authority savings - £1,649,124
- Benefits of new system - £2,300,852
- Cost of new system - £1,220,000
- Net benefit - £1,080,852

Further detail on the methodology can be found in the 2011 Impact Assessment.

The Impact Assessment made the following assumptions on the new electronic system:

- Movement data captured more quickly and in real time
- Validation at time of reporting will improve accuracy of data submitted
- Both Government and industry will achieve a much more reliable register of pig keepers
- More timely and accurate data supports the control of both endemic and exotic diseases of pigs in the event of a disease outbreak
- The costs of capturing statutory movement data will be reduced
- Transferring data capture function to a central industry point mitigates the potential risks with regard to out of date/incomplete data on AMLS
- Reduces the risk of EU challenge for non-compliance with requirements for CA to maintain a database of pig movements.

5. Were there any unintended consequences?

The evidence gathering indicates that there have been no unintended consequences. The consultation explicitly asked stakeholders whether the consequences of the new Order differed from the original assumptions in the impact assessment (see above) and relatedly whether there were any unintended consequence. The responses from the two pig trade associations, which represent the majority of the industry, did not identify any unintended consequence. Additionally, the relatively low response rate from stakeholders would indicate passive assent with how the Directive has been implemented.

6. Has the evidence identified any opportunities for reducing the burden on business?

Yes.

Paperless Movement Reporting

Now that the electronic reporting system has been well established and used by the industry, the Defra animal movements policy team will consider further streamlining the movement reporting process through implementation of a paperless movement reporting system. Currently, there is still a requirement for a paper record to accompany pigs when they move.

There are legal issues which need to be considered given EU Council Directive 2008 / 71 on the identification and registration of pigs only provides for a paper movement document. There may be an opportunity to amend those rules as part of replacement of pig movement legislation needed to implement the recently adopted EU Animal Health Law.

There would, however, need to be e-AML2 IT system changes to facilitate this because the keeper will require a system notification (e.g. a SMS text) with an official movement reference ID) to verify a paperless move to enforcers, e.g. if stopped in transit to confirm that the movement has been pre-notified prior to departure of the animals. This will incur costs and we need to carry out a comprehensive cost-benefit analysis. Our initial assessment indicates that introducing a paperless reporting system would reduce industry costs per movement by 6 pence. (see annex). Based on an annual movement total of c.175k moves of which c.96% are electronically reported the total annual saving to industry would be £8,613. This cost saving will need to be balanced against the cost of enhancing the system to deliver such a change.

Defra is looking to transform the IT services it delivers to customers. Part of this project involves a rationalisation of the various species movement reporting systems, whereby pig reporting arrangements could be delivered through a new livestock reporting system in the future (target c.2020). If we are unable to deliver as a change to the existing system we will look to ensure the new system caters for paperless movements.

Identification requirements for piglets accompanying sows to shows

Industry has indicated that the existing rules to individually identify all pigs moving to shows needs to be reviewed. They say that individually identifying piglets up to 8 weeks of age with permanent identifiers causes unnecessary welfare issues and is very time consuming. We will review this requirement with our veterinary advisors with a view to permitting piglets up to 8 weeks of age moving to shows accompanied by their mother to be identified with a temporary identification mark that lasts until the animals are returned to their home holding and is recorded on the accompanying haulier document. Provisional economic analysis indicates that changing the requirement would save £10.44 per sow in monetised time savings and result in higher welfare for the piglets. Additionally, the change would increase the number of sows with litter at shows.

7. For EU measures, how does the UK's implementation compare with that in other EU member states in terms of costs to business?

We have received 10 responses (Annex C) from Member States regarding implementation of the EU rules on pig identification and traceability. Implementation in Denmark utilises the identification derogation and is similar to the regime applied in England. Denmark does however provide for certain approved movements direct to an abattoir without any form of identification. We do not consider that this approach would provide us with the necessary level of traceability and does not reflect the lessons learnt following the 2001 Foot and Mouth disease outbreak.

Stakeholders were given the opportunity to provide differential business costs for other Member States (Annex B). None did so. We have been unable to identify any published cost information relating to Member State costs from other sources. The Red Tape Challenge feedback included a proposal that only single slap marks, as opposed to double, should be used to identify pigs. We have responded to this proposal and advised that it is important to maintain the use of double slap marks because of legibility concerns, particularly at abattoirs. Industry is aware that the use of slap marks as a form of identification is optional and that other identification options are available to them.

Annex A - Selected economic tables and graphs

Figure 1: Export value of swine products since 2001 - HRMC

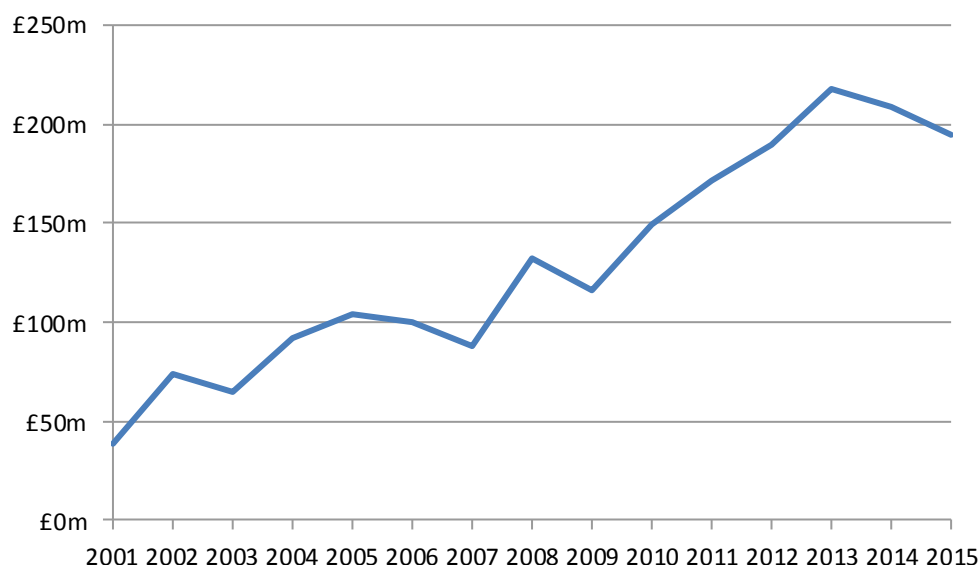


Table 4: Volume of UK pig meat exports since 2011

	2011	2012	2013	2014	2015
Fresh / frozen meat	144,427	154,300	180,749	181,713	187,080
Of which:					
EU	106,015	112,333	127,625	127,490	130,122
China	4,003	11,458	25,006	24,669	27,250
Hong Kong	26,610	19,025	15,842	14,634	11,123
United States	2,223	2,677	3,112	3,267	5,998
R.O.W.	5,576	8,807	9,164	11,653	12,587
Pig offal	34,852	48,534	41,648	45,084	58,929
Of which:					
EU	16,766	35,051	22,373	11,131	13,294
China	3,664	4,049	7,263	17,202	27,287
Honk Kong	12,643	6,975	8,335	11,980	10,957
Philippines	584	719	652	1,288	2,005
South Korea	229	226	321	833	1,369
Cote d'Ivoire	-	49	317	401	1,093
R.O.W.	966	1,465	2,387	2,249	2,924
Other, e.g. ham & bacon	50,447	37,479	36,439	38,323	38,386
Total	229,726	240,313	258,836	265,120	284,395
Live pigs	11,875	3,810	2,079	1,295	126

Source: AHDB Pig Pocketbook

Table 5: Value of total UK pig meat exports since 2011

	2011	2012	2013	2014	2015
Fresh / frozen meat	171,274	189,342	218,136	209,178	197,405
Of which:					
EU	133,350	143,005	166,454	157,366	138,118
China	2,805	10,645	20,441	19,619	25,027
Hong Kong	22,324	18,081	13,457	11,980	7,632
United States	7,421	9,589	10,932	10,289	17,699
R.O.W.	5,374	8,022	6,852	9,924	8,929
Pig offal	25,001	30,249	26,091	35,048	38,464
Of which:					
EU	11,296	17,821	10,111	5,502	5,213
China	2,460	3,310	5,555	11,654	17,937
Honk Kong	10,075	7,255	8,104	14,612	11,157
Philippines	362	454	462	981	1,073
South Korea	190	199	194	497	928
Vietnam	73	-	-	-	512
Cote d'Ivoire	-	38	150	178	419
R.O.W.	618	1,172	1,515	1,624	1,737
Other, e.g. ham & bacon	100,658	87,087	85,345	90,766	85,276
Total	296,933	306,678	329,572	334,992	321,145
Live pigs	5,950	1,863	1,631	1,481	82

Source: AHDB Pig Pocketbook

Table 6: Domestic consumption of pig meat since 2000

Kg / person

	Pig meat	Total meat
2000	23.6	79.2
2005	24.7	83.4
2006	24.9	83.2
2007	25.7	82.8
2008	24.5	80.0
2009	24.3	77.9
2010	24.1	79.4
2011	24.6	80.0
2012	24.6	79.7
2013	23.9	78.6
2014	24.4	79.8
2015	25.0	83.7

Source: AHDB Pig Pocketbook

Annex B - Stakeholder consultation

BPA = British Pig Association

NPA = National Pig Association

QT = QuickTag

	Industry comment		Defra comment
1. To what extent do you believe that the pig movement system should become fully electronic and remove the requirement for a paper record to accompany pigs when they move?	BPA	We don't see a need for the paper record to accompany the pigs provided that the driver has the unique reference number so that any inspector can verify the details of the movement.	<p>Defra agrees that where the pig movement is pre-notified electronically and receipt of animals is confirmed electronically to the eAML2 database there is no need for a movement document, provided a unique reference number has been allocated and is available for inspection by an enforcement inspector during movement.</p> <p>EU rules do not however permit paperless movements, probably because the legislation has not kept pace with technology.</p> <p>Whilst Defra is prepared to consider this proposal in doing so there would be an under implementation of EU law. We therefore need to consider the associated infraction/disallowance risk and take the view of the Commission as to whether such an enhancement needs to be authorised by EU law and if so be pursued through the impending negotiations on implementation of the recently adopted EU Animal Health Law (AHL).</p> <p>There will also be a cost involved in enhancing eAML2 to issue a unique ref number (probably via mobile phone text). It may not be cost effective to deliver paperless movements now, and if that is the case we will ensure this proposal is delivered as part of the new animal movement and tracing systems in England scheduled to be implemented around 2020.</p>
	NPA	We don't see the need for a paper record to be present as long as the driver has the unique identifier for the journey to be made.	

	Industry comment		Defra comment
	QT	Support the above and particularly so if it implements a database accessible to tag manufacturer's for tag authorisation.	<p>EU rules do not provide for pig identifiers (alpha/numeric marks) to be managed through an official allocation system (in the same way as they do for sheep/goats and cattle).</p> <p>Whilst this may be desirable for tag suppliers it may not be beneficial for pig keepers as there will be costs involved in approving official identifiers and putting in place an official ear tag mark allocation system for pigs, which may result in higher tag costs.</p> <p>We do not think it is appropriate to pursue an official ear tag allocation system for pigs in the absence of an EU legislative driver as this would be gold plating.</p>
<p>2. To what extent do you believe that paint marks should continue to be permitted for piglets less than 12 months that go directly to other farms?</p> <p>What would be the impact if this was no longer permitted?</p>	BPA	<p>Paint marks should still be permitted for piglets less than 12 months. Black pigs such as Berkshires or Large Blacks can travel on a red paint mark.</p> <p>If weaners of these breeds were required to be tagged for farm to farm moves - the tags would have to be replaced when the pigs moved to slaughter.</p>	<p>The use of temporary paint marks is permitted in the UK as part of our national pig ID and tracing system which we have a derogation from the EU rules for.</p> <p>We see no reason why the use of paint marks should be discontinued for movements of animals between farms under 12 months of age.</p> <p>We will seek to ensure that our national arrangements continue to be accommodated during EU AHL negotiations which are expected to commence by the end of 2016.</p>
	NPA	We believe that paint marks should continue to be permitted for farm to farm moves of piglets less than 12 months. We believe that piglet welfare would be significantly negatively affected if temporary marks were no longer permitted and more permanent identification such as tagging was required. In addition, these tags would also probably have to be removed prior to slaughter and slap marks used instead, as happens in Belgium.	

	Industry comment		Defra comment
	QT	This is partly determined by point 1. If a database is developed to record movements then tags are a valuable method of identification.	
3. To what extent do you believe that slap marking should continue to be a permanent marking? What would be the impact if this was no longer permitted?	BPA	Slap marking is still the best way to identify pigs moving to slaughter. Even for black breeds where tags are required for the slaughter move some breeders will also slap mark to ensure traceability of the carcass once the head has been removed.	<p>The use of slap marks is permitted in the UK as part of our national pig ID and tracing system which we have a derogation from the EU rules for.</p> <p>We see no reason why the use of slap marks should be discontinued for movements of animals to slaughter and for animals over 12 months of age.</p> <p>We will seek to ensure that our national arrangements continue to be accommodated during AHL negotiations which are expected to commence by the end of 2016.</p>
	NPA	Slap marking, whilst not ideal, is the best option that we currently have to identify pigs back to farm. Whilst we need to retain flexibility to allow for better methods of identification (such as whole batch identifiers as allowed for use by some companies in Denmark), at the moment, there is no viable alternative that is as reliable and can ensure traceability back to farm.	
	QT	As above	

	Industry comment		Defra comment
4. How do other EU countries operate their pig identification and movement recording systems? Are they different to system operated in England? If so, what are the main advantages and disadvantages of the different approaches?	NPA	As mentioned above, Denmark has a derogation that does not require any marking of pigs as long as they go direct from farm to slaughter on a single load. This clearly is better for welfare as no intervention is required, but must of course be employed in line with a very good vehicle traceability system and identification of pigs through the slaughterhouse after delivery. Also mentioned above, in Belgium all pigs must be ear tagged at weaning, but also slap marked before going to slaughter, which clearly demonstrates duplication of cost and effort.	Denmark applies the national rules derogation as we do which provides flexibility on how pigs are identified as long as the holding from which they last came from as well as the holding on which they were born on are identifiable. In England movements of pigs do not generally move direct from their holding of birth to slaughter, most commercial pig production requires animals to be moved between weaning/fattening/finishing units. Our requirement to identify with a permanent mark where pigs have moved from any holding including direct to slaughter is a disease control measure to ensure that in the event that an infected pig arrives at an abattoir the holding it came from can be easily identified. The current arrangements were in fact introduced following a case of unidentified pigs arriving at an abattoir post FMD in 2002.
Do other EU countries implement the movement recording system differently? If so, is the implementation more or less burdensome? Are you able to supply an estimate of the difference in cost per movement recorded?	QT	We are approved as a supplier under the National Pig Identification and Tracing Scheme in ROI. It is beneficial to have a database issuing numbers however we do not have a complete knowledge of the greater impact and benefit.	We do not think that the arrangements in place in Denmark would provide us with the necessary traceability for disease control purposes.
5. Assumptions / unintended consequences.	BPA	The assumptions made in 2011 are still correct except that the cost of printing paper records will have increased.	We estimate that it is still possible to print an A4 form for less than or equal to the 6p assumption used in the 2011 impact assessment.
	NPA	None identified	

	Industry comment		Defra comment
6. Other Ideas	BPA	<p>i) Sows with litter at foot. A sow and litter is a very popular attraction with the public at shows or educational events. If the piglets are under 8 weeks of age and have not been weaned we would like to be able to identify them with a paint mark provided that the sow has the herd mark of the herd of origin. Metal tags cannot be applied at that age and large plastic tags with the herd mark are too big for the ears of these very young pigs.</p> <p>ii) Unique ear numbers. A unique ear number should be able to include a letter. E.g. Two pigs with ear tags or tattoos 1 and 1A respectively should be recognized as two uniquely identified pigs.</p>	<p>i) In this scenario individual identification is a domestic legal requirement to ensure that animals are fully traceable if they move to and from shows. In the event of a disease outbreak this ensures we can identify what pigs have moved and what animals they have mixed with.</p> <p>We will consider with veterinary colleagues whether a legislative change , as described, is advisable for young piglets accompanying sows to shows/exhibition that are under 8 weeks of age.</p> <p>ii) Legislation provides for the unique identification number to consist of the herdmark and a unique number. We consider that having many animals with the same unique number with an alphabetical suffix would be confusing. There is however nothing in existing legislation to prohibit the inclusion of an alphabetical mark on an eartag providing that mark is distinct from the unique number.</p>

Annex C - Responses received from Member States about systems of pig identification and traceability

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
Bulgaria	Domestic pigs in Bulgaria are identified by one of the official means of animal identification, the ear tags. The means for official individual identification of pigs are single (for the one ear only), yellow ear-tags marked by a unique number identifying the animal concerned. The means for the official group identification are single, green ear-tag marked by the number of the holding, where the animal was born. Pigs intended for slaughter coming from approved and registered holdings (of more than 50 mother sows) may not be identified by ear-tags of	The farmers of animal holdings, where pigs are kept (pig farms), are obliged to maintain (keep) a holding register (log-book) on a paper carrier. It stores the data about the holding authorisation /registering/ number, its owner / farmer responsible and the animals kept therein, its location (also as GPS coordinates; its maximum capacity, data about the bans imposed (animal numbers, type of the ban, date of imposition and lifting of each specific ban, if any such bans have	The farmers/owners of pig holdings are obliged to notify in writing the registered veterinarian(s) of private practicing that serves their holding about any newly purchased pigs that have been accepted in their facilities. Farmers are also obliged to notify in writing the registered veterinarian (within 24 hours prior to the start of transportation about any change of ownership of the pigs. The information on these events is to be entered by registered veterinarians into the	The BFSA database keeps information about the movements of pigs. Registered veterinarian servicing the farm of origin of the animals concerned are obliged to enter the information for the outgoing traffic into this database, while the registered veterinarian at the point where animals are accepted as new ones shall enter into the same data base the relevant information about the incoming traffic thereinto. Yes it should always have paper certificate. Each single animal to be examined and then enlisted into such movement document is a basis for payment of government fee payable by the animal owner(s) concerned.	Not applicable.

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
	<p>individual numbers, while group numbering being mandatory as decided by their owner/farmer.</p> <p>Pigs born in the pig holdings located within the country are to be tagged ASAP after their birth, but no later than their first exit of the holding of birth.</p>	<p>ever been imposed by the official veterinarian on animal health).</p> <p>Further information recorded therein would include data about the number of the official identifier, date of birth, date of identification, sex, breed, intended use, ownership of the animal(s), date of entry/exit into/from the holding and/or of death, data about the serial number of the veterinary health certificate accompanying animals when moved/transported from one pig farm to another holding or slaughterhouse, data about all previous holdings of accommodation, registry number of the</p>	<p>Integrated Information System (database) of Bulgarian Food Safety Agency, which is the national Competent Authority for animal health, food and feed safety, etc.</p> <p>This data entering must be finalised within three days of the notification about the event.</p>		

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
		<p>previous/next holding(s) when animals are moved, data about the transporter and transport vehicle(s) used for movement of pigs, data about the inventory checks carried out by farm's owner, data about the cases of replaced official identifier(s) if those has been lost of when those have become not readable), data about the results of checks and/or inspections performed by a veterinarian.</p>			

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
Denmark	<p>Pigs have to be identified by an ear tag or a tattoo before they leave the holding of origin.</p> <p>Pigs that die and are sent off to a rendering plant do not have to be identified.</p> <p>In accordance with the legislation described in Council Directive 2008/71/EC article 5 (2) derogation 2nd paragraph, pigs can be moved without identification in these cases:</p> <ul style="list-style-type: none"> • Delivery declaration: Porcine animals may be moved to a holding from up to three holdings with sows without identification when the agreement are authorised by the Danish Veterinary and Food Administration. 	<p>Each herd of pigs has its own holding register.</p> <p>The register must contain the following updated information for each animal:</p> <ul style="list-style-type: none"> • The total number of animals. • Date of movement to or from the herd, the number of moved animals and the holding number of the herd to/from which the group of animal has been moved. 		<p>Since 2002, all movements of pigs are registered in the CHR with the following information:</p> <ul style="list-style-type: none"> • The number of animals received. • The date and time of the movement. • The holding number of the herd to/from which the group of animal has been moved. • The country code and registration number of the transport carrying the animals. • The TRACES number or health certificate number accompanying the animals (in case of intra-Community trade). 	

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
	<ul style="list-style-type: none"> • Batch delivery: Movements of pigs is a Danish national system which allows a group of pigs to be transported to a slaughterhouse with a transport document stating that the pigs are moved as a batch. All the pigs originating from one sow herd. • Injecting pigs with a chip: Pigs in zoos and pet pigs can be injected with a chip. The chip shall not to be approved by DVFA. The chip-number, the location of the chip in the animal and which herd the pig belongs to, has to be described in the herd register. Pigs injected with a chip that are exported must be ear tagged before leaving the holding 	<ul style="list-style-type: none"> • In case of animals imported to Denmark: the identification code and supplemental information on the foreign ear tag. • Information on replacement ear tags. 		<p>The registration has to be made by the receiver of the pigs within 7 days after the receipt of the animals. In case of export of animals, the exporter must notify the movement to the CHR.</p>	

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
Estonia	Pigs are identified in line with Article 5 of Council Directive 2008/71/EC. National Regulation requires pigs to be identified with a tattoo or a plastic ear tag identifying holding of birth before they leave from it and pigs sent for slaughter must have a mark identifying the holding from where they have been despatched. No age of pig defined for identification.	Keeper must keep holding records of pigs. There is no prescribed format for herd register in holding in Estonia, it may be electronic or paper format. Keeper recorded data includes date of movement in to or out of the herd; number of pigs in herd; registration number of the holding of birth, the holding of origin or the holding of destination; new owner's name, address, personal or business ID code.	Keeper must record movement in holding records during 3 days and report movement to ARIB during 7 days from movement taking place.	Yes. The Agricultural Registers and Information Board (ARIB) is a government body under the Ministry of Rural Affairs. It is responsible for maintaining national registers relating to farms and farm animals and issuing holding numbers. ARIB database provides the CA with an up-to-date list of all the holdings which keep pigs, in line with Article 3 to Directive 2008/71/EC, including the keeping of a single animal. The CA has direct access to ARIB database. The information in ARIB database contains all the information required by Article 1(1) to Commission Decision 2000/678/EC. For pigs, data recorded included holding number, keeper name and address, date holding registered, geographic coordinates and the number of pigs recorded at last annual census (by age groups). Additionally, database could be used to demonstrate infected areas for ASF.	No

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
				<p>Keeper can report everything needed to ARIB via secure electronic channel. National veterinary certificate is needed when moving to assembly centre, dealer's establishment or animal by-product plant according to Veterinary and Food Board(CA) risk assessment in normal situation. Normal movement to slaughter must be accompanied with food safety notice. When in disease situation, national movement of pigs from farms within restricted area to slaughter or to other herds or to animal by-product plant within Estonia must be accompanied by certain types of national veterinary certificates.</p>	

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
Greece	<p>All pigs should be identified not later than the age of 3 months and in any case before their leaving the holding of birth. Sows and boars, as well as growing pigs reallocated from the holding of birth to another holding for fattening purposes are individually identified with two conventional ear tags. Slaughter pigs moved directly from the holding of birth are identified either an ear tag or tattoo bearing the holding number of birth in both cases.</p>	<p>Keepers are responsible for updating the holding register with the annual holding inventory, numbers of animals by each entering and leaving, date of each movement and animals' origin/destination.</p>	<p>Each keeper is obliged to notify to the regional competent authority the number of animals entering or leaving the holding within 30 days from the date of the event. Currently, there is no operational electronic reporting system. Notification is also provided for in the case of the death of any breeding animal (sows/boars).</p>	<p>Each keeper is obliged to notify to the regional competent authority the number of animals entering or leaving the holding within 30 days from the date of the event. Currently, there is no operational electronic reporting system. Notification is also provided for in the case of the death of any breeding animal (sows/boars).</p>	Not applicable

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
Hungary	<ul style="list-style-type: none"> – When leaving the holding – With ear tag (plastic button; in certain cases metal plate for slaughter only) – identification hammer (very exceptional; only in certain cases; only inland; only when direct slaughter; in practice it is rarely used now) – import re-identification, link between the old and new id) <p>Must identify:</p> <p>At the time of leaving the place of origin</p> <ul style="list-style-type: none"> – Imported animals at the time of leaving the quarantine or the place of destination <p>For breeding purpose</p> <p>For animal health purpose</p>	Farmers have to notify central database on animal keeping, farmers have to keep copies of documents of animal transports, register for animal movements, register on animal identifications	7 days	<p>Transport registration</p> <ul style="list-style-type: none"> – Between registered holdings report to central database within 7 days (also import-export) – transport documents in hard copies (4 copies, 1 copy is retained at the place of origin, 1 copy is to notify central database on animals leaving from the place of origin, 2 copies are accompanying the consignment of which 1 is for notifying the database that the animals have arrived to the place of destination and the other one is retained at the place of destination) 	<p>identification hammer (very exceptional, only in certain cases for certain farms, only inland, only when direct slaughter, in practice it is rarely used now)</p> <p>Do not need to identify or re-identify:</p> <ul style="list-style-type: none"> – Slaughterhouse and herd at the same place – Animals slaughtered within 5 days from out of the EU

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
	<p>NEW:</p> <p>obligatory individual identification of breeding animals (sows: before first fertilisation, male: before first natural or artificial fertilization)</p> <p>notifications electronically (web-based)</p> <p>right ear tag contains electronic transponder,</p> <p>left ear tag usual</p> <p>11 digit identification number</p>				
Lithuania	Ear tags with herd number, applied just before the movement of pigs to another holding or slaughterhouse or tattoo (in the case moved to slaughterhouse)	Yes	Keeper is obliged to declare pigs kept once per quarter.	Yes	No

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
Poland	<p>One ear tag (left ear) or tattoo (on the back or in the earlobes, half of which is one earlobe and second half in another, starting in left earlobe) with the holding number.</p> <p>Each pig must be marked as soon as possible and the fact of identification must be reported to CDB not later than one day before it leaves a holding of origin.</p>	holding registers are kept by each pig keeper ³	Information on movements (change of the number of pigs on the holding) should be indicated in the holding register within 7 days after the movement (change of the number of pigs on the holding)	Yes, movements/change of the number of pigs on the holding should be reported to CDB within 30 days after the movement/ that change by both buying and selling farmer	No
Portugal	Tattoos and ear tags. Shall be marked in the right ear as soon as possible, at least when weaned, always when leaving herd.	Holding number, movements in and out, date, number of animals.	7 days	<p>Yes, it's possible to make information reports from the database.</p> <p>Must be accompanied by paper and producers have access to database.</p>	No

³ http://www.arimr.gov.pl/fileadmin/pliki/IRZ/formularze_IRZ/KRS.pdf

Member State	Identification – in particular what methods of identification do you permit and at what age do you identify animals.	Holding Records	Movement documents – in particular what period of time do you allow for movements to be reported	Database – does this include an electronic reporting system for capturing movement reporting information	Do you apply the national rules derogation as provided for at article 5.2 of Directive 2008/71. If so, how?
Romania	<p>identification term - up to 60 days after birth or before movement out from the holding that they were born, if the moving is make before animals reached 60 days of age</p> <p>means for identification:</p> <ul style="list-style-type: none"> – for backyards pigs single ear tag with unique identification code of the animal – for commercial pigs – with tattoo or ear tags containing the holding code 	Yes		Yes paper records needed.	No
Sweden	<p>Tattoos and ear tags.</p> <p>No set age for marking.</p> <p>Shall be marked when leaving the herd.</p>	Movements in and out, date, number of animals holding number	7 days	<p>Yes – It includes an electronic reporting system.</p> <p>No paper document needed.</p>	Yes – presentation sent separately.



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