# **Ingress** Questionnaire "BIOPIGEE: European survey on biosecurity in pig farming V1"

## 1. 1. Name of the interviewer

- 2. 2. Institution of the interviewer
- 3. 3. Date:
- 4. 4. City/Region:

## 5. 5. Name of the farm or anonymised acronym (same as for samples collected, eg IT-01, NL-01):

### 6. 7. Is the farm operating indoor or outdoor?

Indoor	0
Outdoor	0

## 7.8. What kind of farm type do you have?

Farrow-to-finish	0
Breeding	0
Weaning	0
Fattening	0
Breeding+weaning	0
Breeding+fattening	0
Weaning+fattening	0

## 8. 9. Are pigs in your operation kept outdoors (regularly or permanently)?

• No	
Yes - gestating sows	
<ul> <li>Yes - lactating sows with sucklers</li> </ul>	
Yes - weaners	
Yes - fatteners	

• Yes	0
• No	0

#### 10. 11. Are all farm buildings surrounded by a perimeter fence?

• Yes	0
• No	0
<ul> <li>Partly interrupted</li> </ul>	0

# 11. 11o. Are all farm enclosures (does not have to include accommodation for farm staff) surrounded by a single fence around the entire perimeter of the site?

Doubled fence	0
Single fence	0
Perimeter fence exists around main site and separate fences     around linked fields/sites	0
No perimeter fence	0

## 12. 12. Is a hygiene lock present in the operation?

• No	
Yes, one for whole operation	
Yes, one per barn	
Yes, one per barn section	
Yes, one for quarantine area	

## 13. 120. Is a room for changing clothes present in the operation?

• No	
Yes, one for whole operation	
Yes, one per outdoor enclosure section	
Yes one for quarantine area	

### 14. 13. Do people always have to use the hygiene lock when entering the barn?

<ul> <li>No (not present or not always used)</li> </ul>	
Yes - internal people	
Yes - external people	

#### 15. 14. Do people always have to take a shower before entering the barn?

• No	
Yes - internal people	
Yes - external people	

## 16. 14o. Do people always have to take a shower before entering the outdoor encloscure?

•	No	
•	Yes, internal people have to take a shower	
•	Yes, external people have to take a shower	

## 17. 15. Do people always have to wash or disinfect their hands before entering the barn?

• No	
Yes, internal people wash hands	
Yes, internal people desinfect hands	
Yes, internal people wear disposable gloves	
<ul> <li>Yes, external people wash hands</li> </ul>	
<ul> <li>Yes, external people desinfect hands</li> </ul>	
<ul> <li>Yes, external people wear disposable gloves</li> </ul>	

## 18. 15o. Do people always have to wash their hands before entering the outdoor encloscure?

• No	
<ul> <li>Yes, internal people wash hands</li> </ul>	
Yes, internal people disinfect hands	
<ul> <li>Yes, internal people wear disposable gloves</li> </ul>	
Yes, external people wash hands	
<ul> <li>Yes, external people disinfect hands</li> </ul>	
Yes, external people wear disposable gloves	

## 19. 16. Do people always have to wash or disinfect their hands between different barn sections?

• No	
<ul> <li>Yes - internal people wash hands</li> </ul>	
<ul> <li>Yes - internal people desinfect hands</li> </ul>	
Yes - external people wash hands	
Yes - external people desinfect hands	
<ul> <li>Farm has only one barn section</li> </ul>	

# 20. 16o. Do people always have to wash or disinfect their hands between different outdoor enclosure sections?

• No	
<ul> <li>Yes - internal people wash hands</li> </ul>	
<ul> <li>Yes - internal people disinfect hands</li> </ul>	
<ul> <li>Yes - external people wash hands</li> </ul>	
Yes - external people disinfect hands	
<ul> <li>Farm has only one outdoor enclosure section</li> </ul>	

## 21. 17. Do people always have to wear farm-specific clothes and footwear?

• No	
Yes - internal people: farm-specific clothes	
Yes - internal people: farm-specific footwear	
Yes - external people: farm-specific clothes	
Yes - external people: farm-specific footwear	

# 22. 18. Are clothes and footwear always changed or cleaned and disinfected between barn sections or when moving to another production stage (e.g. from weaners to fatterns)?

• No	
Yes - clothes changed	
Yes - footwear changed	
Yes - footwear cleaned	
Yes - footwear disinfected	
<ul> <li>Farm has only one barn section</li> </ul>	

## 23. 18o. Are clothes and footwear always changed or cleaned and disinfected between outdoor enclosure sections or when moving to another production stage (e.g. from weaners to fatterns)?

• No	
Yes - clothes changed	
Yes - footwear changed	
Yes - footwear cleaned	
Yes - footwear disinfected	
<ul> <li>Farm has only one outdoor enclosure section</li> </ul>	

## 24. 19. How many internal persons are in charge of taking care of the pigs?

## 25. 20. Whom of external people have access to the barns?

Veterinarian (if external)	
<ul> <li>Advisor (feed, management, hygiene, etc.)</li> </ul>	
Maintenance company	
Drivers of transport vehicles	
Distributers	
Other visitor	
None of the above mentioned persons	

### 26. 200. Whom of external people have access to the outdoor enclosures?

Veterinarian (if external)	
<ul> <li>Advisor (feed, management, hygiene, etc.)</li> </ul>	
Maintenance company	
Drivers of transport vehicles	
Distributers	
Other visitor	
<ul> <li>None of the above mentioned persons</li> </ul>	

## 27. 21. Is there a pig-contact free period of >12h before any external people are allowed to enter the barn?

• Yes,	0
• Yes, 12 to 24h	0
• Yes, 24 to 48h	0
• Yes, 48 to 72h	0
• Yes, >72h	0
• No	0

# 28. 21o. Is there a pig-contact free period of >12h before any external people are allowed to enter the outdoor enclosures?

• Yes,	0
• Yes, 12 to 24h	0
• Yes, 24 to 48h	0
• Yes, 48 to 72h	0
• Yes, >72h	0
• No	0

## 29. 22. How often do external people enter the barn(s)?

• Daily	0
<ul> <li><daily li="" to="" up="" weekly<=""> </daily></li></ul>	0
<ul> <li><weekly li="" monthly<="" to="" up=""> </weekly></li></ul>	0
• <monthly< td=""><td>0</td></monthly<>	0
• Never	0

## 30. 220. How often do external people enter the outdoor enclosures?

• Daily	0
<ul> <li><daily li="" to="" up="" weekly<=""> </daily></li></ul>	0
<ul> <li><weekly li="" monthly<="" to="" up=""> </weekly></li></ul>	0
• <monthly< td=""><td>0</td></monthly<>	0
• Never	0

### 31. 23. Do external vehicles have access to the clean area within the farm perimeter?

• Yes	0
• No	0
Do not have clean area	0

## 32. 24. When loading/unloading, do you use a ramp or loading area which prevents the pigs having contact with other houses/pens/areas containing pigs?

			olicable
	Yes	No	Not sold
Loading	0	0	0
• Unloading	0	0	0

## 33. 25. Are transport vehicles (own or external) always cleaned and disinfected before loading pigs?

• No	
Yes - cleaned	
Yes - disinfected	
Unknown, whether cleaned or disinfected	

## 34. 26. Do you use separate transport vehicles for pigs of different age groups?

Yes	No
0	0
0	0
0	0
	Yes O O O

### 35. 27. Where is semen sourced from?

From boars on farm	
<ul> <li>From boars of another farm</li> </ul>	
From boar studs	

## 36. 28. Does the semen originate from farms/ boar studs with equal or higher Salmonella / HEV status?

<ul> <li>Salmonella - Yes, with equal or higher status.</li> </ul>	
<ul> <li>Salmonella - No, with lower status.</li> </ul>	
<ul> <li>Salmonella - Unknown status.</li> </ul>	
<ul> <li>HEV - Yes, with equal or higher status.</li> </ul>	
HEV - No, with lower status.	
HEV - Unknown status	

#### 37. 29. Do you purchase pigs?

• Yes	0
• No	0

#### 38. 30. Do the breeding pigs come from one or multiple sources within a year?

•	Single source	Ο
•	Multiple sources	Ο

#### 39. 31. If you purchase pigs, do they have equal or higher Salmonella / HEV status than your own pigs?

	1	2	3	4	5
<ul> <li>Salmonella - Breeding pigs</li> </ul>	0	0	0	0	0
Salmonella - Weaners	0	0	0	0	0
Salmonella - Fatteners	0	0	0	0	0
HEV - Breeding pigs	0	0	0	0	0
HEV - Weaners	0	0	0	0	0
HEV - Fatteners	0	0	0	0	0

40. 32. Are purchased breeding pigs (gilts and boars) moved to a quarantine area before they enter the sow herd?

			, aquillage
	Yes	No	Notion
• Gilts	0	0	0
• Boars	0	0	0

41. 33. What is the minimal length of the quarantine period (in days) ? (no quarantine period = -99)

### 43. 33ao. Do pigs have access to open water sources?

• Yes	0
• No	0

## 44. 34. Where does the drinking water originate from?

Public network	
Private well/borehole	
• Surface water (lake, pond, river etc	:.)

## 45. 35. If private water sources are used, is the quality of the drinking water checked every year at the well/ borehole by means of a bacteriological analysis?

• Yes	0
• No	0
No private water source	0

## 46. 36. Is the drinking water system (storage tank and pipeline) cleaned and disinfected at least once a year?

	1	2	3
Cleaned	0	0	0
Disinfected	0	0	0

## 47. 37. Where does the feed originate from ("No supplemental feed" is an option only for sucklers)?

	A HE BUS SUS	plemental feed	Not present at farm
		plementarieeu	Not present at lann
Breeding pigs			
Weaners			
Fatteners			
Sucklers			

## 48. 38. Is all feed always tested for or treated against Salmonella contamination?

	Not tested/trea	بې ( <sup>وې</sup> ب ted	Yes, treated (heat, pressure)	Not present at farm
Own feed				
<ul> <li>Purchased feed</li> </ul>				

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# 49. 39. What is the form of the feed for each production stage? ("No supplemental feed" is an option only for sucklers)

	1	2	3	4	5	6
Breeding pigs	0	0	0	0	0	0
Weaners	0	0	0	0	0	0
Fatteners	0	0	0	0	0	0
Sucklers	0	0	0	0	0	0

# 50. 40. How do you supply the feed per production stage? ("No supplemental feed" is an option only for sucklers)

	Dry Wet No supplemental feed $\neq^{\circ}$ Not present at			<sup>o</sup>
	Dry Wet No s	upplemental	feed 💫	Not present at farm
Breeding pigs				
Weaners				
Fatteners				
Sucklers				

# 51. 41. Is all feed and bedding stored protected from wildlife, pets and pests? Feed:

Yes, from wild life	
Yes, from pets	
Yes, from pests	
No, not protected	
52. Bedding:	
oz. Bedding.	
oz. Bodding.	
Yes, from wild life	
-	
Yes, from wild life	

## 53. 42. Do the feeding storage and feeding pipelines get cleaned at least once a year?

	1		2		3
Feeding storage	0		0		0
Feeding pipelines	0		0		0
54. 420. Does the feeding storage get cleaned at least	-	ar?	0		2
•	1 0		2 〇		3 O
	0		Ũ		0
55. 43. Is the feed acidified? ("No supplemental feed" i	s onlv an	option for s	ucklers)		
	1	2	3	4	5
Breedings pigs	0	0	0	0	0
• Weaners	0	0	0	0	0
Fatteners	0	0	0	0	0
Sucklers	0	0	0	0	0
56. 44. Are sucklers transferred between sows (cross-	fostering)	?			
• Yes (	<u> </u>				
	) )				
57. 45. Are individual piglets sometimes cross-fostered	d more tha	an once?			
F-9					
• Yes	)				
• No (	C				
58. 46. Does cross-fostering sometimes occur 4 or mo	re days af	ter farrowin	ıg?		
	2				
	C				
• No C	C				
60. 47. Are weaners kept routinely in the farrowing roo	m for son	ne days/wee	ks?		
		•			
• Yes	)				
• No (	)				
Does not apply at the farm	C				
			_		_
61. 47o. Are weaners kept routinely adjacent to farrow	ing sows a	and piglets	for some da	ays/weeks	?
• Yes (	C				
	$\mathbf{D}$				
	) )				
	-				
62. 48. Are individual weaners or fatteners occasional	moved to	another per	n, containin	ig another	group of
animals of the same age?		·		-	
	1		2		3
Weaners	0		0		0

0

• Fatteners

0

0

63. 48o. Are individual weaners or fatteners occasional moved to another outdoor enclosure section, containing another group of animals of the same age?

	1	2	3
Weaners	0	0	0
Fatteners	0	0	0

64. 49. Are stay-behinds and sick animals always isolated from the healthy ones (in physically separated hospital area/or by euthanasia)?

			Silade
	Yes	No	4 <sup>0</sup> 802
Sick animals	0	0	0
Stay behinds	0	0	0

### 65. 50. Are sick pigs consistently handled after the healthy pigs?

• Yes	0
• No	0

### 66. 51. Is the anteroom/hygiene lock and its equipment cleaned and disinfected at least every 2 weeks?

			Not applicable
	Yes	No	40 <sup>0</sup> 0×
Floor cleaned	0	0	0
Floor disinfected	0	0	0
Equipment cleaned	0	0	0
Equipment disinfected	0	0	0

## 67. 52. Is dung from the sows held in farrowing pens removed daily?

• Yes	0
• No	0

### 68. 520. Is dung from the sows held in farrowing huts removed daily?

Yes	0
• No	0
No farrowing area	0

#### 69. 53. Are barn sections always managed all-in/all-out?

		Ner.
Yes	No	Hot prest
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
	Yes O O O O	Yes         No           O         O           O         O           O         O           O         O           O         O           O         O           O         O           O         O           O         O           O         O

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## 70. 53o. Are outdoor enclosure sections always managed all-in/all-out?

			Not Desert
	Yes	No	40 <sup>t</sup>
Breeding area	0	0	0
Farrowing area	0	0	0
Weaning area	0	0	0
Fattening area	0	0	0
Quarantine area	0	0	0

71. 54. Is the floor in each barn section and anteroom/hygiene lock everywhere even and without damages and thereby easy to clean and to disinfect?

	Yes	No
Anterooms or hygiene locks	0	0
Barn sections	0	0

## 72. 540. Is the floor in the changing room everywhere even and without damages and easy to clean and to disinfect?

• Yes	0
• No	0

## 73. 55. Which of the following steps are included in your standard cleaning & disinfection procedures in the barns between batches? (let the farmer describe before reading categories)

	No cleaning, no disinfectio n	Wet cleanin g Seap deanin g	t	Drying ime (Ontil anca is Ompletel 'y dry)	Downtim ex(at deast 3 days)	,	Not presen t at farm
Breeding area							
Farrowing area							
Weaning area							
Fattening area							
Quarantine area							

74. 550. Which of the following steps are included in your standard cleaning & disinfection procedures for the outdoor equipment (huts, troughs, etc.) between batches and between movement to new land? (let the farmer describe before reading

categories)

	No		Wet cleanin		Drying			Efficacy	
			g Saap seanin g		time. (Ontil		Downtim es(at deast 3 days)		t at
Between batches - Breeding area									
Between batches - Farrowing area									
Between batches - Weaning area									
Between batches - Fattening area									
Between batches - Quarantine area									
<ul> <li>Before moving to new land - Breeding area</li> </ul>									
<ul> <li>Before moving to new land - Farrowing area</li> </ul>									
<ul> <li>Before moving to new land - Weaning area</li> </ul>									
<ul> <li>Before moving to new land - Fattening area</li> </ul>									
<ul> <li>Before moving to new land - Quarantine area</li> </ul>									
75. 56. How long is the minimal empty downtime period		arn		on					
Des silvers see s	1		2		3			4	5
Breeding area	0		0		0			-	0
• Farrowing area	0		0		0		(		0
• Weaning area	0		0		0		(		0
• Fattening area	0		0		0		(		0
Quarantine area	0		0		0	)	C	)	0
76. 560. How long is the outdoor enclosure section le	ft empty	of	oigs b	oefc	ore a nev	w k	oatch is	moved in	?
	1				2		3	4	
Breeding area	0			(	C		0	С	
Farrowing area	0				C		0	С	
Weaning area	0			(	C		0	С	)
Fattening area	0			(	C		0	С	)
Quarantine area	0			(	C		0	С	)

# 77. 57. Are corridors within barns always cleaned and disinfected, before other pigs are moved via those corridors?

No	
Yes, cleaned	
Yes, disinfected	

## 78. 58. What kind of flooring system is in the barn sections per age group?

		Politi and	ed slate	) itter	
	solid	Patily	FUN	Or Cor	Not present at farm
Breeding pigs					
Sucklers					
Weaners					
Fatteners					

## 79. 58o.What kind of flooring system is in the huts per age group?

	من بری Added material (e.g.							
	Solison sto	්ර්ර්යාන්තයේ (e.g. ඉංගි stones, wood, plastic) Bedding material						
Breeding pigs								
Sucklers								
Weaners								
Fatteners								

## 80. 59. Is the pit below slatted flooring emptied between two batches per production stage?

					No of	lesert.	Not applicable
	Ye	S	No		400 <sup>011</sup>	<b>K</b>	40 <sup>1,80</sup> 1
Breeding area	0	)	0		0		0
Farrowing area	0	)	0		0		0
Weaning area	0	)	0		0		0
Fattening area	С	)	0		0		0
Quaratine area	0	)	0		0		0
81. 590. How is the field typically used between pig he	olding?						
	1	2	3	4	5	6	7
Breeding area	0	0	0	0	0	0	0
Farrowing area	0	0	0	0	0	0	0
Weaning area	0	0	0	0	0	0	0
Fattening area	0	0	0	0	0	0	0
Quarantine area	0	0	0	0	0	0	0

## 82. 60. Are any equipment (shovel, broom, pig moving board etc.) shared between age groups?

• No	
<ul> <li>Yes, without cleaning and disinfection</li> </ul>	
Yes, with cleaning	
Yes, with disinfection	

## 83. 61. Are machines and other equipment (e.g. manure trailer, transport vehicle) shared with other farms?

• No	
Yes, without cleaning and disinfection when returned	
<ul> <li>Yes, with cleaning when returned</li> </ul>	
Yes, with disinfection when returned	

# 84. 62. Are dedicated injection syringes and needles used for each age group (breeding pigs, sucklers, weaners, fatteners)?

• No	
Yes, syringes	
Yes, needles	

85. 63. Do you change or clean and disinfect materials/tools (e.g. castration blade, tail-docker, ear-tagger, injection needles) used for treatment of piglets between litters?

• Yes	0
• No	0

#### 86. 64. Is the carcass storage closed, so that wildlife, pets and pests don't have access to the carcasses?

• No	
Yes, against wildlife	
Yes, against pets	
Yes, against pests	

## 87. 65. Are disposable gloves worn when manipulating carcasses and/or are hands washed and disinfected after manipulating carcasses?

• No	
Yes, gloves worn	
<ul> <li>Yes, hands washed</li> </ul>	
<ul> <li>Yes, hands disinfected</li> </ul>	

#### 88. 66. Are mice and rats or signs of their presence (faeces, holes etc.) observed on the farm?

	Yes	No
• Mice	0	0
• Rats	0	0

#### 89. 67. Is a pest control program carried out?

• No	
Yes, against rodents	
Yes, against wild birds	
Yes, against insects	

#### 90. 68. Is pest control carried out by a professional company?

• No	
Yes, against rodents	
Yes, against wild birds	
Yes, against insects	

### 91. 69. Are rodent baits used in the surroundings of the farm enclosures?

• Yes	0
• No	0

#### 93. 70. Do wild birds have access to the barn?

• Yes	0
• No	0

#### 94. 71. Do cats and dogs have access to the barn?

• No	
• Yes, cats	
• Yes, dogs	

## 95. 71o. Do cats and dogs have access to the outdoor enclosure?

• No	
• Yes, cats	
• Yes, dogs	

### 96. 72. Are there other livestock species present on the farm?

• Yes	0
• No	0

## 97. 73. Which livestock species? (if several, please list them comma-separated)

#### 98. 74. Number of individuals of that livestock species?

#### 99. 75. Are the other species physically separated from the pigs on this farm?

• Yes	0
• No	0

100. 76. Optional comment on biosecurity and farm characteristics:

101. Section on farm performance and costs. Please use the period of the last three years for the calculation of the averages. If you are not able to provide an answer, please write "-99".

102. 77. How many sows do you have?

103. 78. What is the annual replacement rate per year on average (in %)?

104. 79. What is the return to service rate per sows/year on average (in %)?

105. 80. How many litters has a sow per year?

106. 81. What is the average numbers of total born piglets per litter (incl. stillborn and malformed)?

107. 82. What is the number of live born piglets on average per litter per year ?

#### 108. 83. What is the average weight of piglets that are sold (in kg)?

- Sold after end of suckling period:
- · Sold after end of weaning period:

109. 83a. Which currency will you use to answer the following questions on costs?

#### 110. 84. What is the average sale price per kg of the piglet per year?

- · End of suckling period:
- · End of weaning period:

#### 111. 85. What is the average sale price per piglet per year?

- · Sold after end of suckling period:
- Sold after end of weaning period:

### 112. 86. How many piglets are weaned on average per litter?

### 113. 87. What is the mortality rate during the weaning period per litter per year (in %)?

- · Pre weaning mortality:
- Post weaning mortality

## 114. 88. How many weaners are bought on average per year?

115. 89. What is the average weight of a (purchased or on-site) weaner (in kg)?

• At weaning:

• When leaving the nursery:

116. 90. What is the average price of a (purchased or on-site) weaner? If the farm produces its own weaners, what would be the price?

117. 91. How many batches (fattening) do you produce on average per year (per barn section/pen)?

118. 92. How many weeks does the fattening period last on average?

119. 93. What is the average daily weight gain of the fattening pigs over a year (in g)?

120. 94. What is the average feed conversion rate over a year (kg of feed for 1 kg weight gain)?

121. 95. What is the average price per kg of a slaughter pig?

122. 96. What is the mortality rate (% incl. assisted death) on average during the fattening period?

# 123. 97. What are the annual feed costs for the pigs (national currency and incl. VAT)? (please use -99 if you do not have this production stage)

- · Breeding pigs (own feed)
- · Sucklers (own feed)
- Weaners (own feed)
- · Fatteners (own feed)
- · Breeding pigs (purchased feed)
- Sucklers (purchased feed)
- · Weaners (purchased feed)
- Fatteners (purchased feed)

124. 98. What is the price for full immunisation per pathogen per age group (incl. VAT)?("I do not vaccinate my pigs = -98", "I do not know" = -99, "I do not have this production stage" =-100)

- Salmonella Breeding pigs
- Salmonella Sucklers
- · Salmonella Weaners
- Salmonella Fatteners

## 125. 99. What are the average annual costs of veterinary care (in the respective national currency and incl. VAT)? If the farmer is a combined enterprise please distinguish between fattening and breeding.

- Fattening: Medication i.e. antibiotics and other pharmaceuticals (per year):
- Fattening: Prevention i.e. Vaccinations and Consultancy (per year):
- Breeding: Medication i.e. antibiotics and other pharmaceuticals (per year):
- Breeding: Prevention i.e. Vaccinations and Consultancy (per year):
- Weaning: Medication i.e. antibiotics and other pharmaceuticals (per year):
- Weaning: Prevention i.e. Vaccinations and Consultancy (per year):

#### 126. 100. Optional comment on performance: