



EFSA assessment on ASF and outdoor pig farming

Standing Group of Experts on African Swine Fever in Europe

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African swine fever and outdoor farming of pigs

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1. EFSA should

- verify the **risk factors** for **ASF introduction** and **spread** that are linked to the **keeping of pigs outdoors**. EFSA should also
- evaluate the **sustainability** of such farming **under different management and risk mitigation measures** and
- assess the effectiveness of banning outdoor farming in already affected or at-risk areas, and the **risks linked to possible options for derogation to prohibition** of keeping of pigs outdoors **in affected areas**.

2. EFSA should

- **characterize** and **categorize** the **keeping of pigs outdoors**; and
- describe the **application of biosecurity measures** for keeping of pigs outdoors (such as effective separation between the pigs kept outdoors and wild boar and other animals, the logistical arrangements for entry of new animals into the herd, control of unauthorized entry into the herd, disinfection, pest control etc.). Where possible, EFSA should
- **evaluate the effectiveness of these practices** in different environments on **mitigating the risk of ASF introduction** (in regions of Member States not yet affected) and **ongoing spread** (in regions of Member states already affected) by this disease.

- ***Outdoor farms****
 - 'holdings in which pigs are kept temporarily or permanently outdoors'
 - no specification of the degree, type or the duration of the exposure of the pigs to the outdoor environment

*SANTE/7113/2015 – Rev 11 (Nov 2019). WORKING DOCUMENT. Strategic approach to the management of African Swine Fever for the EU

- ***Kept animals**** = animals which are kept by humans
- ***Wild animals**** = animals which are not kept animals
- ***Outdoor pig***
 - a suid animal (*Sus scrofa*) that is kept temporarily or permanently outdoors, not necessarily with means to constrain its movements, and with clearly defined ownership
 - including kept wild boar (identified and owned) as well as suid animals kept for non-commercial purposes; excluding hunting pens keeping wild boars in a fenced area without clear ownership

*REGULATION (EU) 2016/429 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on transmissible animal diseases and amending and repealing certain acts in the area of animal health ('Animal Health Law')

I Pigs have access to an outdoor area in forest, woodlands, on agricultural land or pastures



II Pigs have access to an outdoor area on farm premises (adjacent to farm buildings)



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ASF introduction risk pathways
specific for outdoor farms

Direct contact of outdoor pigs with

- infected wild boar/suids (live or carcasses)
- contaminated wildlife that has been in contact with carcasses of infected wild boar
- contaminated humans other than farm personnel (e.g. hunters, people in rural areas/forests for work or recreation)



Indirect contact of outdoor pigs with

- infected wild boar/suids, other contaminated wildlife that has been in contact with carcasses of infected wild boar (through use of the same grazing/ feeding/ watering/ resting/ burrowing sites)
- carcasses of infected wild boar/suids transported over longer distances by carnivores (mammals or birds) or by water (rivers, after rainfall)

ASF spread risk pathways
specific for outdoor farms

Direct contact between infected outdoor pigs or their carcasses with

- wild boar
- Other wildlife
- kept pigs from other farms



Indirect contact between infected outdoor pigs or their carcasses with

- wild boar
- other wildlife
- kept pigs from other farms (through use of the same grazing/ feeding/ watering/ resting/ burrowing sites)

Interpretation of ToR, Data, Methodologies

What are the characteristics of keeping pigs outdoors?
(farm structures, farming practices, herd size, geographical location, biosecurity measures applied)

What are potential risk factors for introduction into farms and spread into the region linked to outdoor pig farming?

Questionnaire survey to MS VA and FA

Literature review

Internet search

ADNS review

PAFF presentations review

Aggregated information on outdoor pig farming

Expert Knowledge Elicitation (EKE)

Categorisation of outdoor pig farms in EU MSs according to their risk of ASFV introduction and spread

Effect of biosecurity measures on ASFV introduction and spread in a region in different environments

What could be required to maintain outdoor farming of pigs in ASF-affected areas of the EU MSs without increasing ASF spread and introduction risk?

EKE results, Aggregated information on outdoor pig farming

Overall assessment



Veterinary Authorities of the EU MSs

- Sent to the CVOs of the 27 EU MSs
- Replies from 26 EU MSs (except Malta)

Farmers Associations in EU MSs

- Sent to 68 farmers associations or pig farmers associations
- Replies from 12 pig farmers'/producers' associations from 9MSs

Valuable information and data received on:

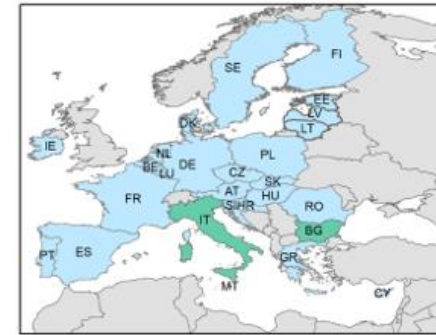
- Types of pig outdoor farms existing in MSs
- National pig farm categorisation systems
- Specific pig breeds that need outdoor access
- Biosecurity measures implementing on pig farms and more specific on outdoor pig farms
- Pig farms classification based on the level of biosecurity
- Non compliances on biosecurity measures
- ASF epidemiology on outdoor farms, protentional risk factors for AFS in outdoor farms

Main conclusions

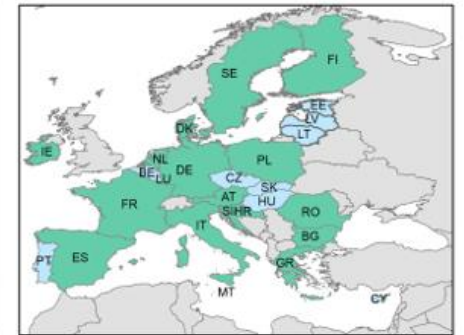
Outdoor pig farms are common and present throughout the EU

No harmonised system to define or categorise different types of pig farms exists in EU legislation

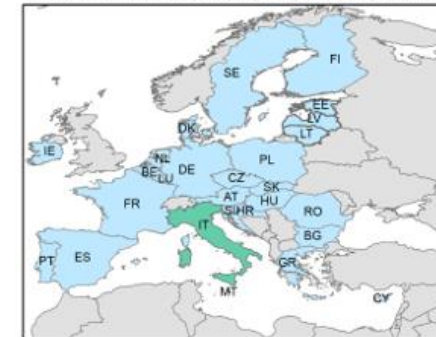
No harmonised data are currently available at EU level on (type of) outdoor access, number of outdoor farms, number of pigs per outdoor farm, commercial/ non-commercial nature or breed of pigs kept



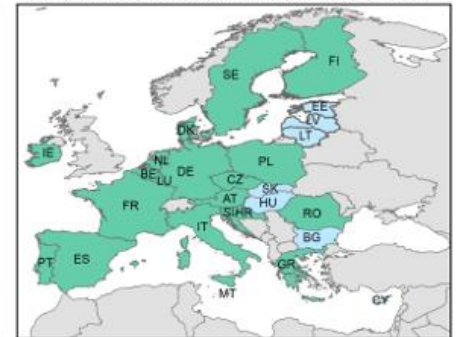
1. Access to unfenced areas in woodlands or forests



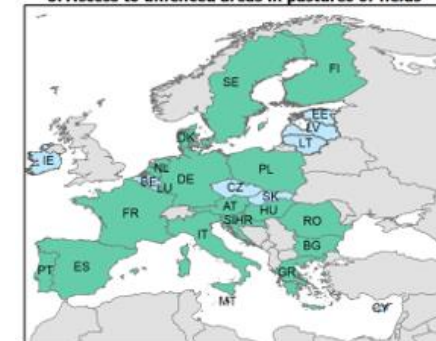
2. Access to fenced areas in woodlands or forests



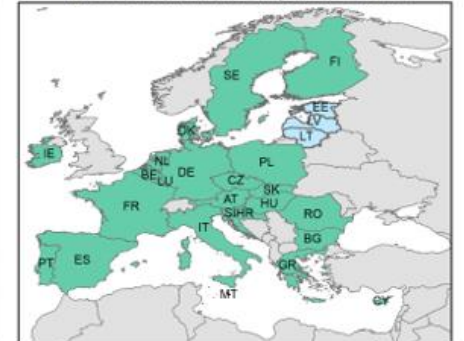
3. Access to unfenced areas in pastures or fields



4. Access to fenced areas in pastures or fields



5. Open buildings with unlimited access to fenced yards



6. Closed buildings with controlled access to fenced yards or runs



- The baseline risk for ASF introduction and spread related to outdoor pig farms is substantial but there is considerable uncertainty

To explain: the Panel is 66-90% certain that

- if outdoor pig farms were permitted in ASF-affected areas of the EU, where ASF is present in wild boar and in domestic pigs (both in indoor and outdoor farms) (i.e., a worst-case scenario that does not consider different restriction zones or particular situations),
- and no outdoor-specific biosecurity measures and control measures are implemented,

more than 20% of those outdoor farms would experience new ASF outbreaks within a year ('baseline risk')

Single row solid fence made from metal, masonry or other solid material around the perimeter of the outdoor area of a minimum height of 1.5 m, properly fixed to the ground to prevent the ingress of wild boar under the fence (undercrossing).

Double row of fencing made from metal net or wire or electric wires around the perimeter of the outdoor area of a minimum height of 1.5 m and with a minimum distance of 1.5 m between fence rows, properly fixed to the ground to prevent undercrossing.

Single row of fencing made from metal net or wire or electric wires around the perimeter of the outdoor area of a minimum height of 1.5 m without measures to prevent undercrossing.

The Panel is 66-90% certain that if **single solid** or **double fences** were fully and properly implemented on all outdoor pig farms in ASF-affected areas of the EU,

- where ASF is present in wild boar and in domestic pigs (both in indoor and outdoor farms) (i.e., a worst-case scenario that does not consider different restriction zones or particular situations),
- without requiring any other outdoor-specific biosecurity measures or control measures,

this would **reduce** the number of new ASF outbreaks occurring in these farms within a year **by more than 50%** compared to the baseline risk

Main conclusions – effectiveness of biosecurity measures: **simple single fences**

The Panel is 80-95% certain that if **simple single fences** were fully and properly implemented in all outdoor pig farms in ASF-affected areas of the EU,

- where ASF is present in wild boar and in domestic pigs (both in indoor and outdoor farms) (i.e., a worst-case scenario that does not consider different restriction zones or particular situations),
- without requiring any other outdoor-specific biosecurity measures or control measures,

this would **reduce** the number of new ASF outbreaks occurring in these farms within a year **by up to a maximum of 30%** compared to the baseline risk (**=0-30%**).

The Panel concludes that the implementation of **regular, independent and objective on-farm biosecurity assessments** using a **standard protocol/tool** (e.g. Biocheck UGent or similar) and **farm-level benchmarking**, designed to promote continuous improvement of biosecurity practices, and **using these assessment results in an official system** managed by competent authorities **to categorise and approve outdoor pig farms on the basis of their biosecurity risk**, will **reduce** the risk of ASF introduction and spread related to outdoor pig farms.

The Panel is 75-90% certain, that if these measures and controls were implemented fully and properly on all outdoor farms in ASF-affected areas of the EU, in addition to single solid or double fences, this would **reduce** the number of new ASF outbreaks **by an additional 30 or more farms per hundred** compared to single solid or double fences alone.

- Although specific quantitative information on the effectiveness of on-farm BSMs to mitigate ASF introduction/spread to/from pigs kept outdoors is lacking,
- **double fences** and **single solid fences** rate highest in terms of effectiveness for both outdoor farm types and with 66-90% certainty their correct implementation would reduce the baseline risk of outdoor pig farms by more than 50%
- the regular implementation of **independent and objective on-farm biosecurity assessments** using comprehensive standard protocols and approving outdoor pig farms based on their biosecurity risk in an official system managed by competent authorities will further reduce the risk of ASF introduction and spread related to outdoor pig farms
- Therefore, Panel recommends that **derogations from the current restriction of outdoor pig farming in ASF-affected areas** can be considered **on a case-by-case basis** if the **appropriate biosecurity measures indicated above are implemented**

- A **harmonised registration system** should be developed at EU level for the categorisation of pig farms regarding their **outdoor access** and the **different types** thereof, the number of outdoor farms, the number of pigs per outdoor farm, the commercial or non-commercial nature of the pig keeping activity, or the breed of the pigs kept. The registration of this information in national databases for pig population would allow the collection of harmonised and comparable data for further analysis.
- **Kept wild boar populations** in MSs should be registered and their biosafety, particularly regarding fencing, feeding, animal movements among facilities, etc. should be assessed.
- Specific risk factors/biosecurity breaches leading to outbreaks in **backyard farms** should be determined, including collecting information about outdoor access and BSMs applied in these farms.
- When reporting ASF outbreaks to **ADIS**, the presence/absence and type of outdoor access provided by the affected farms should be recorded, to allow farm types at highest risk of ASF introduction and spread to be identified.



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