

# Best Practice Hens

Pilot project on best practices for  
alternative egg production systems

SANTE 2020/S 189-455185

2021-2023



**Funded by  
the European Union**

## Background

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- Since 2012, ban on conventional cages in EU (1999/74/EC)
- Furnished cages and cage-free systems
- Limited space and limited opportunities for natural behaviour in furnished cages
- Improving laying hen welfare by stimulating transition to non cage systems





## Main objective

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Help egg producers to meet market demand by providing practical guidance on [how to transition](#) to alternative higher-welfare cage-free systems





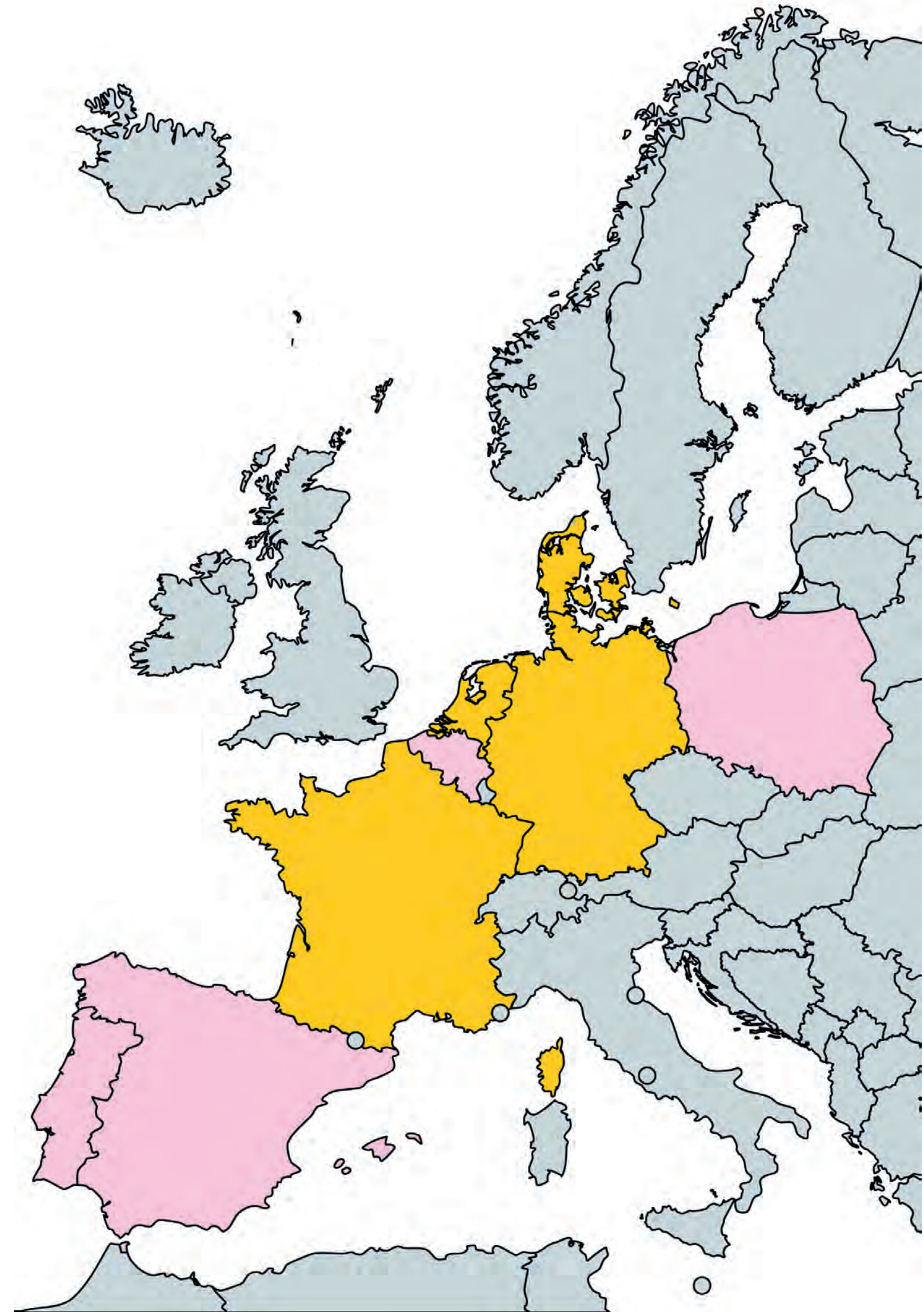
# Consortium

7 Partners

5 Countries (BE, DK, ES, NL, PL)

Countries with high % cage-free:  
DK, NL, DE, FR

Target countries (defined in call):  
ES, PT, PL, BE





## Project tasks (May 2021- May 2023)

Task 1 Work plan + methodology

Task 2 Collecting and assessing  
information

Task 3 Drafting best practices

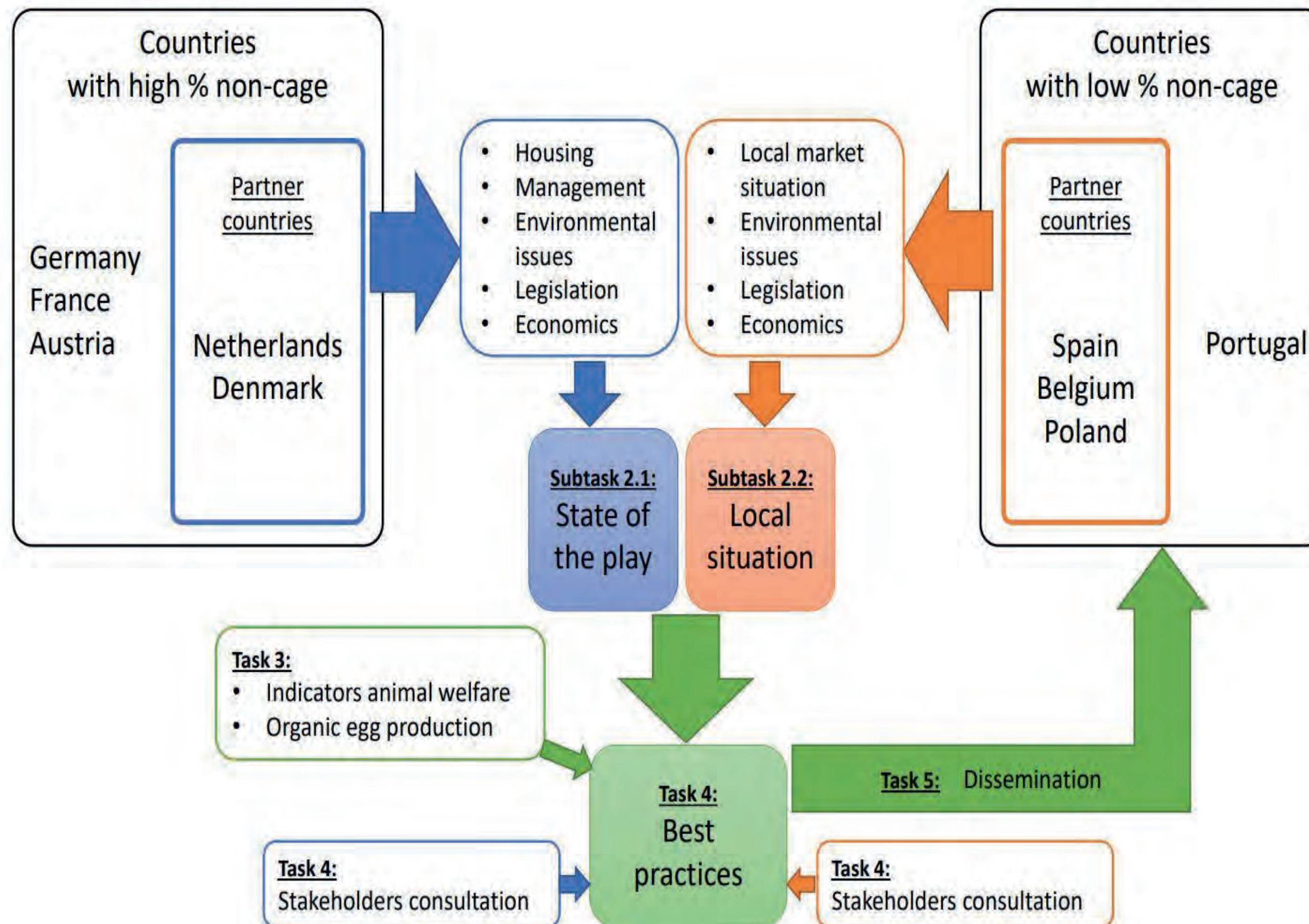
Task 4 Consulting stakeholders

Task 5 Dissemination





## Work plan + methodology



## Collecting and assessing information: State of Play

Scientific literature (separate for pullets and laying hens):

- Web of science
- Timespan: 2005-2021
- Peer-reviewed original research and review articles
- In English
- Removal of duplicates
- Abstract reading
- Categorization or rejection (incl. reason)
- Full paper reading, report writing

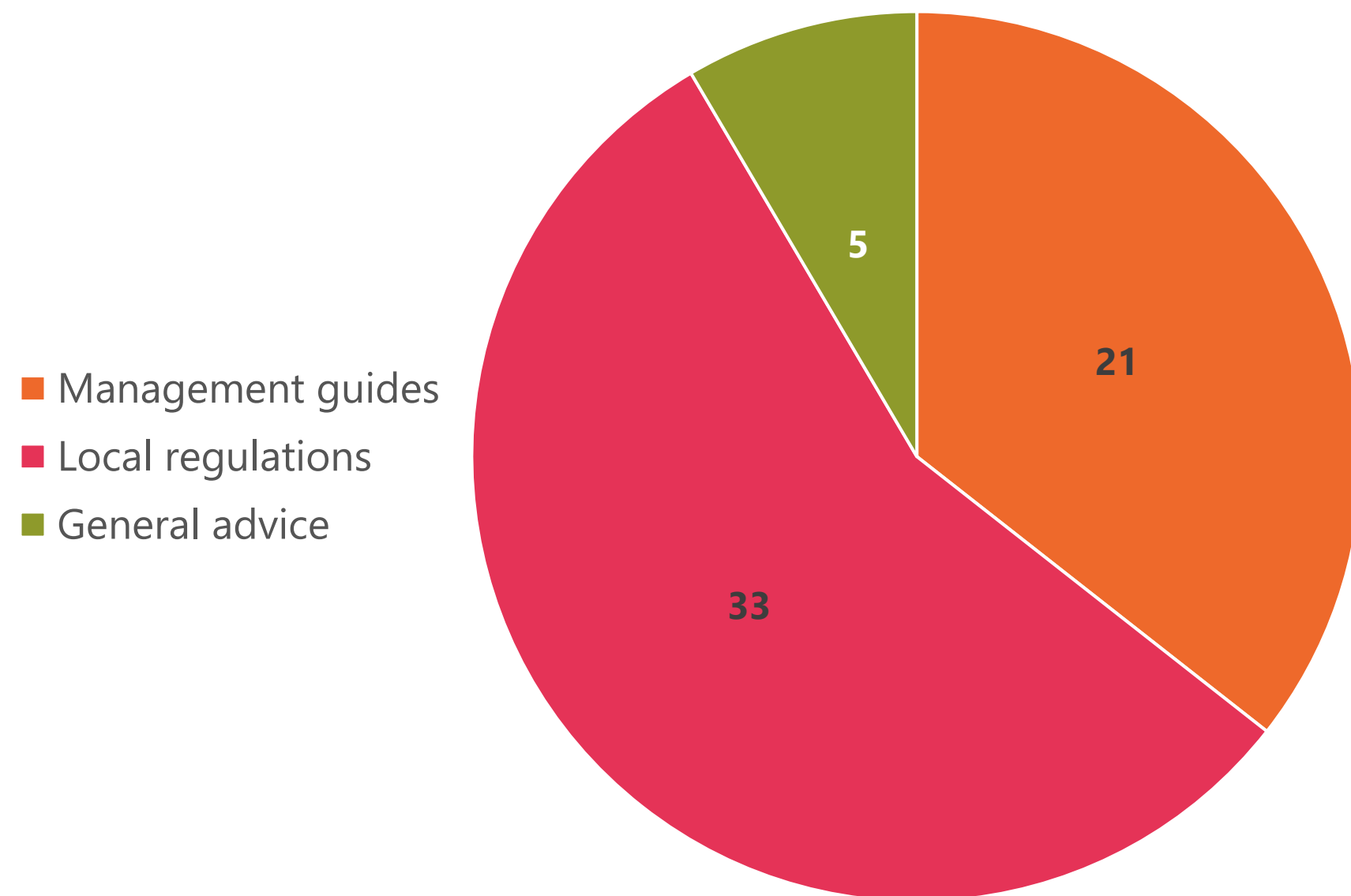


➔ 39 papers pullets  
167 papers laying hens

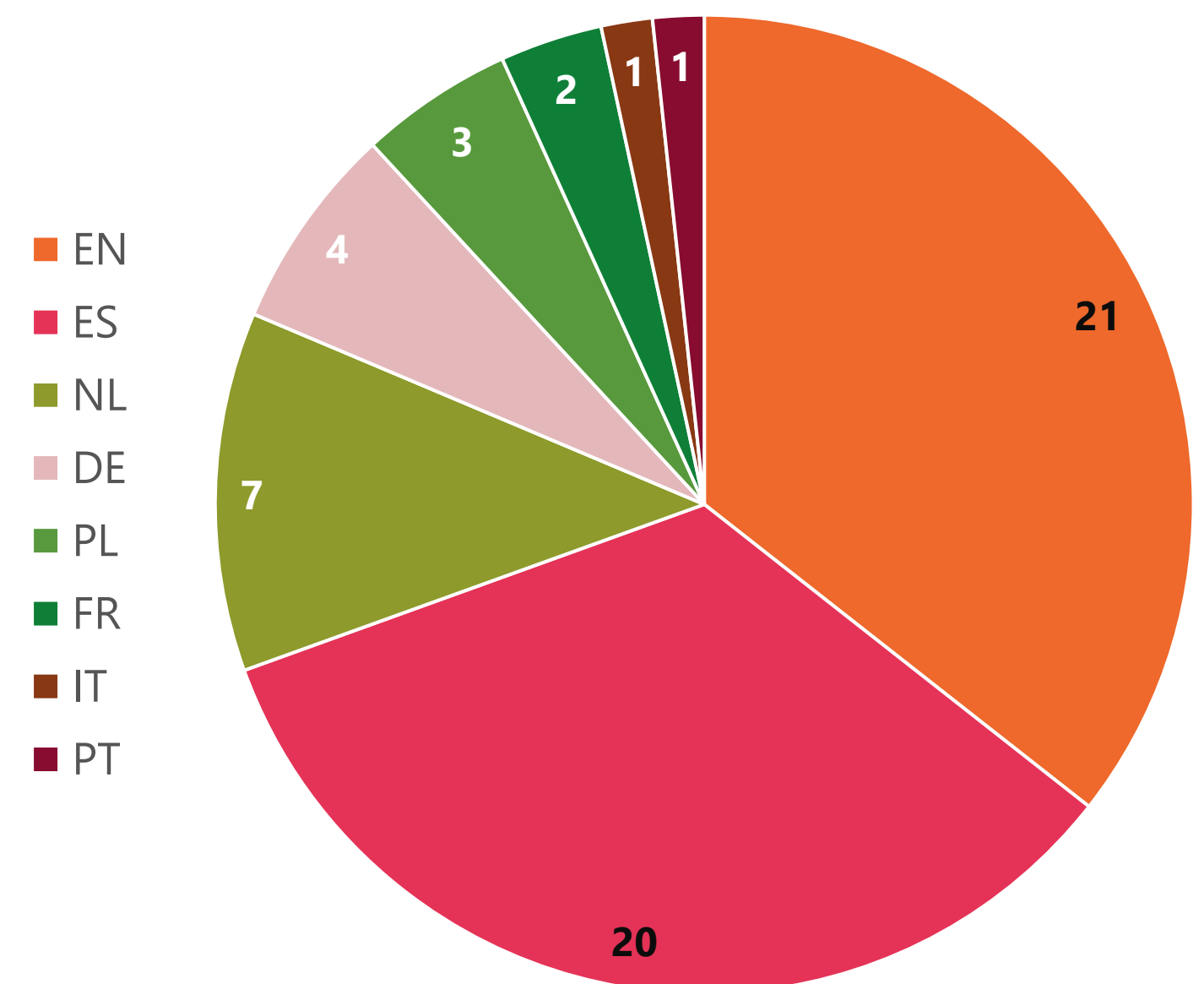


# Collecting and assessing information: Technical information

Number of references



Number of references





## Drafting Best Practices

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- 68 best practices in total (based on scientific literature)
  - **24 Pullets**
    - 10 All systems
    - 4 Floor / single-tier system
    - 4 Multi-tier system
    - 1 Covered veranda / free range
    - 5 Organic
  - **44 Laying hens**
    - 12 All systems
    - 3 Floor / single-tier system
    - 9 Multi-tier system
    - 14 Covered veranda / free range
    - 6 Organic





# Refined to main topics: best practices across housing systems



**15 BEST PRACTICES FOR PULLET REARING**

Practices to consider when an egg producer transitions to alternative housing systems, particularly from cage to cage-free systems.

- 01 CHOOSE THE REARING SYSTEM
  1. Litter (single-tier)
  2. Aviary (multi-tier)
  3. Moveable platforms (multi-tier)
 Optional: covered veranda / free-range / organic production
- 02 CHOOSE GENETICS
- 03 TRAINING OF FARMER AND STAFF
- 04 INSPECTION AND STOCKMANSHIP
- 05 WELFARE ASSESSMENT
- 06 PULLET HEALTH
- 07 FEEDING EQUIPMENT AND FEEDING
- 08 DRINKING EQUIPMENT
- 09 ENRICHMENT
- 10 LITTER
- 11 PERCHES
- 12 LIGHTING
- 13 STOCKING DENSITY
- 14 AIR QUALITY AND THERMAL ENVIRONMENT
- 15 BEAK TRIMMING

USE THE QR CODE TO ACCESS THE PRACTICE ABSTRACTS WITH MORE INFORMATION ON EACH BEST PRACTICE. + INFORMATION ON THE WEBSITE.

**Best Practice Hens:** To support egg production in non-cage systems and improve animal welfare, a consortium consisting of 7 partners will develop Best Practices for Non-cage Egg Production Systems as a European Commission, DG SANTE pilot project. These Best Practices will provide practical support to egg producers to encourage them to convert from cage to non-cage systems, including organic production.

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@bestpracticehens @BestHens



**16 BEST PRACTICES FOR LAYING HENS**

Practices to consider when an egg producer transitions to alternative housing systems, particularly from cage to cage-free systems.

- 01 CHOOSE THE REARING SYSTEM
  1. Single-tier
  2. Aviary (multi-tier)
 Optional: covered veranda / free-range / organic production
- 02 CHOOSE GENETICS
- 03 TRAINING OF FARMER AND STAFF
- 04 INSPECTION AND STOCKMANSHIP
- 05 WELFARE ASSESSMENT
- 06 LAYING HEN HEALTH
- 07 FEEDING EQUIPMENT AND FEEDING
- 08 DRINKING EQUIPMENT
- 09 ENRICHMENT
- 10 LITTER
- 11 PERCHES
- 12 NESTS
- 13 LIGHTING
- 14 FREE-RANGE AND COVERED VERANDA
- 15 STOCKING DENSITY
- 16 AIR QUALITY AND THERMAL ENVIRONMENT

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## 31 Best practices:

- 15 for pullets
  - 16 for laying hens
- Local situation target countries taken into account
  - Discussed with stakeholders (cage-free countries, target countries and EU level)





## Consulting stakeholders

- Collected input and feedback on best practices
  - Stakeholder Advisory Board
  - Cage-free countries: Germany, Denmark
  - Target countries: Belgium, Spain, Portugal, Poland
- **Additions: useful practical advice for farmers**

### FINAL BEST PRACTICES



Pilot Project on Best Practices for Alternative Egg Production Systems –  
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# Output

In 7 languages:

- Practice abstracts (>30)
- Protocol for practical welfare assessment
- Videoclips
- Smartphone videos
- ...

**PRACTICE ABSTRACT**

Best Practice Hens

Training for farmers and staff to handle and care for hens in cage-free housing systems

**Problem**  
The care for pullets and laying hens in cage-free housing systems places high demands on farmers and staff. Caretakers who have only experience with managing hens in cages are often not sufficiently trained for this new task. Therefore, problems may arise particularly during the transition phase from cages to cage-free systems.

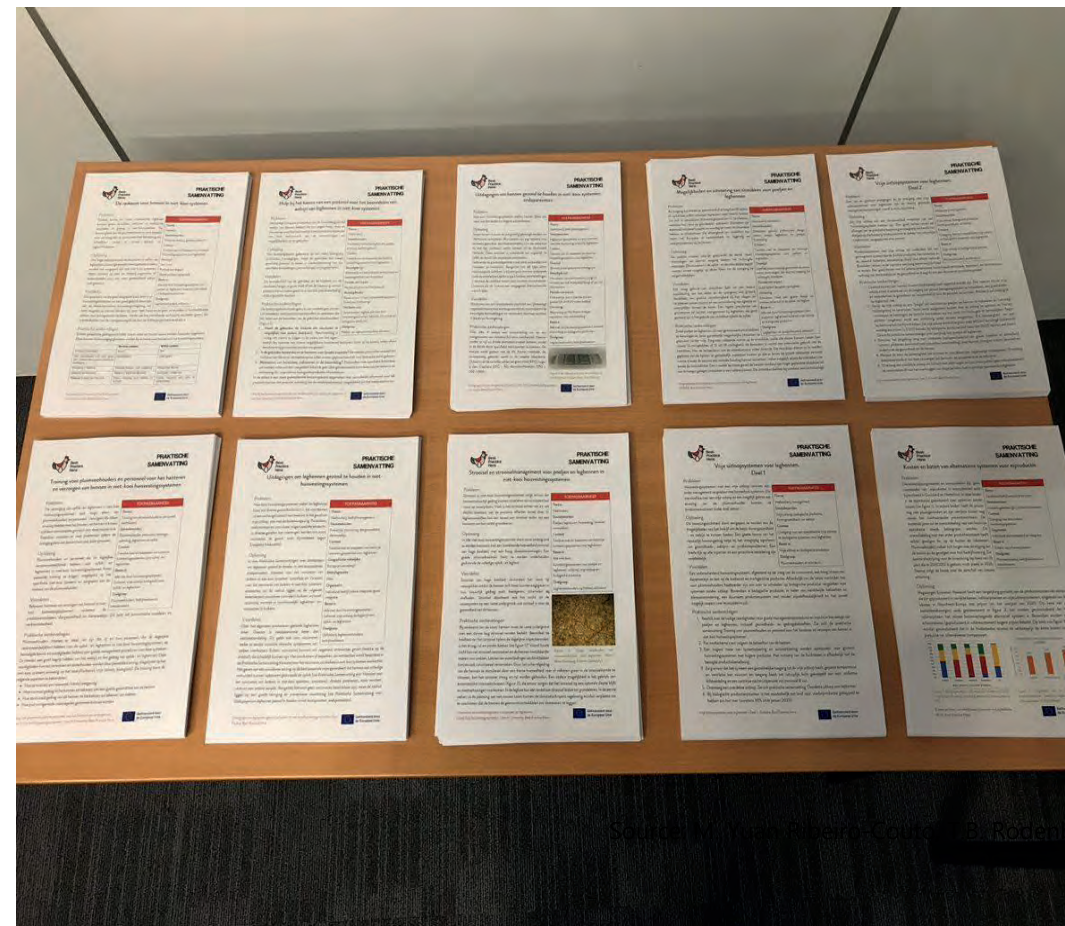
**Solution**  
Farmers and staff having the daily responsibility for

APPLICABILITY BOX	
<b>Theme</b>	Training of farmer and staff, animal husbandry
<b>Keywords</b>	Farmer, personnel, caretaker, education, laying hens, and pullets.
<b>Context</b>	Transition to and operating cage-free housing





# Dissemination events



Final event Brussels, 3<sup>rd</sup> May 2023



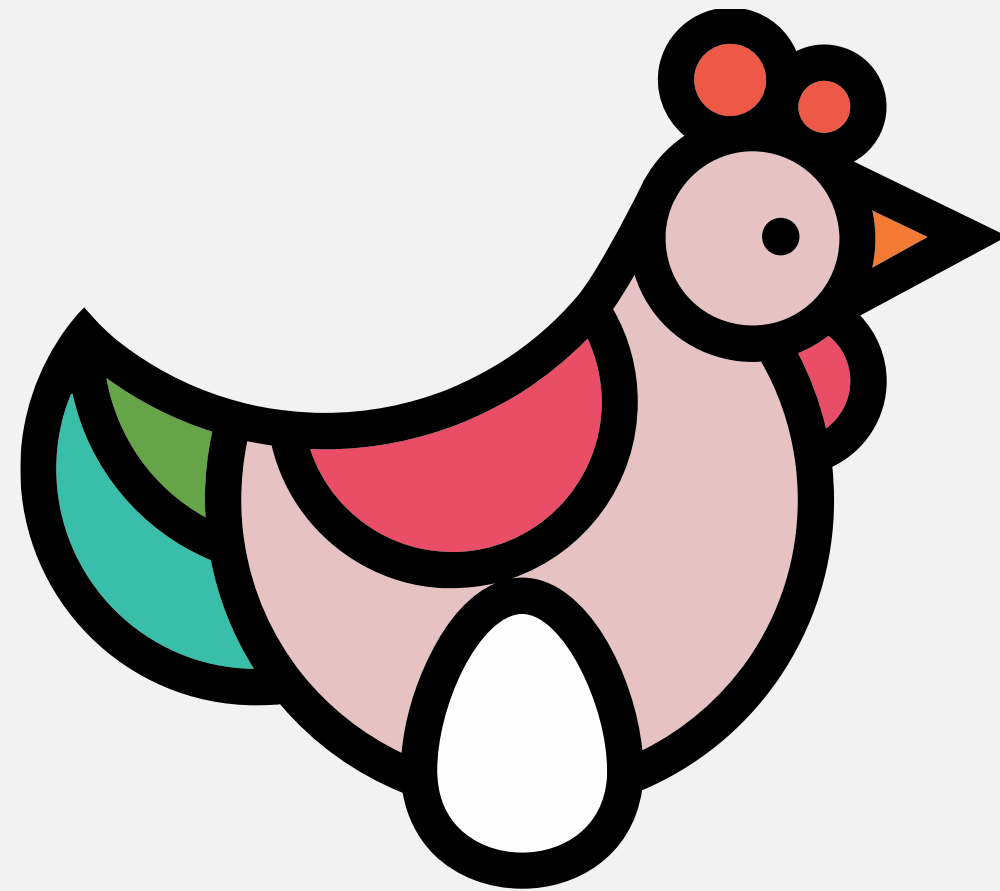


## Conclusions

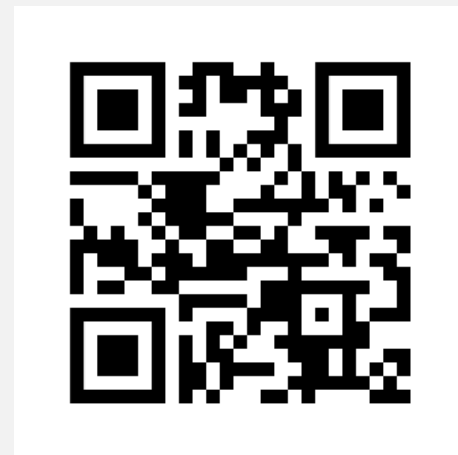
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- Clear interest in technical information on keeping pullets and laying hens in cage-free systems
- Increasing market demand for cage-free eggs and egg products and possible EU cage ban are driving transition
- The economic and market situation are very important, because higher costs cage-free need to be recovered
  - (+16% for indoor aviary compared to furnished cage)





# Best Practice Hens



[www.bestpracticehens.eu](http://www.bestpracticehens.eu)

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