

EADGENE

Animal Health data collection

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Motivation for EADGENE “Data comp” project?

- Suggested by members:
 - What is happening in different countries/spp.?
 - Integrate health with genetic & genomic data
 - Encourage engagement with various stakeholders (predominantly breeders & veterinarians)
- Improve understanding of information, own data and how fits across EU
- Help establish links & understanding in basic recording
- Enable better utilisation of data by many stakeholders
- Learning – knowledge sharing



EADGENE “Data comp” objectives?

- Pilot study with the following aims:
 1. Overview & map of animal health recording, establish data trail, data comparability
 - cattle, pigs and poultry -UK, DK, NL, FR but with a breeder’s perspective
 2. Differences & Similarities between countries & between spp.
 3. Encourage stakeholder integration/ involvement
 4. At a practical level!



EADGENE

- European Animal Disease Genomics Network of Excellence for Animal Health and Food Safety



European Projects

- **Networks of Excellence**

www.medvetnet.org (NoE for zoonoses research, 15 partners)

eadgene.info (Animal disease genomics –animal health & food safety, 13 organizations)

neuroprion.com (Neuro Prions, 52 institutes)

- **Other instruments**

medreonet.cirad.fr (Reoviruses – e.g. Blue tongue)

eden-fp6project.net (Emerging diseases in a changing climate)

flutrain.captureclients.net (Avian influenza)

www.offlu.net (OIE & FAO Network of Expertise on Avian Influenza)

fmd-and-csf-action.org (Coordinate info on control of FMD CSF)

BIOSAFETY

Lab-on-site

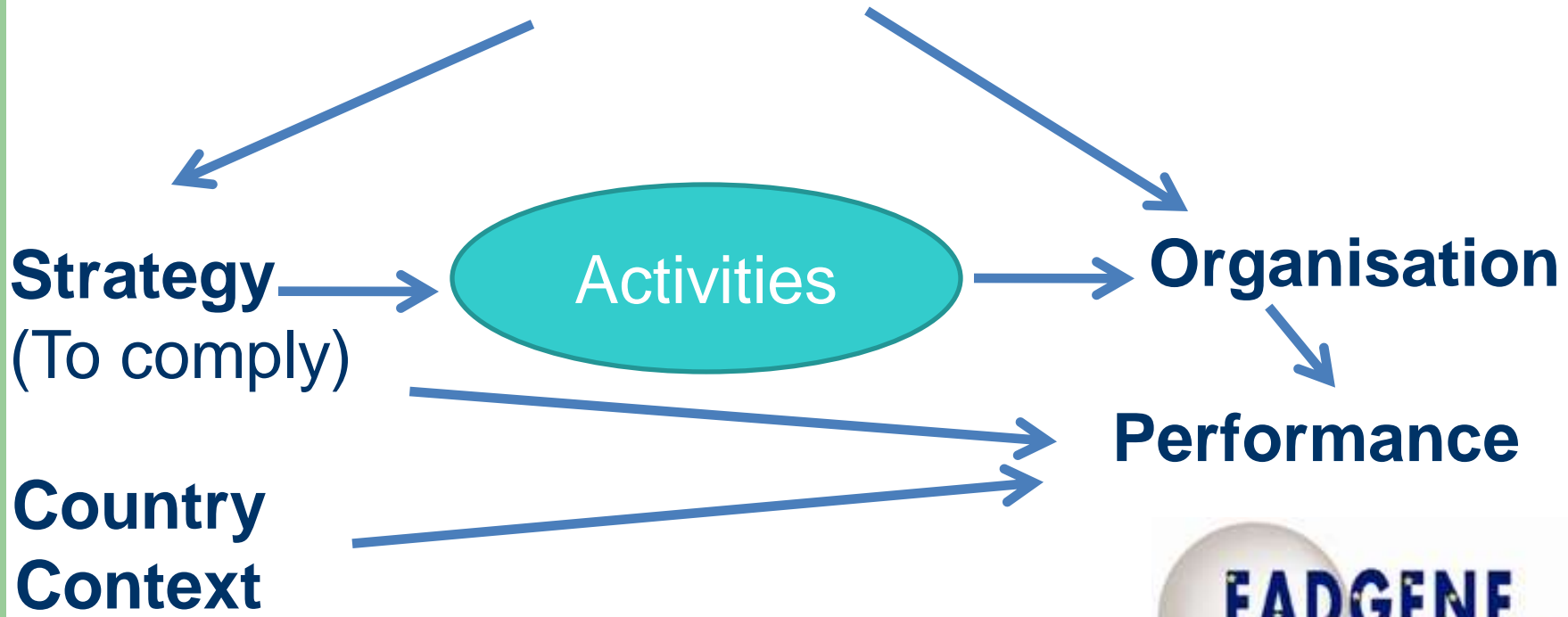
Method

- Interviewed people in
 - Govt., Levy boards, Vet institutes, Animal Science Unis., abattoirs, farms, movement bodies, meat hygiene.
- Diagram of data flow
- Description of data
- Maps exclude Salmonella, AI (same across EU) and Primary Govt. Ministries



General Organisation

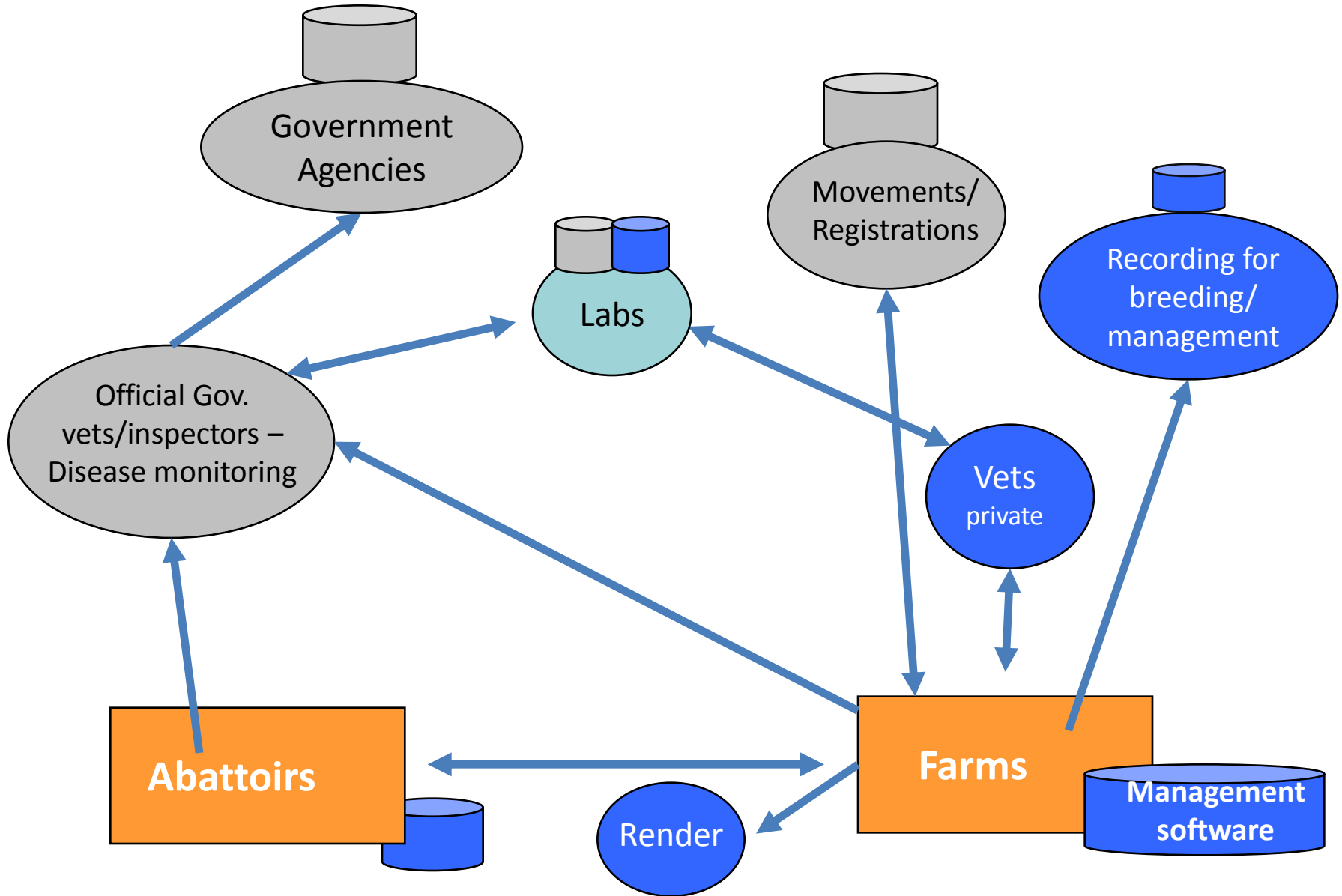
Architect: (EU/ Country legislation)



How to 'read' the maps?

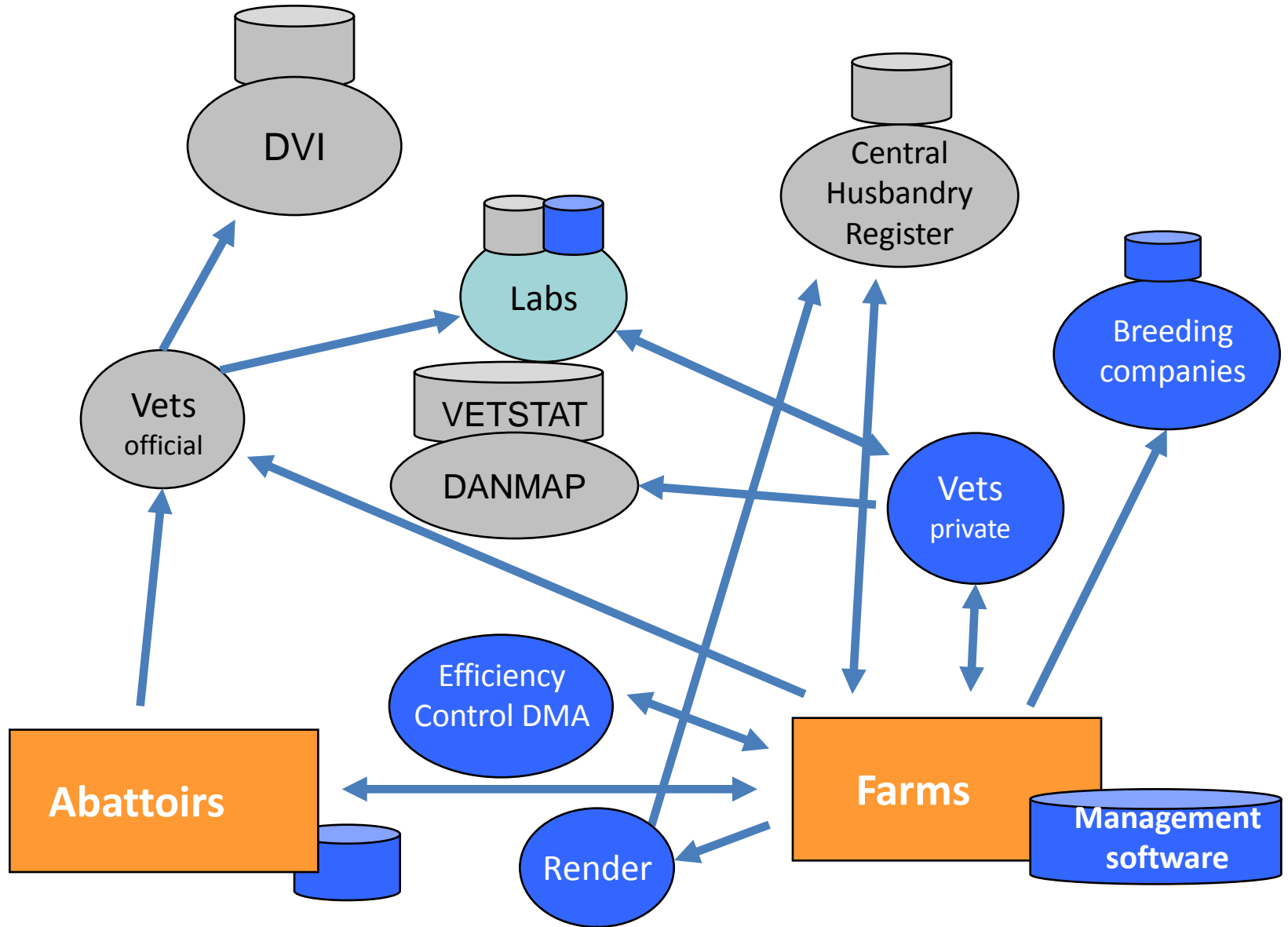
- Generally similar layout
 - Primary sources in **orange**
 - Statutory in **grey**
 - Private in **blue**
 - **Mixed** in **light blue**
 - **Databases:** 

General diagram



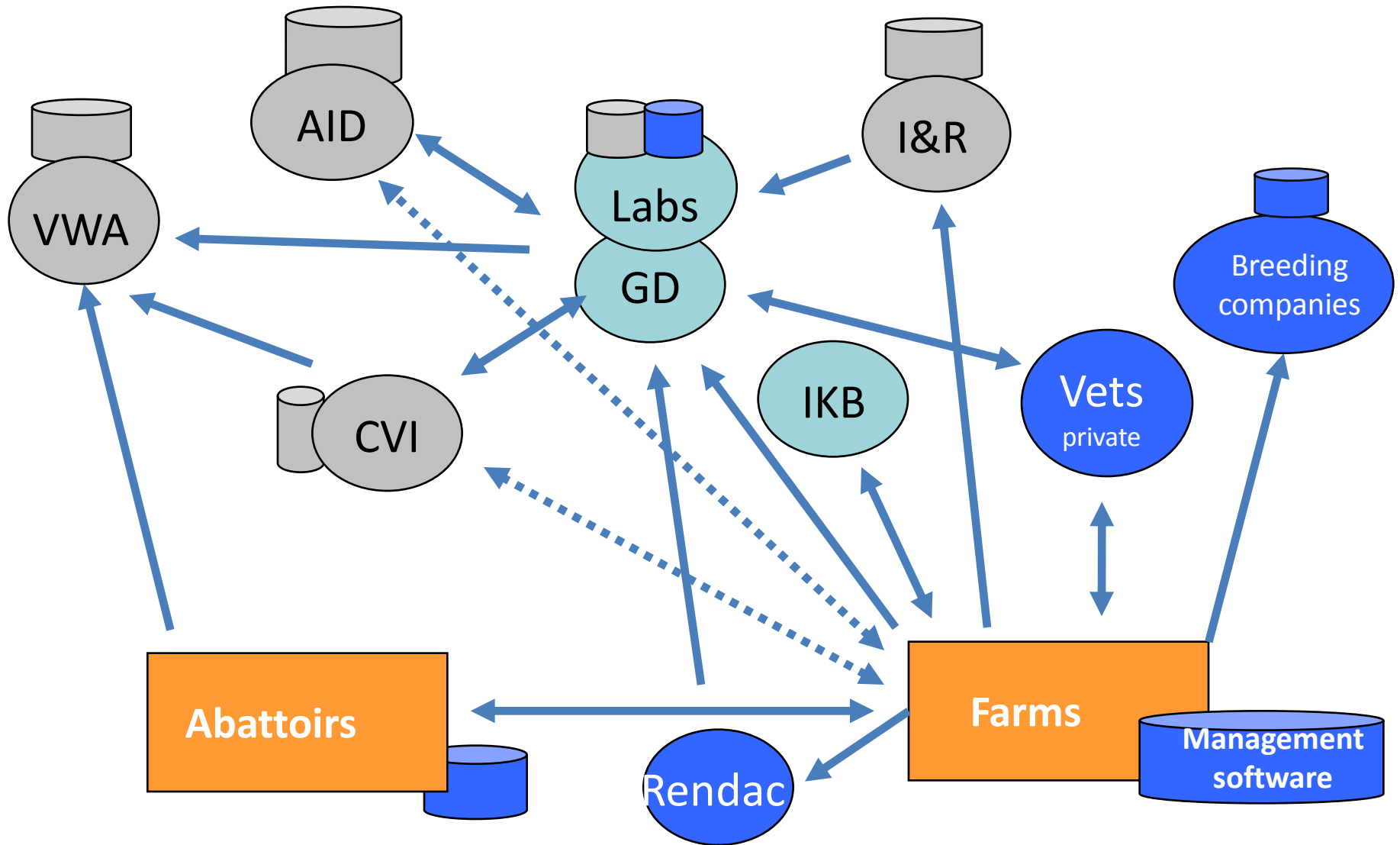
Denmark

Pigs



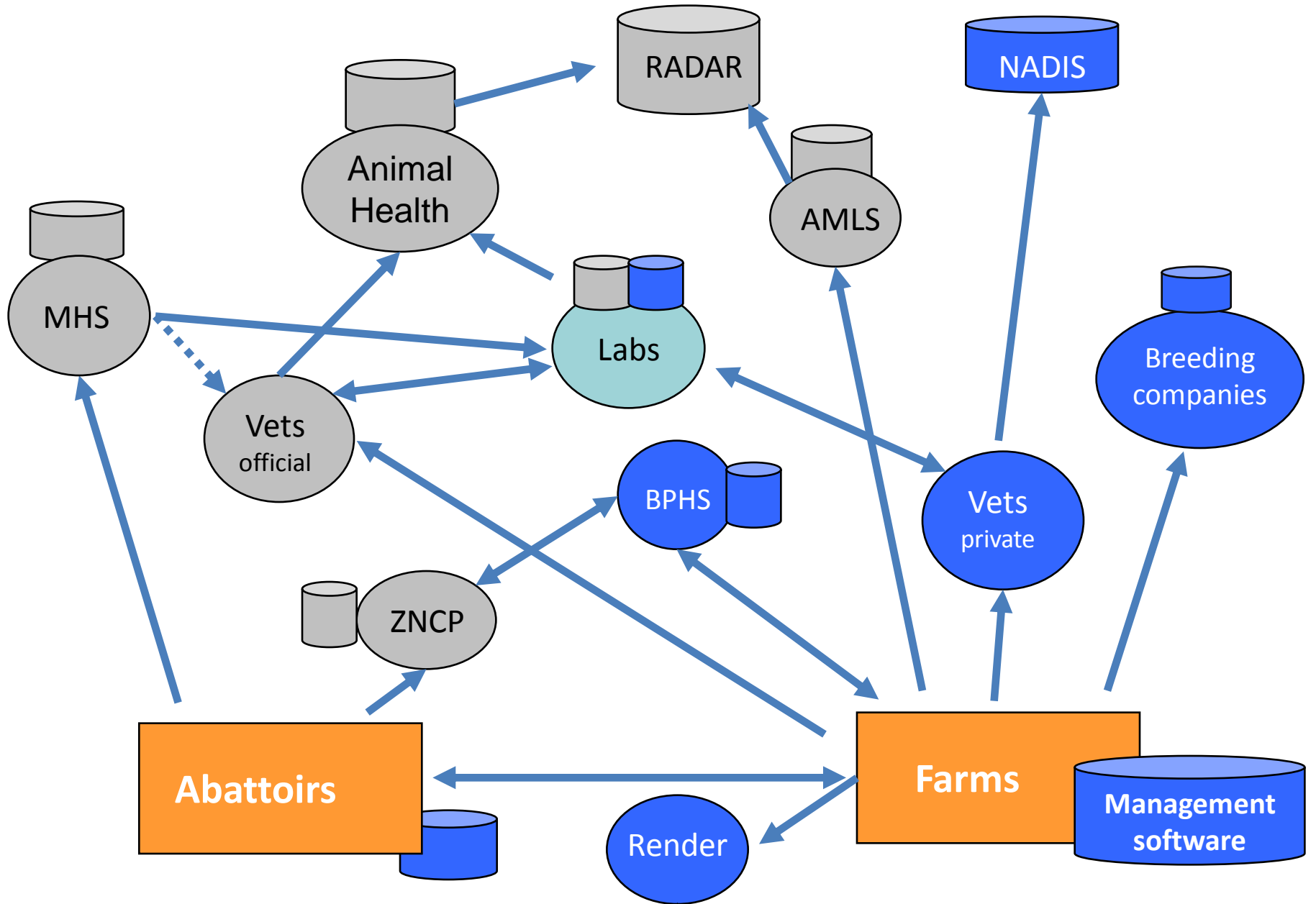
Netherlands

Pigs



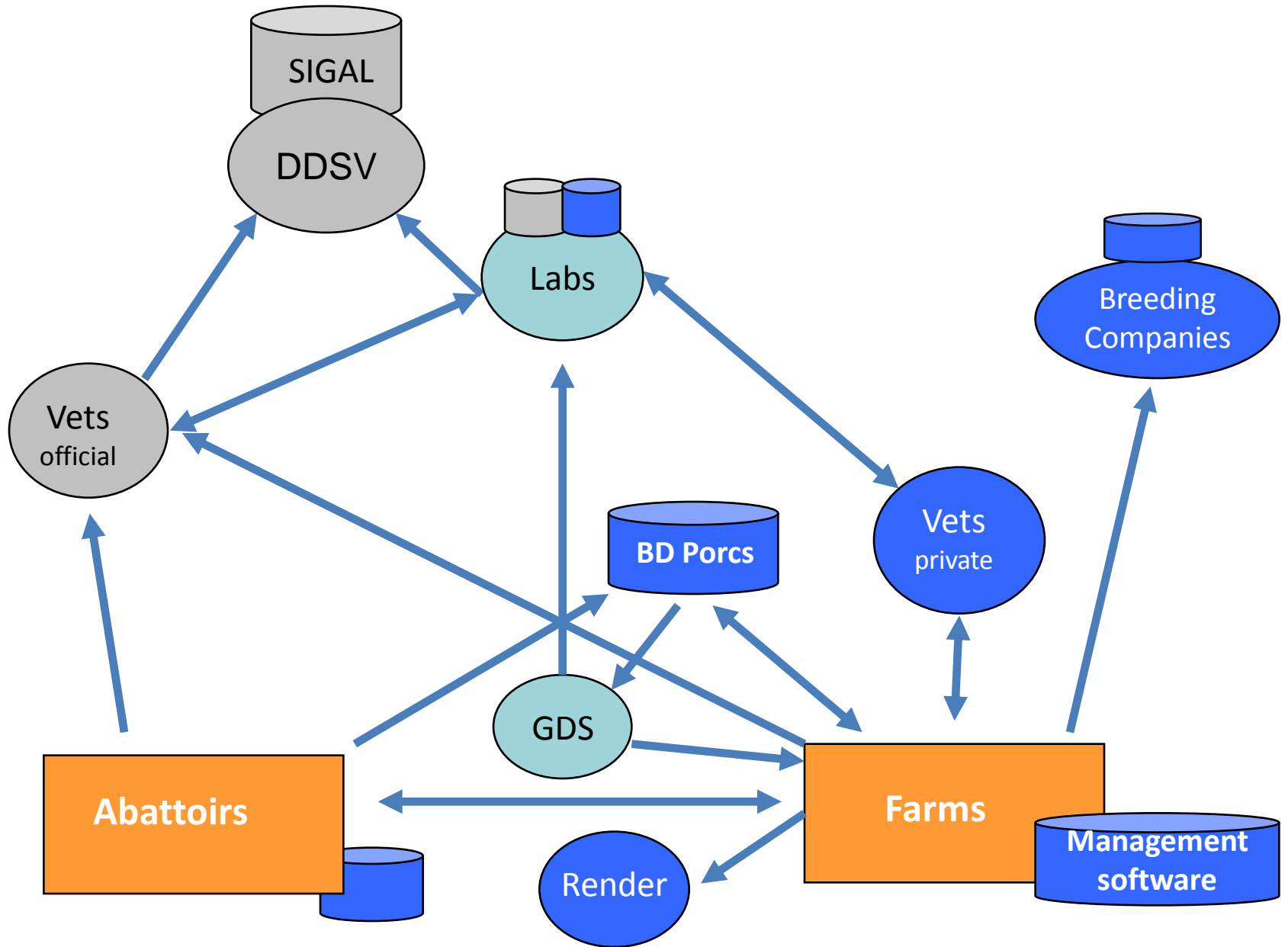
UK

Pigs



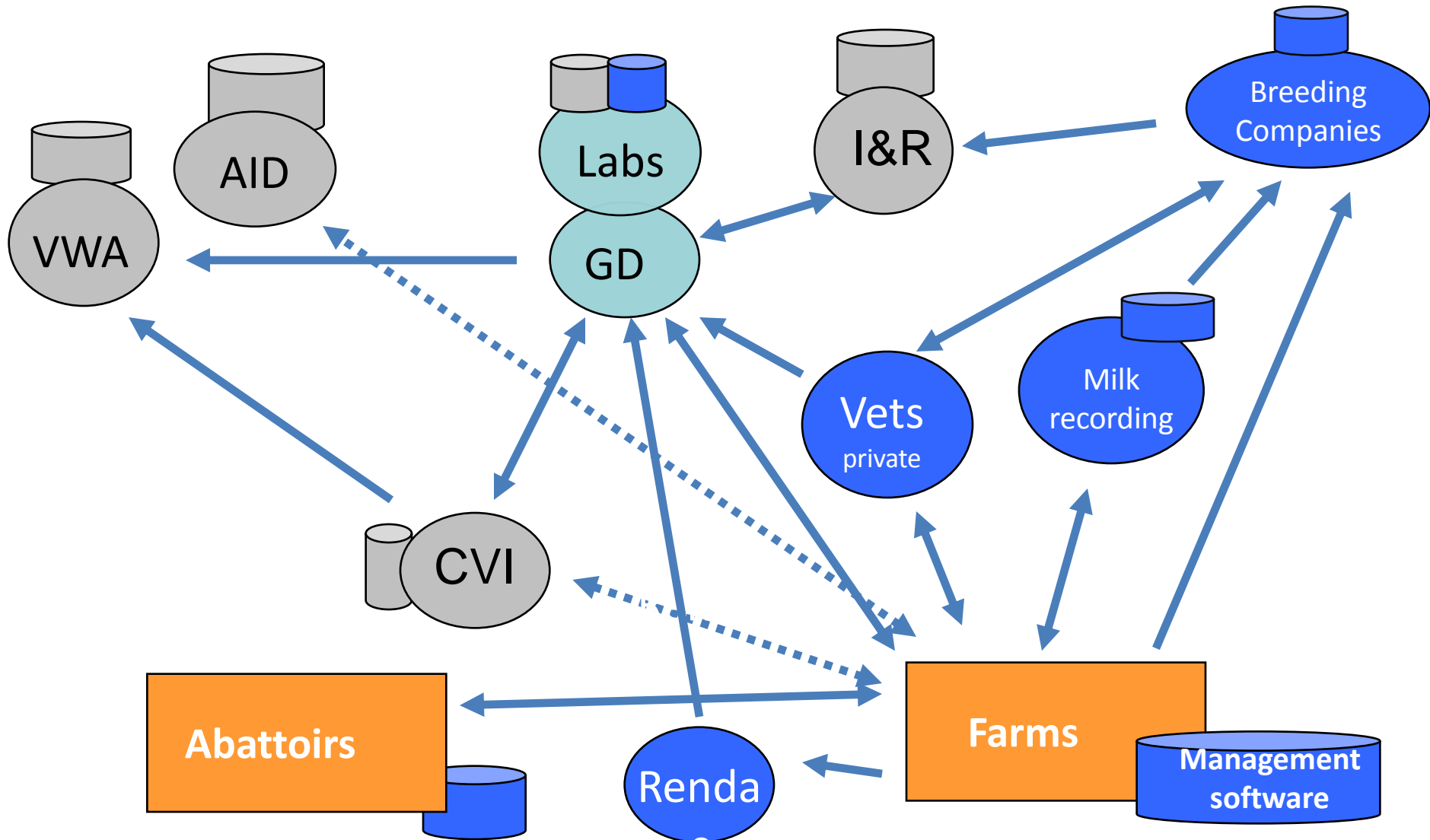
France

Pigs



Netherlands

Cattle



Differences between countries

- Many similarities (expected ~ legislation)
- BUT
 - GD in NL (equiv. Of UK Animal Health but private. Potential impt. in Cost & Responsibility sharing)
 - Use of rendering information:
 - DK Balance of births and deaths
 - NL e.g Unusual findings in livestock health (Kardinal & GFV van der Peet)
 - GDS in France, NADIS & BPHS in UK

Differences between species

- Group/flock v individual identification
- Crossbred v purebred
- Ind. Ident. In cattle c.f. other spp. – A significant enabler?
 - Individual data collection from field: AI, hoof trimmers, conformation, vets.
 - Farmer involvement/interest in breeding



Thoughts for Stakeholders

- In design consider multiple use & links
- Increasing importance of Levy / Product boards in animal health data collection
- Opportunities for learning / sharing are substantial
- Encourage involvement of both breeders and veterinarians



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