#### Horizon 2020 Programme

# INFRAIA-02-2017 Integrating Activities for Starting Communities



SmartCow: an integrated infrastructure for increased research capability and innovation in the European cattle sector



**Project ID: 730924** 

Deliverable number: D1.2

Deliverable title: Construction of an interactive map of national and

regional cattle RIs across EU countries

EC version: V0

Due date of deliverable	31/01/2019 (M12)
Actual submission date	24/07/2019 (M18)

### **DOCUMENT INFO**

## 1. Author(s)

Organisation name lead contractor	Institut de l'élevage
-----------------------------------	-----------------------

Author	Organisation	e-mail
Pauline Madrange	Institut de l'élevage	Pauline.madrange@idele.fr

### 2. Revision history

Version	Date	Modified by	Comments

### 3. Dissemination level

PU	Public	X
СО	Confidential, only for members of the consortium (including the Commission Services)	



### **EXECUTIVE SUMMARY**

Background	SmartCow is a European project integrating key European cattle research infrastructures. Its objective is to promote the coordinated use and development of these infrastructures, and thereby help the European cattle sector face the challenges of sustainable production. By covering all the relevant scientific fields and the diversity of cattle types and production systems, SmartCow will provide easy access to high quality services and resources to academic and private research communities. For instance, access to research results, free trainings, national meetings with stakeholders and project applications TNA (transnational access) to conduct experiments in the project's infrastructures. Such services and resources are needed to develop innovative and ethical solutions for efficient use of animal and feed resources, promoting animal welfare and healthy livestock, as well as sustainable competitiveness.  To build close links and synergies within the European research community working on cattle, the first step is to identify and characterize European research infrastructures.
Objectives	The objective of this task is to create an inventory that describes and maps the principal animal research infrastructures of the project partners.
Methods	A contact person from each research institute within the consortium was identified at the kick off meeting and their email address obtained.  An exhaustive list of general information about the research infrastructures was developed and an excel spreadsheet created to collect the data.  Before sending to all project partners, the file was sent to a smaller group of people involved in the project to review and identify any areas, which were missing, or where more information was required. Once this sub-committee was satisfied with the database, it was sent to the people within the consortium whose email addresses were collected at the kick off meeting.  Once all information was returned it was collated into one document, validated and sent to partners working on Tasks 1.1 and 3.1 to allow them to go further in their respective work packages.



# Results & implications

The result is the creation of an interactive map of the Research installations of SmartCow partners. The map is disseminated through the project website (<a href="http://www.smartcow.eu/map/">http://www.smartcow.eu/map/</a>) and allows any visitor to have access to a short description with key figures and a link to the website of each infrastructure In a second step, the map will be completed with infrastructures outside the SmartCow consortium, within SmartCow organisations and outside, that are volunteer to disseminate information through the map.



#### **Table of contents**

1	Descri	iption of the Interactive map	6
1	.1 Typ	be and origin of the information displayed on the interactive map	6
1	.2 Pre	sentation of the interactive map	7
	1.2.1	1st set of information:	7
	1.2.2	2 <sup>nd</sup> set of information	8
	1.2.3	3 <sup>rd</sup> set of information	8
2	Access	s to the map	9
3	Updat	es of the map	9
4	Comm	nunication about the man	9

#### 1 Description of the Interactive map

#### 1.1 Type and origin of the information displayed on the interactive map

The information about the Research infrastructures has been collected in the Database from D1.1. Most of the information from this database is available on the interactive map:

- All Institute details (address, responsible person, website...)
- Site characteristics
  - Enterprise (dairy or meat)
  - o Climate
  - o Total land
  - Grazing land
  - o Grazing season
- All Animal types and breeds (dairy and suckler cows and finishing cattle)
- Research equipment
  - o Individual feed intake facilities (Yes/No)
  - Metabolism facilities (Yes/No)
  - Greenhouse gas measurement (Yes/No)
  - Digestion facilities (Yes/No)
  - Grazing studies equipment (Yes/No)
  - Behavioural monitoring (Yes/No)
- Laboratory facilities
  - Capacity to process blood sample (Yes/No)
  - Capacity to process meat sample (Yes/No)
  - Capacity to process milk sample (Yes/No)
  - Capacity to process digestive system sample (Yes/No)
  - Capacity to process calorimeter/metabolism sample (Yes/No)
  - Capacity to process diet/feed sample (Yes/No)
  - Capacity to process DMI sample (Yes/No)
- Ethical aspects
  - o Animal Welfare body (Yes/No)
  - Licence to perform experiments (Yes/No)
  - Name of the ethical licence body

In its first version, the map display information from 12 research infrastructures which are summarized in the table below:

Country	Institute	Research infrastructure	Installations
	INRA	Pôle experimental bovin (PEB)	Le Pin
France			Herbipôle-Theix
France			Herbipôle-Laqueuille
			Herbipôle-Marcenat
Scotland	SRUC	Dairy Research Centre	Dairy centre
Scottanu		Beef centre	Beef centre 1 & 2
The Netherlands	Wageningen University	Carus	Carus
	WU-DLO	Dairy Campus	Dairy Campus
England	University of Reading	CEDAR	CEDAR
	ny FBN	FBN-EFC	Barn
Germany			ExpPhysRoom
			RespCham

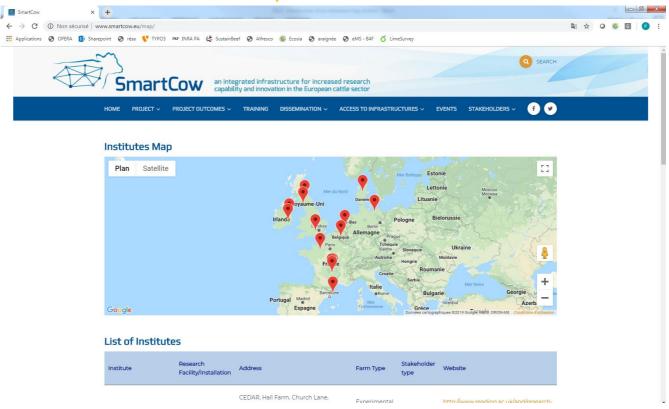




an integrated infrastructure for increased research capability and innovation in the European cattle sector

			BehavArena
Ireland	Teagasc	Moorepark	Moorepark
		Grange	Grange
Denmark	Aarhus University	Danish Cattle Research Centre	AU1 & 2
Spain	IRTA	EVAM	EVAM
Belgium	CRAW	Experimental dairy farm	-

#### 1.2 Presentation of the interactive map

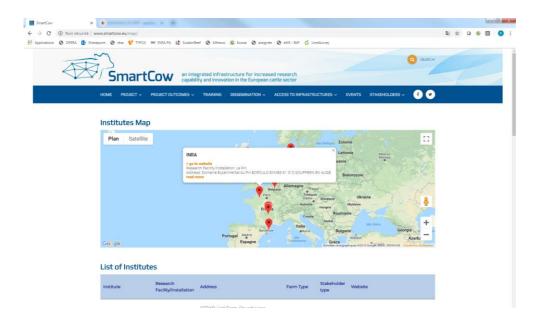


There is 3 sets of information for the interactive map.

#### 1.2.1 1st set of information:

When clicking on a marker, the identification of the RI is precised:

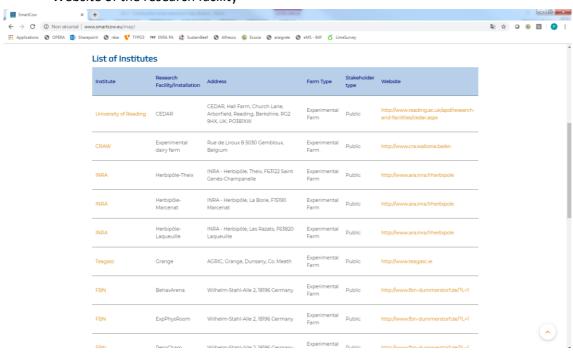
- Name of the institute
- Name of the research facility
- Address of the facility
- Link to the website of the facility



#### 1.2.2 2<sup>nd</sup> set of information

Below the map, there is a listing of all the RIs with a few information:

- Institute
- Research facility / installation name
- Address of the research facility
- Type of farm
- Type of stakeholder
- Website of the research facility



#### 1.2.3 3<sup>rd</sup> set of information

When a user click on "read more" for a facility, he will access an exhaustive presentation of the research facility with:

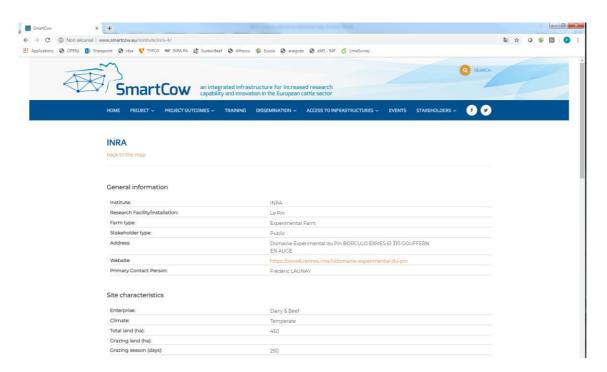
- General information
- Site Characteristics





an integrated infrastructure for increased research capability and innovation in the European cattle sector

- Animal types, breed and head numbers
- Research equipment
- Laboratory facilities
- Ethical aspects



#### 2 Access to the map

The map is accessible to all on the project website: http://www.smartcow.eu/map/

#### 3 Updates of the map

In the course of the project, the interactive map will be extended progressively to other research infrastructures on cattle within the institutions and the countries of the SmartCow consortium in a first step.

In a second step, the mapping will be extended beyond participating countries to a whole Europe by the mean of a questionnaire sent to EAAP European network.

An online survey has been created and disseminated toward scientific and university organizations listed in the EAAP database and through the EAAP Newsletter, and congress. SmartCow partners have been encouraged to disseminate the survey toward their own contact.

#### 4 Communication about the map

The map has been presented to the SmartCow consortium during the 1<sup>st</sup> year meeting in March 2019. The review from the consortium has allowed for an improvement of the 1<sup>st</sup> version of the map. Communication about the map will be done on SmartCow newsletter and social networks (twitter @cow\_smart, Facebook @smartcowproject) and the map will be made available from SmartCow



website homepage. That information will be relayed on SmartCow partners' own communication tools (website and / or social network).

Furthermore, along with the invitation to the online survey, universities and scientific organizations have been informed about the map and a direct link to the map has been send to them.

