

Report of the 2nd transnational workshop (TNWS 2)



Agris

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Agencia regionala per la ricerca in agricultura




INRAE

In Extenso
Innovation Croissance

Moredun



Eesti Maaülikool
Estonian University of Life Sciences



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22nd February 2022
Zoom/hybrid conference
11h30 – 16h30 CET

TNWS2



OBJECTIVES

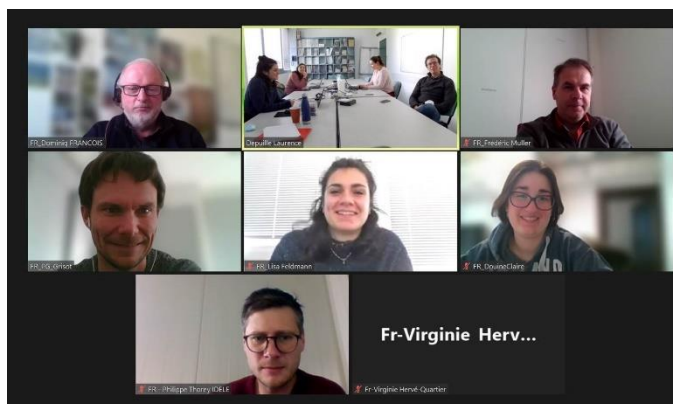
Four main objectives were identified for the second transnational workshop (TNWS 2):

1. Briefly present the Sm@RT project and its progress
2. Exchange on innovative technologies/digital tools can help answer your needs
3. Get an opportunity to see what the other partners' countries propose in terms of technology use for sheep and goats
4. Meet some of the participants 'for real'

ORGANISATION AND ATTENDEES

Due to Covid-19 ongoing restrictions, the original organisation which was a face-to-face meeting in France was replaced by a hybrid Zoom conference. Indeed, some of the partners' countries were able to join the meeting from a room, where some of their participants were sitting. That was the case for the UK, France, Israel, and Estonia. The Italian, Norwegian, Irish, and Hungarian participants joined individually the Zoom meeting. The main meeting was hosted by the UK partner. The TNWS 2 took place on the 22nd of February 2022 at 10:30 am CET for 4 hours with 1 hour lunchbreak. The meeting was a multi-lingual plenary session and a series of breakout sessions by country. In total, there were 8 breakout rooms and 4 sessions (one on feeding/grazing, one on health/welfare/reproduction, one on milking/fattening and one on flock management). The agenda of the meeting is detailed in annex 1.

A total of 60 people participated in this second TNWS, 11 from France, 6 from the UK, 5 from Ireland, 4 from Hungary, 8 from Norway, 6 from Estonia, 4 from Israel and 16 from Italy. More than a third of participants were farmers.



The French group – hybrid



The UK group – face to face and hosting the Zoom meeting

The slides used during the meeting are presented in annex 2.

SOLUTIONS RETAINED BY THE WORKSHOP PARTICIPANTS






























During the plenary session, the project was presented to the participants, as well as the preliminary global results on the farmers' needs in terms of technology and digital innovations, based on the NWS results and global survey. Then participants were shown the number of solutions identified by all countries (68 in total: 11 from the UK, 3 from Israel, 6 from Norway, 4 from Estonia, 11 from Italy, 4 from Hungary, 19 from France and 10 from Ireland).

The main cross-activity was for participants to look at the solutions proposed from the other countries, and to vote on the ones they preferred (solutions market approach). Four sessions were organised, to cover the main topics (feeding/grazing, health/welfare/reproduction, milking/fattening, and flock management). Some of the solutions proposed were presented in more than one session. Some solutions were also presented by more than one country. Participants were asked not to vote for their own country solutions. In each breakout session, participants had the list of solutions proposed for the topic in an excel file, with the links to PPT slides, or to videos, so they could visualise the solutions.





























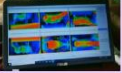












After visualisation, they discussed in their country group which solution they preferred. The whole participants came back in the plenary session to give their votes.

The preferred solutions by topic are shown below (the 'heart' symbol shows the votes).







1. Feeding/Grazing:

Feeding/Grazing			
SmartFence/Virtual fence  	EID weighcrate + autosorter  	Grazing management app  	Automated grass measurement  
Pregnancy scanning 	Ration/Feeding Software  	Drone  	Portable NIR  
Milkmeter 	Automatic feeder  	Connected Fence  	GPS collars  
Postdried hay technology 	HappyGrass  	Drone with thermal camera  	GPS collars with behaviour  

2. Health/welfare/reproduction:

Health/Welfare/Reproduction			
EID hand-held wand/data loggers  	Data recording system/ Flock recording app  	EID weigh crate and autosorter  	FEC software (FecPak G2)  
Pregnancy scanning  	Parentage test  	Worming /vaccinating gun  	Sheep conveyor  
Happy Factor algorithm  	Camera  	Somatic Cell counter  	Weather/ environmental station  
Water meter  	Automatic feeder  	Alpha detector  	3D imaging  
Ultra High Frequency  	Walk Over Weigh  	Environmental enrichment  	EID-enabled water trough  
GPS & proximity ear-tags  	Guard dog & high tensile fence  	Milk feeders for kids/lambs  	GPS collars & behaviour information  

3. Milking/fattening:

Milking/Transformation			
Milk tank weighing  	Milk meter + milking management software  	Somatic Cell Count  	



Fattening

EID hand-held wand/data loggers



Walk Over Weigh



EID weigh crate and autosort



FEC software



EID tags



Electronic weather station



Automated grass measures



Happy Factor algorithm



EID-enabled weighing trough



Flock recording app (SheepIreland)



4. Flock/herd monitoring

Flock/Herd monitoring



EID hand-held wand



Worming/Vaccinating guns



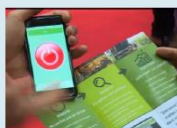
EID weigh crate and autosorter



Milking parlour with EID



Aptimiz



Environmental station + cooler



Automatic feeder



Camera



Milk meter



EID-enabled water trough



Data recording system



ANNEXES

Annex 1 - agenda

Agenda:



What	UK/Ireland	France/Italy Norway/Hungary	Estonia/Israel
Project presentation & game	10.30-11.00	11.30 – 12.00	12.30- 13.00
Breakout session on Feeding/Grazing	11.00 – 11.20	12.00 – 12.20	13.00 – 13.20
Vote	11.30 – 11.40	12.30 – 12.40	13.30 – 13.40
LUNCH (~1 HOUR)	11.40 – 12.45	12.40 – 13.45	13.40 – 14.45
Breakout session on health/welfare/reproduction	12.45 – 13.15	13.45 – 14.15	14.45 – 15.15
Vote	13.15 – 13.25	14.15 – 14.25	15.15 – 15.25
Breakout session on milking/fattening	13.25 – 13.40	14.25 – 14.40	15.25 – 15.40
Vote	13.40 -13.50	14.40-14.50	15.40 – 15.50
Breakout session on flock management	13.50 – 14.05	14.50 – 15.05	15.50 -16.05
Vote	14.05 – 14.15	15.05 – 15.15	16.05 – 16.15
Conclusions & feedback	14.15 – 14.30	15.15 – 15.30	16.15 – 16.30





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Annex 2 - slides



Sm@RT - Small Ruminant Technology

2nd Transnational Workshop – 22nd February 2022







Carte réalisée avec Cartes & Données - © Artique

Welcome! Tere tulemast!

Bienvenue!

Benvenuti!

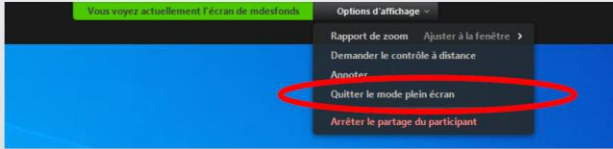
Üdvözljük!


Velkommen! שלום



Good practices

- Mute yourself unless you want to say anything
- Stop your video if you are not a facilitator
- Quit 'Full Screen' mode to be able to see the 'chats'







Good practices



- During the plenary session, use 'Chat' to ask questions



- During the breakout rooms, use the chat in the room or use your microphone (unmute yourself).
- Update your username to make it more explicit (country_name_surname) to facilitate the breakout rooms allocation.
- Put letters in front of your name to precise your country:

FR - France
IL - Israel
HU - Hungary
IR - Ireland

IT - Italy
NO - Norway
EST - Estonia
UK - UK

Examples :
UK_Ann McLaren
NO_Lise Grova

Welcome!

Goals for today:

- Present briefly the Sm@RT project
- Exchange on innovative technologies/digital tools can help answer your needs
- Get an opportunity to see what the other partners' countries propose in terms of technology use for sheep and goats
- Meet some of you 'for real'

Agenda:



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Breakout session on milking/tattening	13.25 – 13.40	14.25 – 14.40	15.25 – 15.40
Vote	13.40 -13.50	14.40-14.50	15.40 – 15.50
Breakout session on flock management	13.50 – 14.05	14.50 – 15.05	15.50 -16.05
Vote	14.05 – 14.15	15.05 – 15.15	16.05 – 16.15
Conclusions & feedback	14.15 – 14.30	15.15 – 15.30	16.15 – 16.30





Sm@RT - Small Ruminant Technology



Sm@RT presentation



Sm@RT: Sm@RT: Small Ruminant Technology – PLF and Digital technologies for small ruminants

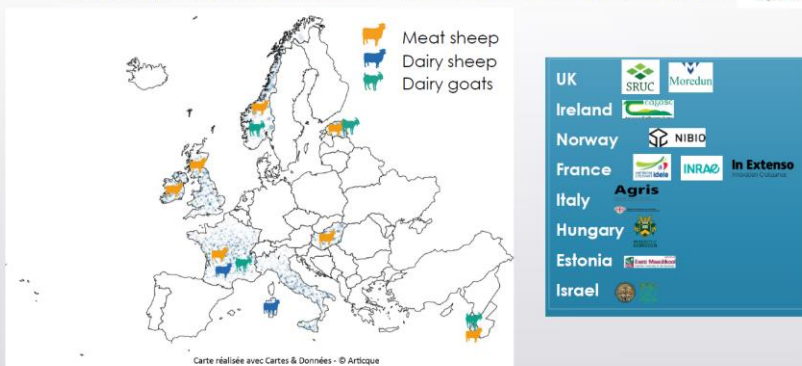
3 years
Starting Jan 2021

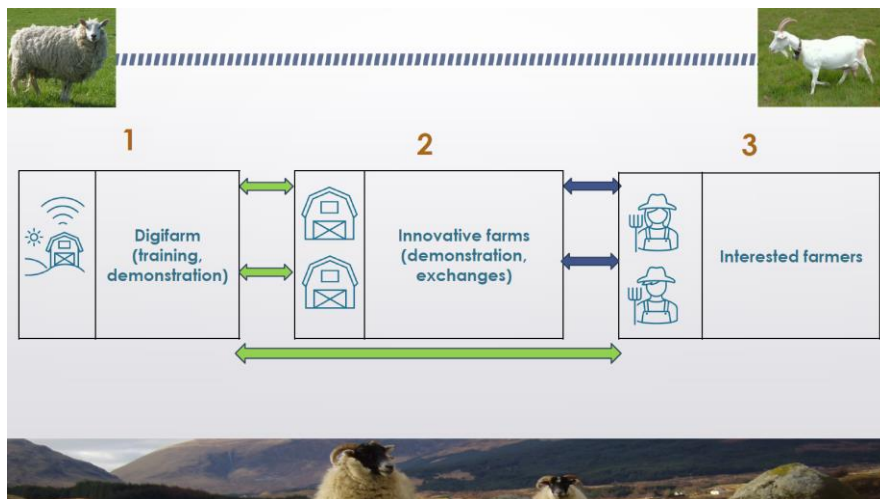
Objectives :

- To create a European **network** around the **use of PLF and digital technologies** in small ruminants
- To encourage **knowledge exchange**, new technologies **adoption** and **communication** between farmers and stakeholders of the small ruminant sectors.



Partners & Countries:





Important dates to remember



National workshops
Every 6 months



International workshops
Every 6 months after the
national workshops



**PLF/Digital technologies
demonstration/training**
On the Digifarms and
'Innovative Farms' in
2022 / 2023



Step 1

- 1a: Identification of farmers needs
- 1b: Inventory of corresponding PLF/digital technologies



Step 2

- Selection of PLF/digital technologies suitable to the different contexts and countries



Step 3

- Farmers barriers and testimonies

Step 4

- Assessment of farmers acceptance of the different technologies from the sessions, visits, and farm demo on Innovative Farms and Digifarms.

Step 5

- Definition of a European dissemination and uptake strategy for PLF and digital technologies in small ruminants systems





What have we done?

Online survey
(May – July 2021)
(669 answers)



Workshops
(Sept – Oct 2021)

List of farmers' needs for
tools to help them at:

1. Feeding/Grazing
2. Health/Welfare
3. Reproduction
4. Flock/Herd management
5. Fattening/Milking



A little game....

1



	Ireland?
	United Kingdom?
	Hungary?
	Italy?
	Estonia?
	Israel?
	Norway?
	France?

Zoom poll / hand raised
in rooms



A little game....

2



	Ireland?
	United Kingdom?
	Hungary?
	Italy?
	Estonia?
	Israel?
	Norway?
	France?





A little game....



3		Ireland?
		United Kingdom?
		Hungary?
		Italy?
		Estonia?
		Israel?
		Norway?
		France?



Sm@RT – breakout sessions

1 room	1 online breakout room (IRE)	1 online breakout room (HU)	1 online breakout room (IT)	1 room	1 room + some people online (IL)	1 online breakout room (NO)	1 online breakout room (FR)



Breakout Session 1

Feeding/Grazing





Feeding/Grazing

SmartFence/Virtual fence Italy, France, UK	EID weighcrate + autosorter Italy, UK	Grazing management app Italy	Automated grass measurement Italy
Pregnancy scanning Italy	Ration/Feeding Software UK, France, Italy	Drone UK, France, Italy	Portable NIR Italy, France
Milkmeter Italy	Automatic feeder Italy, France, UK	Connected Fence France	GPS collars UK, France
Postdried hay technology UK	HappyGrass France	Drone with thermal camera UK	GPS collars with behaviour UK



Breakout Session 1

Feeding/Grazing

2 best ones?? ❤️❤️

plenary

LUNCH!



Back in 1 hour





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Breakout Session 2

Health/Welfare/Reproduction



Health/Welfare/Reproduction					
EID hand-held wand/data loggers	Data recording system/ Flock recording app	EID weigh crate and autosorter	FEC software (FecPak G2)		
Pregnancy scanning	Parentage test	Worming /vaccinating gun	Sheep conveyor		
Happy Factor algorithm	Camera	Somatic Cell counter	Weather/ environmental station		
Water meter	Automatic feeder	Alpha detector	3D imaging		
Ultra High Frequency	Walk Over Weigh	Environmental enrichment	EID-enabled water trough		
GPS & proximity ear-tags	Guard dog & high tensile fence	Milk feeders for kids/lambs	GPS collars & behaviour information		



Breakout Session 1

Health/Welfare/Reproduction

2 best ones?? ❤️❤️



plenary





Breakout Session 3

Milking/Fattening



Fattening

EID hand-held wand/data loggers



Walk Over Weigh



EID weigh crate and autosorter



FEC software



EID tags



Electronic weather station



Automated grass measures



Happy Factor algorithm



EID-enabled weighing trough



Flock recording app (SheepIreland)



Milking/Transformation

Milk tank weighing



Milk meter + milking management software



Somatic Cell Count





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Breakout Session 3

Milking/Fattening

2 best ones?? ❤️ ❤️























plenary



Breakout Session 4

Flock/Herd management

Flock/Herd monitoring

EID hand-held wand  	Worming/Vaccinating guns  	EID weigh crate and autosorter  	Milking parlour with EID  
Aptimiz  	Environmental station + cooler  	Automatic feeder  	Camera  
Milk meter  	EID-enabled water trough  	Data recording system  	





Breakout Session 4

Flock/Herd management

2 best ones?? ❤️❤️

plenary



Next steps:

3rd National Workshop: early June 2022

3rd Transnational workshop: early July 2022



Feedback on today:

Did you enjoy the meeting and discussions?



How was the meeting organisation?



Zoom poll/ on paper





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Merci beaucoup! A bientôt!

Thank you very much! Good bye!

Tusen takk! Ha det bra!

Grazie mille! Arrivederci

תודה רבה לך! שלום!

Tänane väga! Head aega!



The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 101000471

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