

ROADMAP

Rethinking of antimicrobial decision-systems in the management of animal production

Research and Innovation action: H2020 – 817626

Call: H2020-SFS-2018-2

Type of action: Research and Innovation Action (RIA)

Plan for the Exploitation and Dissemination of Results- ODP Version 2

Lucía Novoa¹, Tamara Rodríguez¹, Cagla Kaya²
Duru Eroglu²

¹FEUGA, Spain; ²EFFAB, The Netherlands

* Deliverable leader – Contact: trodriguez@feuga.es

DELIVERABLE D7.3

Workpackage N°7

Due date: M6

Dissemination level: Public

Revision History

This document contains a revision history log. When changes occur, the document’s revision history log will reflect an updated version number, the date of the new version, the author making the change, and a summary of the changes.

Version	Date	Author	Summary of changes
V1	30 November 2019	Lucía Novoa Tamara Rodriguez Cagla Kaya	This is the first version created for PEDR and ODP.
V2	30 November 2020	Lucía Novoa Tamara Rodriguez Cagla Kaya Duru Eroglu	This is the updated version created for PEDR and ODP. <ul style="list-style-type: none"> • Introductory videos and project brochure in 7 languages were created. • 1st SAB meeting held online (M17) • LL Meetings have started. • Profile raising event section is updated with past and future events. • Timeline of outreach and dissemination activities and tools is updated for year 2. • Publication strategy is being prepared. • Appointment of the official members of the IPUDC Committee. (Section 5.3)

About the ROADMAP research project

The overall aim of ROADMAP is to **foster transitions towards prudent use of antimicrobials (AMs) in animal production in different contexts to manage antimicrobial resistance (AMR). Prudent antimicrobial use (AMU) will be achieved by enhancing antimicrobial decision-systems along the food and drug supply chains.** ROADMAP will focus on supporting animal health and welfare through prevention and health promotion actions.

AMR is recognized as a significant threat to global public health and food security. Overuse and improper use of AMs in many parts of the world contribute to the emergence and spread of AMR. Although human and animal health require AMs, it has been estimated that two thirds of the future AMU growth worldwide will be in animal production. Improving the management of AMU in farm animals is therefore a critical component of dealing with AMR and optimizing production in the livestock sector. Nevertheless, the variety of contexts of AMU in the livestock sector is a major challenge to managing AMR. **There is no “one-size-fits-all” solution to improve AMU and strategies must be contextually developed** (for instance, strategies used in the Danish pig industry are difficult to adapt and adopt in the French free-range poultry farming). Successful solutions must be combined and tailored to the production systems and the social and economic context in which they operate.

ROADMAP will meet three general objectives, in line with the EU AMR Action plan: i) **Rethink AM decision-systems and animal health management;** ii) **Develop options for encouraging prudent AMU in animal production;** iii) **Engage all actors in the food and drug supply chains in fostering a more prudent use of AMs.**

Project consortium

Part. N°	Participant organisation name (acronym)	Country
1	Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement (INRAE) **	France
2	Association de coordination technique agricole (ACTA) ***	France
3	Centre de coopération internationale en recherche agronomique pour le développement (CIRAD) **	France
4	University of Liverpool (ULIV) *	United Kingdom
5	Cardiff University (CU) *	United Kingdom
6	James Hutton Institute (HUT) **	United Kingdom
7	Alma Mater Studiorum - Università di Bologna (UNIBO) *	Italy
8	Aarhus Universitet (AU) *	Denmark
9	Eigen Vermogen van het Instituut voor Landbouw en Visserijonderzoek (EV-ILVO) **	Belgium
10	Research Institute of Organic Agriculture (FiBL) **	Switzerland
11	Stichting Wageningen Research (WR) *	Netherlands
12	Swedish University of Agricultural Sciences (SLU) *	Sweden
13	Southern Agriculture and Horticulture Organization (ZLTO) ***	Netherlands
14	European Forum of Farm Animal Breeders (EFFAB) ****	Netherlands
15	Fundacion Empresa Universidad Gallega (FEUGA) ****	Spain
16	Dierengezondheidszorg Vlaanderen (DGZ) ***	Belgium
17	INRAE Transfert (IT) ****	France

* *Universities/veterinary schools*

** *Research institutes specialized in both fundamental and applied agricultural and veterinary sciences*

*** *Public and private advisory services Organisations*

**** *Knowledge transfer and Innovation organisations*

Table of Contents

1. Summary.....	11
2. Introduction.....	11
2.1. Objectives	11
2.2. Methods.....	12
3. ROADMAP Communication Tools and Activities	13
3.1. Project communication package	13
3.1.1 Project Logo	13
3.1.2 Project Message	14
3.2. Project website and online promotion activities	14
3.2.1 ROADMAP Public Website	15
3.2.2. Social media strategy & management	16
3.2.3. Online promotion materials.....	19
3.2.4. Offline tools and activities.....	20
4 ROADMAP Dissemination strategy.....	21
4.1. Dissemination goals.....	21
4.2. Targeted dissemination tools	22
4.2.1 Peer-reviewed and Scientific papers	23
4.2.2 Practice abstracts and Operational Groups	24
4.2.3 Policy briefs.....	24
4.2.4 Workshops, Living Labs and Networking activities.....	24
4.2.5 ROADMAP Training Activities	25
4.3. Management of the research data and dissemination of own results	25
4.4. Strategy for knowledge management and protection	26
4.5. Evaluation.....	26
4.6. Annual Outreach, Dissemination and Training plans	27
4.6.1. Year 2 (01/06/2020-31/05/2021).....	27
4.7. Results & Implications	25
5. ROADMAP Exploitation Strategy.....	26
5.1. Executive summary.....	26
5.2. Grant Agreement and Consortium Agreement Articles related to Exploitation.....	27

5.3. Objectives of the Exploitation Plan.....	27
5.4. Exploitation Activities	30
5.5. Result Collection	30
5.6. List of Exploitable Result(s).....	31
5.7. Exploitation Analysis.....	31
5.7.1. Description and analysis (for result 1).....	31
5.8. Exploitation Strategy	31
5.8.1. Roadmap for exploitation pathways.....	33
5.8.2. Exploitation strategy (for result 1)	35
5.9. Final Recommendations	35
6. Partners involved in the work.....	35
7. Conclusion.....	35
8. Appendix.....	37

Table of tables and figures

<i>Table 1: ROADMAP collaborative platform</i>	16
<i>Table 2: ROADMAP Social Media accounts</i>	16
<i>Table 3: Relevant keywords and tags</i>	17
<i>Table 4: Risks of social media usage in projects</i>	18
<i>Table 5: Provisional Newsletter publication dates</i>	19
<i>Table 6: ROADMAP press releases</i>	20
<i>Table 7: Possible international events for profile raising events of ROADMAP</i>	21
<i>Table 8: Evaluation tools for the communication and dissemination activities</i>	27
<i>Table 9: Deliverables and milestones of WP7 for the second project year</i>	27
<i>Table 10: Summary of results and implications of ROADMAP Dissemination strategy</i>	25
<i>Table 11: Partners’ role in implementing the Exploitation Plan</i>	28
<i>Table 12: Protection possibilities for ROADMAP project</i>	33
<i>Figure 1 Dissemination and exploitation roadmap</i>	12
<i>Figure 2 ROADMAP Logo with acronym only and including the title</i>	13
<i>Figure 3 Site map of ROADMAP</i>	15
<i>Figure 4 ROADMAP dissemination goals targeted to different levels of stakeholders</i>	22
<i>Figure 5 ROADMAP targeted dissemination strategy</i>	23
<i>Figure 6 Strategy for ROADMAP knowledge management and protection</i>	26
<i>Figure 7 Timeline of outreach and dissemination activities and tools for year 2</i>	25
<i>Figure 8 Exploitation pathway</i>	34

List of acronyms and abbreviations

Abbreviation	Description
ACTA	Association de Coordination Technique Agricole
AMR	Antimicrobial Resistance
AMs	Antimicrobials
AMU	Antimicrobial use
ANIS-EMA	AU Epidemiology and Management research unit
AU	Aarhus Universitet
AU-ANIS	AU Department of Animal Science
CA	Consortium Agreement
CIRAD	Centre de cooperation internationale en recherche agronomique pour le développement
COGECA	General Committee for Agricultural Cooperation in the European Union
COPA	Committee of Professional Agricultural Organisations
CU	Cardiff University
D	Deliverable
DoA	Description of Action
DGZ	Dierengezondheidzorg Vlaanderen VZW
DISTAL	Department of Agricultural and Food Science
DLS	Department of Livestock Sciences
DMP	Data Management Plan
EAAP	European Federation of Animal Science
EC	European Commission
EFFAB	European Forum of Farm Animal Breeders
EIP-AGRI	The Agricultural European Innovation Partnership
EU	European Union
EV-ILVO	Eigen vermogen van het instituut voor landbouw en visserijonderzoek
ExCom	Executive Committee
FABRE-TP	Farm Animal Breeding and Reproduction Technology Platform
FEUGA	Fundacion empresa Universidad Gallega
FIBL	Forschungsinstitut fur biologischen landbau stiftung
FSL	Food Safety Lab
FVE	Federation of Veterinarians of Europe
HUT	The James Hutton Institute

ICOH	International Conference on One Health
INRAE	Institut national de la recherche agronomique
IPR	Intellectual property rights
IPUDC	Intellectual Property Use and Dissemination Committee
IT	INRAE Transfert
ITAs	Technical Agricultural Institutes
MS	Milestone
NGOs	Non-governmental organisations
ODP	Outreach & Dissemination Plan
PEDR	Plan for Exploitation and Dissemination of Results
SAB	Stakeholder advisory board
SLU	Sveriges Lantbruksuniversitet
UEVP	Union of European Veterinary Practitioners
ULIV	The University of Liverpool
UNIBO	Alma Mater Studiorum – Università di Bologna
WBVR	Wageningen Bioveterinary Research
WLR	Wageningen UR Livestock Research
WOHC	World One Health Congress
WP	Work Package
WR	Stichting Wageningen Research
WVAC	World Veterinary Association Congress
ZLTO	Zuidelijke land- en tuinbouworganisatie vereniging

1. Summary

Since ROADMAP has strong connections with the actors in the animal production system, it requires a detailed and targeted outreach and dissemination strategy to be developed at the onset of the project. Main targets and end-users of ROADMAP's tools, strategies and new knowledge are all the actors involved in the animal health sector and the food and drugs supply chains (farmers, veterinarians, technical advisors and farmers' organisations, pharmaceutical companies, breeding, feeding industries, retailers and processors, policy makers) and the wider citizens concerned by the reduction of AMU. Therefore, a Plan for Exploitation and Dissemination of Results (PEDR) is designed to focus the dissemination strategy that are keys to acceptance and exploitation of ROADMAP results. Optimized and quick utilisation of project outputs by all stakeholders requires an efficient strategy to disseminate ROADMAP information in relevant formats and through specific dissemination channels suitable for each stakeholder group. The Exploitation Plan establishes the goals, guidelines, strategies, and work-flows for partners to follow when developing the activities related to the transfer of knowledge and exploitation towards end-users from the beginning of the project. A final Exploitation Plan will be presented at the end of the fourth year of the project (M48), including the joint exploitation objectives as well as the partner-specific exploitation plans for each meaningful result. It will also include a description of actions leading to exploitation as well as the specific model and strategy for the exploitation of each significant exploitable result.

2. Introduction

2.1. Objectives

The ROADMAP PEDR constitutes a strategic deliverable (D7.3) consisting of the Outreach and Dissemination Plan (ODP) (MS36) and the Exploitation Plan detailing the potential users, the communication and dissemination strategy, the potential use/exploitation and the impacted area for each main result. The context of D7.3 is built on the description given in the Description of Action (DoA) of the Grant Agreement. Therefore, PEDR together with the ODP focuses on *dissemination and exploitation activities* while communication activities are more detailed in M36, both ensuring the aimed impacts including the food and drug supply chain actors will be achieved. The main objective of the dissemination and exploitation strategy of ROADMAP is to ensure the uptake of integrative strategies developed within ROADMAP. In addition, an Exploitation strategy is designed to provide an adequate approach and ensure that the ROADMAP's novel solutions, applicable in the field, will come out of the project and reach the market. Therefore, this plan has a dynamic character which would follow the project progress, update as project evolves and guide ROADMAP partners so that the project impact could be maximised. PEDR will support ROADMAP partners in establishing the basis for their intellectual property strategy.

This document contains a revision history log. When changes occur, the document's revision history log will reflect an updated version number, the date of the new version, the author making the change, and a summary of the changes. This is the updated version of the PEDR. The content has been updated with upcoming tasks and deliverables.

ROADMAP's outreach and dissemination strategy and activities will be based on the following roadmap. The lead partners EFFAB and FEUGA will be supported by the academic and non-academic ROADMAP partners and the stakeholders' platform mainly represented by SAB members.

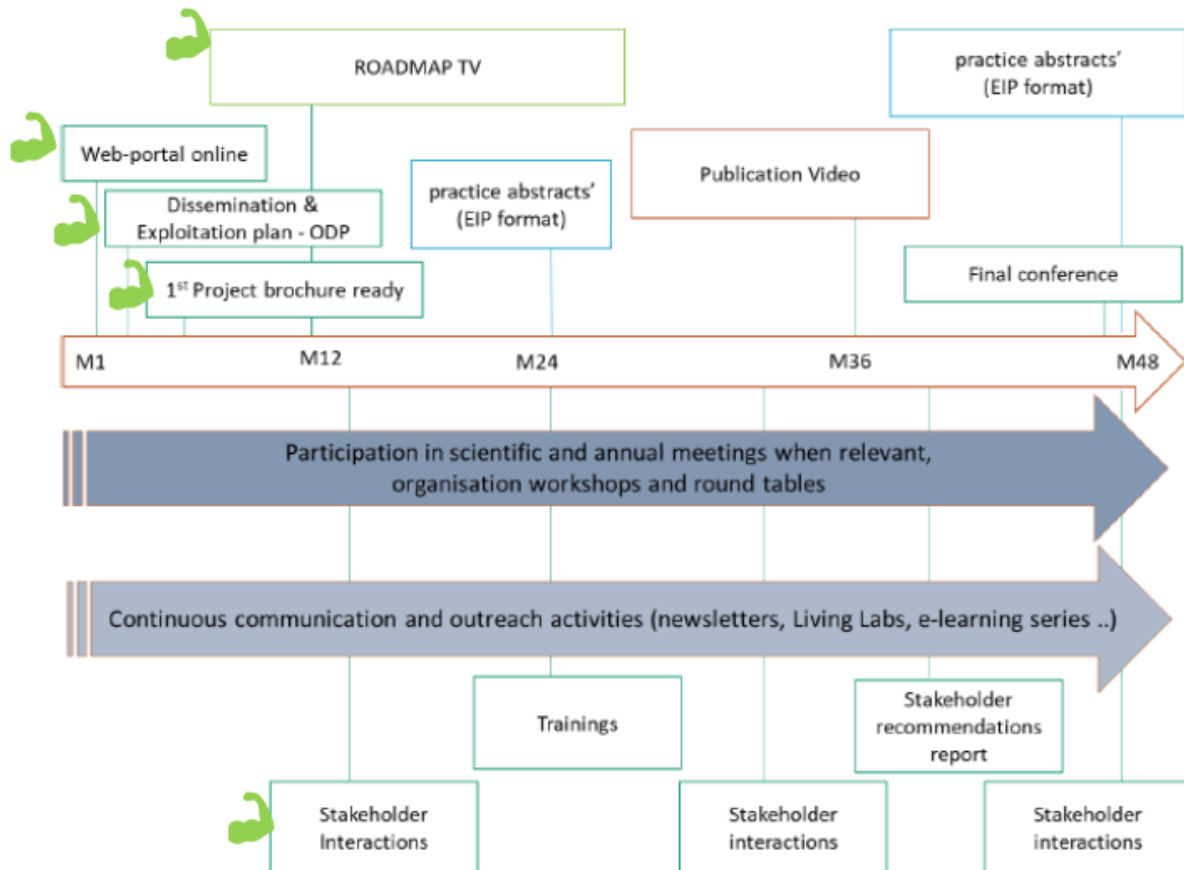


Figure 1 Dissemination and exploitation roadmap

2.2. Methods

The Outreach, Dissemination and Exploitation strategy will be carried out through 5 main tasks during the lifetime of the project.

- Stakeholder engagement and knowledge exchange
- Online and offline, targeted communication activities
- Conventional and innovative dissemination activities
- Supportive training events
- IPR management and post-project commercialisation

WP7 is in close contact with all the WPs using a multi-actor approach by including stakeholders all throughout the project period. WP7 promotes the project, makes project results available and facilitates their use, by providing a basis for stakeholder inclusion and knowledge exchange. Interactions with other relevant EU projects such as Star-Idaz, PROHEALTH, SAPHIR, Paragone, GenTORE, HealthyLivestock, One Health EJP, PanaMast,

SIRCAH, DISARM, SONAR Global and liaisons with local and European networks are implemented to promote the transfer of the results. Particular attention is paid to liaising with the Joint Programming Initiative on Antimicrobial Resistance (JPI AMR).

3. ROADMAP Communication Tools and Activities

ROADMAP communication strategy targets stakeholders and end-users such as animal health professionals (veterinarians, technicians), farmers, breeding and feeding industries, pharmaceutical companies, retailers, processors, public authorities. Chosen communication tools and materials aim to target different audiences with different methods and channels selected to be used under ROADMAP project.

3.1. Project communication package

To make sure that the ROADMAP project appears coherent and consistent in all communication materials related to the project, a project identity and accompanying templates are produced. All participants are encouraged to follow the guidelines, for presentations, brochures, newsletters, publications etc. All official material for the European Commission and general public must be in accordance with the guidelines. The details of the project identity and communication package are given in detail in D7.2.

3.1.1 Project Logo

The ROADMAP logo has been designed for branding the project in all communication forms. Humans are in the center of the logo because they are the main elements of ROADMAP project (which is about understanding behaviors and strategies of stakeholders) and also the main population threatened by the risks of antimicrobial resistance. The ROADMAP logo shows people on the crossroads that lead to different directions since we consider there is a diversity of pathways to foster transitions towards prudent use of antimicrobials. Animal heads are linked to circular paths referring to “ONE HEALTH” approach, highlighting the connection between human, health, animal health and the environment.

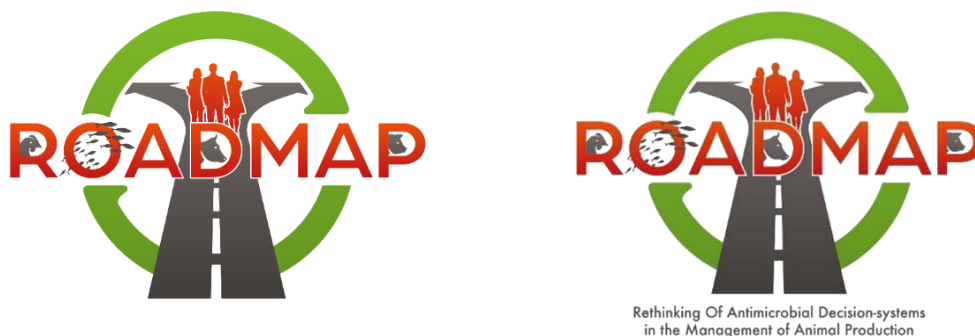


Figure 2 ROADMAP Logo with acronym only and including the title

Along with the ROADMAP logo, the EU flag should be visible on all communications from the ROADMAP project.



Link to graphic design of EU-projects: http://ec.europa.eu/regional_policy/information/logos/index_en.cfm

Please note that any **dissemination** and any **communication** activity related to the action (including in electronic form, via social media, etc.) and any infrastructure, equipment and major results funded by the grant must include this information:



This project has received funding from the European Union's H2020 research and innovation programme under grant agreement No 817626.

3.1.2 Project Message

3.1.2.1 Tagline

The tagline describes the essence of the project in a short and understandable way, linking to why this is important for the target audiences. This is used on communication materials (website, brochure, presentations, etc.).

Currently used and proposed taglines:

“Rethinking of Antimicrobial Decision-systems in the Management of Animal Production”

“Understanding sociotechnical and socioeconomic drivers of AMU”

“Tailoring contextualized strategies to foster prudent AMU in diverse production systems in Europe and worldwide”

“Developing innovative socioeconomic and technical instruments to foster prudent AMU adapted to various production systems”

“Fighting against antimicrobial resistance by allowing cross-learning from diverse successful experiences”

“Encouraging a harmonization of AMU reduction trends across Europe”

“Favoring a global decrease of AMU in animal production”

3.1.2.2 Communication message

The communication message consists of one general message that should be further specified per target group. It will create the ‘external identity’ of the project. The message must be simple, clear and positive. This main communication message is:

ROADMAP aims to foster transitions towards prudent use of antimicrobials (AMs) in animal production in different contexts to manage antimicrobial resistance (AMR). ROADMAP will analyze sociotechnical and socioeconomic drivers of AMU and develop innovative strategies to promote prudent AMU, based on social sciences, interdisciplinary and participatory approaches.

3.2. Project website and online promotion activities

3.2.1 ROADMAP Public Website

The ROADMAP website is an important communication tool that requires continuous updating during the course of the project. It is the major communication and dissemination tool for the project. It presents the project objectives, work plan, highlights major results, presents the project partners and stakeholders, including electronic versions of training courses, links to other EU or international projects and stakeholder associations and contact details of relevant partners within the project. It also includes news and events and a media section including newsletters, brochures, press releases, and a link to the YouTube channel where video materials, e-trainings and webinars are posted. The goal is to keep the website informative, up-to-date, inspiring and inclusive, so that it invites visitors to further engage with the project. Project website will be maintained for 2 more years after the project. Specifics of the website are given in D7.2 Website online and communication package.

The project website link is <https://www.roadmap-h2020.eu>. The site map for the website is shown below. In addition to provide basic information about the project, it provides information about the involved countries, including the stakeholder activities. Furthermore, it provides up-to-date information about project progress and events, communication and dissemination materials.

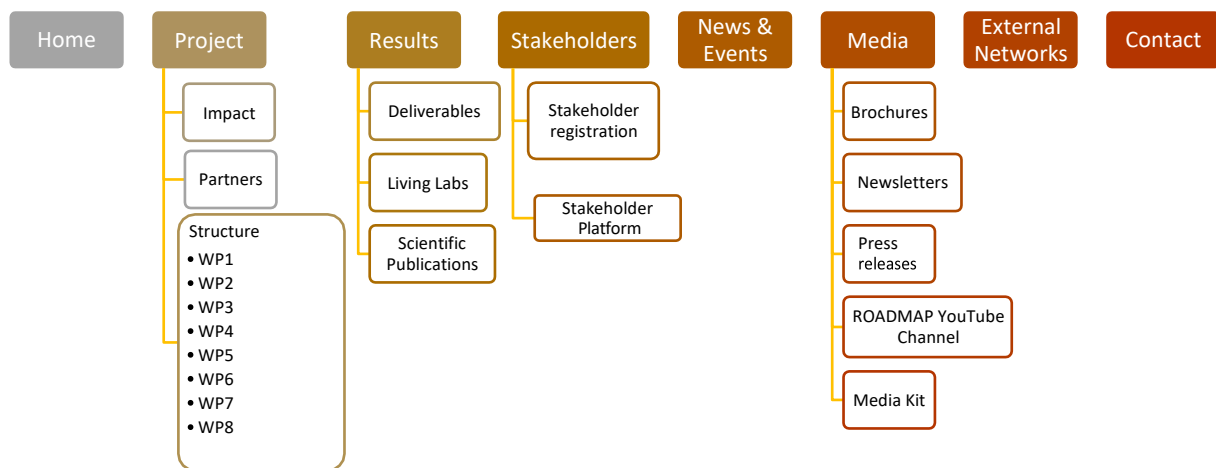


Figure 3 Site map of ROADMAP

3.2.1.1 Stakeholders Repository

The stakeholder’s repository is an online space within a specific section of the ROADMAP website where stakeholders can contribute, interact and stay tuned with the news, events and work developed through the project. It is developed and managed by FEUGA, and it includes links to the Facebook group developed and managed by EFFAB to reach and foster interactions with stakeholders. The link for the Stakeholders’ Community on the website is here: <https://www.roadmap-h2020.eu/stakeholders.html>.

All the specifications and operational information is provided in deliverable D7.1 Stakeholders Engagement and MS35 Establishment of the stakeholder community.

3.2.1.2 ROADMAP Collaborative Platform developed by IT

All individual partners get access to the ROADMAP Collaborative Platform. This collaborative workspace is secured by password and only authorised partners can access this site. This platform is intended to enable collaboration between the different partners at all levels: Work Packages, ExCom, etc. and to trace document delivery. The access to the platform is organised with different permission levels. It is used as a central storage system of the project. Its functions include scientific, management administrative and financial information exchange and storage. INRAE Transfert (IT) sets up the ROADMAP collaborative platform and will ensure its maintenance throughout the project. More details about the collaborative platform are given in deliverable D8.4.

Table 1: ROADMAP collaborative platform

Aim:	Partners can share and exchange information on the progress of the project in a secure way.
What:	Its functions include management, administrative and financial information and storage of interim EU Commission reports, minutes of the different meetings and deliverables.
How:	Accessible through the project’s main website providing partners with one portal for all their ROADMAP internet (news updates, dissemination material, stakeholder exchange, etc.)
Who:	All project partners are responsible for providing input on their WPs
Time frame:	M6

3.2.2. Social media strategy & management

The project uses five different social media networks to target different stakeholder groups; YouTube, Facebook, Twitter, LinkedIn and ResearchGate. Facebook is the most popular social network when targeting the end-users in many of the European countries. Twitter and LinkedIn are being used by companies, researchers and in particular by international, national and local policy and decision makers. It is also used by different umbrella organisations representing different parts of the society from producers to consumers. LinkedIn is targeting mainly professionals working in the sector and willing to read more about the technological and knowledge advances. It enables users to connect and share content with other professionals, including colleagues. ResearchGate is a media used mostly by researchers working in the public and private institutes including the R&I departments of companies. YouTube is used to share all kinds of audio-visual information for a broad range of stakeholders from the general public to scientists.

Table 2: ROADMAP Social Media accounts

SOCIAL MEDIA CHANNEL	ACCOUNT LINK
Facebook	https://www.facebook.com/Roadmap-H2020-2341808712742536/
Twitter	https://twitter.com/ROADMAP_H2020
LinkedIn	https://www.linkedin.com/company/roadmap-h2020

ResearchGate	https://www.researchgate.net/project/ROADMAP-Rethinking-Of-Antimicrobial-Decision-systems-in-the-Management-of-Animal-Production
YouTube	https://www.youtube.com/channel/UCGRI_SjrjaheclVxCJHmPQ/about

All partners are encouraged to follow and share the above-mentioned accounts. In order to engage a wider audience through social media, their content must be relevant, valuable and usable for the different target groups. Different kinds of content could (among others) be:

- Publication of research results
- Writing articles or blogs
- Publication of whitepapers
- Publication of informative videos
- Photographs
- Promoting ROADMAP or other interesting events

The social media accounts can also be used to participate in discussions on relevant social platforms.

Table 3: Relevant keywords and tags

HASHTAGS	MENTIONS
#antimicrobialuse	@ROADMAP2019
#AMU	@EFFAB
#AMR	@WUR
#animalproduction	@Inra_France
#foodsupplychain	@ACTA_asso
#innovative	@Cirad
#antimicrobialresistance	@LivUni
#AMUreduction	@cardiffuni
#livestockproduction	@JamesHuttonInst
#livestockfarming	@UniboMagazine
#animalhealth	@AarhusUni
#antimicrobials	@ILVOvlaanderen
#livinglab	@fiblog
#datacollection	@_SLU
#costeffectiveness	@ZLTO
#dataanalysis	@FEUGA_20
#socsciAMR	

In order to make full use of the communication channels, it is important to integrate the social media channels.

- Content on the ROADMAP website should be shareable for visitors, allowing them to share interesting information within their network.
- Social media feed should be placed on the homepage of the ROADMAP website.
- Social media buttons should be available in the ROADMAP newsletter.
- URLs or QR codes to the social media accounts or website could be used on offline communication, like brochures, posters or banners.
- ROADMAP activities, or related activities, have to be promoted via the social media accounts.

There are also some risks that could generate from social media shares. Therefore, it is important to see the

possible risks and offer solutions beforehand. Table given below summarizes some of the main risks and solutions.

Table 4: Risks of social media usage in projects

RISK	SOLUTION
<p>Webcare is important in order to manage your online reputation. If there is no control over what is being said about ROADMAP or related topics online, an unwanted message can spread very quickly.</p>	<p>In all cases, it should be clear that thoughts are shared prior to replying to such messages. It could be very helpful to discuss it with the WP7 leader. This also depends on the severity of the unwanted message; in some cases, it could be better not to react.</p> <p>By monitoring what is going on online, it is possible to respond to potential crises within a short amount of time.</p> <p>When responding to unwanted messages it is not essential not to engage with people obvious bad intentions.</p> <p>Always show respect and be transparent.</p>
<p>Responding too quickly to a tweet or post may compromise the quality of the response. However, waiting for days to get a tweet approved is not accepted either.</p>	<p>As a starting point, a response should be sent within a couple of hours to a working day at the latest, depending on the subject.</p> <p>The most important thing is to manage expectations and give relevant reactions to questions and comments.</p>
<p>Time, content and overview of online activities are key factors for success. If it is decided to use social media, it has to be taken care of on a regular basis. Social media accounts are not updated regularly, it will lose its impact and followers.</p>	<p>Choose wisely which channels will be used and how many.</p> <p>There are tools available to manage posting on social media accounts, for example Twitterfeed.</p> <p>To keep track of what is happening it is advisable to use tracking tools like Hootsuite, LinkedIn analytics, Facebook analytics, Google analytics or YouTube analytics.</p>
<p>Manage the opinions and expectations from stakeholders. The project is designed in order to achieve a maximum interaction with stakeholders, but many different views/opinions could also be difficult to manage; how do you coop with opposite opinions? And what do you do when stakeholders feel like nothing was done with their ideas/opinions?</p>	<p>In order to manage the stakeholders should be included from the beginning, in order that they feel like they have had an influence on the direction of the project. Depending on the number and kind of stakeholders, WP7 should prepare a plan to manage expectations.</p> <p>An option could be to organize evaluations with the stakeholders.</p>

3.2.3. Online promotion materials

3.2.3.1. Newsletters

To spread project news to partners, stakeholders and other groups of interest, in total 6 digital newsletters are planned to be prepared. The first newsletter was issued in May 2020. Items for the newsletter will be assembled by EFFAB, who will also facilitate the distribution. All partners are strongly encouraged to share articles and other news items to be published in the newsletter. The newsletters are created and distributed by using the online tool MailChimp. Updates of the newsletter are mentioned on the website and other social media to increase awareness. People can subscribe for the newsletter via the ROADMAP homepage. Furthermore, partners and stakeholders are encouraged to share the newsletter within their network.

Table 5: Provisional Newsletter publication dates

ISSUE NO	PROJECT MONTH	PUBLICATION DATE
ROADMAP Newsletter 2	M24	May 2021
ROADMAP Newsletter 3	M30	November 2021
ROADMAP Newsletter 4	M36	May 2022
ROADMAP Newsletter 5	M42	November 2022
ROADMAP Newsletter 6	M48	May 2023

3.2.3.2. Audio-visual documents

Audio-visual media in form of interviews, presentations with commentaries and session recordings will be prepared during the course of the project for creating awareness, communication, dissemination and training purposes. EFFAB recorded an explanatory video of the ROADMAP project presented by the ROADMAP project coordinator Nicolas Fortané. This short video has been uploaded on the YouTube channel and was shared on the website and through the social media channels. Also, the video of the ROADMAP presentation by the project coordinator during the 1st SAB meeting at M17, has been uploaded on the YouTube channel. A ROADMAP animated video will be prepared to raise awareness to AMR and communicate the integrative strategies to public and policy makers. ROADMAP animation video will be communicated through ROADMAP TV at YouTube channel and will be promoted through social media channels (Facebook, Twitter, LinkedIn) of the project as well as EFFAB and FABRE-TP networks.

3.2.3.3. Press releases

Press releases on the project's actions will be created, publishing interesting results and progress. All press releases will be published on an international level, targeting the broader press by using the website, social media accounts and the network of ROADMAP partners and stakeholders. Partners will assure translation into national language. Press releases, news and events about the project will be shared with the online magazines that have high number of audiences in the field of animal health and AMR. Popular agricultural

media channels and online magazines will be used to reach to a wider audience.

Table 6: ROADMAP press releases

Aim:	Inform wider society about ROADMAP project’s aim and results through magazines such as Feedstuffs, Agrifutures, Farmers Weekly
What:	Information about AMR
How:	Through press releases, articles and news
Who:	EFFAB and all partners
Time frame:	M1-M48

3.2.4. Offline tools and activities

3.2.4.1. Project Brochure

A brochure was prepared in English to promote the ROADMAP project to potential stakeholders at M8. The brochure has been translated into 6 languages (German, Dutch, French, Spanish, Portuguese and Italian), aiming to reach out to a wider audience in the countries where Living Labs (LL) and case studies are located. The brochure aims to create awareness to the project objectives and impact targeting different stakeholders. It will be distributed during conferences, workshops and other awareness events. It will also be sent to the project partners as a hardcopy.

A second brochure will be prepared at the last year of the project. This will be used for the dissemination of the project outcomes and results. It is aimed to be available in English and other European languages.

3.2.4.2. Banners

During the course of the project 2 banners will be prepared to be used during conferences, workshops, profile raising events and stakeholder activities. First banner will give information on the aim and objectives of the project whereas the second one will give brief information on the outcomes of the project. The preparation of the first banner is on hold as all events being organized virtually due to Covid-19.

3.2.4.3. Infographic

An infographic will be prepared with the aim to simplify and visualize the results of the project at the last year of the project. It will target the policymakers and the general public as well as end-users.

3.2.4.4. Profile Raising Event

As a profile-raising activity, ROADMAP has been presented at the EFFAB Annual General Meeting on 28 May 2020, targeting breeding and reproduction companies and knowledge institutes. ROADMAP was also presented at “Veterinary Humanities” Conference in Vienna at M17, 4S Conference in "Antimicrobial resistance in globalized economies” panel in Prague at M15, Virtual 6th World One Health Congress at M17-M18 and 4th Conference of the International Society for Economics and Social Sciences of Animal Health (ISESSAH), virtually held in Copenhagen at M18. It was planned to join an international event such as annual meetings of Federation of Veterinarians of Europe (FVE) or Union of European Veterinary Practitioners (UEVP), COPA-COGECA,

International Conference on One Health (ICOH). But due to Covid-19, these events have been postponed. Most of the events have been taken place virtually.

Table 7: Possible international events for profile raising events of ROADMAP

WHEN	EVENT	WHERE
24-26 March 2021	SVEMP	Toulouse, France
7-9 June 2021	Responsible Use of Antibiotics in Animals	Virtual Meeting
8-12 August 2021	WPC	Paris, France

4 ROADMAP Dissemination strategy

The main targeted end-users of ROADMAPS tools, strategies and new knowledge are all the actors involved in the animal health sector and the food and drugs supply chains (farmers, veterinarians, technical advisors and farmers’ organisations, pharmaceutical companies, breeding, feeding industries, retailers and processors, policy makers) and the wider citizens concerned by the AMR issue. Chosen dissemination methods aim to target different audiences with materials and tools with ROADMAP outcomes and results. The dissemination strategy is mainly based on the results of the ROADMAP research and the relevant deliverables to be developed during the course of the project. It is devoted to ensuring the uptake of integrated strategies developed within ROADMAP and their wide-ranging coverage.

4.1. Dissemination goals

ROADMAP results and outputs will have an impact on different levels of actors in the society ranging from global impacts to highly specialized ones. In Figure 4, different levels of target groups are given in relation to the dissemination goals of ROADMAP based on its expected results. ROADMAP aims to provide tools and results starting from the farmer itself, as the main end-user of ROADMAP strategies, to the general public and human/animal populations in the world.

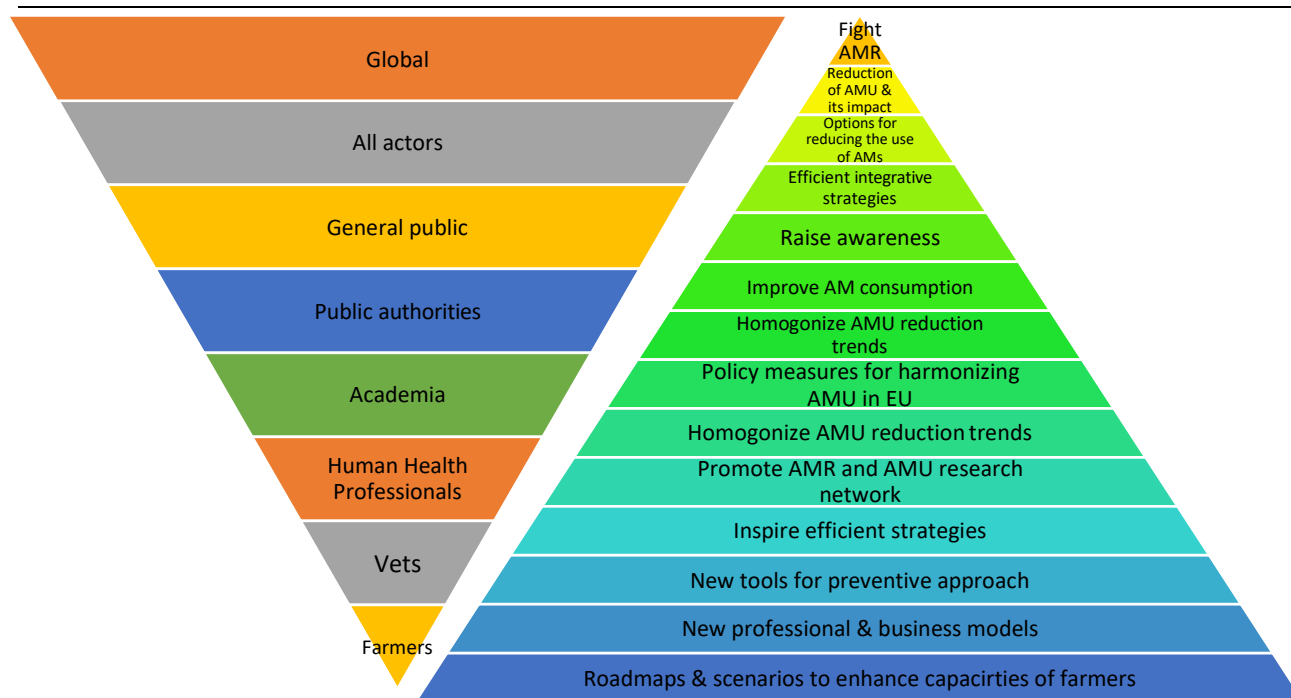


Figure 4 ROADMAP dissemination goals targeted to different levels of stakeholders

4.2. Targeted dissemination tools

ROADMAP will make use of different interactive and innovative dissemination methods and tools in order to target different stakeholders and actors. These tools will ensure that key stakeholders are aware of ROADMAP results and know-how to be actively involved in project activities and training. ROADMAP organized its first SAB meeting online on 22 October 2020 (M17), connecting SAB members and project partners to discuss the project progress and exchange knowledge and experience. It was a very interactive meeting with many useful recommendations and advices from the SAB members. The meeting minutes will be included in the “D7.5 Mid-term report on stakeholder consultations” for M24. The following table lists the target audiences and the specific tools to reach out to them:

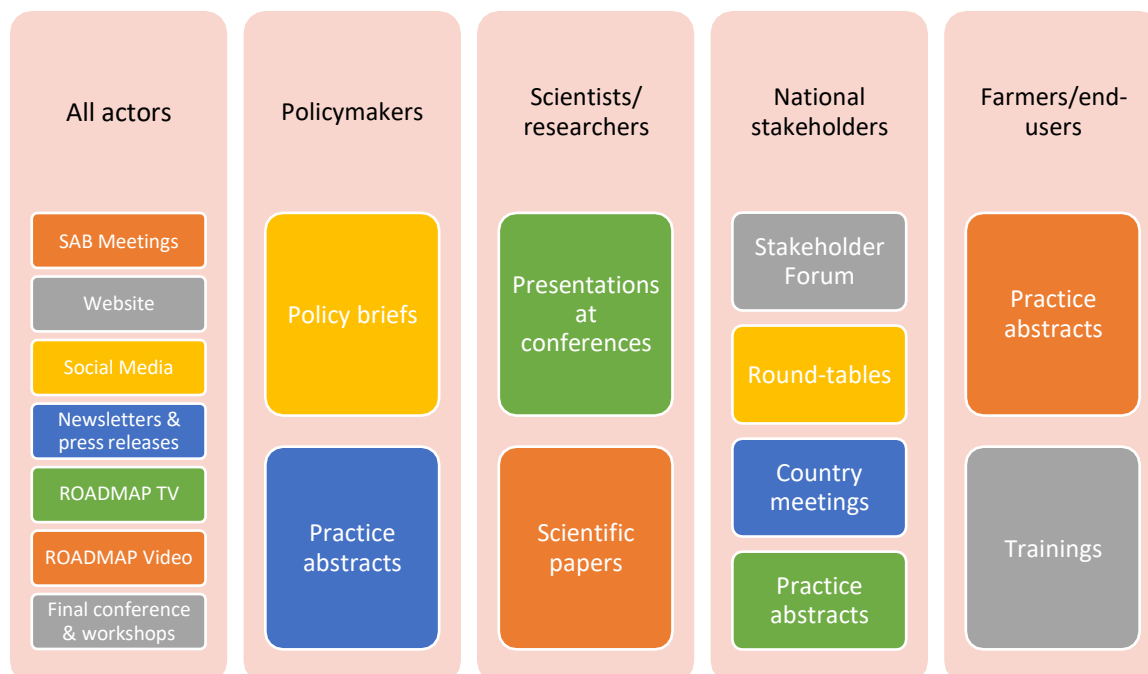


Figure 5 ROADMAP targeted dissemination strategy

4.2.1 Peer-reviewed and Scientific papers

ROADMAP results will be disseminated in accordance with the ODP to targeted stakeholders by publications in high-ranked peer reviewed journals and attendance to international scientific conferences. Publications in peer-reviewed scientific journals will contribute to the Green or Gold model of open access journals and they will be communicated in congresses (oral communications and posters).

For peer-reviewed scientific publications, all partners will apply the Horizon 2020 Open Access Policy and deposit scientific peer reviewed publications (machine-readable electronic copy of the published version) in an institutional repository of their research institution. Where this is not available to partners, an alternative repository will be identified so that all scientific publications are included in the European research e-infrastructure of OpenAIRE. ROADMAP will encourage gold open access publishing. Owing to the four-year duration of ROADMAP, at least 6 peer reviewed outputs are expected during the project, with several more published after the project concludes. Funding for Gold Open Access will be sought from other sources after the project concludes (e.g. partner’s institutional budgets), and Green Open Access (self-archiving) undertaken if funding is not found.

A publication strategy for the ROADMAP project will be designed within the dissemination strategy, to inform project partners about “valuable publication material”. Therefore, partners will be able to propose topics for interesting articles regularly. A common publication strategy would allow partners to use their dedicated

publications budget wisely, whilst also enhancing collaboration between partners and the mutualization of results.

4.2.2 Practice abstracts and Operational Groups

Disseminating about project activities and results is much easier through the use of a common format. The EIP-AGRI common format facilitates knowledge flows on innovative and practice-oriented projects from the start until the end of the project. The use of this format also enables farmers, advisers, researchers and all other actors across the EU to contact each other. Operational Groups are regional or national practice-oriented innovation projects supported by rural development programmes under the Common Agricultural Policy. The EIP-AGRI helps these projects to work in synergy with other interactive innovation projects under Horizon 2020. At least ten “practice abstracts” will be delivered in the common EIP format to feed into the European Innovation Partnership (EIP) ‘Agricultural Productivity and Sustainability’ for broad dissemination. Common EIP format is given in Annex 1. The prepared practice abstracts are aimed to be translated in different European languages whereas appropriate.

In addition to EIP Common format, a ROADMAP common template will be prepared for practice abstracts to be published at the end of the project in the form of a booklet.

4.2.3 Policy briefs

A policy brief is a concise summary of a particular issue, the policy options to deal with it, and some recommendations on the best option. It is aimed at government policymakers and others who are interested in formulating or influencing policy. ROADMAP policy briefs will be prepared in the second half of the project. A specific ROADMAP policy template will be prepared to have a common format and the policy briefs will be published in the form of a booklet to be distributed in the networking events.

4.2.4 Workshops, Living Labs and Networking activities

Various workshops with different purposes will be organised during the project lifetime. There will be involvement of different WPs and partners in the organisation of these workshops. Workshops will be organised to increase the interaction with the stakeholders, to increase the dissemination of project results to the scientific community and end-users.

In each country where research is going to be undertaken, strong collaborations between scientists and stakeholders and animal health professionals are going to be implemented, through the conceptual and methodological framework of Living Labs (LL). The LL will allow a mutual learning process across different production systems and sectors. International joint reflective workshops will be organised for the partners from the different LL. The group meetings of LLs have started and will be organized every two months in order to know the current interactions with stakeholders.

Danish LL had a meeting on October 2020 (M17). The LL bridges dairy cattle and calves at all age groups, and will involve other stakeholders along the way in debates, workshops and farm visits and discussions. The next LL meeting will take place in January 2021 (M20) and go a step further in identifying actions at different levels in the dairy and calf sector.

ROADMAP final conference is intended to be organised next to an international scientific conference like WVAC where the outcomes of the project could be shared with the scientific world and top industry representatives.

A final conference at the end of the project will be organised to present the outcomes of the project to stakeholders with a specific policy side-event.

4.2.5 ROADMAP Training Activities

Training workshops will be organised to target animal health professionals and end-users in order to facilitate the uptake of the integrated strategies by using the material generated within the project. Within the project course, a set of four training sessions will be carried out in the locations of the case studies proposed in the project. Due to Covid-19, training activities will be planned in the coming period when the travel restrictions and physical meetings are permitted.

The adaptation of the materials developed will compose training modules. These modules will be focused on the results generated during the project related to the Solutions (Pillar 2, WPs 3 and 4) and Evaluation and recommendations (Pillar 3, WP 5 and 6). In this context, the development of guidelines on how to conduct LLs and the data collection during implementation under WP4 will be done in exchange with WP3 and WP7. These LLs take place in the national case studies, in order to develop new comprehensive approaches to foster prudent AMU. In the LLs, stakeholders such as farmers and vets are included. Co-learning events for farmers, vets and advisory services (3 exchanges are foreseen) organised by WP4 as cross-country events, targeting farmers from Switzerland, France, Denmark and Italy will be facilitated by WP7. These co-learning events aim to explore, what strategies farmers and vets implemented to foster prudent AMU. A mini webinar series will complement the training to the industrial stakeholders (breeding, feeding, pharmaceuticals, farm technologies, etc). The webcasts and other training materials will be published at the ROADMAP TV.

4.3. Management of the research data and dissemination of own results

ROADMAP will follow principles of good data management that incorporate management of data at every stage of the data lifecycle, covering data capture; storage; preservation; access; reuse; and where appropriate, disposal. The project drew a first version of the Data Management Plan (DMP) as deliverable (D8.3) at month 6 of the project to ensure compliance with guidance from the Pilot on Open Research Data and H2020 Open Access policy. This version will be updated when necessary in the course of the project, in particular once the extent of the dataset from each WP becomes clear, and if there are any changes in consortium policies or external factors requiring an update. Updated versions would be provided at every periodic reporting.

Project outputs such as presentations, brochures, and publications, as well as videos, practical abstracts, research and innovation protocols will continue to be published on the ROADMAP official website. Dissemination of knowledge stemming from ROADMAP (outputs) is aimed at maximising the open access to ROADMAP's results. Fundamental scientific results will be freely disseminated through appropriate channels: scientific publications, presentations at international conferences and workshops, etc. Regarding LLs, intellectual property rights about the service innovation will be discussed for each LL. ROADMAP will ensure that generic knowledge and tutorials will be diffused on an open basis from each LL.

ROADMAP dissemination of own results is outlined in detail within the Consortium Agreement (CA) section 9.4.2.1 paragraph 2.

“Prior notice of any planned publication shall be given, including copy of the proposed publication, to the other Parties at least 45 calendar days before the intended date of publication. Any objection to the planned publication shall be made in accordance with the Grant Agreement in writing to the Coordinator and to the

Party or Parties proposing the dissemination within 30 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.”

4.4. Strategy for knowledge management and protection

ROADMAP knowledge is managed by the partners contributing to generate it with the support of the Executive Committee (ExCom) and the Intellectual Property Use and Dissemination Committee (IPUDC). Knowledge management will comply with the rules established in the Consortium Agreement (CA). The IPUDC members are representatives of the partners’ technological transfer departments. When necessary and upon request of the ExCom, the IPUDC will screen the deliverables, planned publications and progress reports to identify the possible IP and the potential exploitation of the results. Then, it will advise the ExCom and concerned parties. The concerned parties will review the results and will choose either to disseminate (i.e. prepare a publication) or to seek appropriate protection actions of the results and eventually a plan for their best exploitation.

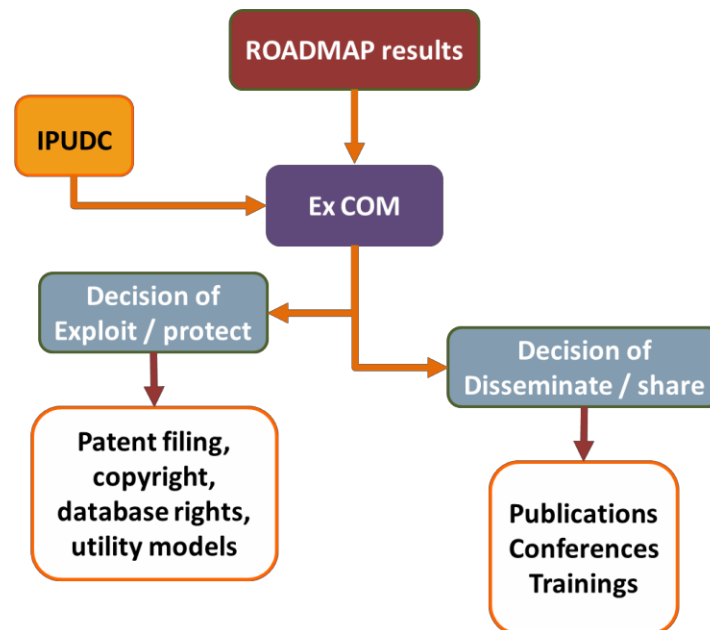


Figure 6 Strategy for ROADMAP knowledge management and protection

ROADMAP will follow the H2020 guidelines on Open Access to scientific publication and research data. All the resulting peer reviewed scientific articles will be published at least in “green” open access. For ROADMAP, in case of results in rapidly evolving domains, Gold Open Access will be used. If relevant, patent applications will be filed in if the invention meets patentability criteria and if it displays enough commercial potential. Otherwise, all foreground generated by the project will be freely accessible.

4.5. Evaluation

As mentioned, the success of ROADMAP project is highly related to the extent of stakeholder involvement. A maximal stakeholder inclusion is required in order to create the most beneficial effect on the quality and applicability of the tools and other outcomes, and to get a wider view on different ideas and perspectives. Also,

it will guarantee the relevance of the tools and create conditions for rapid uptake and deployment of them in the industry. The outreach, dissemination and training activities mentioned in this plan should help to achieve this. To be able to know whether the communication has been used effectively, it is important to evaluate the use of communication means.

Table 8: Evaluation tools for the communication and dissemination activities

ACTIVITY	EVALUATION TOOL
Social Media	The number of interactions (views, mentions, re-tweets, etc)
ROADMAP Website	Google Analytics is used to evaluate the number of new visits, average time per visit, number of visits to multiple pages, etc.
Newsletter	MailChimp offers an analytical tool to keep track on the number of people opening the newsletter, direct feedback, number of downloads
Brochures, flyers and other marketing materials	Number of downloads and visualizations, direct feedback
Stakeholder Platform	Number of participants, visits, feedbacks and information exchanges
Conferences and events	Number of participants to the meeting, Survey after the conference or event
Peer-reviewed / Scientific papers	Number of citations
Workshops and training sessions	Number of participants, Surveys after the workshop or training are spread among the participants in order to receive feedback

4.6. Annual Outreach, Dissemination and Training plans

This chapter summarizes the activities planned for each year of the ROADMAP project. Upon completion of the first year, it will be updated with the subsequent year and so on in order to properly monitor and evaluate the progress.

4.6.1. Year 2 (01/06/2020-31/05/2021)

Table 9: Deliverables and milestones of WP7 for the second project year

DELIVERABLES/MILESTONES	RESULTS
D7.4 First batch of practice abstract for end-users (M24/EFFAB)	Practice abstracts describing the main information/ recommendation/practice will be issued to serve the end-users in their daily practice.
D7.5 Mid-term report on stakeholder consultations (M24/FEUGA)	Report consisting of stakeholder meeting minutes, survey results, notes...etc.

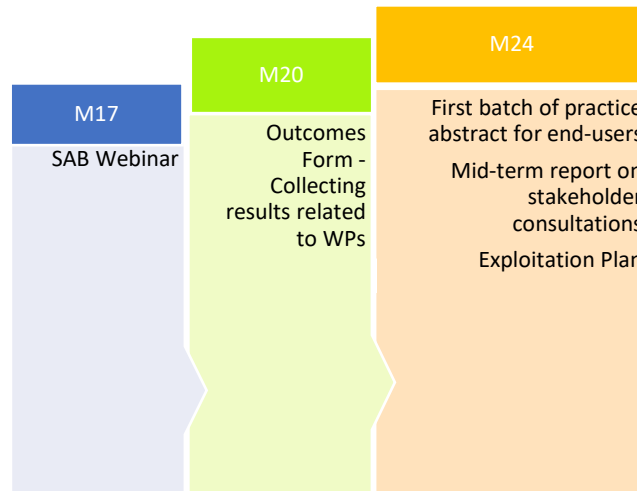


Figure 7 Timeline of outreach and dissemination activities and tools for year 2

4.7. Results & Implications

The main result and implication of the outreach and dissemination strategy is to ensure and maximise the uptake of the ROADMAP results by the end-users. In order to contribute to achieving the expected impacts of the project the results will be used in various forms of dissemination materials and tools targeting different audiences as given in Figure 4. The summary of results and implications per expected impact is given in the table below.

Table 10: Summary of results and implications of ROADMAP Dissemination strategy

Expected Impact	Target audience	Outputs by WP7	Dissemination Media
Contribute to the fight against AMR arising from farmed animal production	All stakeholders	All dissemination materials	All dissemination channels
Develop options for reducing the use of AMs in farming	Animal health professionals, farm managers/advisors, farmers, breeding and feeding companies, pharmaceuticals	Practice abstracts; workshops and trainings, audio-visuals and brochures	Website, Facebook, Twitter, LinkedIn, EIP-AGRI, international and national events
Provide roadmaps and scenarios for transition towards prudent use, enhance capacities of farmers for innovation and AMU change	Farmers	Practice abstracts; workshops and trainings, audio-visuals and brochures	Website, Facebook, EIP-AGRI, national and regional events, stakeholders’ community on Facebook
Provide new tools for preventive approach of animal health, and new	Veterinarians	Guidelines, practice abstracts, workshops,	Website, Facebook, Twitter, LinkedIn, EIP-AGRI, emails, national and international

professional and business models for veterinary practices		training, specialized brochures	events, stakeholders' community on facebook
Propose new contractual instruments and incentives to engage animal health professionals and stakeholders in a shared process of reducing AMU	Upstream and downstream industries (pharmaceuticals, breeding, freeing companies, food chain)	Guidelines, strategies, specialized fact sheets, workshops, webinars	Website, Twitter, LinkedIn, ResearchGate, EIP-AGRI, emails, national and international events, stakeholders' community on facebook
Propose policy measures for harmonizing AMU practices across Europe, and homogenize AMU reduction trends	Policy makers, decision makers, influencers, professional bodies	Policy briefs, press releases, guidelines, infographics, networking activities, audio-visuals	Website, Twitter, popular press, YouTube channel
Promote AMR and AMU research networks at national & international levels	Academia/Researchers	Peer-reviewed articles, posters, oral presentations at scientific events, e-book of abstracts	Website, ResearchGate, emails, international conferences
Raising awareness of animal health professionals and stakeholders, and large end-user community	All actors	All communication tools	All communication channels

5. ROADMAP Exploitation Strategy

5.1. Executive summary

The biggest strength of the project lies in the integration of the substantial knowledge on the prudent use of antimicrobials (AMs) in animal production in different contexts to manage antimicrobial resistance (AMR).

Based on the forecast of the project's results, this preliminary Exploitation Plan describes the exploitation activities that will be developed during the life of the project, collecting all the relevant exploitation information. This report will be updated continuously throughout the project's lifetime.

A final Exploitation Plan will be presented at the end of the fourth year of the project (M48), including the **joint exploitation objectives** as well as the **partner-specific exploitation plans** for each meaningful result. It will also include a description of actions leading to exploitation, as well as the specific model and strategy for the exploitation of each significant exploitable result.

The ROADMAP consortium counts on several segments of the value chain: universities, research institutes, public and private organisations and organisations specialized in knowledge transfer and innovation; providing an **adequate approach and ensuring novel solutions applicable in the field will come out of the project**.

The following preliminary Exploitation Plan document is structured in three **main sections**:

- **RESULT COLLECTION:**

In this section, a general description of the expected results of the project will be included. Throughout the development of the project, this list will be continuously updated.

- **LIST OF EXPLOITABLE RESULTS AND EXPLOITATION ANALYSIS:**

Once the results of the project have been compiled, they will be analysed to identify those that are considered innovative to be transferred to the market.

This list is not identified at this stage so, for this preliminary document, the section includes the activities that will be carried out after the list of exploitable results are identified.

Once identified, the next step will be to analyse, among other things, their novelty, inventive step and industrial application, as well as the development of an IPR protection strategy; market study, competitors, applicability and value proposition of the technology with respect to the state of the art in the sector.

- **EXPLOITATION STRATEGY:**

For the preliminary version, this section presents the pathways of an exploitation strategy that can be used by the project partners as a guideline for formulating their exploitation plans. Next steps, to update in the following years, will be the identification of the most appropriate strategy and the proposed exploitation route for each exploitable result.

This section will present the partners-specific exploitation plans, which will be included in the final Exploitation Plan at the end of the fourth year of the project.

The final objective is to establish, from the beginning of the project, the goals, guidelines, strategies, and workflows for partners to follow when developing the activities related to the **transfer of knowledge and exploitation towards end-users**.

This document will be reviewed and updated regularly, since new results may come out during the project's development.

5.2. Grant Agreement and Consortium Agreement Articles related to Exploitation

The Grant Agreement (nº 817626-ROADMAP-H2020-SFS-2018-2020/H2020-SFS-2018-2) stipulates the following articles, related to exploitation and protection of results:

- **ARTICLE 27 – PROTECTION OF RESULTS – VISIBILITY OF EU FUNDING**
- **ARTICLE 28 – EXPLOITATION OF RESULTS**

All the rules related to exploitation of results are stipulated in the **ROADMAP Consortium Agreement**, according with the articles of the Grant Agreement.

5.3. Objectives of the Exploitation Plan

The applied and innovative societal **objectives of the project** are the following:

- Co-design and co-develop innovative strategies with animal health professionals and stakeholders to foster more prudent use of AMs in animal production, adapted to the local contexts.

- Assess the proposed solutions and co-work with animal health professionals and stakeholders to ensure their impact within and beyond the project lifetime.

Thus, the objective is the development of an **effective Exploitation Plan** for the **transfer and full exploitability of the obtained results** to farmers and other end-users such as veterinarians, breeding and feeding industries, pharmaceutical companies or public authorities.

The aim of the final Exploitation Plan is to describe the **activities** that will be carried out and the **channels** that will be used **to exploit the project results**; so that:

- Serve as a guidance document for ROADMAP project partners and for stimulate exploitation engagement among partners.
- Promote transfer of the project results beyond the consortium to the target end-users, stakeholders, the scientific community, and society in general.
- Ensure that appropriate intellectual property rights (IPR) strategies are considered, for the optimal exploitation of project results.
- Ensure that appropriate exploitation strategy for each result with potential to be transferred to the market is defined.

It is important to highlight that the **involvement of all partners** in the **development of a successful exploitation plan and in the achievement of the described objectives** is crucial.

- **Exploitation Manager (EM):** FEUGA will play the role of EM, designing the Exploitation Plan in collaboration with INRA as Project Coordinator. FEUGA will coordinate all exploitation activities and will ensure the involvement of all consortium partners. The EM will be also in charge of ensuring the proper exploitation of projects results in line with the European Commission requirements and considering the interest of all partners.
- **Exploitation Core group (ECG):** INRA, UNIBO, HUT, AU, FiBL, ULIV, CIRAD and EFFAB, as work packages leaders, will be the core group for the monitoring of the Exploitation Plan, with the support of FEUGA as EM.
- **Exploitation agents:** all partners will act as exploitation agents. In order to do so, they are responsible for implementing the Exploitation Plan following the procedures defined in the plan.

The provisional list of the Exploitation contacts is here below:

Table 11: Partners’ role in implementing the Exploitation Plan

	PARTNER	CONTACT
Exploitation Core group	FEUGA	Lucía Novoa
	INRA	Nicolas Fortané

	UNIBO	Massimo Canali
	HUT	Anja Byg
	AU	Mette Vaarst
	FiBL	Bernadette Oehen
	ULIV	Jonathan Rushton
	CIRAD	Flavie Goutard
	EFFAB	Cagla Kaya
Exploitation agents	ACTA	Pauline Bodin
	CU	Gareth Enticott
	EV-ILVO	Erwin Wauters
	WR	Annemarie Rebel
	SLU	Susanna Sternberg-Lewerin
	ZLTO	Heleen Prinsen
	DGZ	Stefaan Ribbens
	IT	Floriana Pondichie

Furthermore, the **Intellectual Property Use and Dissemination Committee (IPUDC)** will advise on the management of knowledge and intellectual property and of other innovation-related activities arising in the project.

The objective of the IPUDC Committee is to discuss future issues with the EM such as possible IP rights created jointly by several partners, establishment of commercial exploitation interests of each entity, etc.

The consortium has been informed via email about the need to appoint the official members of the IPUDC Committee. Each entity has been asked for the name of the contact person on exploitation issues, highlighting that the contact person should be a transfer and exploitation specialist in order to deal with these issues and advise the consortium.

Committee members may be reappointed throughout the project if requested by the consortium.

Finally, the IUPDC committee is officially constituted by the following members:

1. Lucía Novoa, FEUGA
2. Nicolas Fortané, INRA
3. Massimo Canali, UNIBO
4. Anja Byg, HUT
5. Mette Vaarst, AU
6. Bernadette Oehen, FiBL
7. Jonathan Rushton, ULIV
8. Flavie Goutard, CIRAD
9. Cagla Kaya, EFFAB
10. Léa Tourneur, ACTA
11. Gareth Enticott, CU

12. Erwin Wauters, EV-ILVO
13. Annemarie Rebel, WR
14. Susanna Sternberg-Lewerin, SLU
15. Heleen Prinsen, ZLTO
16. Stefaan Ribbens, DGZ
17. Floriana Pondichie, IT

5.4. Exploitation Activities

The **exploitation activities** allow underlining the added value of the project, boosts further scientific development and maximize the impact of the funding granted in the market.

The development of this kind of activities will allow describing the following points:

- **Identification of the exploitable results** that are expected to be obtained.
- **Interests of each participant** in the project regarding the exploitation of the results.
- **Forecast for the protection of results (IPR)**, both expected and others that may arise during the development of the project. Analyses on the state of the art, which will allow applicants to describe the planned developments and differences from existing competing products and services.
- **Market identification.** Analysis of the potential geographical coverage and target markets where project results will be exploited, including potential users, main competitors and competitive advantages.
- **Type of protection.** Analyses on the intellectual property:
 - Ownership (participating members; associated company).
 - Exploitation rights.
 - Role of each participant in protection.
 - Geographical scope of protection.
- **Exploitation and commercialization strategy.** Description of the exploitation and commercialization paths.

In order to guarantee the market introduction of ROADMAP solutions, the development of exploitation activities to obtain the information described in the points above is expected. The detailed activities will be presented in future updates of this document.

5.5. Result Collection

In the **final Exploitation Plan**, this section will include the technical description of the project's results and the partner(s) contribution to the generation of each result during the project's lifetime. We have first to collect all project results and further analyse them (in point 8) regarding their imminent potential to be exploited.

It is important to highlight that ROADMAP will favour niches-innovations within its LLs and offer means to large-scale changes through its transition pathways and scenarios. The project's results will then offer options for efficient, context-adapted and socially acceptable innovations that a large community of stakeholders and animal health professionals will be able to adopt and convert to large-scale market opportunities.

For the present document, taking into account that this is a preliminary Exploitation Plan version, is too early to have all the detailed results. *(This chapter is left empty for the present version. It will be completed during the analysis of the results and enhanced by the actions taken by the partners and the consortium as a whole for the Exploitation Plan of the results that will be available at the end of the project.)*

5.6. List of Exploitable Result(s)

The partners will develop different kinds of exploitable results e.g. processes, technologies, methods, protocols, recommendations for standards, etc. The continuously updates through the coming years will serve to list all the results that the partners consider exploitable.

In this section, an analysis of which results have potential to be exploited and a classification of result's types will be made. *(This chapter is left empty for the present version. It will be completed during the analysis of the results and enhanced by the actions taken by the partners and the consortium as a whole for the Exploitation Plan of the results that will be available at the end of the project.)*

5.7. Exploitation Analysis

This section will collect all the analysis and evaluation for each result from the list detailed in point 6. **(This chapter is left empty for the present version.** It will be completed during the analysis of the results and enhanced by the actions taken by the partners and the consortium as a whole for the Exploitation Plan of the results that will be available at the end of the project.

5.7.1. Description and analysis (for result 1)

5.7.1.1. Status quo of the project result

5.7.1.2. State of the art

5.7.1.3. Market analysis

5.7.1.4. Applicability

5.7.1.5. Target customers and competitiveness

5.8. Exploitation Strategy

Previously to the discussion of the analysis of possible exploitation strategies, all the data has to be recorded in order to start to discuss all the exploitation and commercialization options for the results of the ROADMAP project.

Usually, the partners of a project have different exploitation strategies. In general, their strategies can be classified into four categories:

- New research, when the results are intended to be used for publications and to be involved in new research projects and activities.
- Standard setting, when the partner intends to propose the adoption of the result as a standard.
- Internal adoption, when the partner plans to use the results internally to improve the knowledge

within the organization or improve the internal procedures.

- **Commercial exploitation**, when the partner intends to use the result according to a market-oriented strategy, based on offering a new service or a new product on the market.

The ROADMAP Exploitation Plan is **focused on the commercial exploitation strategies**, dedicated to deepening the analysis and the description of the strategy applied in case of market-oriented results, i.e. those results that are intended to be exploited at commercial level as products or services.

In order to support the partners in better describing their exploitation strategy of market-oriented results, FEUGA Exploitation team will develop an in-deep analysis of the final list of the ROADMAP exploitable results, including in the final version of the present Exploitation Plan.

A preliminary context of the IPR measures for the ROADMAP project was made, in order to focus the main possibilities that can be applied to ROADMAP results. Furthermore, IP rules are described and agreed in the CA and one of the first actions will be to establish a set of guidelines, as part of the **'Data Management Plan' (D8.3, M6), that will be communicated to the partners.**

Depending on business and exploitation strategy, it could be recommendable to protect the outcomes and results of the ROADMAP project by Intellectual Property Rights (IPR). The selection of appropriate IPR depends, on the one hand, on the **strategy of the consortium** and, on the other hand, on the **market potential**. Using this as a basis, we will develop specific recommendations and strategies for each ROADMAP key exploitable result.

The following IPR are available for protection:

Copyright

Copyrights protect original works of authorship, such as literary works, music, graphic works, artistic works and computer software. With copyright protection, the consortium has the exclusive rights to modify, distribute, perform, create, display, and copy the generated results of the project. A copyright exists from the moment the work gets created, without any registration procedures. Thereby a reference to the copyright can be made on generated documents.

Trade Marks

A trademark is a sign by which an entity identifies its products and/or services and distinguishes them from the products and services supplied by other entities.

Patents

Inventions and new solutions to a technological problem can be protected through patents. In reference to the ROADMAP project results, technological output will be generated throughout the lifetime of the project. Thereby a protection of the ROADMAP project outputs through patents will be analysed.

Industrial design

An industrial design covers the outward appearance of the whole or a part of a product particularly resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation. In reference to the ROADMAP project results, no industrial design is

expected to be generated. The protection by an industrial design is not currently considered.

Below a summary of the protection possibilities for the ROADMAP project:

Table 12: Protection possibilities for ROADMAP project

IPR OPTIONS	COPYRIGHT	TRADEMARK	DESIGN	PATENT
Use of IPR for ROADMAP protection	✓	✓	✗	✓
	For example, scientific research documents and website content.	ROADMAP's future brands for final products.	No industrial design is expected as a project result.	Technological developments.

An in deep analysis of the ROADMAP results regarding their protection possibilities will be described during the lifetime of the project.

5.8.1. Roadmap for exploitation pathways

The general exploitation pathways include the following activities and measures:

- The project team will engage in continuous analysis of technology transfer opportunities, adjusting the project when necessary in order to ensure the best possible outcome.
- The project team will investigate economic benefits from the impact of the research results of the project. There will be continuous evaluation of the advancement of the research results against the user requirements/needs throughout the project with the help of the partners and adjustments will be applied when necessary.

A general pathway for the exploitation of results is described in the following figure:

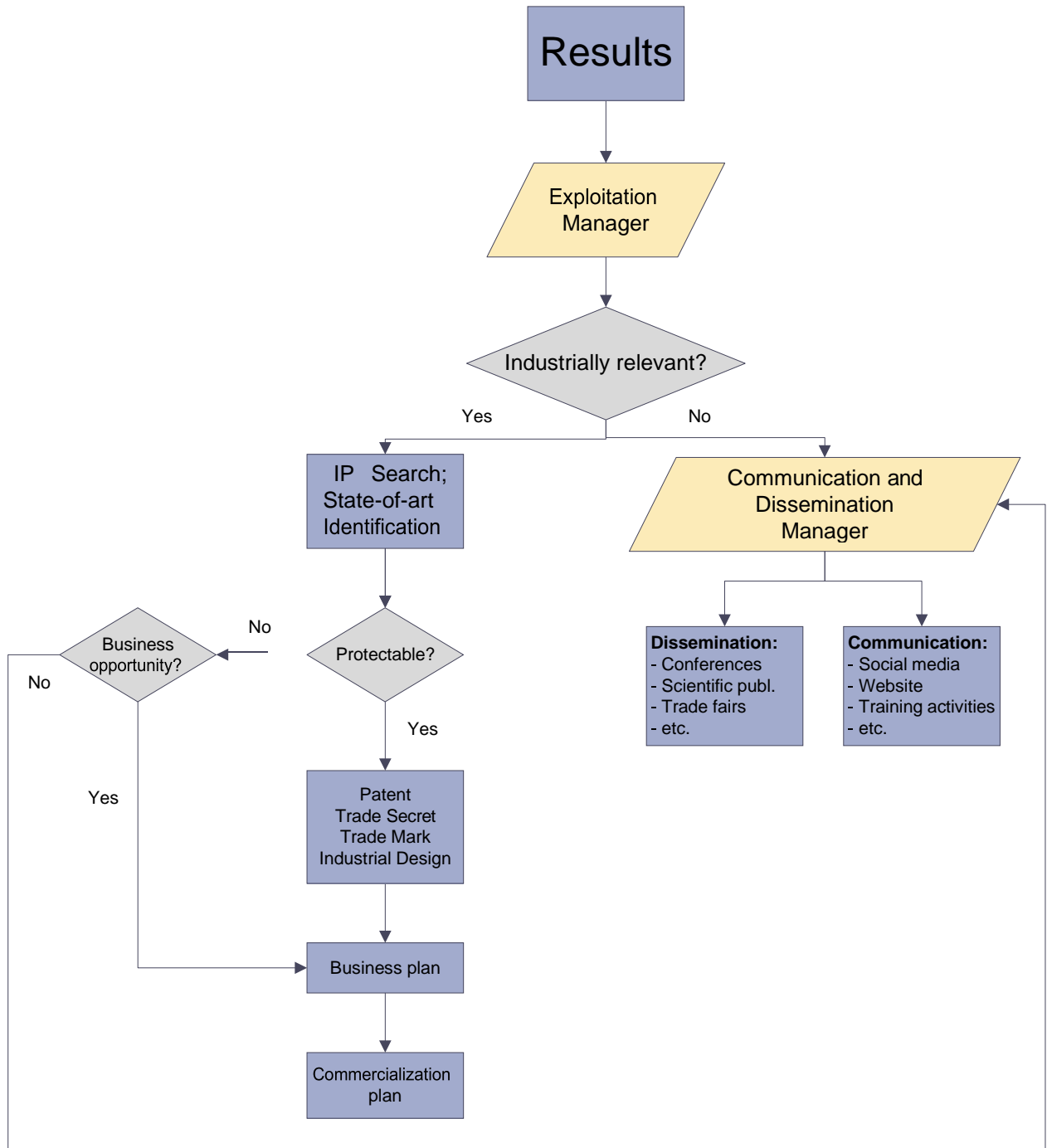


Figure 8 Exploitation pathway

It is important to highlight that the final implementation of an Exploitation Plan serves not only to keep the further exploitation of project results (beyond the H2020 funding), but also to develop a strategy on which the partners can guarantee the project outcome’s sustainability with a worldwide coverage.

5.8.2. Exploitation strategy (for result 1)

This chapter is left empty for the present version. It will be completed during the analysis of the results and enhanced by the actions taken by the partners and the consortium as a whole for the Exploitation Plan of the results that will be available at the end of the project.

5.8.2.1. Intellectual Property Rights (IPR)

5.8.2.2. Proposed Exploitation Route

5.8.2.3. Proposed Action Plan

5.9. Final Recommendations

All the decisions and conclusions detailed throughout this document should be taken as “recommendations” resulting from the work carried out in **Task 7.5 (WP7)** lead by FEUGA and in which all partners have actively participated and whose final deliverable is this document.

These “recommendations” should be taken into account for the final implementation of the EP for the project’s results. That will determine the exploitation of the novel ROADMAP’s innovations once the project, as a project financed by the H2020 programme, is completed.

6. Partners involved in the work

All partners of ROADMAP are involved in the communication and dissemination activities. However, there are some of the partners who carry out these activities. Below is the list of main partners involved in ROADMAP Outreach and Training.

EFFAB, as the WP Leader, is responsible for the whole WP7 Outreach, dissemination and training and related tasks to be carried out. **FEUGA** is the deputy leader of WP7.

FEUGA is responsible for the Stakeholders community creation and management. **EFFAB, ACTA, CIRAD, HUT, UNIBO, EV-ILVO, SLU, ZLTO, DGZ** will be also involved in this task.

EFFAB and **INRAE** and **FEUGA** will be involved in communication activities.

EFFAB and **FEUGA, INRAE, ACTA, CIRAD, ULIV, CU, HUT, UNIBO, AU, EV-ILVO, FIBL, WR, SLU, ZLTO, DGZ, IT** are responsible of the dissemination of project results.

FEUGA and **INRAE, ACTA, CIRAD, ULIV, CU, HUT, UNIBO, AU, EV-ILVO, FIBL, WR, ZLTO, EFFAB, DGZ, IT** are responsible for the Innovation, IPR management and exploitation of ROADMAP outcomes.

7. Conclusion

PEDR explains the activities dedicated to the different target audiences and thereby reflects how a high transparency is reached during the project lifetime. It shows how the project will **report**, how the project



will **handle results**, how stakeholders will be **informed** and moreover **involved**, where the project will be **presented** during the next years, how the project will **measure** and **improve the communication and dissemination tools** and how the project will **ensure the sharing (communication and dissemination) and take-up (exploitation) of the research results with the identified potential users**.



8. Appendix

Annex 1 Common EIP-AGRI format for “Practice abstracts”

Practice "abstract" 1:	Several practice abstracts may be needed for one project, depending on the size of the project and the number of outcomes/recommendations which are ready for practice.		
Short title in English		Recommended	0 character(s) / 150
<p>Short summary for practitioners in <u>english</u> on the (<u>final or expected</u>) <u>outcomes</u> (1000-1500 characters, word count – no spaces). <i>Do not complete if the summary below is completed in English</i></p> <p>This summary should at least contain the following information:</p> <ul style="list-style-type: none"> – Main results/outcomes of the activity (expected or final) – The main practical recommendation(s): what would be the main added value/benefit/opportunities to the end-user if the generated knowledge is implemented? How can the practitioner make use of the results? <p>This summary should be as interesting as possible for farmers/end-users, using a <u>direct and easy understandable language</u> and pointing out entrepreneurial elements which are particularly relevant for practitioners (e.g. related to cost, productivity etc). Research oriented aspects which do not help the understanding of the practice itself should be avoided.</p>		Recommended	0 character(s) / 1500
Short title in <u>native language</u>		Mandatory	0 character(s) / 150

<p>Short summary for practitioners in <u>native language</u> (can be the language of the coordinator / one of the partners - otherwise in English) (1000-1500 characters, word count – no spaces).</p> <p>This summary should at least contain the following information:</p> <ul style="list-style-type: none"> - Main results/outcomes of the activity (expected or final) - The main practical recommendation(s): what would be the main added value/benefit/opportunities to the end-user if the generated knowledge is implemented? How can the practitioner make use of the results? <p>This summary should be as interesting as possible for farmers/end-users, using a <u>direct and easy understandable language</u> and pointing out entrepreneurial elements which are particularly relevant for practitioners (e.g. related to cost, productivity etc). Research oriented aspects which do not help the understanding of the practice itself should be avoided.</p>		Mandatory	0 character(s) / 1500
---	--	-----------	-----------------------

Annex 2. Disclaimer

Diligence

The execution of the project has been carried out with the maximum diligence, according to the published information and the state of the art at all times. The execution of the project does not require the incorporation or identification of all the documentation which could potentially exist related to an investigation, but only the one that can be accessed at any time. Considering that generally the part of the investigation is carried out following certain patent classifications to obtain a reproducible result, this circumstance constitutes an essential restriction which determines that relevant documents are not identified, since the patent offices have been able to use other classifications.

Another relevant restriction is that the patent applications are not published in most countries until 18 months after the application has been filed in the patent office, so that only after that can they be identified. This implies that highly relevant documents may not have been found in a precise moment. Therefore, the execution of the project does not require assuring the legal terms of the investigation or the specific legal scope of the protection, obligations and rights which are included in the regulation of intellectual property, which, furthermore, do not constitute the purpose of this project.

Integrity

In the execution of projects, FEUGA is not responsible for the integrity, precision and update of the information contained in the databases used that are owned by third parties, as well as the various sources of information used that are owned by third parties and which are related with the intellectual property, patent standards and scientific literature.

Responsibility

FEUGA is not responsible of any infringement, damage or prejudice related to the technological project or the legal situation of the identified intellectual property. The responsibility of FEUGA related to the results of the investigation is limited to possible failures of its strict obligations in the framework of the execution of the service and is limited to the maximum cost incurred to the development of the service.