

M12 – Minutes on the dissemination events

Milestone Lead	UNITUS
Milestone due date	2024/10/31
Status	FINAL
Version	V1.0
Project	SEBASTIEN

DOCUMENT INFORMATION

Title	Milestone 12
Agreement	INEA/CEF/ICT/A2020/2373580
Action	2020-IT-IA-0234
Creator	UNITUS
Milestone Description	Minutes on the dissemination events
Means of verification	Dissemination plan and minutes and material from the events shared with the Agency
Contributors	Federica Gabbianelli (UNITUS)
Requested deadline	M34
Reviewer	Antonio Aloisio (CMCC), Alessandro D'Anca (CMCC)

Table of contents

1 THE SEBASTIEN PROJECT	4
1.1 BACKGROUND	4
1.2 GOALS	5
2 TARGET AUDIENCE	6
3 DISSEMINATION EVENTS MINUTES	7
4 DISSEMINATION AND COMMUNICATION TOOLS	13
4.1 INTERNAL COMMUNICATION	13
4.2 EXTERNAL COMMUNICATION AND DISSEMINATION	13
4.2.1. ONLINE TOOLS	14
4.2.1.1 WEBSITE	14
4.2.1.2 PARTNERS' WEBSITES	15
4.2.1.3 SOCIAL MEDIA	15
4.2.1.4 VIDEO TEASER	15
4.2.2 OFFLINE TOOLS	16
4.2.2.1 PRINTED PROMOTIONAL MATERIAL (FLYERS, ROLLUPS, POSTERS, PROMOTIONAL MATERIALS)	16
4.3 CONGRESS, WORKSHOP, FAIRS, PUBLICATIONS	16
4.4 SCIENTIFIC PUBLICATIONS	17
5 DISSEMINATION AND COMMUNICATION KIT	19
5.1 LOGO	20
5.2 TEMPLATES AND IMAGES OF TOOLS	21
5.2.1 PRESENTATIONS TEMPLATE	22
5.2.2 DELIVERABLES TEMPLATE	23
5.2.3 MILESTONES TEMPLATE	25
5.2.4 FLYER	27
5.2.5 WEBSITE	28
5.2.6 SOCIAL MEDIA	29
6 CONCLUSIONS	34
7 ANNEXES	35

1 THE SEBASTIEN PROJECT

1.1 BACKGROUND

Livestock production in the European Union (EU) is a large economic sector and animal products make up 45% (168 billion euros annually) of the EU agricultural production value, generating jobs for almost 30 million people. The sector based on animal production supports potential in labour generation and enables livelihoods in rural areas having the potential to bring about a better functioning circular bioeconomy.

In Italy, the livestock sector is mostly concentrated in the Northern regions, accounting for most farms and animals. Region-wise, Sardinia hosts the largest number of farms, whereas southern and central Italian regions (Toscana, Lazio, Campania, Calabria, and Sicilia) rank within the top ten. The value of the sector with respect to the total agricultural production is about 36% for the Country, of which meat and milk products cover more than 60% and 30%, respectively. In terms of species, cattle alone cover 45% of the production value, 48% when sheep and goats are included.

Agriculture is responsible for >10% of EU greenhouse gas (GHG) emissions, of which 60% to 70% are non-CO₂ GHGs (methane and nitrous oxide) sourcing from the livestock sector. In Italy, the direct and indirect livestock emissions components cover 73% of the total release of CO₂eq of agriculture

- this was estimated at ≈29.5 MTon in 2017 - and around 6% of the amount from the EU.

In the last decades, the livestock sector focused on improving both productivity and nutritional management rather than stress resistance. Hence, animal sensitivity to anomalous conditions increased along with their productivity. The processes leading domestic animals to respond to changes in their environment are crucial for survival but may negatively affect the productivity and profitability of livestock systems.

Climate change affects both extensive and intensive systems, in particular by increasing extreme temperatures and altered radiation regimes, which in turn can lead to extraordinary windy conditions. The impact of environmental change on animal production can be categorised as 1) health, growth, and reproduction; 2) diseases and the spread thereof; 3) feed availability.

There is an increasing need to formulate management options meeting the challenges of both climate mitigation and adaptation, starting from the integration of the latest and consolidated scientific evidence, the growing availability of high-quality data, and the capabilities of digital infrastructures, components, and tools to produce more comprehensive and consistent information. Further, the communication approaches towards those people and entities responsible for its effective mainstreaming into decision-making should also be improved.

1.2 GOALS

SEBASTIEN has implemented large-scale ICT-based services to support smart livestock farming and management while reducing risks and taking opportunities posed by climate change and its variability, by other concurrent environmental stressors, and anthropogenic pressures.

The project SEBASTIEN has aimed to deliver a Decision Support System (DSS) for a more efficient and (economically and environmentally) sustainable management, and the consequent valuing of the livestock sector in Italy.

The DSS addresses extensive and intensive cattle, sheep, and goat farming systems to meet the needs and priorities of different actors, i.e., breeders, assisting practitioners, researchers in the field, governments, market operators, entrepreneurs, and SMEs. The DSS alerts about the expected occurrence of uncomfortable conditions for animals affecting their general behaviour, productivity, reproduction, mortality, and feed availability.

A mobile application has also been designed and developed to offer users the same functionalities available in desktop mode. It allows users to access data and services anytime and everywhere, even without a PC, directly from their mobile phones. The mobile App is closely integrated with the SEBASTIEN data lake, like the portal, and it queries and retrieves forecasting indicators that are produced periodically.

The project mainly builds on environmental, sectoral, and other geospatial datasets:

- In situ sensors that allow measuring parameters related to animal body conditions.
- Historical and future climate simulations, using unprecedented spatial details over Italy, were combined into environmental comfort/wellbeing conditions indicators.
- Satellite images were integrated for multi-dimensional analyses of feed availability.

Data is translated into user-tailored information through different techniques, from empirical/statistical indicators to Machine Learning algorithms. Produced information is accessed and exploited through a Platform of customised tools and services.

This goal was reached through six different specific objectives:

- SO1 Maximising the synergistic exploitation and integration of multi-thematic, multi-source, last generation, continuously updated, highly detailed, and harmonised datasets.
- SO2 Condensing and synthesising the newly produced information into science-driven but user-tailored, and thus more communicative, either quantitative indicators or qualitative indices.
- SO3 Fully exploiting the existing and available Cloud/HPC capabilities.
- SO4 Balancing needs and priorities of different sectoral stakeholders maximising benefits for all.
- SO5 Ensuring the long-term functionality and sustainability of the generated services.
- SO6 Complementing and extending the outcomes and tools from the HIGHLANDER project (Cofinanced by the Connecting European Facility Programme of the European Union under Grant agreement n° INEA/CEF/ICT/A2018/1815462).

2 TARGET AUDIENCE

In accordance with Sebastien's aims and purposes, different categories of stakeholders have been identified, such as cattle, sheep, and goat farmers and their associations and assisting practitioners, researchers, educators/teachers, actors of the food/feed industrial processing, market operators in the sector downstream chain, entrepreneurs and private investors, policy makers at different levels, ICT companies, in particular SMEs. All these categories compose the final target audience, and all SEBASTIEN participants contributed to compiling a longlist of potential stakeholders, starting with those within their professional networks. Stakeholders already involved in SEBASTIEN associated projects, such as Highlander (*High performance computing supporting smart land services*, founded by CEF), LEO (*Livestock Environmental Opendata*, a project led by AIA), and Scala-Medi (*Improving sustainability and quality of Sheep and Chicken production by leveraging the Adaptation of LocAl breeds in the MEDiterranean*, funded by PRIMA EU program), were also included. The longlist included every stakeholder type and allowed the identification of the best candidate for all the project steps.

For each item suggested, specifics of the stakeholder type, person to contact within the stakeholder organisation and proponent were required, i.e. the "champions".

Fifty-three stakeholders were chosen and contacted to represent all stakeholder types:

Stakeholder ID	Category
AGRIS	Researchers
ANAFBIJ	Breeders Association
UNIMI	Researchers
DQA	Actors of the food/feed industrial processing
Slow food	Market operators
FAO	Policy makers
IAEA	Policy makers
EFFAB	Breeders Association
EAAP	Policy makers
UNIPD	Researchers
ANARE	Breeders Association
ANAPRI	Breeders Association
ANABORAVA	Breeders Association
Ass Pastorizia	Breeders Association
3A - Ass. Assegnatari Arborea	Actors of the food/feed industrial processing
Cami sostenibili	Actors of the food/feed industrial processing
ndustrie LAGREEN	Entrepreneurs/private investors
JNIPA	Researchers
Esselunga	Market operators
Consulenti	Entrepreneurs/private investors
Consorzio Grana Padano	Actors of the food/feed industrial processing
Consorzio Parmigiano Reggiano	Actors of the food/feed industrial processing
ASPA	Researchers
CAO Sardegna	Actors of the food/feed industrial processing
ASSOLATTE	Actors of the food/feed industrial processing
ASSOCARNI	Actors of the food/feed industrial processing
nvemizzi	Actors of the food/feed industrial processing
CCBI	Actors of the food/feed industrial processing
atteria Soresina	Actors of the food/feed industrial processing
Ass. consumatori	Actors of the food/feed industrial processing
ZSS	Researchers
ZSVe	Researchers

CREAIZ	Researchers
West Systems	Entrepreneurs/private investors
ANABORAPI	Breeders Association
FAO	Policy makers
ANABIC	Breeders Association
SCR	Entrepreneurs/private investors
IDEAS ENGINEERING	Entrepreneurs/private investors
ANACLI	Breeders Association
ARAS	Policy makers
Azienda Agricola Pratoleva	Breeders
Azienda Agricola Mariotti	Breeders
IZSUM	Researchers
CREA Monterotondo	Researchers
Unipg	Researchers
ASSONAPA	Breeders Association
ISMEA	Policy makers
IZSLT	Researchers
EFSA (european food safety authority)	Policy makers
ANAREAI	Breeders Association
Zootecnica Viterbese	Market operators
Orobix	ICT companies, SME

The stakeholders' engagement methods were also selected and relied on personalized

communication (email, phone, face-to-face), organized events (livestock fairs, exhibitions), project website and digital resources. Tailored communication channels for different categories were used.

Target audience	Key messages (ad-hoc points to stress)	Communication channel(s)
Farmers	extension services technical advice herd/flock management tools means for certifications (env/quality/traceability)	emailface to faceconference callphone call
Technical personnel (vets /consultants)	management tools (decision making aid)	• email
Breeders Association	 genetic improvement new phenotypes	emailleaflet/flyers
Researchers	improved understanding biol/physiol	emailleaflet/flyers
Actors of food processing (industrial/HORECA)	 quality environmentally friendly raw materials means for certifications (env/quality/traceability) 	emailleaflet/flyers
Market operators	 product added value means for certifications (env/quality/traceability) 	emailleaflet/flyers
Private investors / Public funding agencies	innovationsocial value	emailleaflet/flyers
Policy makers	 public health decision making tools (CAP policies) food safety /security social sustainability 	emailleaflet/flyers
ICT companies, SME	sensors / big datanew servicesIoT	emailleaflet/flyers
Consumers	environmental sustainability (antibiotics load) animal welfare food safety	emailleaflet/flyers

3 DISSEMINATION EVENTS MINUTES

Below is the list and description of the dissemination events that took place throughout the lifetime project, split by year.

2022

- The SEBASTIEN Kick-off meeting took place online (due to the pandemic situation) on January 14th, 2022, with the participation of all project partners and the Project Officer. It was an opportunity to introduce all the institutions and staff. Each Activity Leader presented its aims and objectives to achieve the common goal of delivering a Decision Support System (DSS) for a more efficient and sustainable management of the livestock sector in Italy.
- On April 1st, 2022, the Sebastien project website was online with all the information about the project, the partners, the stakeholders, including a news and events section.
- On April 2nd, 2022, a conference on "Certification, digitalization and health prevention in support of extensive zootechnics" was held at Agriumbria in Bastia Umbra (PG), organized by A.I.A. – Italian Association of Breeders and within the LEO (Livestock Environment Opendata) project. Dr. Marco Milanesi (University of Tuscia) gave a presentation entitled "Satellites and sensors: towards smart pasture management" (in collaboration with Prof. Giovanni Chillemi and Dr. Gaia Vaglio Laurin), which mentioned the service that is currently being developed in SEBASTIEN and related projects.

Agriumbria 2022 presentation

• On April 26th, 2022, Sebastien social media channels were created:

<u>LinkedIN</u> - <u>Twitter</u> - <u>Instagram</u> - <u>Facebook</u>

- On July 5th, 2022, the first SEBASTIEN Outreach team meeting was held in Lecce in mixed form at CMCC Headquarters.
- At the ICAR event (https://www.icar2022.ca/program/) held in Montreal from May 27th to June 2nd, 2022, AIA presented two works related to the LEO project:
 - LEO: A National-wide open big-data facility on livestock. R. Negrini & LEO CONSORTIUM.
 - In-farm and environmental THI measurement for mitigation of Heat Stress in dairy cattle in Italy. R. Negrini, M. Fioretti, L. Pascarella, A. Tondo, C. Melilli., F. Luisi.

ICAR 2022 presentation

ICAR 2022 presentation 2

- In October 2022, the SEBASTIEN project was promoted by AIA at the following events in conjunction with the dissemination of the LEO project:
 - Teramo, 15th October, One Health Award "LEO project: Italian livestock heritage in a single digital platform for the ONE HEALTH objective"
 - Montichiari (BS), October 21st, 94th edition FAZI— At the ANAFIBJ technical conference "SENSORS AND DAIRY COW SELECTION", the work: "NEW SENSORS: tools and technologies for a state-of-the-art milking control service" was presented, with the aim of showcasing the new technologies to be used for milking control and the new parameters defined by the LEO project
 - Montichiari (BS), October 22nd, 94th edition FAZI During the final ALL4ONE conference, 'Data Utilisation – Livestock Environment Open data' was presented, showcasing examples of the practical use of OPEN DATA

One Health 2022 presentation

FAZI 2022 presentation

 On 22 December 2022, the third webinar of the Highlander talk cycle organised by Arter was aired, The ARIA webinar which was dedicated to the two use cases Human Wellbeing in rural and urban areas (by CMCC) and IoT for Animal Wellbeing (by UNITUS) from which the SEBASTIEN project was derived, and which is mentioned. The recording of the webinar is available.

ARIA webinar

2023

 On January 19th, 2023, AIA gave a presentation during the GALA project Final Conference held in Crema mentioning the SEBASTIEN project.

GALA 2023 presentation

• On 26 January 2023, the Highlander final event CLIMATE CHANGE IN ITALY – Supercomputing as a tool to deal with impacts on the territory took place at the Sala Borsa of the Auditorium E. Biagi in Bologna in the presence of over 200 people (scientific community but also citizens, public administrations and bodies, associations, entrepreneurs, researchers and students who wish to know more about how digital technologies can help tackle climate change) in addition to those connected online. The event was moderated by Claudia Adamo, journalist in charge of Rai Meteo. The results of the use cases and continuity through the Sebastien project were presented as part of the extensive programme.

HIGHLANDER Final Event presentation

On February 22nd, the XXIV S.I.P.A.O.C. National Congress was held in Viterbo.
 Dr.ssa Licia Colli (Università Cattolica del Sacro Cuore – UCSC) gave a presentation entitled "SEBASTIEN: un Sistema di Supporto alle Decisioni per la zootecnia basato su dati ambientali, geospaziali e di settore" which illustrated the project, its objectives and services, and the timeline of events especially related to the Montecristo goat population.

SIPAOC 2023 presentation

 On April 1st, 2023, a conference on "Producing quality meat efficiently for a healthy diet" was held at Agriumbria in Bastia Umbra (PG), organized by A.I.A. – Italian Association of Breeders and within the LEO (Livestock Environment Opendata) project. Riccardo Negrini, A.I.A. Technical Director, gave a presentation entitled "Leo Project: state of the art on data access", which mentioned the SEBASTIEN project.

Agriumbria 2023 presentation

- On April 13-14, 2023, the SEBASTIEN Midterm General Assembly was held in Lecce, Italy, at the headquarters of the Euro-Mediterranean Center on Climate Change (CMCC), with the virtual attendance also of the P.O. Fani Tsirantonaki. During day one of the meeting, several topics were discussed, i.e., an overview of the status of the project so far, the data sources integration and data elaboration procedures concerning the project implementation, as well as the data lake, the stakeholders involved, and the four services offered by the project. During the second day, the following topics were addressed: the Open Data and Services Exploitation portal, the website, the mobile application, the Dissemination Plan, and the sustainability of the project.
- The EGU European Geosciences Union General Assembly took place in Vienna and online from April 23 to 28, 2023, with thousands of scientists participating from all over the world. On April 25, Paola Nassisi, the scientific leader of SEBASTIEN, presented the project at the press conference on "Early warning for extreme events: earthquakes, droughts, floods and livestock

disease". It is worth noting that the abstract was selected from a pool of 17,000 submissions for the press conference organized by the EGU General Assembly Press Centre.

EGU 2023 presentation

EGU 2023 press conference

• During the IEEE International workshop on Measurements and Applications in Veterinary and Animal Sciences (MEAVEAS) held in Naples on April 26-28, 2023, a paper related to the SEBASTIEN project received the award as best conference paper. The award recognizes the most outstanding paper presented at IEEE MeAVeAS 2023. A selection committee evaluated papers based on technical merit, originality, potential impact on the field, clarity of the written paper, and quality of the conference presentation. The paper entitled "Machine Learning NIR wavelength selection: application for a low-cost portable instrument for livestock feed management" was presented by Marco Milanesi, Daniele Pietrucci, Francesco Renzi, Giovanni Vignali, Chiara Evangelista, Riccardo Valentini and Giovanni Chillemi from the University of Tuscia (UNITUS).

MEAVEAS 2023 paper awarded

MEAVEAS 2023 proceedings (including three paper citing SEBASTIEN)

• At the ICAR event held in Montreal from 21st to 26th May, 2023, Riccardo Negrini (AIA) gave a presentation entitled "Estimation of enteric methane emission in Italian dairy herds: application of IPCC equations using DHI data" related to the LEO project.

ICAR 2023 presentation

• Paola Nassisi (CMCC) presented the Sebastien project in an interview published on TechEconomy 2030 on May 29th, 2023. Here is the link to the article:

<u>Una gestione zootecnica contro il cambiamento climatico: ci aiuta SEBASTIEN e ce lo racconta</u> Paola Nassisi del CMCC

 On June 13th to 16th, the ASPA Congress was held in Monopoli (BA) with the attendance of national and international scientists. A poster illustrating the SEBASTIEN project was presented by Mario Barbato (UCSC) on behalf of all partners. Also, Marco Milanesi and Daniele Pietrucci from UNITUS gave two oral communications about the Machine Learning approach used in correlation with climate change and dairy cow's milk production.

ASPA 2023 poster

ASPA 2023 presentation

ASPA 2023 presentation 2

 On September 13 to 15, 2023, the 27th Workshop on the Developments in the Italian PhD Research on Food Science Technology and Biotechnology was held in Portici (NA) at the Department of Agricultural Sciences, with the attendance of PhD students coming from 25 Italian Universities. A poster entitled "Development of strategies for the adaptation of the livestock sector to the new climate regime with machine learning and artificial intelligence methods" was presented by Chiara Evangelista with the collaboration of Marco Milanesi, Daniele Pietrucci, Federica Gabbianelli and Giovanni Chillemi (UNITUS).

PhDfood 2023 poster

 European Livestock Voice is a multi-stakeholder group of associations representing sectors ranging from animal health to the livestock food chain, that have decided to unite for the first time to balance the debate on a sector that plays such an essential role in Europe's rich heritage and future. They mentioned SEBASTIEN Project on LinkedIn focusing on the importance of the DSS for more efficient and sustainable livestock farming.

https://www.linkedin.com/posts/european-livestock-voice_the-sebastien-project-for-a-more-ef ficient-activity-7109430848940044288-mdQR

- The SEBASTIEN project video teaser was submitted by CINECA to the Suzanne Awards Film Festival, which has been honoring the best animation work created with Blender since 2003.
 There are three categories: animation, design and short film and the video competes for all of them.
- On September 29th, 2023, SEBASTIEN project attended the European Researchers' Night2023, an all-night long dialogue between science and society. The event was an opportunity to introduce and discuss the project with the public in two different venues, i.e., Lecce and Bologna. The project was introduced to a large audience and raised a lot of interest amongst participants.

European Researchers' Night 2023

• On October 28th, 2023, the SEBASTIEN project was introduced at the Exhibition Center in Montichiari (BS) during the FAZI 2023 event. The project was presented at the AIA stand by Marco Milanesi (UNITUS) together with Paolo Ajmone Marsan (UCSC) and Riccardo Negrini (AIA). The meeting was a chance to illustrate the project objectives and services, including the teaser video, and it was attended by quite a few breeders, breeder representatives and interested people. The discussion that followed the presentations allowed the audience to provide useful comments, besides offering valuable insights based on breeders' impressions and needs, which will be used to improve the services offered within the project.

FAZI 2023 presentation

 On December 13th, 2023, a stakeholder meeting attended by UCSC and Nature4.0 was held at AGRIS' experimental sheep farm located in Monastir, Cagliari. The partners introduced the SEBASTIEN services and answered various questions about the services themselves and the sensors. It was a good opportunity to gather further feedback from the project stakeholders.

2024

 On January 29th, 2024, CMCC presented the SEBASTIEN project in the monthly insert of Sole24Ore called "Scenari – Guida, ricerca e innovazione". The article illustrates the rationale behind the project, along with its goals, services, applications, and the partners involved. The article was a great opportunity to disseminate the project to a large audience.

Scenari (Sole24Ore) article

- From February 1st to 3rd, SEBASTIEN services were presented to the individual stakeholders
 who attended the 116th Fieragricola held in Verona. The UCSC team composed of Matilde
 Passamonti, Prof. Paolo Ajmone Marsan, Prof. Riccardo Negrini, Elisa Somenzi, Mariantonietta
 Palazzo, and Maria Antonietta Palumbo, attended the three days of the fair and handed out
 assessment questionnaires to collect feedback.
- On April 6th, 2024, a conference on "The barn of the future in the present" was held at Agriumbria in Bastia Umbra (PG), organized by ANGA Umbria. Daniele Pietrucci (University of Tuscia) gave a presentation entitled "The 4.0 technologies at animal genetics service", which mentioned the SEBASTIEN project and its services.

Agriumbria 2024 presentation

 On April 19th, 2024, the SEBASTIEN project was introduced at the Exhibition Center in Benevento during the CampaniAlleva 2024 event, Southern Italy's largest livestock exhibition. The project was presented at "Sala Convegni e Mostra d'Arte" by Riccardo Negrini (AIA). The meeting was a chance to illustrate the project objectives and Sebastien DDS including a focus on Service 3 regarding the pastures. The event was attended by quite a few breeders, breeder representatives and interested people.

CampaniAlleva 2024 presentation

• From September 1st to 5th, 2024, the 75th EAAP Annual meeting took place in Florence. Daniele Pietrucci (UNITUS) and Riccardo Negrini (AIA) gave two oral presentations entitled...

EAAP 2024 presentation

EAAP 2024 presentation 2

• From September 17th to 20th, 2024, the XXV S.I.P.A.O.C. National Congress was held in Sassari. Riccardo Negrini (AIA) presented a poster entitled "A Decision Support System for disease outbreaks and pasture management in small ruminants".

SIPAOC 2024 poster

• On October 12th, 2024, "STRESS DA CALDO NELLA VACCA DA LATTE: genetica, benessere, razionamento, tecnologie" Congress was held in Bressanvido (VI). Lorenzo Pascarella (AIA) presented "Big-Data al servizio della zootecnia: Prevenire lo stress da caldo"

STRESS DA CALDO NELLA VACCA DA LATTE: genetica, benessere, razionamento, tecnologie 2024 presentation

• From October 10th to 12th, 2024, World AgrifFood Innovation Conference (WAFI) 2024 was held in Beijing, China. Riccardo Negrini (AIA) presented "Exploiting big-data and phenotypes for Animal Source Food".

WAFI 2024 presentation

 On October 29th, 2024, the SEBASTIEN Final General Assembly was held in Casalecchio di Reno (BO), Italy, at the headquarters of CINECA and online. Several topics were discussed, all the Activities were summarized with a focus on the final months and results. Both the DSS and the APP were illustrated to the stakeholders present. Also, the sustainability of the project was presented and discussed.

4 DISSEMINATION AND COMMUNICATION TOOLS

The Dissemination Plan aimed to raise awareness of the project aims, objectives, and scope.

The project communication relied on strong internal dissemination of the information to provide all partners with a clear vision of the project both as a whole and of the respective tasks.

To this end, a strategy for internal information flow was developed so that all consortium members had a common understanding and had what was needed to present the project and raise stakeholder awareness.

4.1 INTERNAL COMMUNICATION

Internal communication between partners was facilitated through emails, phone calls, and online meetings. Specific mailing lists were created to better direct communication within groups.

Each partner notified the coordination of one or two contact persons to be included in the Outreach Team. These people were in charge of quickly disseminating communications pertaining to project outreach to their colleagues who were part of the same institution.

Topics needing further study or discussion were addressed during outreach team meetings.

4.2 EXTERNAL COMMUNICATION AND DISSEMINATION

External communication was essential to present the project, raise awareness among national and regional stakeholders and reach new ones. Various tools were used to achieve these objectives: online such as the website and social media, and offline such as flyers, posters, and roll-ups. Scientific publications generated within the project have further promoted SEBASTIEN among a more specific audience.

4.2.1 ONLINE TOOLS

4.2.1.1 WEBSITE

The project website was developed at the beginning of the project (M3) to disseminate information on the project activities, objectives, services, and also correlated events (URL: https://www.sebastien-project.eu/).

The website includes the following sections:

- Homepage: which includes an overview of the main contents and the video teaser
- **About:** which lists the project objectives and Linked Projects
- Services: where an overview of four main services delivered by the web Portal is provided
- Partners: that provides a description of all partners involved in the project
- **News and events:** where all relevant news relative to the project are provided, with the contribution of all partners
- **Contacts:** provides the e-mail address of the outreach team for requesting additional information

Moreover, according to the rules for EU fund beneficiaries, the website footer includes, on the left, the EU emblem along with the acknowledgment Co-financed by the Connecting Europe Facility of the European Union. In the center of the footers, there is the project ID card with the following information:

SEBASTIEN Project

Coordinator: Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC)

Topic: Public Open Data (POD) - Type of action: CEF-TC-2020-2

Duration: 30 months - Starting date: Jan 2022

Total budget: €1,338,553.18

Total CEF Contribution: €1,003,914.89

On the left of the footer there are the project logo and social media logos with a link to the related pages.

The website was updated regularly with news (also shared in social media channels) and two sections were added: a page dedicated to <u>in situ sensors</u> and a page in <u>Italian</u> (mainly addressed to stakeholders) collecting information about the project and the services and the Italian version of the project video teaser.

4.2.1.2 PARTNERS' WEBSITES

Each partner created a web page on their organisations' websites, where SEBASTIEN and its services were presented including the link to the project website. Each partner was also supposed to mention their role within the project itself.

4.2.1.3 SOCIAL MEDIA

In parallel with the creation of the website, the project social channels were created to reach a wider audience: contents are exclusively provided in English.

X (Twitter) is the main social network for reaching as many interlocutors as possible and allows for informal interaction and communication, as well as facilitating the creation of networks and connections. A Twitter account has been created under the name @SEBASTIENproje1.

The hashtag #sebastienproject was used to give evidence to the news published and allowing all partners to use it autonomously, *tweeting* on their institutional or personal feeds.

It was determined to open a corporate page on <u>LinkedIn</u> to give maximum visibility to the project, reach other stakeholders, and create a network of effectively useful links.

It was decided to also create a Facebook page (<u>Sebastien project</u>) and an Instagram account (<u>sebastien project.eu</u>) in order to expand the audience and reach more stakeholders and also engage the general public.

In order to collect and disseminate the project video teasers, a YouTube channel was created.

Updates to the website contents were mirrored in the social networks pages with news, announcements of events such as congresses or seminars, information on the progress of objectives, and updates on activities where the project was involved in raising awareness and communicating about SEBASTIEN. The Outreach Team was involved in this task and in promoting the project hashtag and sharing its contents with their network.

4.2.1.4 VIDEO TEASER

A <u>project video teaser</u> was foreseen by Month 12 and delivered to disseminate the project. The video presents the objectives and the services of SEBASTIEN.

The video has a general perspective and its goal is to stress the negative impact of climate change on livestock management and the importance to anticipate and mitigate these effects through a Decision Support System (DSS). The language uses the present tense - instead of the future tense - to enable a long-lasting exploitability of the video, even after the conclusion of the project.

The aesthetics are colourful, inspired by pop-up books and paper collages, with stylized animation. Its duration is <3 minutes to comply with the standards of EU projects video trailers.

<u>An Italian version</u> was also created to allow non-English speaking stakeholders to take advantage of the video teaser, as was done for the main information page in Italian on the project website.

4.2.2 OFFLINE TOOLS

4.2.2.1 PRINTED PROMOTIONAL MATERIAL (FLYERS, ROLLUPS, POSTERS, PROMOTIONAL MATERIALS)

The flyer covered the most important aspects of the SEBASTIEN project: the objective, the partners, the services, and the potential.

A detailed leaflet was produced for stakeholders to be distributed during communication and dissemination events.

In the design of the flyers, consistency with the colour scheme was maintained to help the audience to associate the material with the project. For this reason, the same colours, images, and symbols were used both on the website and social channels.

Within the flyer, the information was structured to allow readers to easily find the information sought, thanks to the division into sections and differently coloured parts of the text.

A rollup was created to be displayed at events with the project logo, partner symbols, website graphics, and all necessary information for dissemination. Also, various promotional materials carrying the project logo were created with the same purpose, i.e., pens, stickers, notebooks and keychains.

4.3 CONGRESS, WORKSHOP, FAIRS, PUBLICATIONS

An initial Gantt of relevant events has been developed (see Annex 1) because partners' participation in related events was a dynamic process. In fact, new events were added during the project. This also applied to publications in both scientific and general journals.

A new version of the initial Gantt (see Annex 2) has been created with more information. The new version had drop-down menus and different colours associated with the types of dissemination (article, face to face event, presentation during a congress, etc) and with the partner involved. There were also columns for the date, the link (if applicable), the number of people reached and any notes.

Regarding the improvement of internal communication, an online kick-off meeting has been organised on January 14, 2022.

Further, a mid-term General Assembly was held at the CMCC headquarters in Lecce on April 13-14, 2023, to discuss the progress of the project, with the virtual attendance also of the P.O. Fani Tsirantonaki.

A final meeting was held at the CINECA headquarters in Casalecchio di Reno (Bologna) on October 29th, 2024, where the results achieved were analysed and the sustainability of SEBASTIEN were discussed. The meeting was conducted both in presence and online, with some stakeholders attending.

As already listed in the minutes, a wide array of events has been proposed: public/private, internal/external, including scientific conferences, congresses, fairs, workshops, open days, and exhibitions. For each event, consideration was also given to arranging relevant promotion activities, the follow-up actions of high relevance, and maintaining relations with the interested persons who participated, once the event is over.

There were different levels of participation in an event: as a speaker, the partner indicated in his/her agenda the participation of the SEBASTIEN project and used the official template with the logo, by also bringing promotional materials such as a poster, rollup, flyer, and project gifts. Moreover, every partner attending the events took photos that were then used for the creation of news to be published on the website and social channels using the hashtag #sebastienproject.

4.4 SCIENTIFIC PUBLICATIONS

SEBASTIEN results were disseminated also through peer-reviewed journals and other scientific publications. The targeted journals covered all the project's topics: livestock farming systems, Climate change, Artificial Intelligence, IoT, HPC, Big Data, etc.

All papers published by partners in the framework of the SEBASTIEN project include the following sentence within the ACKNOWLEDGMENT section:

"This research was partly (or fully) supported by the CEF SEBASTIEN project Co-financed by the Connecting European Facility Program of the European Union, Grant agreement n° INEA/CEF/ICT/A2020/2373580."

The last plan update includes the list of papers submitted and accepted for publication. Moreover, any dissemination of results must indicate that it reflects the author's view only and that the European Commission is not responsible for any use that may be made of the information it contains.

Since the start of the project to date, the following research articles on animal wellbeing have been published:

- Mecocci, S.; Ottaviani, A.; Razzuoli, E.; Fiorani, P.; Pietrucci, D.; De Ciucis, C.G.; Dei Giudici, S.; Franzoni, G.; Chillemi, G.; Cappelli, K. Cow Milk Extracellular Vesicle Effects on an In Vitro Model of Intestinal Inflammation. Biomedicines 2022, 10, 570. https://doi.org/10.3390/biomedicines10030570
- Mecocci, S.; De Paolis, L.; Fruscione, L.; Pietrucci, D.; De Ciucis, C.G.; Dei Giudici, S.; Franzoni, G.; Chillemi, G.; Cappelli, K.; Razzuoli, E. In vitro evaluation of immunomodulatory activities of goat milk Extracellular Vesicles (mEVs) in a model of gut inflammation. Research in Veterinary Science 2022, 152, 546-556. https://doi.org/10.1016/j.rvsc.2022.09.021

Moreover, three articles were published in Proceedings of <u>MEAVEAS 2023</u> and the first of them won the best conference paper award:

- Milanesi, M.; Pietrucci, D.; Serva, L.; Renzi, F.; Vignali, G.; Evangelista, C.; Marhcesini G.; Andrighetto, I.; Bernabucci, U.; Valentini, R.; Chillemi, G. Machine Learning NIR wavelength selection: application for a low-cost portable instrument for livestock feed management
- Renzi, F.; Milanesi, M.; Pietrucci, D.; Vignali, G.; Carta, A.; Ajomine-Marsan, P.; Chillemi, G.;
 Valentini, R. Design of a flexible, expandable, and customizable sensor network for monitoring livestock behaviour and welfare
- Porzio, E.; Milanesi, M.; Chiaradia, E.; Mecocci, S.; Vignali, G-; Trabalza-Marinucci, M.; Renzi,
 F.; Valentini, R.; Cappelli, K.; Chillemi, G.; Beccati, F.; Pepe, M. Innovative sensors for the assessment of exercise stress in athlete horse

Moreover, four posters were presented during conferences and events:

- ASPA 2023: M. Barbato, E. Somenzi, P. Nassisi, A. Rullo, C. Dellacasa, G. Chillemi, M. Milanesi, R. Valentini, M. Donda, P. Ajmone Marsan. Smarter livEstock Breeding through Advanced Services Tailoring Innovative and multi-source data to users' Needs.
- PhDFood 2023: C. Evangelista, M. Milanesi, D. Pietrucci, F. Gabbianelli, G. Chillemi. Development of strategies for the adaptation of the livestock sector to the new climate regime with machine learning and artificial intelligence methods.
- European Researchers' Night 2023: CMCC Foundation (Euro-Mediterranean Centre on Climate Change). SEBASTIEN Smarter LivEstock Breeding through Advanced Services Tailoring Innovative and multi-source data to users' Needs.
- SIPAOC 2024: Negrini R., Milanesi M., Chillemi G., Gabbianelli F., Pietrucci D., Ajmone-Marsan P., D'Anca A., Nassisi P., & SEBASTIEN consortium. A Decision Support System for disease outbreaks and pasture management in small ruminants.

5 DISSEMINATION AND COMMUNICATION KIT

A communication and dissemination kit including templates for presentations, deliverables, and milestones including the logo, was created.

The main font used is 'Calibri', while titles use 'Quattrocento Sans'.

The colour palette includes 'gold colour 4' to 'orange' gradient to recall the colour of the logo. In addition, 'green colour 6' is used for the headings of the pages following the first. The names of the colours refer to those available on PowerPoint. This kit is intended to standardise the graphic part of the project and is in line with the website and social media. The kit was made available to each project partner.

5.1 LOGO

The SEBASTIEN logo synthesises the slogan "Smarter livEstock Breeding through Advanced Services Tailoring Innovative and multi-sourcE data to users' Needs".

The three species involved in the project: cows, sheep, and goats, are represented as parts of an outer circle and connected within it by a network to exemplify the project's main topics clearly at first glance. A colour scheme ranging from yellow to orange was chosen for the symbol and a shaded green for the lettering.

There are two versions of the logo, classic and horizontal.



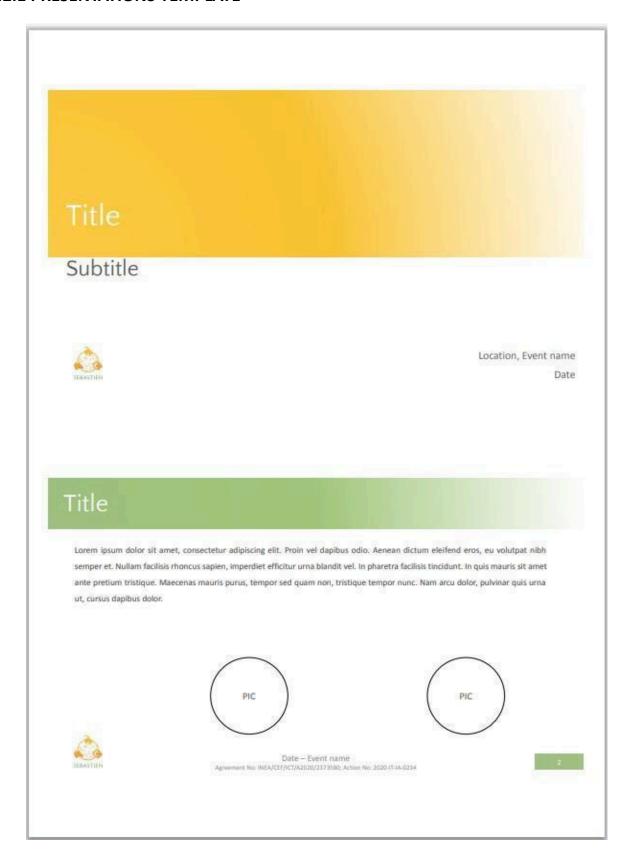


5.2 TEMPLATES AND IMAGES OF TOOLS

Below are the various templates created and images for flyers, web and social pages.



5.2.1 PRESENTATIONS TEMPLATE





5.2.2 DELIVERABLES TEMPLATE







DOCUMENT INFORMATION

Title	Milestone xxx
Agreement	INEA/CEF/ICT/A2020/2373580
Action	2020-IT-IA-0234
Creator	XXX
Deliverable Description	XXX
Contributors	Name (Institution)
Requested deadline	Mxx
Reviewer	Name (Institution)



5.2.3 MILESTONES TEMPLATE



MX - Title

Milestone Lead	XXX	
Milestone due date	y/m/d	
Status	DRAFT / FINAL	
Version	Vx.x	
Project	SEBASTIEN	

Co-financed by the Connecting Europe Facility of the European Union

Agreement: INEA/CEF/ICT/A2020/2373580 Action: 2020-IT-IA-0234





DOCUMENT INFORMATION

Title	Milestone xxx
Agreement	INEA/CEF/ICT/A2020/2373580
Action	2020-IT-IA-0234
Creator	XXX
Milestone Description	XXX
Means of verification	XXX
Contributors	Name (Institution)
Requested deadline	Mxxx
Reviewer	Name (Institution)

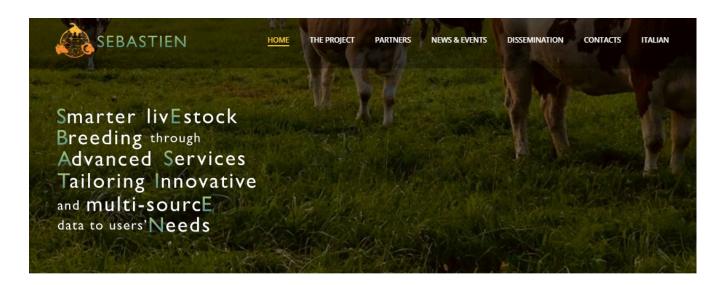


5.2.4 FLYER





5.2.5 WEBSITE





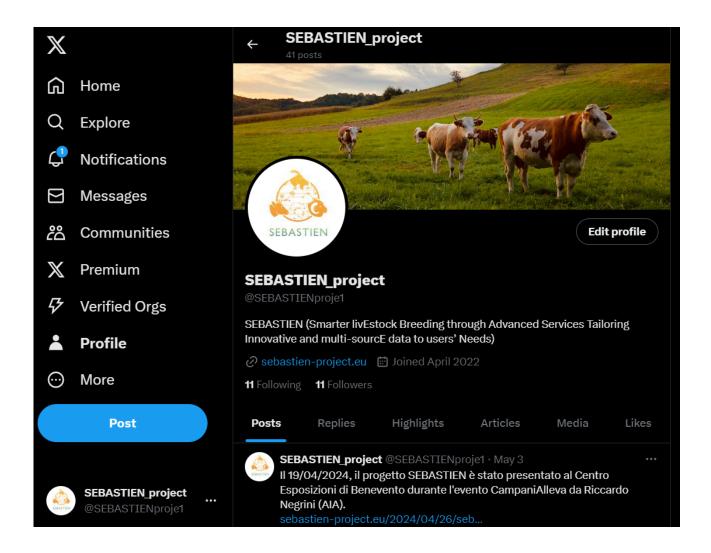
SEBASTIEN wishes to implement large-scale ICTbased services to support smart livestock farming and management, while reducing risks and taking opportunities posed by climate change and its variability, as well as by other concurrent environmental stressors and anthropogenic pressures.

READ MORE





5.2.6 SOCIAL MEDIA



















Stai visualizzando questa pagina come membro





SEBASTIEN Project

Smarter livEstock Breeding through Advanced Services Tailoring Innovative and multi-sourcE data to users' Needs

Infrastruttura di dati e analisi · 49 follower · 11-50 dipendenti



Marco e altri 32 collegamenti seguono questa pagina







Home

Chi siamo

Post

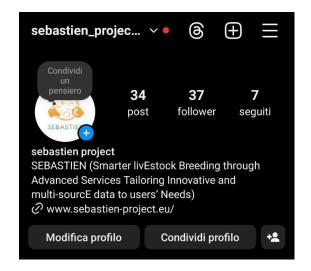
Lavoro

Persone

Informazioni

Smarter livEstock Breeding through Advanced Services Tailoring Innovative and multi-sourcE data to users'















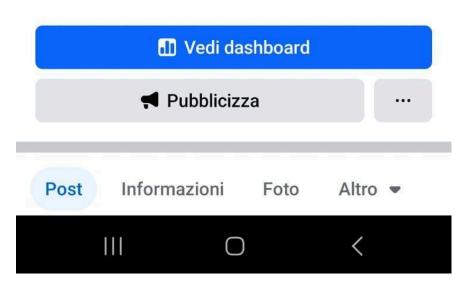


Sebastien project

11 Mi piace • 15 Follower



SEBASTIEN (Smarter livEstock Breeding through Advanced Services Tailoring Innovative and multi-sourc







SEBASTIEN Project

@sebastienproject 2 iscritti 2 video

The project Smarter livEstock Breeding through Advanced Services Tailori... >

HOME

VIDEO

PLAYLIST

CANALI INFORMAZIONI

Q

Video

► Riproduci tutti



SEBASTIEN 2:49

Video teaser del Progetto Sebastien

7 visualizzazioni • 1 mese fa Sottotitoli Sebastien Project Video Teaser

57 visualizzazioni • 1 mese fa Sottotitoli

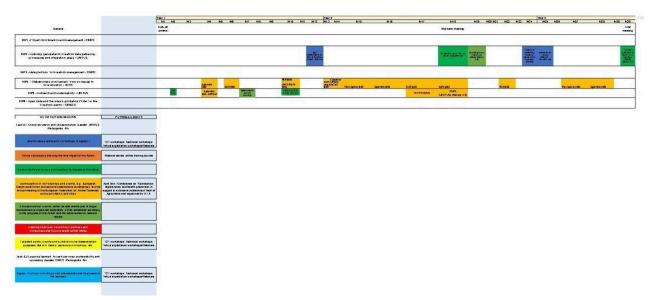


6 CONCLUSIONS

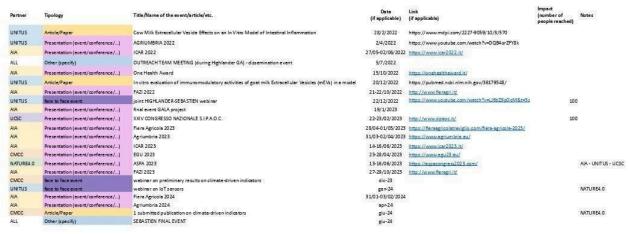
Milestone 12 consists of all dissemination activities and related material collected during the events. The dissemination and communication strategy had begun with a plan providing the project with guidelines and a practical toolkit that helped disseminate the project activities and results. Specific strategies were developed throughout the duration of the project considering stakeholder needs and project objectives. After having selected champions (together with Activity 4) from the long list of stakeholders, dissemination and communication activities have been aimed to further increase their interest in the project and to further promote the results of SEBASTIEN.

7 ANNEXES

Annex 1 and Annex 2 are available as separate files, below are two images of them



Annex 1: Event Gantt initial version



Annex 2: Event Gantt new version