Reports on dissemination activities I

Deliverable D11.5

25 November 2020

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Pensoft Publishers

PoshBee

**Pan-european assessment, monitoring, and mitigation
of stressors on the health of bees**

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Table of contents

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Preface

WP11 "Dissemination, Communication & Knowledge Transfer" has the main objective to promote and disseminate the outcomes of the PoshBee project across stakeholders and the general public in the most efficient manner. To achieve this, a recognisable project identity was created, a number of promotional tools and materials were produced, and relevant communication channels were created and are regularly maintained with new content. As part of the PoshBee communication strategy, both offline and online dissemination tools are used in pursuit of the objective to reach a broad audience of relevant stakeholders. This report describes the processes of dissemination, communication and knowledge transfer in the first 30 months of the PoshBee project, including estimated results from the implementation of different dissemination activities within the project.

Summary

This report covers the dissemination activities for the first two and a half years of the project duration (Months 1 - 30). The report outlines the activities conducted throughout the period. The document gives an overview of the various types of information channels that are applied for dissemination and communication of project developments. Moreover, this report also includes a list of dissemination activities in which PoshBee consortium members have engaged for this period (Annex 1).

The report covers the promotional materials, online and electronic activities (including website and social media); news; events and networking, and publications (both academic and industrial).

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1. Introduction

PoshBee Work Package 11 (WP11) is responsible for maximising the awareness of PoshBee among the project's stakeholders and other interested parties. This document represents the fifth deliverable of WP11, D11.5: Report on dissemination activities I. This report gives an overview of the main target groups of the project, as well as the specific communication tools, channels and methods that will be used to address them. The document also describes the dissemination and exploitation activities carried out during the first half of the project.

2. PoshBee target groups and specific communication tools and channels

This section provides an overview of the broad stakeholder groups within PoshBee, as well as an overview of the specific communication tools, channels and methods which are used to disseminate project developments.

2.1. PoshBee target groups

The broad stakeholder groups within PoshBee, as identified by the stakeholder mapping exercise described in D10.1 Report on the knowledge exchange and impact strategy for PoshBee, are as follows:

- Beekeepers (beekeeper associations/organisations),
- Business (private companies, industry, SMEs),
- European Commission (EC, DG's and agencies),
- Farmers (farmer associations/organisations),
- Government (national government agencies or ministries),
- Media,
- NGO (non-governmental organisation),
- Public,
- Researchers (university, government or private research organisation).

This categorisation ensures that the most important stakeholders relevant to PoshBee are well known. The different target groups vary in their degree of influence and interest in project outputs. Building on this, different knowledge exchange strategies can be adopted (see D10.1 for more information on the knowledge exchange and impact strategy).

2.2. Communication tools and channels: an overview

As already mentioned, PoshBee is applying suitable manners of communication and dissemination to reach the different target audiences and engage with them. The main tools and channels are listed below, followed by an overview of their usage by PoshBee consortia members in the first half of the project implementation.

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- **Visual identity**: The PoshBee visual identity and all its elements (project name, logo, colours, funding information, infographic and branded templates for presentations and administrative documents) have been used in all external and internal communication activities.
- **Project website**: The PoshBee website (https://poshbee.eu) can be considered as the main online communication channel. A dedicated deliverable has been provided, describing its different sections and pages (D11.1 Branding products, promotional materials, website, social network profiles, project communication platform, and online libraries)
- **Promotional material**: The following set of promotional materials has been developed to support the dissemination of the project and uploaded to the media center of the website – project logo, sticker, brochure, poster, scientific poster, infographic.
- **News and articles**: Various channels are being used to publish project related news and developments. These include news items on the website, annual newsletters, monthly success stories, press releases and publication of articles in external platforms/media.
- **Social media**: PoshBee is present on Twitter, Facebook and as of recently – on YouTube. These are the main social media accounts used to disseminate the results of PoshBee, as well as to raise awareness of the project activities. A description of the organic social media activity implemented to date is provided in the next section of this report.
- **Practice abstracts**: As part of the promotional and dissemination toolset of the project selected to make the results of PoshBee available across stakeholders and the general public, a total of four practice abstracts were prepared and published on the EIP-AGRI platform. These concise and clear pieces of knowledge aim to present PoshBee results to one of the key project target groups – the practitioners.
- **Events and networking:** Being present at events and conferences is one of the main approaches to disseminate PoshBee. Project partners have raised awareness of PoshBee activities in a significant number of events – these are listed in Annex 1 of this report.
- **Scientific publications:** Research results will be disseminated via the publication of scientific papers and the participation in scientific conferences. The first PoshBee scientific articles that have been published are listed in Annex 2 of this report.
- **Media and other channels:** Additional tools and channels will be used to disseminate the activities and results of PoshBee to a wider audience. These include local communication channels (PoshBee has provided features and press releases for local journalists across Europe), as well as any other form of direct contact with citizens.

The next chapter will take a closer look at the latter communication tools and channels. It will also provide an overview of their usage by PoshBee project partners in the first half of the project implementation.

3. Overview of Dissemination Activities for the first half of the project implementation

Given the long reporting period and the substantial consortium of the PoshBee project, the dissemination and communication activities of partners have been categorised in Annex 1. The list gives an overview of the type of dissemination activity, key partner involved, date and place of

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occurrence, an estimated type and size of the audience, as well as countries involved in the activity. This chapter will analyse the communication tools and channels listed in chapter 2.2 in greater detail. It will also provide some statistical data of the performance of the main channels and will exemplify their usage with examples from Annex 1.

3.1. Project website

The PoshBee website (www.poshbee.eu) serves as a prime dissemination tool and was designed to act as an information hub about the project's aims, goals, activities and results. The website consists of separate information pages with project background information, news, events, publications, contact details, etc. It is updated with new contents on a regular basis to keep the audience informed and ensure continued interest of already attracted visitors. Moreover, an internal communication platform is available on the website (only after logging in) for consortia members to use. Further information can be acquired from the details provided in Deliverable 11.1.

Fig.1: *PoshBee website*

The website has received a steady flow of users since its launch in August 2018. Table 1 gives an overview of the main statistical data points regarding website usage for the period August 2018 (launch) – November 2020 (the submission month of this report).

Data point	Results (August 2018 – November 2020)
Total page views	67,373
Total page users / sessions	9,843 users / 17,363 sessions

Average session duration	03:42
Most visited pages	Home, about, library
Bounce rate	Healthy at 49.12%
Mobile/Desktop use	75% desktop, 22% mobile, 3% tablet
Top referral countries	United Kingdom, USA, France, Germany, Italy

Table 1: *PoshBee website: main statistical data points*

*Session: the time period when the user is actively engaged with the website

3.2. Promotional material

The PoshBee visual identity is maintained across all dissemination activities, ensuring a high-quality project branding. Several promotional materials have been developed in order to be used at internal and external events, including:

- **PoshBee logo / sticker**: as a primary element of PoshBee's corporate identity from the very beginning of the project, the logo is available to all consortium members to use in all official communications.
- **PoshBee flyer / brochure**: a carefully designed piece of marketing material providing an explanation of the project rationale - its objectives, activities and main tasks planned as well as the expected outcomes.
- **PoshBee poster:** eye-catching material illustrating the aim of the project. The poster features interactive icons for each respective project outcome.
- **PoshBee scientific poster:** created by PoshBee researchers Sara Hellstrom, Christopher Dosch, and Robert J. Paxton, the poster titled "Honeybee viruses in novel hosts" provides an explanation of a study aiming to gain insight into agrochemical-pathogen stress on wild bees.
- **PoshBee infographic:** captures the project objectives and expected outputs to provide a simple visualisation of PoshBee for the general public.

Fig.2: *PoshBee promotional material*

These promotional materials have been printed and circulated at various events where PoshBee participated (see Annex 1). Moreover, the brochure has been translated into other European languages (Spanish, French, Italian, German) in order to engage stakeholders on a local level.

3.3. News and articles

News items on the project website

The PoshBee news section features all project related news articles. To this date, 34 articles have been written and published on the project website. The 3 most recent articles are highlighted on the PoshBee home page (see fig.3).
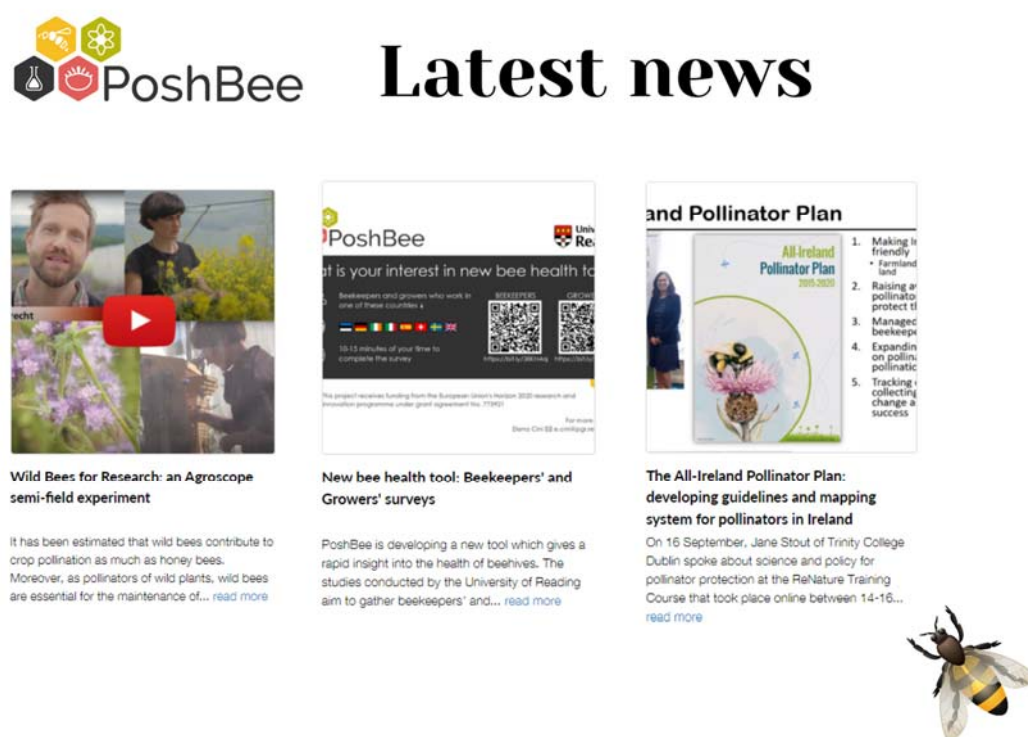
Fig.3: *PoshBee website: latest news section*

PoshBee "Buzz" Newsletter & success stories

The PoshBee newsletter is circulated among subscribers via Mailchimp, an easy to use marketing automation platform and email marketing service. The newsletter is sent on a yearly basis. To this date, PoshBee has published two newsletters, with the third one scheduled to be issued in June 2021. With an attractive and engaging design, PoshBee newsletters encompass the most exciting and insightful project developments. The first newsletter was sent to a total of 162 recipients, whereas the second went to 200 recipients. Both newsletters are available to download in the media section of the website

In addition to the yearly newsletter, PoshBee sends periodic 'success stories' to project partners. These email campaigns are circulated on a monthly schedule, aiming to maintain presence and

encourage consortia members to send relevant news and developments to the dissemination team at Pensoft.

Fig.4: *PoshBee newsletters and success stories*

Press releases

In accordance with the project communication plan, PoshBee press releases are to be issued in order to amplify the project visibility. To this date, two press releases have been published and circulated.

The first PoshBee press titled "Assessment, monitoring, and mitigation of stressors on bee health" was issued on 27 August 2018. It was published on the *Eurekalert*! and *CORDIS Wire* platforms.

The second PoshBee press release titled "EU-funded Horizon 2020 project PoshBee gathers in Marseille to discuss all things bee health" was issued on 16 January 2020. It was published on the project website

Both press releases have been published on the PoshBee website, under the project media center, and are publicly available to view and download.

External articles

In addition to our internally produced news articles, PoshBee has been featured in the news/blogs sections of the partners' websites, as well as in various international and local newspapers and magazines. Following the project's second annual meeting, two news articles featuring PoshBee and highlighting the meeting were published in the local French newspapers – *Agra* and *Bienvenue sur La Dépêche Vétérinaire.* Moreover, several articles featuring PoshBee were published in the Swiss Bauern Zeitung (see Annex 1).

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3.4. Social media

PoshBee is present on 3 social media channels: Twitter, Facebook and YouTube (see table 2). Each social network offers different benefits for the communication and dissemination of the project results and outputs.

Channel	Account name	Number of followers	Number of posts
Twitter	@poshbee_eu	746	462 (including retweets)
Facebook	@poshbee.eu	263	42
YouTube	PoshBee Project	7	3

Table 2: *PoshBee social media channels overview*

Twitter

Twitter provides short, fast and easy communication. This social network is popular and has a high number of users. Twitter is increasingly used professionally as a means of fast communication of organization specific news and events. The PoshBee Twitter feed has proven to be successful with a relatively high number of followers (746).
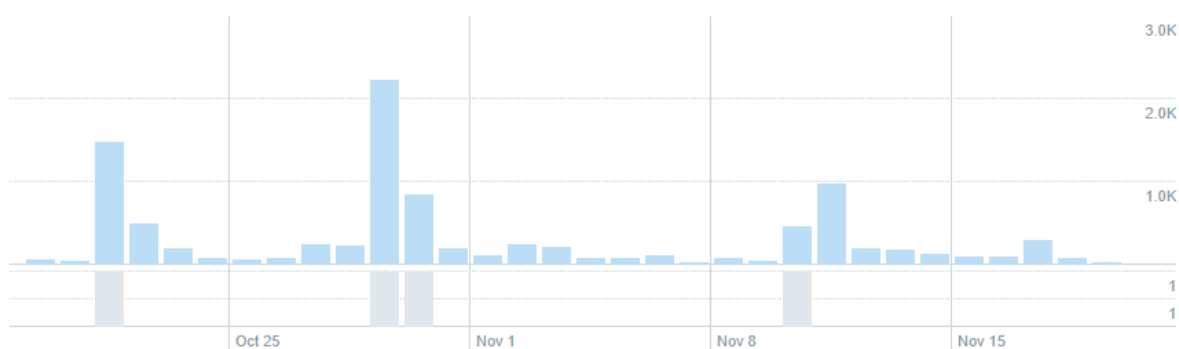
Fig. 5: *PoshBee recent Twitter activity*

For the period between 19 October 2020 and 19 November 2020, PoshBee tweets have made nearly 10 000 impressions (the number of times people have seen a tweet). The tweet that has gathered most attention during the period is a recent announcement of two PoshBee surveys aiming to determine the needs of beekeepers and farmers. It has received 4559 impressions, and a total of 259 engagements (detail expands, link clicks, retweets, media engagements, likes, profile clicks, and hashtag clicks). This high engagement rate with PoshBee questionnaires leads us to believe that Twitter can serve as a tool for interacting with target audiences.

Further dissemination activity on Twitter can be found in Annex 1. Some of the more prominent tweets of partners include those highlighting the second annual meeting of PoshBee in Marseille, France, as well as those advertising the survey linked to the Bee Health card.

Facebook

Although not the most preferred medium for scientific discourse, but rather as one for sharing personal experiences, Facebook remains one of the most popular social networks up to this day. The number of PoshBee followers on Facebook has grown by nearly 5% over the last 28 days - from 251 followers on 21 October 2020 to 263 followers on 19 November 2020 (Fig. 6). Analysis shows that PoshBee followers on Facebook are generated organically, with no additional advertising of the page applied in order to attract potential new followers.

Fig. 6: *PoshBee recent Facebook activity*

The best performing post for the same period is the announcement of the publication of the *Wild Bees Fly for Research: A semi-field experiment by Agroscope* video. It has been viewed by a total of 599 people, gaining 15 reactions.

YouTube

YouTube is the newest social media channel used by PoshBee. The platform is commonly used by academia for scientific videos, online academic courses, etc. The PoshBee YouTube channel currently has a collection of three videos, which present in an engaging manner field work and research that is being conducted within the project. However, as the project progresses, more videos will be added to PoshBee's collection (e.g. on training activities). The *Wild Bees Fly for Research: A semi-field experiment by Agroscope* video, which is also available on the PoshBee YouTube channel, is one of the dissemination activities reported by project partner Agroscope (see Annex 1).
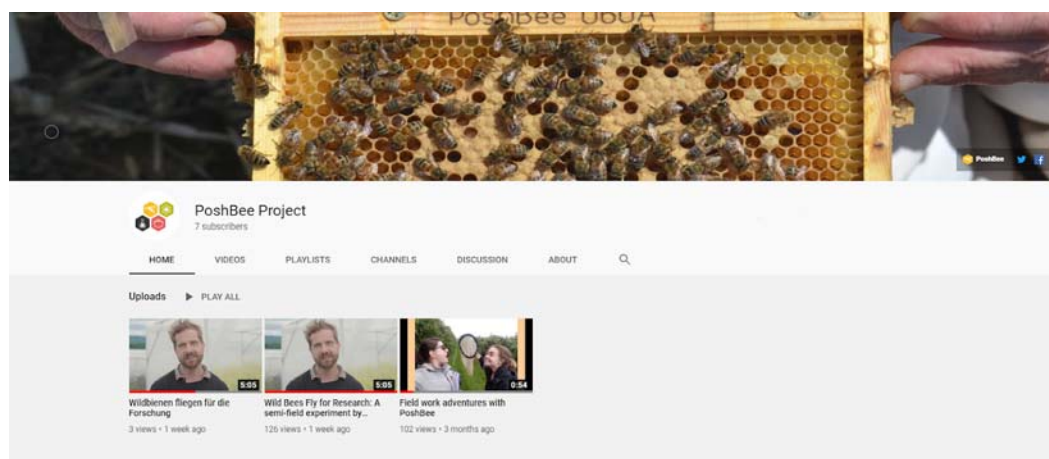

Fig.7: *PoshBee's channel on YouTube*

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3.5. Practice abstracts

As already mentioned in the previous chapter, in an effort to present project results to stakeholders and the general public in a clear and comprehensive manner, PoshBee has published a total of four practice abstracts. These documents aim to translate important project research and results for the needs of practitioners.

- **Practice Abstract 1**: The first practice abstract of the PoshBee project provides a brief overview of the research that is conducted within the project, and it provides a description of project activities that aim at solving practitioners' problems.
- **Practice Abstract 2:** Many recent reports describe long-term declines in insects. 'PoshBee' aims to identify factors negatively impacting bees in European farmland, and in 2019 performed an extensive pan-European field study over 8 countries. The second PoshBee practice abstract features recommendations for groups planning to perform multi-partner, farm-scale, field studies on pollinating insects.
- **Practice Abstract 3**: Scientific analyses showed that clothianidin exposure had no effect on pathogen levels in honeybees, but neonicotinoid exposure in agricultural landscapes strongly affects bumblebees and solitary bees. Farmers are advised to consider adjusting their plant protection strategy to reduce pesticide use, particularly in flowering crops and during bloom.
- **Practice Abstract 4**: Communication between scientists and beekeepers is essential, especially when an experiment is conducted. In the fourth practice abstract project partners make experience-based recommendations for timely planning and the essence of finding a good communicator between scientists and beekeepers when joint research actions are to be made.

All four abstracts are available on the EIP-AGRI platform:
https://ec.europa.eu/eip/agriculture/en/find-connect/projects/pan-european-assessment-monitoring-and-mitigation

3.6. Events and networking

By month 30 of the project's duration, consortium members have attended a high number of project relevant events. Annex 1 gives an overview of these events and their category – conferences, workshops, exhibitions, trainings, brokerage events, pitch events, trade fairs, joint initiatives etc.

Some prominent international events include the 10th ESP World Conference 2019 in Hannover, Germany; the 2019 ANSES/EFSA International Bee Health Conference in France, Paris, and the 2020 SETAC Europe 30th annual meeting.

Fig.8: *PoshBee consortium members at relevant events*

3.7. Scientific publications

PoshBee partners have published papers in various scientific journals during the first half of the project implementation. These publications will ultimately contribute to the evolution of the project. Annex 2 gives an overview of the publications type, authors, journal of publication etc.

3.8. Public project deliverables

The deliverables that the project will produce are listed in the Grant Agreement. The public deliverables produced during the first 30 months of the project are available via the project website, in the library section.

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3.9. Workshops

A methods training workshop was held at CREA in Bologna Italy, organized by CREA and TCD. The workshop focused on the protocols, demonstrations, and practices to be applied when taking samples from field-placed *Apis*, Bombus and *Osmia*. Over 30 participants took part, with representatives from all nine PoshBee field partners, in addition to honeybee organisations, suppliers of the solitary bees, and Project partners responsible for sample analysis.

Fig.9: *PoshBee 2019 workshop at CREA in Bologna, Italy*

3.10.   Synergies with other projects

PoshBee is exploring synergies with other projects, including potential collaborations working with the H2020 project Ecostack. This has been facilitated through attendance by PoshBee members at both EcoStack's first and second annual meeting. Direct discussions to develop potential collaborations happened at EcoStack's first annual meeting, and then at PoshBee's second annual meeting, and these discussions are continuing.

A joint stand with the H2020 project B-GOOD and other bee/pollinator related projects was planned for the 2020 Eurbee 9th congress in Belgrade, Serbia. However, in the light of the recent COVID-19 pandemic, this event has been postponed for the year 2022 and the joint initiative could not take place as anticipated.

4. Monitoring and evaluation

The communication strategy and dissemination plan (D11.3) is revised on a regular basis, taking into account the baseline activities and their expected frequency. In can be observed that PoshBee has achieved a considerable impact through communication and dissemination activities during the first half of the project implementation. Table 3 gives an overview of the KPIs estimation for PoshBee's Twitter and Facebook accounts, as well as the results for these channels in month 30 of the project.

Indicator	Unit	Twitter target	Twitter results	Facebook target	Facebook results
New followers	Per 6 months	+150 followers	751 KPI: 750 / +1	+50 followers	264 KPI: 250 / +14
Tags (being tagged in posts)	Per month	+2	384 KPI: 60 / +324	+1	143 KPI: 30 / +113
Followers from specific target groups	Per 6 months	+40	*No automatic categorisation possible*	+10	*No automatic categorisation possible*
Likes (or other reactions)	Av. per post	5	11.5 KPI: 5 / + 6.5 per post	5	5.3 KPI: 5 / +0.3 per post
Share	Av. per post	5	4.2 KPI: 5 / -0.8 per post	2	3.4 KPI: 2 / +1.4 per post
Impressions / post reach	Av. per month	5000	6680 KPI: 5000 / +1680 per month	200	680 KPI: 200 / +480 per month

Table 3: *Assessment of Planned Dissemination against Success Criteria*

The columns 'Twitter results' and 'Facebook results' can be interpreted as follows: number of followers, posts, likes (indicator), followed by the key performance indicators (KPIs) for the respective category and the exceeded or not reached value (marked by either + or -). According to the table, the project social media channels have met and exceeded the targets on almost all fronts. The number of tags and impressions for both Twitter and Facebook, as well as the average likes per post on Twitter have exceeded the target KPIs substantially. The anticipated number of followers on both social media platforms have met the KPI target. The only category which failed to meet the KPI is the average share (retweet) per post on Twitter (4.2 average shares per post in contrast to the estimated 5 per post). As mentioned in D11.3, these numbers serve as guidelines and may vary each period depending on the relevance and volume of project content. More detailed information about the performance of PoshBee's Twitter and Facebook channels can be found in Annexes 3 and 4 respectively.

With regards to planned baseline activities and their frequencies, D11.3 provides a plan which outlines these. Table 4 gives an overview of these activities and their planned frequency, as well as their current status after the first half of the project implementation.

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Baseline activity	Planned frequency	Status
Press pack	Updated each year to include new information and multimedia materials as they come	Achieved. This item refers to the PoshBee media centre, which has been updated with new promotional materials on a regular basis.
Electronic newsletter	1 every year	Achieved. The two newsletters were circulated on time, with the next one scheduled for June 2021.
News and events	Minimum 1 per month	Achieved and exceeded. To this date (M30), 34 news articles and 71 events have been published in the news and calendar sections respectively.
Social network	Minimum 2 posts per week	Achieved and exceeded. See Table 3 and Annexes 3 & 4 for an overview of the social media channels and their performance.
Attendance at conferences	Minimum 5 per year	Achieved and exceeded. See Annex 1 for a full overview of the conferences where PoshBee was present.
Publication in relevant media	Minimum 2 per year	Achieved and exceeded. See Annex 2 for a full overview of the publications and media outlets by PoshBee consortia members.

Table 4: *Baseline activities and their planned frequency*

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5. Conclusions

This report covered the dissemination activities of PoshBee partners for the first half of the project implementation. Overall, the dissemination activities during the first 30 months of PoshBee have laid a strong base in terms of promoting the project and its mission. The visual identity for the project has been strengthened and implemented in all project materials (project logo, sticker, brochure, poster, scientific poster, infographic etc.). These materials have been shared amongst the partners and used at both internal and external events.

The main online communication channels have been set up and established; these include the project website (with dedicated resources, news and events section, description of the project's objectives and expected outcomes), and social media (Twitter, Facebook and YouTube). The newsletter and regular success stories have been designed according to the visual identity of PoshBee and are growing a steady number of subscribers. According to the statistical analysis in chapter 3, these communication channels are growing at a healthy rate. They will keep publishing project news and developments, targeting the main audiences with relevant content on a regular basis.

With regards to interactions with external media outlets, official press releases have been drafted and circulated on relevant research platforms. PoshBee also made an impact in the local press, receiving coverage in several local languages. In an effort to provide concise information to practitioners, the project has published a total of four practice abstracts on the EIP-AGRI platform.

Based on the contents of this report, we conclude that targets for the first half of the project have been met on all fronts. PoshBee will continue to maintain a strong presence on all communication channels (website, newsletter, social media etc.). Additional resources will be dedicated to promoting, maintaining and updating the newly launched PoshBee YouTube channel, where a collection of the project videos will be stored. With the help of its active consortium, PoshBee is in a good position to continue achieving a high level of dissemination activity.

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Annex 1

PoshBee list of Dissemination & Communication Activities

Type of activity: 1) Organisation of a Conference, 2) Organisation of a Workshop, 3) Press release, 4) Non-scientific and non-peer-reviewed publication (popularised publication), 5) Exhibition, 6) Flyer, 7) Training, 8) Social Media, 9) Website; 10) Communication Campaign (e.g. Radio, TV), 11) Participation to a Conference, 12) Participation to a Workshop, 13) Participation to an Event other than a Conference or a Workshop, 14) Video/Film, 15) Brokerage Event, 16) Pitch Event, 17) Trade Fair, 18) Participation in activities organized jointly with other EU project(s), 19) Other
Type of audience: 1) Scientific Community (Higher Education, Research), 2) Industry, 3) Civil Society, 4) General Public, 5) Policy makers, 6) Media, 7) Investors, 8) Customers, 9) Other

No.	Type of activity	Main partner	Title	Date	Place	Type of audience	Size of audience	Countries addressed
1	11	ANSES	European Week of Bees and Pollination 2018	26 Jun 2018	Belgium/Brussels	3, 5, 7, 9	50	EU Member States
2	3	TCD	€9 million Horizon 2020 project – PoshBee – will protect global bee health	27 Jun 2018	Ireland	1, 2, 3, 4, 5, 6, 7, 8, 9	>200	International
3	3	RHUL	New generation of pesticides can reduce bumblebee reproduction	14 Aug 2018	UK	1, 2, 3, 4, 5, 6, 7, 8, 9	>200	International
4	19	Pensoft	PoshBee sticker	16 Aug 2018	Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	700	International
5	19	RHUL, Pensoft	PoshBee poster	17 Aug 2018	UK/Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	>300	International

6	6	RHUL, Pensoft	PoshBee flyer	21 Aug 2018	UK/Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	900	International
7	9	NFU	NFU joins €9 million PoshBee project on bee health	24 Aug 2018	UK	4	>100	UK
8	8	NFU	Tweet about kick-off meeting	24 Aug 2018	UK	4	673	International
9	8	NFU	Vlog about kick-off meeting	27 Aug 2018	France/Paris	4	1 677	International
10	3	RHUL, Pensoft	Assessment, monitoring, and mitigation of stressors on bee health	27 Aug 2018	UK/Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	>1 150	International
11	9	UM	Evaluación, monitoreo y mitigación de factores estresantes en la salud de las abejas	27 Aug 2018	Spain	4	>200	Spain
12	12	TCD	Aspects 2018	2 Sep 2018	Northern Ireland/Clandeboye	1, 3, 4, 9	30	Ireland/UK
13	3	Coldiretti	Al via il progetto Poshbee per tutelare la salute della api	14 Sep 2018	Italy	4, 5, 9	240 000	Italy
14	9	UNAAPI	Parte il progetto europeo Poshbee	20 Sep 2018	Italy	4, 9	~8 000	Italy
15	14	ALU-FR	W wie Wissen Insektenrückgang	6 Oct 2018	Germany	4	~100 000	Germany
16	8	ALU-FR	Insektenrückgang	6 Oct 2018	Germany	4	10 000	Germany
17	11	Pensoft	ESP Regional Europe conference 2018	15-19 Oct 2018	Spain/ San Sebastian	1, 2, 3, 4	500	Europe
18	6	UM, Pensoft	PoshBee flyer translated in Spanish	17 Oct 2018	Spain/Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	>200	International
19	12	TCD	Botany Department, University of Cambridge	Oct 2018	England/Cambridge	1	60	Ireland/UK
20	11	TCD	Irish Beekeepers Association	Oct 2018	Ireland/Dublin	4, 9	40	Ireland

21	14	RHUL	PoshBee research with Mark Brown	7 Nov 2018	UK	1, 2, 3, 4, 5, 6, 7, 8, 9	>150	International
22	6	ANSES, Pensoft	PoshBee flyer translated in French	28 Nov 2018	France/Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	>200	France
23	13	UNAAPI	Meeting of "Centro di riferimento tecnico per l'apicoltura - Patologie apistiche Unaapi"	5 Dec 2018	Italy/Rome	9	30	Italy
24	11	ANSES	Santé des abeilles : actualités en recherche et surveillance	12 Dec 2018	France/Paris	1, 3, 4, 5	120	France
25	8	ANSES	[#RencontresSc #Abeilles] Marie Pierre Chauzat, de l'@Anses_fr, présente le projet @poshbee_eu, qui vient de démarrer pour le développement d'outils pour protéger les #abeilles en Europe.	12 Dec 2018	France/Paris	1, 2, 3, 4, 5, 6, 7, 8, 9	>200	France
26	12	TCD, Teagasc	Bee Health Research	Dec 2018	Ireland	1, 5, 9	20	Ireland
27	4	FIBKA	Poshbee update (to keep beekeepers informed and to find some volunteers to help with project) for Irish beekeepers in "An Beachaire" magazine January 2019	1 Jan 2019	Ireland	4, 9	3 200	Ireland
28	8	NFU	Vlog about Murcia 2019 meeting	10 Jan 2019	Spain/Murcia	4	3 297	International
29	9	UM	La Universidad de Murcia trabaja junto a un proyecto europeo para mejorar el cuidado de la salud de las abejas	10 Jan 2019	Spain	4	>500	Spain
30	8	SLU	PoshBee AGM1 in Murcia	11 Jan 2019	Sweden, Uppsala	1, 4, 5, 7	176	Sweden
31	9	UM	La Universidad de Murcia trabaja junto a un proyecto europeo para mejorar el cuidado de la salud de las abejas	11 Jan 2019	Spain	1, 4	>150	Spain

32	4	UM	La Union Europea financia un proyecto sobre la salud de las abejas	12 Jan 2019	Spain	4	~30 000	Spain
33	9	UM	Asaja Murcia colabora con la Universidad de Murcia en el proyecto Europeo POSHBEE	14 Jan 2019	Spain	4	>400	Spain
34	12	TCD	Irish Pollinator Research Network	18 Jan 2019	Ireland/Dublin	5, 6, 7, 8, 9	20	Ireland
35	8	SLU	PoshBee WP1 colonies overwintering	21 Jan 2019	Sweden/Uppsala	1, 3, 4, 7	460	Sweden
36	3	UM	El proyecto europeo que intenta mejorar la salud de las abejas toma impulso en la Universidad de Murcia	22 Jan 2019	Spain	1	~3 000	Spain
37	9	UM	El proyecto europeo que intenta mejorar la salud de las abejas toma impulso en la Universidad de Murcia	24 Jan 2019	Spain	1, 2, 3, 4, 5, 6, 7, 8, 9	>500	Spain
38	13	BV ST	Berlin International Green Week	25 Jan 2019	Germany/Berlin	1, 2, 3, 4, 5, 6, 7, 8, 9	>500	Germany
39	19	UM	Blog post: "No sólo abejas; mariposas y otros insectos también están desapareciendo por las actividades del ser humano"	25 Jan 2019	Spain	4	~1 000	Spain
40	13	ALU-FR	Aha Festival Luzern	25-27 Jan 2019	Switzerland/Luzern	1, 2, 3, 4, 5, 6, 7, 8, 9	>300	International
41	11	UM	"Aula de Cultura" del Corte Inglés-UMU Divulga	28 Jan 2019	Spain/Murcia	4	100	Spain
42	10	UM	Proyecto de investigación acerca del estrés que sufren abejas y abejorros	31 Jan 2019	Spain	4	~3 000	Spain
43	3	Coldiretti	Progetto Poshbee sulla tutela delle api, summit in Spagna	1 Feb 2019	Italy	4, 5, 9	240 000	Italy
44	13	UNAAPI	34° Congresso Apicoltura Professionale Italiana	2 Feb 2019	Italy/Policoro-Matera	4, 9	250-300	Italy

45	13	RHUL	Wimbledon Beekeepers Association Seminar	4 Feb 2019	UK/London	3	~40	UK
46	11	BF, LRF, SLU	ApiScandia	8-10 Feb 2019	Sweden/Göteborg	1, 5, 7, 9	130	Norway, Sweden, Denmark, Finland, Estonia, Latvia, Lithuania
47	8	ANSES	[#FemmesdeScience #WomeninScience] Marie-Pierre Chauzat, Chef de projet surveillance #Abeilles, participe au tout récent projet #PoshBee, qui vise à évaluer, suivre et réduire le stress pesant sur la santé des abeilles au niveau européen.	11 Feb 2019	France/Paris	1, 2, 3, 4, 5, 6, 7, 8, 9	~8 000	France
48	6	ALU-FR/Pensoft	PoshBee flyer translated in German	13 Feb 2019	Germany/Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	>200	Germany
49	6	Coldiretti/Pensoft	PoshBee flyer translated in Italian	14 Feb 2019	Italy/Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	>200	Italy
50	13	UM	I Feria Apícola Internacional de Zamora (MELIZA)	15-17 Feb 2019	Spain/Zamora	9	200	Spain
51	13	TCD, Teagasc	TEAGASC Horticulture students	19 Feb 2019	Ireland/Dublin	1	20	Ireland
52	11	TCD	Symposium of post graduate students	26 Feb 2019	Ireland, Dublin	1	70	Ireland, UK, Switzerland
53	4	BF, LRF, SLU	POSHBEE: Nytt EU-projekt om bin	26 Feb 2019	Sweden	1, 7	13 050	Sweden
54	2, 12	FIBKA, CREA, SLU, UREAD, UNAAPI	PoshBee workshop: sampling protocols, demonstrations and practices (WP1 Methods Workshop, CREA)	27 Feb 2019	Italy/Bologna	1	30	Ireland, England, Sweden, Estonia, Germany, Switzerland, Spain, Italy

55	12	RHUL	ICPPR workshop	27 Feb 2019	Germany/Monheim	1, 2	~30	European
56	11	LRF, SLU	Fruktträff	27 Feb 2019	Sweden/Kristianstad	7	60	Sweden
57	12	MLU	ICPPR non-Apis workshop	27-28 Feb 2019	Germany/Monheim	1, 2, 9	100	International
58	13	WBF-Agroscope	ICPPR Meeting of non-apis group	28 Feb 2019	Germany/Monheim	1, 2, 9	100	International
59	1	UM	Los insectos se extinguen	1 Mar 2019	Spain	1, 3, 4, 5, 6, 7	>500	Spain
60	13	EMÜ	Beekeeping course to advanced beekeepers	2 Mar 2019	Estonia/Viljandi	9	20	Estonia
61	13	EMÜ, EPBKA	The spring days of professional Estonian beekeepers	2 Mar 2019	Estonia/Tuhalaane, Viljandi County	4, 9	30	Estonia
62	13	ALU-FR	Sustainability week Switzerland 2019	7 Mar 2019	Switzerland/Bern	1, 2, 3, 4, 5, 6, 7, 8, 9	>200	Switzerland
63	13	ALU-FR	Talk and discussion at NABU Kaiserstuhl	8 Mar 2019	Germany/Vogtburg	1	>20	Germany
64	13	UM	XXXVIII FERIA APÍCOLA INTERNACIONAL	8 Mar 2019	Spain/Pastrana	1, 9	50-60	Spain
65	13	UREAD	Slough and Windsor Beekeeing Association	12 Mar 2019	UK/Windsor	9	30	UK
66	13	BIOPARKA RCHAMPS, CNRS	Internal Scientific Day of CIRAD	14 Mar 2019	France/Montpellier	1	20-30	France

67	13	BV ST, SA	32nd Representative Assembly Beekeepers Association of Saxony-Anhalt e. V.	16 Mars 2019	Germany/Ilsenburg	4, 5, 9	200	Germany
68	13	BIOPARKA RCHAMPS, CNRS	IAB AU BLANC: Sharing research, strengths and values	18 Mar 2019	France/Grenoble	1	40	France
69	8	BIOPARKC HAMPS/C NRS	Dissemination of PoshBee information through local Information flyer: "Les Brèves du Park"	19 Mar 2019	France/Switzerland	4	1600	France & Switzerland
70	14	ALU-FR	Das große Insektensterben- was können wir tun	20 Mar 2019	Germany	1, 2, 3, 4, 5, 6, 7, 8, 9	>1 000	Germany
71	3	Coldiretti, CREA	Progetto Poshbee sulle api, si lavora ai protocolli di ricerca	20 Mars 2019	Italy	1, 3, 5, 7	240 000	Italy
72	4	BF, LRF, SLU	POSHBEE: Ett nytt europeiskt forskningsprojekt om bin, bihälsa och växtskyddsmedel	22 Mar 2019	Sweden	1, 5, 7	1 020	Nordic region (Norway, Denmark, Finland)
73	11	EMÜ	Estonian beekeepers Spring conference	23 Mar 2019	Estonia/Rakvere	4, 9	30	Estonia
74	4	FIBKA	PoshBee article (reporting on the training in Crea Bologna for POSHBEE) published in "An Beachaire" magazine April 2019	1 Apr 2019	Ireland	9	>3 200	Ireland
75	13	BIOPARKA RCHAMPS, CNRS	ANSES Scientific Days	4 Apr 2019	France/Sophia Antipolis	1	50	France
76	9	CREA	PoshBee, un nuovo progetto europeo su api e agrofarmaci	5 Apr 2019	Italy	1, 9	>1 000	Italy
77	19	UREAD	Policy Brief for UK government's (Defra) Pollinator Advisory Steering Group: Pan-European assessment,	5 Apr 2019	UK/London	1, 5, 9	50	UK

			monitoring, and mitigation Of Stressors on the Health of BEEs					
78	11	BBKA	BBKA Spring Convention	12-15 Apr 2019	England/Harper Adams University	9	~120	International
79	13	TCD	Symposium Lund University, Sweden	Apr 2019	Sweden/Lund	1	30	International
80	13	TCD	All-Ireland Pollinator Plan Workshop	April 2019	Ireland/Cork	1, 4, 5	150	Ireland
81	13	TCD	University of the Third Age, Dublin	1 May 2019	Ireland/ Dublin	4	20	Ireland
82	11	UM	Conference celebrating honeybee day	19 May 2019	Spain/As Pontes de García Rodriguez	1	30	Spain
83	19	Pensoft	Poshbee Buzz newsletter	25 Jun 2019	Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	>500	International
84	11	MLU	4th International Conference on Pollinator Biology, Health, and Policy	17-20 Jul 2019	Davis/ University of California Davis	1, 2, 9	150	International
85	19	Pensoft, RHUL, MLU	PoshBee overview infographic	29 Jul 2019	Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	>1 000	International
86	13	TCD	Phoenix Park Biodiversity Fetsival & Honey Show	14-15 Sep 2019	Ireland/ Dublin	4, 9	500	Ireland
87	14	ALU-FR	Effects of pesticides on insects	16 Sep 2019	Germany	1, 3, 4, 5, 9	>500	Germany

88	17	Pensoft	International Fair of apiculture products Varna 2019	17-19 Sep 2019	Bulgaria/Varna	9	>100	Moldova, Bulgaria, Turkey, Romania, Ukraine
89	13	UM	General Dissemination	2 Oct 2019	UK/University of Liverpool	1	40	UK
90	13	UREAD	Seminar	8 Oct 2019	UK/Winchestef	9	50	UK
91	11	EPBKA	Estonian local beekeepers Spring conference	11 Oct 2019	Estonia/Põltsamaa	4, 9	30	Estonia
92	13	RHUL	AGM meeting of Eco Stack (sister project)	15-16 Oct 2019	Portugal/Coimbra	1	50	International
93	13	ISA	"Beekeeper club meeting Beetzendorf"	18 Oct 2019	Germany/Rohrberg	1, 9	30	Germany
94	11	Pensoft	10th ESP World Conference 2019	21-25 Oct 2019	Germany/Hannover	1, 2, 3, 4, 5, 6, 7, 8, 9	800	International
95	11	WBF-Agrocope	ICPPR Meeting of non-apis group	22 Oct 2019	Switzerland/Bern	1, 2, 5	40	International
96	11	MLU	ICPPR Hazards of Pesticides to Bees	23-25 Oct 2019	Switzerland/Bern	1, 5, 7	50-100	International
97	4	TCD	Honey Pie - Are pollinators getting their fair slice?	28 Oct 2019	New Zealand	1, 3, 4	>1 000	international
98	13	TCD	Meeting of the Society of Irish Plant Pathologists	4 Nov 2019	Ireland/Celbridge	1, 5	50	Ireland
99	1, 11	AU, TCD	1st ALMaSS International Meeting	11-12 Nov 2019	Denmark/Aarhus	1	30	International
100	13	EMU	Advisory board by Estonian Agricultural Board	20 Nov 2019	Estonia	5	20	Estonia

101	13	ISA	Germany/Haldensleben	20 Nov 2019	Germany/Ha ldensleben	4, 9	30	Germany
102	1, 11	BIOPARKA RCHAMPS, CNRS	Abeilles et Pathologies	21 Nov 2019	Tunisia/Bizer te	9	72	International
103	4	ATPOLL, RBH	Studying Multiple Stressors on Bees - Practical Aspects (for publication in Bee Craft, independent award-winning monthly magazine for British beekeepers, amateur and commercial)	22 Nov 2019	UK	9	>5 000	UK and Europe
104	13	TCD	SCAPE	26 Nov 2019	Sweden/ Lund	1	150	International
105	1, 11	CREA	Poshbee presentation to the growers involved in the project	28 Nov 2019	Italy	9	30	Italy
106	11	UMONS	EEF 2019	30 Nov 2019	Portugal / Lisboa	1	30	International
107	19	BV ST	Non-scientific and non-peer-reviewed journal for farmers: EU-Forschungsprojekt PoshBee soll Bienen & Co helfen (EU research project PoshBee is supposed to help bees & Co Farmers' Association is a partner)	15th Edition 2019	Germany	9	~30 000	Germany
108	8	FIBKA	Dissemination of PoshBee information through FIBKA Facebook page	2018-2019	Facebook page for FIBKA	4, 9	>5 000	Ireland & the world
109	13	INRA	International Beekeeping Equipment Exhibition	6 Dec 2019	France/Avig non	9	100	France
110	13	RHUL, ANSES, AU	ANSES/EFSA International Bee Health Conference	9 Dec 2019	France/Paris	1, 2, 5, 7, 9	300	International

111	8	NFU	Twitter: PoshBee Marseille meeting	14 Jan 2020	UK	1, 2, 3, 4, 5, 6, 7, 8, 9	3297	International
112	3	PENSOFT	EU-funded Horizon 2020 project PoshBee gathers in Marseille to discuss all things bee health	16 Jan 2020	France/Marseille	1, 2, 3, 4, 5, 6, 7, 8, 9	>100	International
113	19	EPKK	EPKK members newsletter	20 Jan 2020	Estonia	1, 2, 9	110	Estonia
114	8	BIOPARKA RCHAMPS	Twitter: PoshBee AGM2	21 Jan 2020	Online	1	>100	International
115	3	EPKK	POSHBEE project working group meeting	23 Jan 2020	Estonia	1, 2, 9	>110	Estonia
116	11	BIOPARKA RCHAMPS	Coloss Asia conference 2020	6-7 Feb 2020	Thailand/Chiang Mai	1	40	Multi-national
117	9	SLU	Mångmiljonsatsning på pollinerare - anmäl dig till biodlarkonferensen	11 Feb 2020	Sweden	1, 9	>100	Sweden
118	11	SLU	Biodlingföretagarnas Årsmöte	21-23 Feb 2020	Sweden/Sunne	1, 2, 3, 4, 5, 6, 7, 8	255	Sweden, Norway, Finland, Denmark, Belgium, France, Canada
119	13	SLU	Möte för raps-, äppel-, klöverfrö- och biodlare i projekten PoshBee, MixToxBee, BECClover och IPPM	28 Feb 2020	Sweden/Brösarp	1, 9	27	Sweden
120	13	UM	Beekeepers annual meeting	28 Feb 2020	Spain/La Palma	9	35	Spain
121	19	ANSES	Une participation remarquée de l l'Unité pathologie de l'abeille a l'Assemblee generale de POSHBEE	Feb 2020	France	1, 2	>100	France
122	13	UM	XXXVIII FERIA APÍCOLA INTERNACIONAL	8 Mar 2020	Spain/Pastrana	9	>100	Spain
123	13	EMÜ	Discussion with an audience after the movie "Honeyland"	9 Mar 2020	Estonia/Tallinn	4	100	Estonia

124	8	BIOPARKA RCHAMPS	Twitter: Apiculture day at Montbrison	10 Mar 2020	Online	1	>100	International
125	13	EMÜ	Presentation at the Estonian Ministry of Rural Affairs	12 Mar 2020	Estonia/Tallinn	1, 5, 9	30	Estonia
126	3	Coldiretti	"Tutela delle api: nuovi metodi di ricerca sui fattori di stress (in EN: Bee protection: new research methods on stressors)"	9 Apr 2020	Italy	4, 5, 9	240 000	Italy
127	11	TCD	SETAC Europe 30th annual meeting	3-7 May 2020	Online	1, 2, 5, 7, 8, 9	1 606	International
128	14	UM	Divulgando en tiempos de confinamiento XII	7 May 2020	Spain	4	275	Spain
129	3	WBF-Agroscope	Wild bee fly for research	22 May 2020	Switzerland	4, 5, 6, 9	60 000	Switzerland / international
130	3	WBF-Agroscope	Wildbienen fliegen für die Forschung	26 May 2020	Switzerland	4, 5, 6, 9	60 000	Switzerland
131	19	WBF-Agroscope	Stakeholder newspaper article: Wildbienen im Einsatz	27 May 2020	Switzerland	4, 9	20 000	Switzerland
132	19	WBF-Agroscope	Stakeholder newspaper article: Wildbienen fliegen für die Forschung	28 May 2020	Switzerland	4, 9	20 000	Switzerland
133	3	UM	¿Cómo andan de salud las abejas?	2 Jun 2020	Spain/Murcia	4	potentially 145 000	Spain
134	19	Pensoft	Poshbee Buzz newsletter issue 2	15 Jun 2020	Bulgaria	1, 2, 3, 4, 5, 6, 7, 8, 9	>500	International
135	8	TCD	Twitch and YouTube	18 Jun 2020	Dublin	4, 9	>200	Ireland
136	8	BIOPARKA RCHAMPS	Twitter: Haemolymph collection at Agroscope-WP7-WP9 collaboration	22 Jun 2020	Online	1	International	International

137	8	NFU	PoshBee bee health tools	31 Jul 2020	UK	1, 2, 3, 4, 5, 6, 7, 8, 9	609	International
138	19	RHUL	Interview for Science Podcast	3 Aug 2020	UK	4	~200 000	Global
139	14	TCD, PENSOFT	Field work adventures with PoshBee	14 Aug 2020	Bulgaria	4, 9	>95	International
140	4	FIBKA	POSHBEE UPDATE (a 2 page Article in September "An Beachaire" magazine)	1 Sep 2020	Ireland	9	3500	Ireland
141	18	TCD	ReNature Training Course	16 Sep 2020	Online	1, 9	100	International
142	4	Coldiretti	Dal progetto Poshbee una Carta per la salute delle api, scatta il questionario	16 Sep 2020	Italy	4, 5, 9	240 000	Italy
143	8	Coldiretti	Twitter: Dissemination about the survey linked to the Bee Health Card	18 Sep 2020	Italy	4, 9	25 000	Italy
144	13	AU, MLU	EcoStack: second annual meeting	22-23 Sep 2020	Online	1, 9	80	International
145	13	RHUL	EcoStack: second annual meeting	22-23 Sep 2020	Online	1, 9	80	International
146	19	PENSOFT	PoshBee is featured in the September 2020 EIP-AGRI Beekeeping Report and Newsletter	Sep 2020	N/A	1, 2, 3, 4, 5, 6, 7, 8, 9	>200	International
147	4	ATPOLL, UREAD	PoshBee Survey (Article in 'Bee Craft' UK print and online magazine for amateur and commercial beekeepers)	Sep 2020	UK	9	5 500	International
148	13	BIOPARKA RCHAMPS	3ème Journée Intégrative de Protéomique et Métabolomique	08 Oct 2020	Online	1	80	France
149	13	INRAE	GDR Pollineco	14 Oct 2020	Online	1	60	Europe
150	8	BIOPARKA RCHAMPS, CNRS	Twitter: Thesis of Dr. Camille Houdelet linked to PoshBee project	14 Oct 2020	Online	1	>50	International

151	14	WBF-Agroscope	Wild bee fly for research –YouTube Film about WP7 semi-field work by WBF-Agroscope	22 Oct 2020	Switzerland	1, 4, 6, 9	>86	International
152	14	WBF-Agroscope	Wildbienen fliegen für die Forschung	22 Oct 2020	Switzerland	1, 4, 6, 9	>375	Switzerland, Germany
153	19	WBF-Agroscope	Article in Bauern Zeitung (Stakeholder newspaper): Bienen im Forschungs-Flug	23 Oct 2020	Switzerland	4, 9	30 000	Switzerland
154	19	WBF-Agroscope	Article in Schweizer Bauer (Stakeholder newspaper): Bienen im Forschungs-Flug	23 Oct 2020	Switzerland	4, 9	20 000	Switzerland
155	4	ATPOLL	What can We Learn From Photos of Honeybee Brood? (Article in 'Bee Craft' UK print and online magazine for amateur and commercial beekeepers)	Nov 2020	UK	1, 9	5 500	International

Annex 2

List of PoshBee scientific articles
Publication type: (1) Peer-reviewed publication, (2) Paper in a conference proceedings, (3) Book chapter, (4) Thesis, (5) University publication. OA = Open access; WP = Work-Package

No.	Publication type	DOI	Title	Author(s)	Journal	Vol./ Issue	Pages	Year	OA	WP
1	1	10.1038/s41586-018-0430-6	Sulfoxaflor exposure reduces bumblebee reproductive success	Siviter H, Brown MJF, Leadbeater E	Nature	561/7721	109-112	2018	Yes	3
2	1	10.7717/peerj.7208	No evidence for negative impacts of acute sulfoxaflor exposure on bee olfactory conditioning or working memory	Siviter H, Scott A, Pasquier G, Pull CD, Brown MJF, Leadbeater E	PeerJ	7	e7208	2019	Yes	3
3	1	10.1111/1365-2664.13519	Sulfoxaflor exposure reduces egg laying in bumblebees *Bombus terrestris*	Siviter H, Horner J, Brown MJF, Leadbeater E	Journal of Applied Ecology	57/1	160-169	2019	Yes	3
4	1	10.3390/insects11040239	Diversity and global distribution of viruses of the Western Honey Bee, *Apis mellifera*	Beaurepaire, A.; Piot, N.; Doublet, V.; Antunez, K.; Campbell, E.; Chantawannakul, P.; Chejanovsky, N.; Gajda, A.; Heerman, M.; Panziera, D.; Smagghe, G.; Yañez, O.; de Miranda, J.R.; Dalmon, A.	Insects	11/4	239	2020	Yes	

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5	1	10.3389/fmicb.2020.00766	Interactions between thiamethoxam and Deformed Wing Virus can drastically impair flight behavior of honey bees	Coulon M, Dalmon A, Di Prisco G, Prado A, Arban F, Dubois E, Ribière-Chabert M, Alaux C, Thiéry R and Le Conte Y	Frontiers in Microbiology	11		2020	Yes	
6	1	10.3389/fmicb.2020.00943	Bee Viruses: routes of infection in Hymenoptera	Yañez O, Piot N, Dalmon A, de Miranda JR, Chantawannakul P, Panziera D, Amiri; E, Smagghe G, Schroeder D, Chejanovsky N	Frontiers in Microbiology	11	943	2020	Yes	
7	1	doi.org/10.1098/rspb.2020.0935	Individual and combined impacts of sulfoxaflor and *Nosema bombi* on bumblebee (*Bombus terrestris*) larval growth	Siviter H, Folly AJ, Brown MJF, Leadbeater E	Proceedings of the Royal Society B	Vol 287	2020935	2020	Yes	6
8	1	10.1111/1751-7915.13673	The novel insecticides flupyradifurone and sulfoxaflor do not act synergistically with viral pathogens in reducing honey bee (*Apis mellifera*) survival but sulfoxaflor modulates host immunocompetence	Al Naggar, Yahya Paxton, Robert J.	Microbial Biotechnology			2020	Yes	6
9	4		Immunoproteome analysis of the honeybee in response to environmental stressors					2020		
10	1	In review	Roundup causes high levels of contact mortality in bumblebees	Straw E, Carpentier E, Brown M						

11	1	In preparation	Sulfoxaflor insecticide and azoxystrobin fungicide have no major impact on honeybees in a realistic-exposure semi-field experiment	Giovanni Tamburin, Dimitry Wintermantel, Matthew J Allan, Robin R Dean, Anina Knauer, Matthias Albrecht, Alexandra-Maria Klein	Science of the Total Environment					
12	1	In preparation	Sulfoxaflor and nutritional deficiency synergistically reduce survival and fecundity in bumblebees	Alberto Linguadoca, Cristiana Rizzi, Sara Villa, Mark J. F. Brown						
13	1	Submitted	An integrated system of equipment for honeybee studies	Allan M, Dean R	Journal of Apicultural Research					

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Annex 3

Detailed results of the PoshBee Twitter performance. Each period of analysis covers 91 days, starting from 23. August 2018 to 18. November 2020.

Period: 91 days	Number of posts	Impressions	Engagement rate	Link clicks	Retweets	Likes	Replies
23 Aug. – 21 Nov. 2018	12	24 400 (avg. 268 per day)	1.5%	264	67	120	1
22 Nov. 2018 – 20 Feb. 2019	20	24 900 (avg. 273 per day)	1.3%	117	40	177	6
21 Feb. – 22 May 2019	4	10 900 (avg. 120 per day)	0.9%	39	23	68	1
23 May – 21 Aug. 2019	3	7 000 (avg. 77 per day)	1.7%	65	22	39	0
22 Aug. – 20 Nov. 2019	13	19 400 (avg. 214 per day)	0.8%	68	44	111	2
21 Nov. 2019 – 19 Feb. 2020	32	55 200 (avg. 607 per day)	1.0%	259	112	369	10
20 Feb. – 20 May 2020	6	20 000 (avg. 220 per day)	0.8%	33	21	68	3
21 May – 19 Aug. 2020	6	17 400 (avg. 192 per day)	1.3%	77	49	113	7
20 Aug. – 18 Nov. 2020	10	21 600 (avg. 237 per day)	2.3%	159	66	154	3
M1 – M30	106	200.4K (avg. 245 per day)	1.3%	1081	444	1219	33

Annex 4

Results of the PoshBee Facebook performance, covering all activity from the launch of the social media channel.

Period	Number of posts	Impressions	Shares	Likes	Comments
M1 – M30	42	20 400 (avg. 680 per month)	143	221	4