Project funded by the Horizon 2020

Grant Agreement no. 829010

Call: H2020-FETOPEN-2018-2020
Topic: FETOPEN-01-2018-2019-2020
Type of Action: RIA (Research and Innovation action)
Name of Lead Beneficiary: CSIC, Spain
Project Start Date: 1st May 2019
Project Duration: 54 months

DELIVERABLE 4.6:
Dissemination event for stakeholders interested in PRIME's technology

Due date of Deliverable:	31/10/2023
Actual Submission Date:	**31/10/2023**
Responsible partner:	CSIC
Report authors:	Caitlin Ahern, Carmen Gámez, Carlos Sánchez Somolinos,
Type1[1]:	R
Dissemination Level[2]:	PU

[1] **Type**: Use one of the following codes (in consistence with the Description of the Action):
- R: Document, report (excluding the periodic and final reports)
- DEM: Demonstrator, pilot, prototype, plan designs
- DEC: Websites, patents filing, press & media actions, videos, etc.
- OTHER: Software, technical diagram, etc.

[2] **Dissemination level**: Use one of the following codes (in consistence with the Description of the Action)
- PU: Public, fully open, e.g. web
- CO: Confidential, restricted under conditions set out in the Model Grant Agreement
- CI: Classified, information as referred to in Commission Decision 2001/844/EC

Table of Contents

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

Document History

Version	Date	Authors/ who took action	Comment	Modifications made by
0.1	2023-10-04	Caitlin Ahern (BNN)	First draft written	BNN
0.2	2023-10-10	Carmen Gámez, Carlos Sánchez Somolinos (CSIC)	Revision	CSIC
0.3	2023-10-18	Carlos Sánchez Somolinos (CSIC)	Draft sent to PIs	
1.0	2023-10-31	Carmen Gámez (CSIC)	Submitted to Commission	

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

List of Abbreviations

EC	European Commission
EIC	European Innovation Council
KER	the Key Exploitable Result
M	Month
SME	Small Medium Enterprise
TRL	Technology Readiness Level

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

1 INTRODUCTION

1.1 PRIME project in a nutshell

Microfluidic devices manipulate tiny amounts of fluid enabling cost-effective, fast, accurate and high throughput analytical assays. Progress in Microfluidics has huge impact in environmental pollution monitoring, biohazard detection and biomedicine, contributing to the development of new tools for drug screening, biological studies, point-of-care diagnostics and personalized medicine.

Despite this huge potential, Microfluidics market growth is heavily constrained by the complexity and high prices of the required large-scale off-chip equipment and its operational cost. PRIME will use additive manufacturing of responsive materials for the direct implementation and integration of smart valves and pumps in a microfluidic chip. Additionally, new ultra-sensitive and selective sensors will be embedded in the chip and readable with light. The final device will be remotely addressed and read using simple photonic elements that can be integrated in compact, portable and cheap operation&read devices.

PRIME goes beyond the state-of-the-art generating a robust platform to create a new generation of active, tubeless and contactless microfluidic chips effectively changing the currently established paradigm. PRIME will develop a radically new platform that: i) integrates all the required responsive materials and elements in the chip, effectively providing it with all the fluidic and sensing functions, ii) uses compatible materials and manufacturing technologies making future industrial production viable and cost-effective, iii) allows to implement with extensive freedom of design a plethora of new smart-integrated and easy-to-operate microfluidic chips. PRIME will thus narrow the gap between Microfluidics and non-specialized laboratories and end-users enabling the spread and penetration of the technology in diverse application fields as well as its geographical expansion to areas where large equipment is difficult to transport or resources are scarce.

1.2 Objectives

The PRIME project has been awarded funding by the European Commission (EC), which requires the whole consortium to communicate the project and disseminate its results to a wider public community. The exploitation strategy of the project results has been conceived in connection to the Communication and Dissemination strategy that has set the communication activities targeting the relevant stakeholders to be reached. Specifically, we have organized in month 53 (M53) of the project (September 2023) a dissemination event aimed at engaging stakeholders interested in PRIME's technology, with the goal of sharing our findings and delving deeper into their potential. This document gathers the activities carried out around this event. The dissemination level of this document is Public.

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

2 PLANNING OF EVENT

The event was planned by CSIC and BNN as part of WP4 activities. The consortium decided on the title "Microfluidics in their PRIME: Microfluidic Chips, Active Valves, Smart Sensors, and What Comes Next," in an attempt to make clear to those interested what to expect from the event.

2.1 Date and location

It was decided not to schedule the event as a satellite event at an existing conference, as recent conference participation has been lower and schedules busier. Thus, PRIME participants had noticed a decrease in success of satellite events in their other projects.

Instead, BNN planned the event to occur back-to-back with their Annual Forum, where several members of the microfluidics community and the Advanced Microfluidics Initiative technology platform (coordinated by BNN) would be present. Having the event at the same venue would also reduce organizational burden.

The event was set for Thursday, 14 September 2023 from 9:30-13:30. The location was TUtheSky, a top-floor venue with panoramic balcony on the Technical University of Vienna, very close to the city center. Vienna was also chosen rather than Graz (BNN) or Zaragoza (CSIC) because it is much better connected to major airports.

A hybrid set-up ensured that participants could join online who were unable to travel to Vienna for the event.

In addition to booking the venue, BNN organized all the event details, including the IT setup for a hybrid event, the catering, the hotel contingents in the neighborhood, and the online registration.

2.1.1 Event registration and privacy

The PRIME website contained a subpage with a registration link connecting the viewer to a GoogleForm. Here the participant could register for either online or in-person attendance, declare any food allergies, and indicate their interest in each of the Key Exploitable results. The registrations were sent to a GoogleSheet visible to BNN and CSIC only. All personal data were maintained in accordance with the PRIME project and BNN's privacy policy.

2.2 Programme

The entire consortium discussed the programme for the event in our monthly meetings. It was decided that all technical partners should give a presentation, not just the Key Exploitable Results owners. Each presentation would be roughly 10 minutes long with time for questions.

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

In addition, we invited two speakers: one from Joanneum Research, representing NextGenMicrofluidics, an H2020 project related to microfluidics but at a higher TRL, interesting for post-project activities, and one from Micronit, a reference company in the European microfluidics landscape. Both speakers work with BNN in the NextGenMicrofluidics project.

Time was set aside at the end of the workshop for the participants to introduce themselves and their affiliations, and to have time for discussion with the Key Exploitable Results owners. Finally, a general networking lunch (buffet) was offered.

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

PROGRAMME

Time	Topic	Speaker(s)
9:00-9:30	Arrive / registration / coffee & tea	
9:30-9:40	Welcome	Peter Ertl (Designated Vice-Rector of TU Vienna, Chair of Advanced Microfluidics Initiative)
9:40-10:20	• Keynote: PRIME: Advanced and versatile PRInting platform for the next generation of Microfluidic dEvices	Carlos Sánchez Somolinos (CSIC)
	• Computational and Analytic Modelling for PRIME Actuation	Carl Modes (MPI)
	• Removing barriers in Organ-on-Chip	Rosa Monge (BEOnChip)
10:20-10:40	Break	
10:40-11:40	PRIME's Key Exploitable Results	
	• 4D printable light driven autonomous fluidic functions	Ignacio Ochoa (UNIZAR)
	• Ultrasensitive and selective biosensors with colorimetric thermal transducer	Jesus Martinez de la Fuente (CSIC)
	• Thermoplastic liquid crystal elastomer (LCE) actuators	Sean Lugger (TU/e)
11:40-12:30	Roundtable Introductions and matchmaking	
	• NextGenMicrofluidics: Platform for upscaling of microfluidic chips on foil substrates	Anja Haase (Joanneum Research)
	• Title TBD	Maciej Skolimowski (Micronit)
	• General introductions	All
12:30-13:30	Networking lunch	

Find more details and register on our website: https://www.project-prime.eu/event/final-event

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

Figure 1: Programme

3 PROMOTION OF EVENT

BNN, as communication and dissemination manager, handled most of the promotion of the event.

A graphic was created by BNN for use on websites and social media. The image within combines two elements found on the project website: a microfluidic chip and, when zooming in on one of the holes, it reveals molecules within.

Figure 2: Graphic for Final Dissemination Event

The event was posted on the PRIME website on 23 June 2023 under the link https://www.project-prime.eu/event/final-event/ and promoted on social media from July 3 onward.

In total, 9 social media posts were published on LinkedIn and Twitter each. The event was announced and a few weeks later a reminder post was made. Then, BNN created a series of posts announcing 7 of the speakers (who were willing to share their photos) and the titles of their upcoming talks.

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

Figure 3: Example of a graphic created for the series of speaker posts

To complement the website information, each KER owner was asked to write a scientific abstract for their respective KER and create a single slide for a brief graphical overview. The website also contained a link to the programme, as well as travel information to the venue.

The event was promoted via the BNN QUARTERY in June[3], in the Microfluidics special edition of the Human.Technology Styria cluster's BOTENSTOFF[4], on the events section of the TU Vienna website and on LISAvienna's website for life sciences[5]. All consortium members were asked to further promote the event on their institutional websites and social media channels.

A communications toolkit was sent by BNN to all partners on 4 July 2023. It included links to social media posts that partners could share, a sample text for email invitation or newsletter, and the graphic to post on their websites.

Furthermore, individual invitations were sent by all consortium members to those prominent in the field of microfluidics and nanotechnology. Invitations were personalized with e.g. the scientific abstract for those from academia and the single slide for industry. Special effort was put into

[3] BNN QUARTERLY 02/2023 published 29 June 2023, p. 67 https://www.bnn.at/bnn-quarterly-02-2023/
[4] HTS BOTENSTOFF Special: Microfluidics, published June 2023, p. 24 https://www.humantechnology.at/publikationen/
[5] LISAVienna https://www.lisavienna.at/de/veranstaltungen/detail/microfluidics-in-their-prime-microfluidic-chips-active-valves-smart-sensors-and-what-comes-next/

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

finding contacts at the companies identified as potential future partners or clients within the EIC Bootcamp training on October 2022.

4 EXECUTION OF EVENT

On the morning of the event, the room was set up with the PRIME roll-up and all presentations were prepared for viewing. Name tags, attendance list were printed. Only a few feedback forms and programmes were printed, with an eye on sustainability; participants were encouraged to use the forms online.

Attendees were treated to a welcome coffee and pastries before the event began, and enjoyed a view over Vienna from the balconies.

Figure 4: Event speakers on the venue

At the last minute, the welcome speaker had to cancel his participation. Thus, Caitlin Ahern from BNN took over the chairing of the event. The event proceeded smoothly and following the allotted time schedule. The online side of the event was carried out without any technical difficulties.

After the presentations and questions and answers, the participants were asked to introduce themselves and why they were interested in the event. Of note was BNN colleague Clemens Wolf who introduced the technology platform he coordinates called Advanced Microfluidics Initiative. Then we moved to the networking lunch over a buffet.

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

Figure 5: Jesús Martinez de la Fuente during his presentation

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

5 RESULTS

5.1 Follow-up to the event

After the event, thank-you emails were sent to all speakers. A link to the feedback survey was sent to all online participants.

To protect potential IP, the speakers agreed not to publish the presentations or recordings. Instead, BNN created a video summary of the event and published it online and on social media. The video can be viewed on LinkedIn here: https://www.linkedin.com/feed/update/urn:li:activity:7113442373057064961.

A summary of the event a small photo gallery was posted on the PRIME website here: https://www.project-prime.eu/2023/09/26/microfluidics-in-their-prime-brings-consortium-to-vienna/

5.2 Participation and visibility

There were 41 registrations for the event. Of those, 20 were considered external participants, not related to PRIME or to one of the consortium members. Of the external registrants, 1 was from an association, 1 from industry, 4 from SMEs and 14 from the scientific/academic community.

On the day, 18 people attended in person and 9 online. Of the 27 participants, 10 were external to the project.

Since publishing the event on the website on 23 June, the event subpage was viewed 300 times. The LinkedIn posts surrounding the event had a total of 2093 impressions. On Twitter, the posts reached 3307 impressions. The LinkedIn page also received an increase of 40 followers in that time period.

5.3 Feedback

A feedback survey was sent to all participants via a QR code at the event as well as paper forms, and a link via email to those who participated online.

In total, 10 people filled out the survey. The results of the survey are presented below:

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

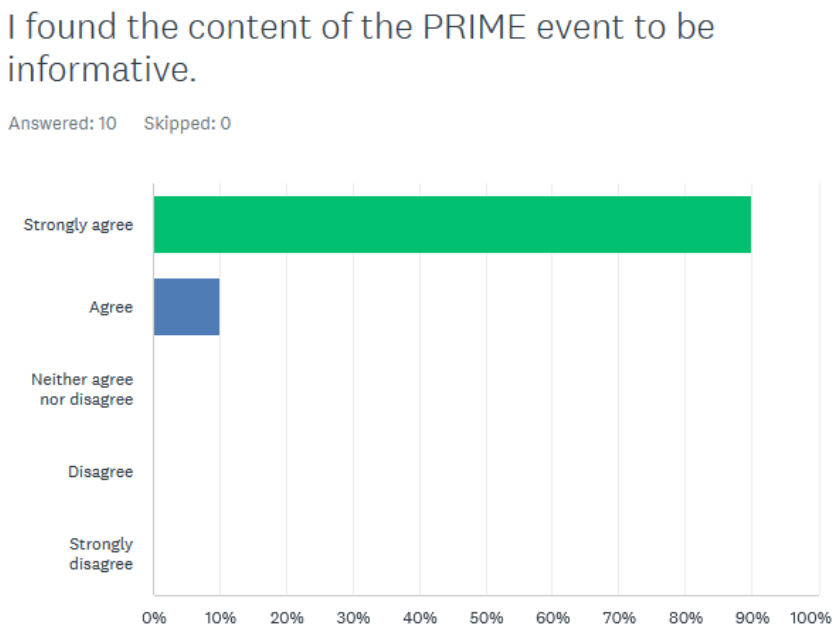

Figure 8: Question 1

It can be seen that 9 out of 10 "strongly agreed" that the content of the event was informative.

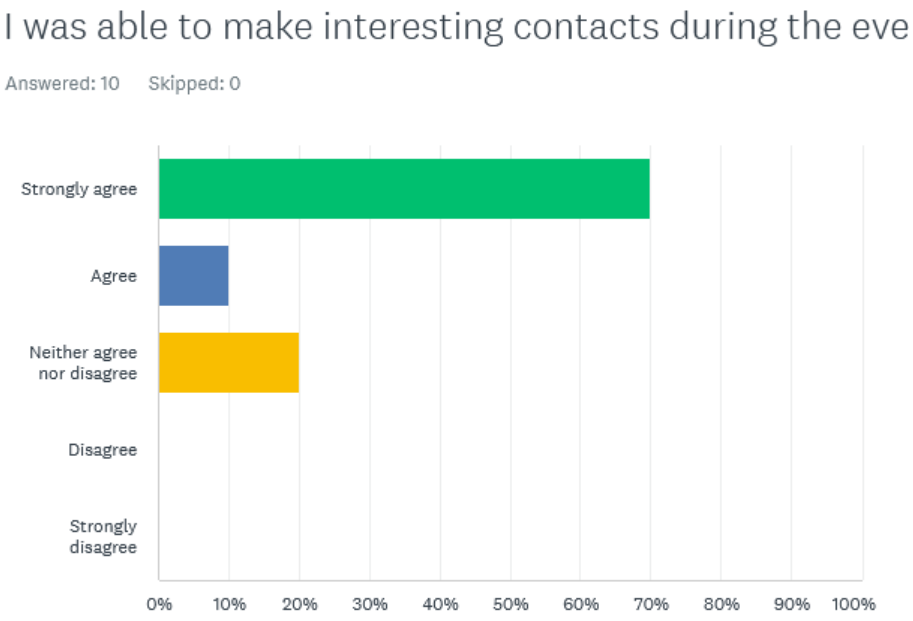

Figure 9: Question 2

Seven out of 10 respondents said that they "strongly agreed" that they made interesting contacts during the event. An additional person agreed. Two answered "neither agree nor disagree" but commented that they had been participating online.

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010

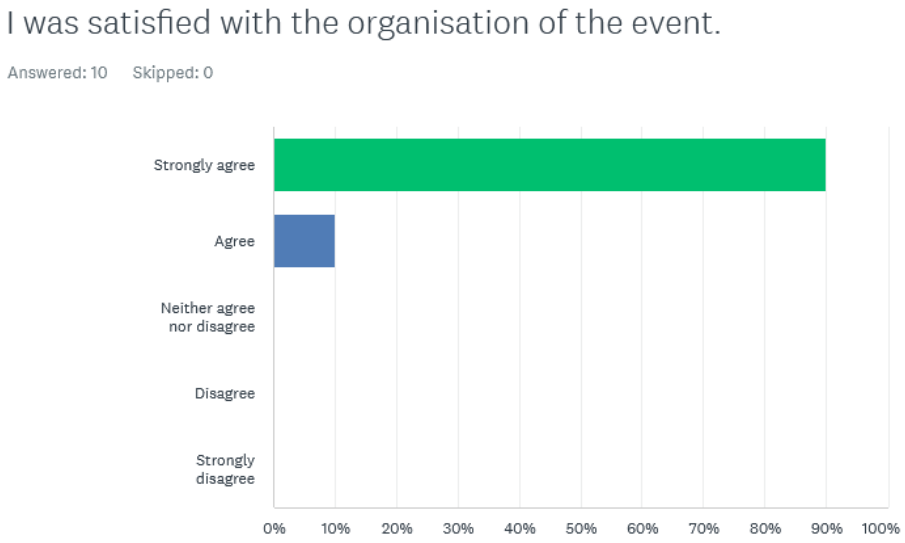

Figure 10: Question 3

All participants were satisfied with the organisation of the event.

Comments given included the following: "Great workshop! Cool science, well organized" "Caitlin and Simone did a GREAT job!" and "The online format was easy to follow."

The speakers were similarly pleased with the event, citing substantive conversations and helpful contacts despite the relatively low participation. Possible future collaborations based on the technology presented were discussed among the assistants.

5 CONCLUSIONS

The organisation and execution of the final dissemination event was a success. ~~P~~articipants felt well-informed and made valuable contacts during the event. Through the presentations, photos and videos, we were able to generate material for further dissemination during the rest of the project and beyond. It is important to note that, over the course of the project, including this event, we have established various connections with stakeholders, that know now about the PRIME project. This interaction has allowed us to gain valuable market-oriented insights that have enhanced our ability to refine the final stage of the project's result exploitation plan.

PRIME has received Funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 829010