D8.2 DISSEMINATION AND COMMUNICATION INTERIM REPORT

Vasilis Papanikolaou, AUSTRALO

@AshvinH2020

ASHVIN H2020 Project

www.ashvin.eu

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Reviewer(s)	EUR, TUB

ABSTRACT

Communication and dissemination are key elements of the ASHVIN project. Several activities have been implemented during the first 18 Months of the project, enabling the project to highlight and share its results with the community. As the project evolves, additional activities have been designed and will be implemented during the second half of the project, enabling ASHVIN to disseminate its results and outcomes to a wider but more targeted audience.

KEYWORDS

Dissemination, Communication, Networking, Community Building

REVISIONS

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DISCLAIMER

ACRONYMS & DEFINITIONS

AI	Artificial Intelligence
AR	Augmented Reality
BCF	BIM Collaboration Format
BIM	Building Information Modelling
CEN	European Committee for Standardization
HSE	Health, Safety and Environment
IEC	International Electrotechnical Commission
IEE	Institute of Electrical and Electronics Engineers
ISO	International Organization for Standardization
MoU	Memorandum of Understanding
PEST	Political, Economic, Socio-Cultural, Technological
R&D	Research and Development
R&I	Research and Innovation
RTD	Research and Technical (or Technological) Development
RTOs	Research and Technology Organisations
SDOs	Standards Developing Organizations
SMEs	Small and Medium Enterprises
SWOT	Strengths, Weaknesses, Opportunities, Threats
TRL	Technology Readiness Level
VR	Virtual Reality

ASHVIN PROJECT

ASHVIN aims at enabling the European construction industry to significantly improve its productivity, while reducing cost and ensuring absolutely safe work conditions, by providing a proposal for a European wide digital twin standard, an open-source digital twin platform integrating IoT and image technologies, and a set of tools and demonstrated procedures to apply the platform and the standard proven to guarantee specified productivity, cost, and safety improvements. The envisioned platform will provide a digital representation of the construction product at hand and allow to collect real-time digital data before, during, and after production of the product to continuously monitor changes in the environment and within the production process. Based on the platform, **ASHVIN** will develop and demonstrate applications that use the digital twin data. These applications will allow it to fully leverage the potential of the IoT based digital twin platform to reach the expected impacts (better scheduling forecast by 20%; better allocation of resources and optimization of equipment usage; reduced number of accidents; reduction of construction projects). The **ASHVIN** solutions will overcome worker protection and privacy issues that come with the tracking of construction activities, provide means to fuse video data and sensor data, integrate geo-monitoring data, provide multi-physics simulation methods for digital representing the behaviour of a product (not only its shape), provide evidence based engineering methods to design for productivity and safety, provide 4D simulation and visualization methods of construction processes, and develop a lean planning process supported by real-time data. All innovations will be demonstrated on real-world construction projects across Europe. **ASHVIN** consortium combines strong R&I players from 9 EU member states with strong expertise in construction and engineering management, digital twin technology, IoT, and data security / privacy.

TABLE OF CONTENTS

INDEX OF FIGURES

INDEX OF TABLES

1 INTRODUCTION

Research innovation is a driving force for economic growth, the creation of new job opportunities and the enhancement of the standard of living. It is therefore important to ensure that the knowledge generated within research and innovation projects is properly diffused and that the means through which such knowledge can be delivered to the society are being effectively explored. Communicating research results can effectively accelerate research and technical development (RTD) towards increasing the technology readiness level (TRL), going beyond the current state of the art, and even creating new research horizon lines on future and emerging trends. Furthermore, dissemination activities, such as participation in workshops or publication of information in websites, enable participants "to get feedback on the economic potential and recommended market-oriented exploitation pathways".[1]

The current deliverable provides an overview of all key activities and actions related to communication and dissemination that took place during the first half of the project. It gives an analytic presentation of the performance of the project's digital channels, participation in physical and online events, scientific publications, online articles, and more.

The basis of this document is **D8.1 ASHVIN Impact Master Plan** that sets the foundations of our strategy. However, communication and dissemination needs to be agile and ready to adapt according to the needs of the project and the overall environment. Therefore, within the document, we make clear that we have implemented activities ahead of time as we found the opportunity and the right time to do so.

In addition, this document provides an overview and criticism of our unique Agile Stakeholder Management Strategy, an open framework of collaboration with peers and groups that can benefit and contribute to the overall impact of the project. We reveal some key activities and interactions that took place during the first three Sprints and highlight the key lessons learnt from this experience.

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[1] D6.1: Dissemination and Exploitation Plan and Annual Dissemination Report 1 (31/08/2017), ICARUS Project, Retrieved from: https://icarus-alloys.eu/

2 COMMUNICATION & DISSEMINATION STRATEGY: AN OVERVIEW

Throughout the first half of the project, communication and dissemination played a significant and crucial role to **ASHVIN's** overall workplan and performance. All partners devoted significant efforts into communicating and disseminating critical project activities, outcomes and results to the wider community. Chapter 2 provides an overview of the performance of **ASHVIN's Dissemination & Communication Strategy** as defined in **D8.1 ASHVIN Impact Master Plan**. Specific KPIs about the performance of each activity can be found in Chapter 3, while an overview of the proposal KPIs can be found in Appendix A.

2.1 STRATEGY OVERVIEW

2.1.1 COMMUNICATION STRATEGY ASSESSMENT & NEXT STEPS

During this first period, **ASHVIN** allocated most of its communication resources into implementing activities mainly around the two first phases: a) Plan and Revisit and, b) Early Bird Communication. However, it is important to mention that while some activities around the third phase (Targeted Communication) have taken place, emphasis on this phase will be given in the second half of the project.
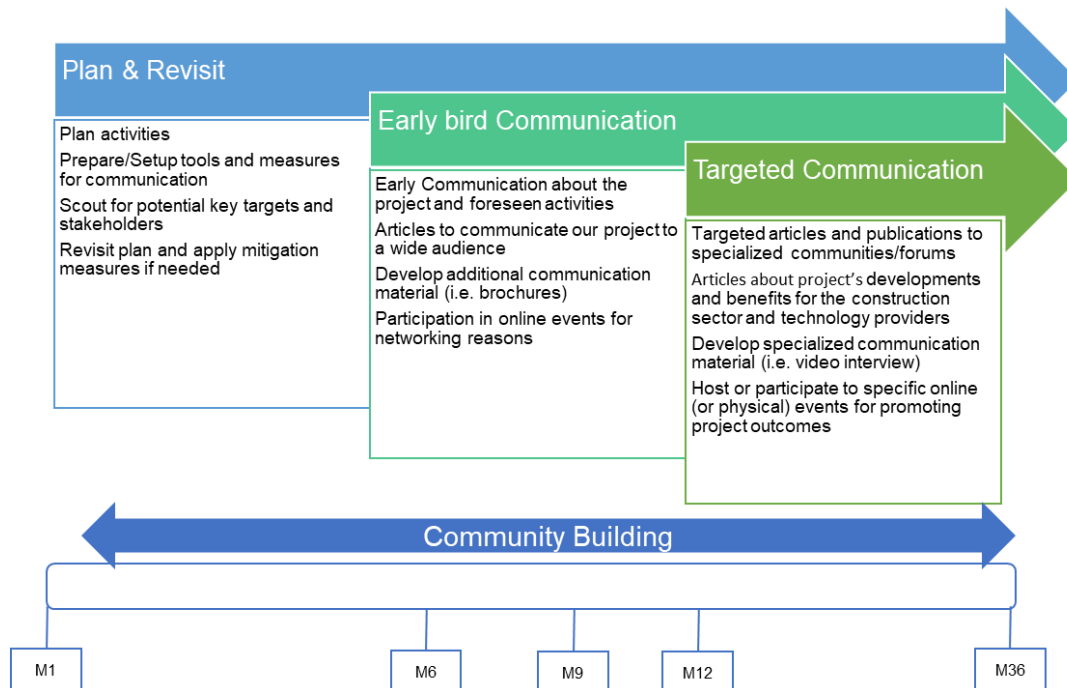
Figure 1: Communication Strategy

2.1.1.1 Plan and revisit

The first communication phase started at M1 of the project and primarily aimed at planning all activities, setting up the main communication tools and channels (Website, Social Media, etc.), and identified potential target groups and stakeholders. The result of this phase was the creation of our communication strategy (as reported in **D8.1 ASHVIN Impact Master Plan**), the development of a number of communication tools and continuous updates of our Stakeholders Database, an internal mind map used to map our primary target groups (stakeholders). This phase will last until the end of the

project and it includes the revisiting of our Database, the modification of existing printed materials, tools and overall strategy based on project needs.

2.1.1.2   Early bird Communication

The second phase started at M6, even though some minor activities have started earlier. During this phase, early bird communication activities took place aiming to communicate both to a wider public and to specific communities, the existence of the project as an instance and its forthcoming activities and actions. Emphasis has been given to the online tools and measures, as they tend to have a wider reach than traditional measures. During this phase, participation for networking purposes to webinars or other online events and publication of articles over the internet about the project took place. This phase will also last for the whole duration of the project as it mainly focuses on communicating the generic aspect of the project to a wide stakeholder base.

2.1.1.3   Next Steps: Targeted Communication

The third communication phase started at M12, as it required the project to be in a relatively mature stage. During the first project period, we implemented minor activities towards this phase such as the publication of two scientific papers, our participation in dedicated scientific events and the publication of technical related articles on our blog. During the second half more targeted communication activities will take place, such as producing and communicating more articles and posts specifically on certain project outcomes and benefits, hosting and/or participating in online events (or physical if possible) for the communication of **ASHVIN's** innovations, production of targeted communication material (i.e. videos) for the community, etc. This phase will run in parallel with the Early bird Communication phase, as it focuses on targeted communication actions for specific audiences and not to actions for the whole community.

2.1.2   DISSEMINATION STRATEGY ASSESSMENT & NEXT STEPS

It is a fact that during the first half of the project emphasis has been given mainly to communication related activities because the most solid and mature scientific and technological related outcomes of the project will be released throughout the second half of the project. However, **ASHVIN** implemented a number of preliminary activities to set up the ground and instruments for achieving a better dissemination outreach during the second half, but also implemented some hands-on activities such as the publication of a whitepaper and participation in scientific related events.
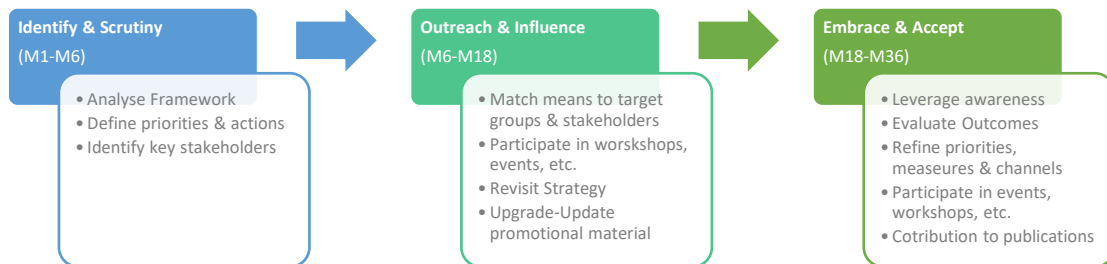

Figure 2: Dissemination Strategy

2.1.2.1   Phase I - Analysis

In this preliminary phase that started at M1, the consortium analysed and noted down means (e.g., scientific journals, publications, key visuals, etc.) and events, related to the project's scientific domains, which will have to be tackled in order to achieve a meaningful and realistic dissemination impact. The results of Phase 1 have been included in **D8.1 ASHVIN Impact Master Plan.**

2.1.2.2   Phase II - Increase impact

The main objective of Phase II, which started at M06, is to increase impact and awareness generated during Phase I and to expose the main **ASHVIN** achievements. Another key objective is to start building relationships and interactions with the community to prepare them for the adoption of our outcomes in a later stage. During this first project period, the consortium has started building relationships with key initiatives by signing **MoU**s, participate in events and bilateral discussions to prepare the ground for the next phase. Synergies with exploitation and standardisation activities are also crucial.

2.1.2.3   Next Steps: Phase III - Adoption

This phase, which will start at M18, will leverage the general awareness raised in Phase I and Phase II, attracting more potential users, customers and adopters of **ASHVIN** project's results. This phase will start in M18, mainly because the project will have more mature outcomes to present and display. The goal is to diffuse project's knowledge and outcomes into other initiatives, through dedicated activities (e.g., scientific journals, conferences, white papers, presentations, etc.). As mentioned above, synergies with exploitation and standardisation activities are of great importance.

3   ASHVIN'S OUTREACH MATERIAL

ASHVIN's Outreach Material is essential for executing both communication and dissemination plans of the project. It is designed for and addressed to specified target audiences that are direct or indirect beneficiaries of the project and its activities. **ASHVIN's** Outreach Material includes a set of communication tools, essentially a common methodology for promotion, a set of specific digital channels and branded promotional material available online and offline. In addition, it includes specific elements used for dissemination, namely project materials and digital resources.

This chapter lists all outreach tools created during **the first 18 months** of the project without placing more emphasis on the rationale behind them as this has been covered in **D8.1**. These tools are living elements that are continuously adapted and refined as **ASHVIN** project evolves and matures. It is also important to highlight, that additional material or adjustments to existing material when and if needed, will be implemented according to the needs of all project partners, end users and the overall environment.

In the forthcoming months, emphasis will be given to digital related materials and elements that will facilitate the communication and dissemination of **ASHVIN**'s objectives and goals towards the community, stakeholders and audiences identified.

3.1   VISUAL IDENTITY

Table 1: Official Logo

Type	Image
Official Logo	
Official Logo (White)	

3.2   DIGITAL TOOLS

Digital tools are the backbone of communication between an initiative and its target audience. **ASHVIN** has devoted significant efforts towards its digital tools, especially social media, not only for exposing its outcomes to the target groups, but also **for creating a community around the project** interested in Digital Twins, Technology and Construction, therefore establishing **ASHVIN** as **a "recognised" brand** which people can visit or follow to find out news about these domains. **Establishing ASHVIN as a brand and building a community of followers around it gives us the**

opportunity to capitalise on the second half of the project where dissemination of our results and outcomes is a priority.

3.2.1   PROJECT WEBSITE

The **ASHVIN website** is our main gateway. It includes all relevant information about the project and news related to our activities.
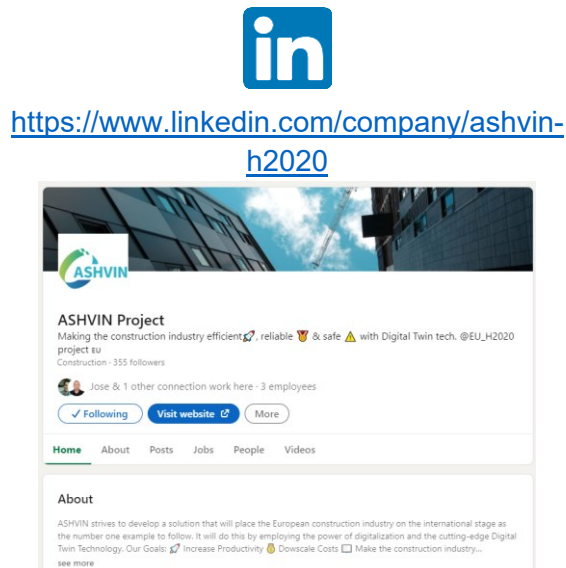

Figure 3: ASHVIN Website

Since its first day of operation (end of M2), it has attracted **1100 new users** who have launched **11592 visits** viewing over **4200 pages**. Given the nature of our project and the limited audience interested in what we do, the metrics are acceptable.

3.2.2   SOCIAL MEDIA

ASHVIN's Social Media accounts are the backbone of our everyday communication. ASHVIN's Twitter and LinkedIn channels have over **1600 followers** and **7000 monthly impressions** since the day they were launched (M3).

https://twitter.com/AshvinH2020   https://www.linkedin.com/company/ashvin-h2020

1267 Followers   *381 Followers*

115k Impressions   *60k Impressions*
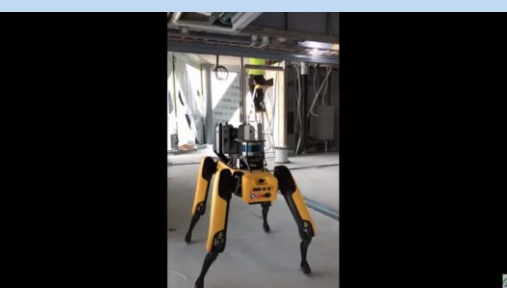
3.2.3 YOUTUBE CHANNEL

Since M14, we have created our **YouTube Channel** that we use to upload and share our own videos of our demonstration technologies and projects. We have created and shared **4 videos** that have attracted **330 views** so far. All our videos are also available through our Demonstrators Page on our Website.

Table 2: YouTube Public Videos

Title	Screenshot
Demo #6: From LIDAR to Digital Twins	
Demo #2: 3D Scanning for a Digital Twin	
Demo #9: Scale reduced cable net - Tests on Sensors and MatchFEM	
Demo #5: Kineum office building in Sweden	

3.2.4 ONLINE REPOSITORY (ZENODO)

ASHVIN project has been respecting and supporting the **Open Access** principle from day one. **Open Access** helps other projects and initiatives build upon previous research results, improving their overall quality, and encouraging collaboration while avoiding duplication and wasting resources. It speeds up innovation, and faster progress in the market translates to faster growth. Lastly, everyone in the society is involved, which brings about more transparency of the scientific process.

For that reason, we have released **ASHVIN's Open Access Repository** through **ZENODO**, the **OpenAIRE** repository hosted by **CERN**. So far, our online repository has **1480 unique online views** and **966 downloads** of our public deliverables.

3.3 PRINTED MATERIAL

In order to enhance the visual identity of the project, we have created some printed material to be used for communication and dissemination purposes. This material will be re-designed (if needed) as the project evolves and can be customised based on project and partners' needs.

Table 3: Printed Material

Type	Screenshot
Poster (Size A0)	

Roll Up Banner (2m x 0,85m)

Double Sided Brochure (Size A4)

Press Release

4 COMMUNICATION & DISSEMINATION ACTIVITIES IMPLEMENTED UNTIL M18

This first project period **ASHVIN** has performed a large number of communication and dissemination activities. While some of them can be clearly categorised either as "communication" or "dissemination" activities, some of them (such as participation ins events" serve a two-fold purpose.

4.1.1 ONLINE ARTICLES & NEWSLETTERS

During the first half of the project, **ASHVIN** has released **19 online articles** and **2 newsletters**. Online articles serve two purposes: on the one hand, to communicate any recent developments made to target groups (that can be publicly announced) and to disseminate key knowledge with target groups. Conversely, newsletters act as teasers to ASHVIN's work and summarise its main achievements.

4.1.1.1 Online Articles

Table 4: Online Articles

Title/Description	Date	Where
Article about the project and its future activities	27/10/2020	BuildUP EU
Article about the project and its future activities	15/11/2020	CORDIS
Modeling, Abstraction, and Digital Twins	30/11/2020	Intengineering
Research, Development and Innovation	10/12/2020	NCC
Mainflux Labs is a member of the construction R&D project funded by the EU H2020 program	01/02/2020	MAINFLUX
Mainflux, an IoT Lingua Franca to serve as a Backbone of ASHVIN Platform	09/02/2021	ASHVIN Website
ASHVIN IoT Platform is up and running	14/02/2021	BuildUP EU
ASHVIN IoT Platform is up and running	14/02/2021	CORDIS
Presentation of ASHVIN	15/03/2021	ITI
ASHVIN and Ethics	12/04/2021	ASHVIN Website
What is a standard?	04/05/2021	ASHVIN Website
Who develops standards?	09/05/2021	ASHVIN Website
Associates: ASHVIN	18/05/2021	LAIA Website
Cross-Industry standardization for the building industry	26/05/2021	ASHVIN Website
PROYECTO ASHVIN 2020	18/06/2021	BIS Website
Performance Indicators for Construction Projects: A Literature Review	07/10/2021	ASHVIN Website
ASHVIN Digital Toolkit: An introduction	14/10/2021	ASHVIN Website
ASHVIN IoT Platform: A short overview	01/11/2021	ASHVIN Website
yfrowy bliźniak budynku mieszkalnego	03/02/2022	GDYNIA City

4.1.1.2 Newsletters

4.1.1.2.1 ASHVIN's 1st Newsletter

Our 1st newsletter has been released in **June 2021**. It has been **distributed directly to 37 registered users** and has been disseminated through our social media as well. Overall, our first newsletter was read online by **98 people** and has been **downloaded 25 times**. It is publicly available on our website.

Similar to the above, our 2nd newsletter has been released in **December 2021**. It has been **distributed directly to 49 registered users** and has been disseminated through our social media as well. Overall, our second newsletter was read online by **104 people** and has been **downloaded 31 times**. It is publicly available on our website.

4.1.2   STRATEGIC COLLABORATIONS

4.1.2.1   ASHVIN & LC-008-EEB funded projects

All four **LC-008-EEB** funded projects **BIMprove**, **COGITO**, **ASHVIN** and **BIM2TWIN**, agreed on joining forces for **raising awareness around Digital Building Twins** and its impact in the construction industry. Their primary aim is to share knowledge, experiences and research outcomes with other stakeholders and communities within the EU and beyond, via online communication like webinars, newsletters, social media channels and scientific or technical articles.

Figure 4: ASHVIN & LC-008-EEB

A full press release is available on our official website. This collaboration has already led to some joint communication initiatives (such as the organisation of a joint workshop at **Sustainable Places 2021**) while foreseeing to implement more activities around communication and standardisation.

4.1.2.2   ASHVIN & StandICT.eu2023 project

ASHVIN has signed MoU with **StandICT.eu2023** project for promoting an open innovation approach in the standardization of **Digital Twin Technologies**.

Figure 5: ASHVIN & StandICT

For this to succeed we need to speak the same language – and that is standards. The cooperation between **ASHVIN** and **StandICT** is an important milestone to drive and develop this unified language. You can read the full announcement and our press release on our official website.

4.1.3   PUBLICATIONS

4.1.3.1   *Virtual construction with digital twins – The key for leanly planned complex construction systems*

Our first scientific publication, entitled **"Virtual construction with digital twins – The key for leanly planned complex construction systems"**, is the first scientific paper published by the project. This paper, by **Professor Timo Hartmann from TUB**, describes the envisioned lean construction approach to be developed during the project. Additionally, the paper provides a number of reflections on how digital supported construction planning can further reduce waste by streamlining resources required for planning activities and by empowering the construction workforce.

4.1.3.2   *Open-source terrestrial laser scanner for the virtualization of geometrical entities in AEC classrooms*

Our partner Universitat Politécnica de Catalunya (UPC) released our second scientific (peer reviewed) publication. Carlos Ramonell and Professor Rolando Chacón published our first paper entitled **"Open - source terrestrial laser scanner for the virtualization of geometrical entities in AEC classrooms"**. This paper depicts a case study that shows an **open-source Terrestrial Laser Scanner (TLS)** to use on the virtualization of simple yet precise geometrical entities **in AEC classrooms**.

4.1.4   PUBLIC EVENTS

The first 18 months of the project **ASHVIN has** participated in a number of scientific and technical events, presenting our project results and views related to the future of Digital Twins in Construction. Overall, we have organised, participated and presented our work at **11 events**. However, project representatives have participated in more events for networking purposes.
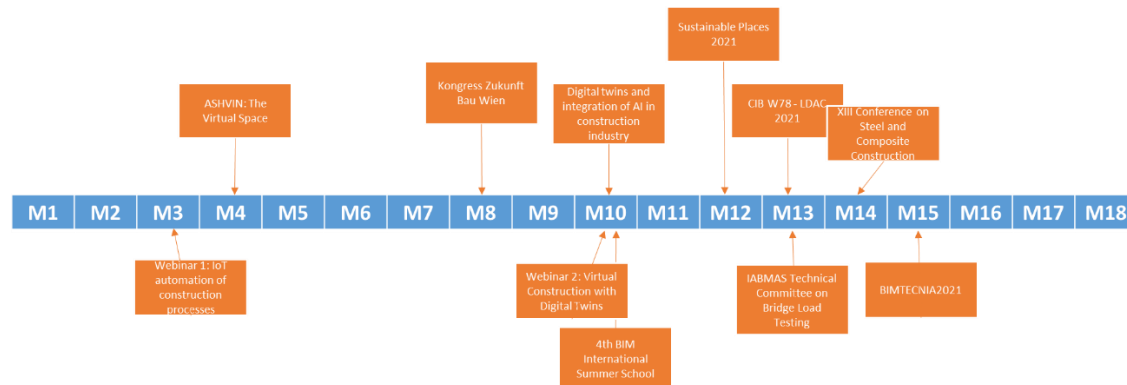

Figure 6: Public Events Timeline

4.1.4.1   *ASHVIN: The Virtual Space (25/01/2021)*

Within the frame of **ASHVIN**, one of the toolkits that will be embedded within the platform is related to Simulation and Multi-physics. The Multi-physics simulation toolkit aims at representing the behaviour of the asset and at providing evidence-based engineering methods.
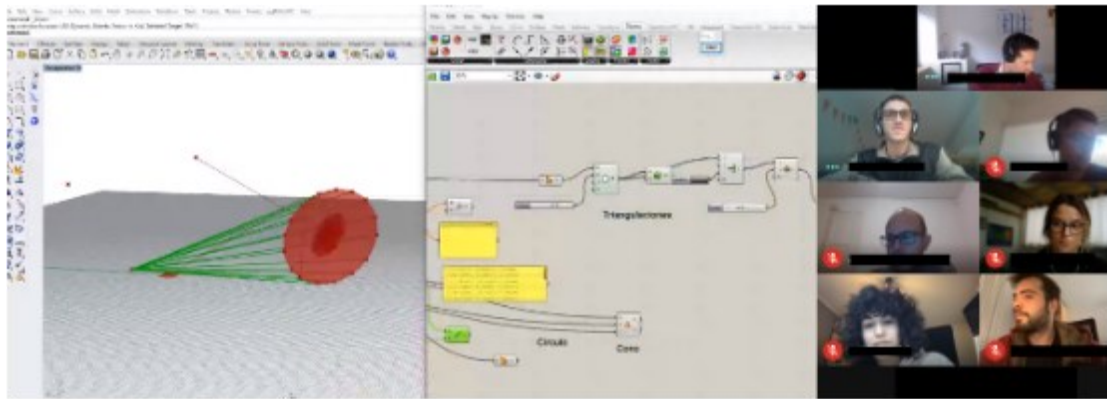
Figure 7: ASHVIN: The Virtual Space

On the **25th of January 2021**, the first edition of The **Virtual Space** took place at **UPC** in Barcelona for the Multi-Physics team. Participants started working on simple yet geometrically rich physical systems within BIM-enabled, Python-infused platforms. The basis established in the webinar are already being used for the development of specific applications related to the demonstrators to be studied by all partners.

4.1.4.2   Kongress Zukunft Bau Wien (17/05/2021)

Professor of Timo Hartmann from TUB represented ASHVIN at the Kongress Zukunft Bau Wien, that took place virtually on 17/05/2021.The topic of his presentation was **"Virtual Construction with Digital Twins"**, specifically about what ASHVIN is doing on digital twins for construction projects.   The presentation was attended by 100 persons in total.
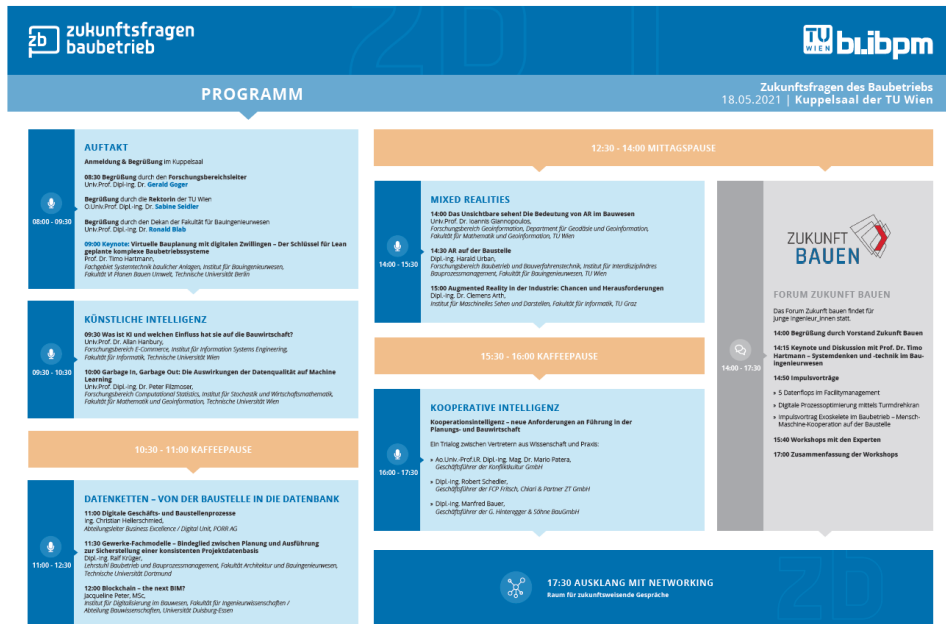
Figure 8: Kongress Zukunft Bau Wien

4.1.4.3   4th BIM International Summer School (5-16/07/2021)

Dr Lucian-Constantin Ungureanu from TUB represented **ASHVIN** at the 4th BIM International Summer School that took place during **5-16 July 2021** at Iasi – Romania. The **BIM International Summer School** targets mainly architecture and engineering undergraduate students. During the two weeks of the summer school, common lectures were being held in order to understand the importance of working as a team.
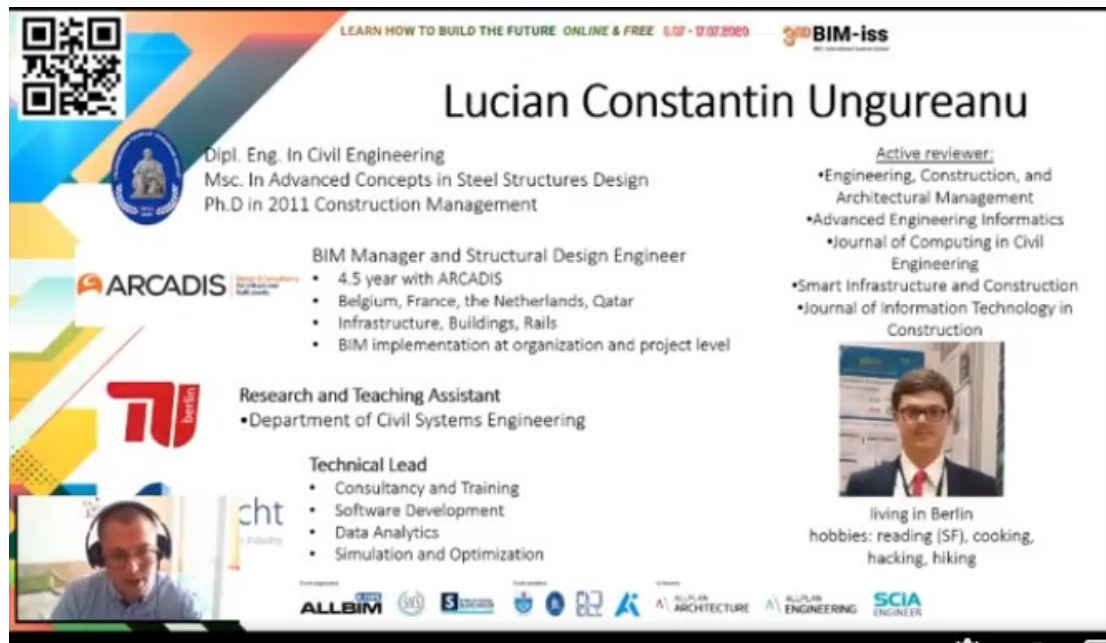
Figure 9: 4th BIM International Summer School

Dr Ungureanu presented **ASHVIN** and its contribution towards the advancement towards BIM, presenting a session about **"Beyond BIM: ASHVIN – Digital Twin for Productivity, Resource Efficiency, and Safety"**.

4.1.4.4   *Digital twins and integration of AI in construction industry (15/07/2021)*

ASHVIN's Scientific Coordinator, Rahul Tomar from DTT, represented the project during the **"Digital twins and integration of AI in construction industry"** webinar, which took place on July 15th, 2021.

Figure 10: Digital twins and integration of AI in construction industry

The webinar was organised by the Artificial Intelligence Research, Development and Innovation Network for Sustainable Cities and was funded by the Royal Academy of Engineering under the Frontiers Champion award. You can watch the official recording of the event here.

4.1.4.5   *Sustainable Places 2021 (30/09/2021)*

ASHVIN joined forces with COGITO, BIM2TWIN and BIMprove and organised a 120-minute hybrid workshop at the **9th annual edition of** Sustainable Places (SP2021) on "Digital Twin for the Construction Phase". The hybrid workshop took place on the **30th of September 2021**, discussing the challenges of creating a digital twin for the construction. The workshop was attended by 41 persons in total (35 online and 6 physical).
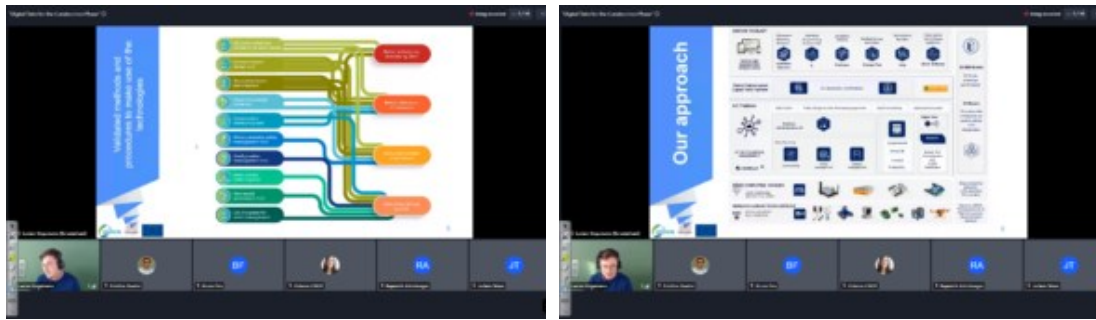
Figure 11: SP2021

4.1.4.6   CIB W78 - LDAC 2021 (11-15/10/2021)

ASHVIN participated in the joint conference CIB W78 – LDAC 2021 that took place in Luxembourg on **11-15 October 2021**. Our coordinator, **TUB**, participated in the "Linking EU H2020 projects on digitization in the construction and maintenance industry's" workshop, together with our **H2020** sister projects BIMprove, COGITO and BIM2TWIN and representatives from BIM4Ren, BIM-SPEED, BIMERR, BIM4EEB, SPHERE and CBIM where the need of aligning effort when developing ontologies has been highlighted.
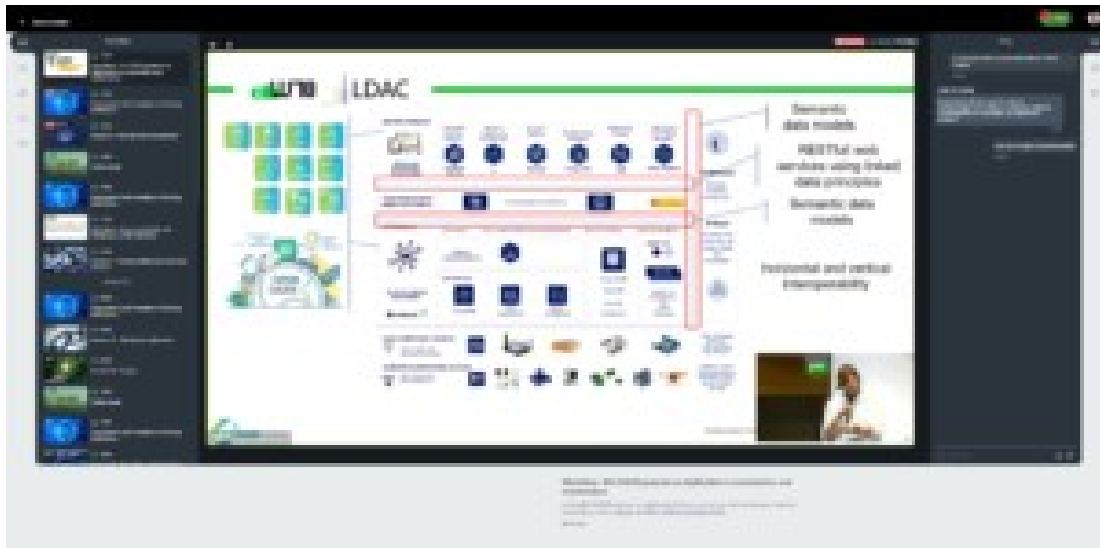
Figure 12: CIB W78 - LDAC 2021

4.1.4.7   IABMAS Technical Committee on Bridge Load Testing (25/10/2021)

ASHVIN project participated in the IABMAS Technical Committee on Bridge Load Testing that took place on **Monday, 25/10/2021**. **IABMAS** mission is to become the premier international organization for the advancement of the state-of-the-art in the fields of bridge maintenance, safety and management.
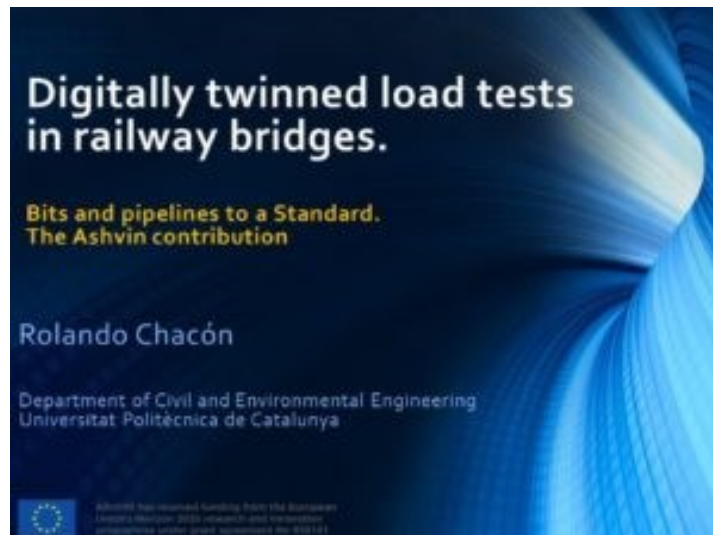
Figure 13: IABMAS Technical Committee on Bridge Load Testing

Dr. Rolando Chacón from UPC represented **ASHVIN** and shared a presentation about "**Bits and pipelines to a Standard**" with the **IABMAS Technical Committee on Bridge Load Testing**. The digital birth of physical bridges has been discussed from an academic, technical, economic and ethical perspective.

4.1.4.8 *XIII Conference on Steel and Composite Construction (25-26/11/2021)*

Professor Rolando Chacón from Universitat Politécnica de Catalunya (UPC) represented **ASHVIN** at the XIII Conference on Steel and Composite Construction that took place on **25-26 November 2021**, presenting about the potential of BIM-enabled digital twins for steel structures in design, construction and maintenance.

Figure 14: XIII Conference on Steel and Composite Construction

The purpose of the conference was to disseminate the most recent innovations and achievements in the scope of this type of construction, seeking to contribute decisively to the promotion, consolidation and expansion of the sector. The conference was a privileged opportunity for the exchange of ideas and experiences between the various stakeholders in the design and execution of steel and composite structures, as well as in the research and teaching activities in the area.

4.1.4.9   BIMTECNIA2021 (14/12/2021)

Professor Rolando Chacón from Universitat Politécnica de Catalunya (UPC) was invited by the **Industrial Sector** as a Keynote Speaker at the BIMTECNIA2021, a conference on BIM Technologies and Construction 4.0 activities that took place on the **14th of December, 2021** at **Valladolid, Spain.**

Figure 15: BIMTECNIA2021

Professor Chacón presented **"*The potential use of digital twins in design, construction and maintenance of infrastructures*"**. The lecture was focused on actions taken in recent years within Academia and European research projects. In particular, **ASHVIN** solutions were presented together with some explanations of the activities developed in the **Laboratory of Digital Twins** at **UPC**.

4.1.4.10   Virtual Presentations (Series) at Huazhong University of Science and Technology

Professor of Timo Hartmann from TUB has given two webinars about **ASHVIN** and its developments at the **Huazhong University of Science and Technology**, in two different periods.

- **Webinar 1: IoT automation of construction processes, 10/12/2020**, attended by 60 attendees.
- **Webinar 2: Virtual Construction with Digital Twins, 13/07/2021,** attended by 86 attendees.

4.1.4.11   Other Events (Networking)

In the context of community and networking, **ASHVIN** partners have also attended a number of events and webinars in which, even though **ASHVIN** is not directly presented, we participate in the discussions to gain useful knowledge that may be infused into the project and for networking purposes with other organisations and individuals. This "resource free" activity brings considerable value to the project.

Table 5: Other Events

Title	Date	ASHVIN Activity
BIM Speed Industry Day	26/11/2020	Networking / Workshop

BIM4Ren workshop	27/11/2020	Networking / Workshop
BIM supports digitalization of standards for the Construction sector	15/02/2021	Networking
Digital Twin for Cities: Initiatives from around the world	10/03/2021	Networking, Knowledge Transfer
BIM FORUM 2020	26/08/2020	Networking, Knowledge Transfer
From BIM to Twin	15/12/2020	Networking, Knowledge Transfer

5 AGILE STAKEHOLDER MANAGEMENT STRATEGY: EVALUATION OF THE STRATEGY

In parallel with the communication and dissemination activities, **ASHVIN** consortium applied its novel approach of agile stakeholder management. The strategy has been described in **D8.1 ASHVIN Impact Master Plan** and aims to establish a two-way information stream with specific organisations and initiatives, in order to not only inform them about our project, but also receive feedback, opinions, and insights to be infused in the project's future work. The framework follows an iterative implementation structure based on **Sprints**, time-boxes of 6 months where the main goal is to incrementally increase and reinforce the engagement of the stakeholders with the initiative.

During the first 18 Months of the project, **ASHVIN** consortium has implemented three Sprints. Each Sprint had a specific focus on some organisations and stakeholder groups. For strategic purposes and because of the nature of this current deliverable (public), certain information cannot be disclosed. However, a synopsis of each Sprint with information regarding specific target groups, nature of interactions and key learnings are presented in the following tables.

Table 6: Sprint Q1

Sprint Q1 (M01-M06)		
Phase 1 Scouting	**Phase 2 Interaction**	**Phase 3 Learning**
H2020 Funded Projects • LC-EEB-02-2018	Participation and Networking with: • BIM Speed - Industry Day • BIM4Ren - workshop	• Have an early start on standardisation with key organisations becomes a valuable guideline for future activities. • Creating synergies with other H2020 projects that were funded by previous calls is quite valuable as they might have performed work that could be important for recently funded projects. • Importance of finding the right persons from organisations and associations you wish to contact.
Digital Twin Tech Providers	Participation and Networking with: • CEN/CENELC - BIM supports digitalization of standards for the Construction sector	

Table 7: Sprint Q2

Sprint Q2 (M07-M12)		
Phase 1 Scouting	**Phase 2 Interaction**	**Phase 3 Learning**
H2020 Funded Projects • LC-EEB-08-2020 • Standardisation related initiatives	• Formulate a cluster with BIMPOVE, COGITO, BIM2TWIN • Sign MoU with StandICT	• Aligning efforts with initiatives funded under the same call is critical – it amplifies the influence of all projects and magnifies available resources. • Establish an Advisory Board with high-profile people, with extensive

Digital Twin Tech Providers	Invite member to our Advisory Board from: • Colorado School of Mines, USA; • Hong Kong Polytechnic University • Center for Integrated Facility Engineering – CIFE • University of Waterloo, Canada;	know how on project's topics of interest that will create a valuable input stream of knowledge. • Make sure what kind of IP you expose to the community. • Involving international consortia and other influential associations, industrial players and end users into a wider project's ecosystem allows the project to receive valuable insights and feedback. • One-to-one discussion with key players are a good way for collecting feedback. • Make sure that the project is mature enough when discussing with potential end users.
Construction Industry Digital Transformation Advocates	Invite member to our Advisory Board from: • Microsoft • DigitalTwin Consortium • CERVVAL Present our project to industrial players: • IBM, Shirley Parsons • AFG, CATENDA	

Table 8: Sprint Q3

Sprint Q3 (M13-M18)		
Phase 1 Scouting	**Phase 2 Interaction**	**Phase 3 Learning**
H2020 Funded Projects • LC-EEB-02-2018 • LC-EEB-08-2020	• Host a joint workshop with COGITO, BIM2TWIN and BIMPROVE at the 9th annual edition of Sustainable Places (SP2021) on "Digital Twin for the Construction Phase". • Participate in a joint workshop with BIM4Ren, BIM-SPEED, BIMERR, BIM4EEB, SPHERE at CIB W78 – LDAC 2021	• Implementing joint initiatives and activities with other projects give the opportunity to actively learn from each other and gives room for new ideas and concepts to be generated and exchanged on the fly. • Exposing project outcomes to end users through physical interaction gives the opportunity to gather feedback and trigger interest. • Having an exploitation plan (or market uptake plan/business model) in place is crucial when you talk with end users, as they could be interested in ways of using your solution.
Construction Industry Digital Twin Tech Providers	• Continue to interact with Construction Industry Players and Digital Twin Tech ProvidersPresent our project to industrial players • VIAS • HRS	

Our first 3 Sprints have been quite successful as we managed to interact and gather feedback from a number of organisations and initiatives both in a structured and unstructured way. Even though most of the feedback we received is confidential, any valuable insight that we considered useful and relevant to our work has been infused into our current and future work and will be reflected in our outcomes. In the second half of the project, **ASHVIN** will continue to work on interacting with more initiatives while placing emphasis on stakeholders that have not been approached yet, such as policy makers. In addition, efforts will be made to increase interaction with industrial players and collect their feedback through structured questionnaires and polls.

6   CONCLUSIONS & NEXT STEPS

6.1   GENERAL CONCLUSIONS

D8.2 is a living document that intends to update the dissemination and communication strategy (as needed), and presents any major and significant activities that took place during the first 18 months of the project.

During our first 18 months of implementation, we have made a strong start towards setting up our communication tools and mechanisms while communicating our main achievements to the wider community. We have managed to establish a relative large and solid community of followers around our social media, which we intend to capitalise on during the second half of the project. In addition, we published a number of articles (mainly on our blog) which were communicated through our digital channels and attracted a lot of interest from the community.

Although recent COVID-19 challenges had an impact on our physical interaction with the community, it gave us the opportunity to invest more in digital and online means, activities and tools, and to capitalise on the opportunity of more digital events (such as workshops). Overall, we have managed to present our work in 11 events while, in addition, participating in more than 5 events for networking purposes.

Another key outcome is the formation of a very strong relationship with the other three LC-008-EEB funded projects (BIMprove, COGITO, BIM2TWIN), which resulted in the organization of our first joint workshop.

This report will be updated in month 36 of the project, which will include the updated dissemination and communication strategy, the description and evaluation of actions from month 19 to month 36 and any sustainability measures we might foresee for our most successful communication tools.

6.2   THE ROAD AHEAD

The coming 18 months will still be a challenge as the overall environment is still unstable. However, as we foresee that a number of opportunities will rise, all **ASHVIN** partners are committed to stay focused on communicating and disseminating the most important outputs of our project.

As the project matures and produces more concrete results, emphasis will be given to dissemination activities. Publishing scientific results and presenting them in scientific conferences will be on the forefront of our activities, while continuing to capitalise on our digital channels. Furthermore, we foresee to increase our interactions with other funded projects, initiatives and associations in order to establish a solid network of key actors to which we can expose and present our results.

Obviously, as the project evolves all our communication materials will evolve in parallel. Updated brochures and videos will be produced to reflect the project's maturity level, and both the website and newsletters will enter a new phase and are expected to reach a wider and more targeted audience.

Next Steps

Continue Doing

Produce & Communication Technical Articles
Participate in External Events (non scientific)
Create & Publish More Videos
Increase interaction with the community
Publish Content through Social Media
Publish & Contribute to more Newsletters

Focus Efforts

Scientific team to participate in scientific conferences & journals
Host technical webinars (open)
Increase interactions with Potential Customers/Users
Emphasise on Dissemination
Create Targeted Communication Material

5 on the way

2 on the way

Figure 16: Next Steps (in a nutshell)

ANNEX A: KPIS

For **ASHVIN** it is very important to keep tracking our KPIs. Even though some KPIs where quite optimistic and affected by the recent COVID-19 challenges, we managed to remain on track. During the second half of the project we will emphasise on dissemination related KPIs (especially around scientific publications and conferences) while putting more effort on participating in additional scientific events. As the project becomes more mature and can reveal tangible and presentable results, our efforts will lean towards that direction.

Table 9: KPIs

Measure	Indicator	Target	Where we stand (M18)
Publications	Peer-reviewed scientific research publications in international journals	10	1
	Peer-reviewed publications and presentations in international conferences	10	0
	Scientific and Technical Publications (e.g. articles, blog posts) (yearly)	20+	19
Events	No. of scientific events participated	30+	10
	No. of non-scientific events participated	10+	7
Project Website	No. of visitors (monthly average)	1000+	662
Printed Material	No. of hard copies (e.g. flyers) distributed	2000+	130
Social Media	Size of the online community (by the end of the project)	3000+	3300
	No. of impressions (monthly average)	500+	7000
Videos	No. of videos produced	3	4
	No. of visits (by the end of the project)	3000+	360
Newsletters	No. of newsletters contributed/released	9	2

ANNEX B: TEMPLATES

All the templates below are available to project partners, only through the internal working space.

DELIVERABLE'S TEMPLATE

Figure 17: Deliverable's Template

Figure 18: ASHVIN's Deliverable Template

POWERPOINT PRESENTATION TEMPLATE

Figure 19: PPT's Template

INFORMED CONSENT FORM

Figure 20: Informed Consent Form

PRIVACY NOTICE

PRIVACY NOTICE TEMPLATE
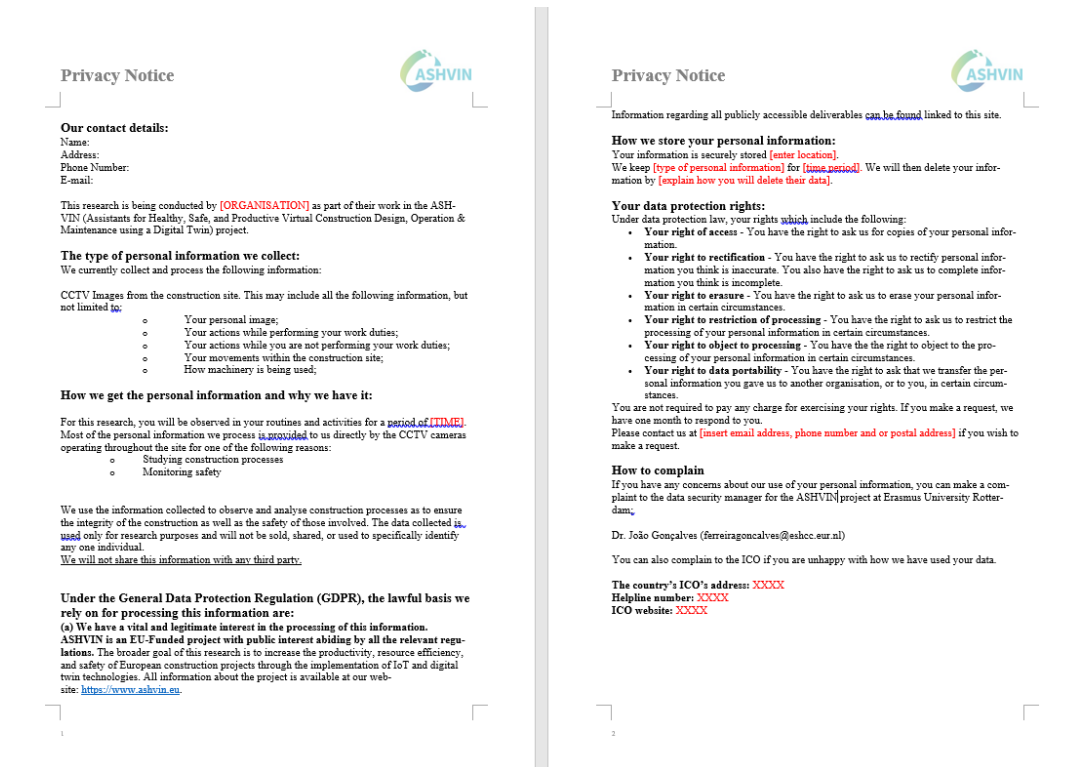
Figure 21: Privacy Notice Template

PRIVACY NOTICE VISUAL

Figure 22: Privacy Notice Visual

MEETING TEMPLATES

AGENDA TEMPLATE

Figure 23: Agenda Template

MEETING MINUTES TEMPLATE

Figure 24: Meeting Minutes Template

CERTIFICATE OF PARTICIPATION IN ASHVIN'S WORKSHOPS

Figure 25: Certificate of Participation in ASHVIN's Workshops