SOPHIA

Sustainable off-grid solutions for pharmacies and hospitals in Africa

DISSEMINATION, COMMUNICATION AND CAPACITY BUILDING STRATEGY

DELIVERABLE D8.1

VERSION 1.0

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PU = Public

PP = Restricted to other program participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)*

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EXECUTIVE SUMMARY

SophiA project will provide sustainable off-grid energy supplies and clean drinking water for rural and remote health facilities in Africa, thereby accelerating the sustainable development, growth and economic transformation, and ensuring improved access to energy and health services for all. SophiA will develop and locally manufacture innovative, modular, flexible, affordable and efficient solar containers to provide the local population in four rural health centres located in four different climatic regions where help is most needed, offering sustainable solutions adapted to the African context and then transferable to the whole of Sub-Saharan Africa. Leaded by Hochschule Karlsruhe (HKA), the SophiA consortium consists of 13 project partners from France, Germany, Switzerland and the five African countries Burkina Faso, Cameroon, Malawi, South Africa and Uganda.

This report was made in the frame of Work Package 8 “Communication, Dissemination, and Capacity Building”, led by the International Institute of Refrigeration. Its purpose is to formalise all dissemination actions planned for the project, to provide guidelines on the approach and to set out the key dates associated with planned events. The aim of this strategy plan is to ensure that information is shared with appropriate audiences on a timely basis and using the most effective means. The strategy on the communication, dissemination and capacity building adopted by the SophiA partners will ensure the maximum return on investment provided for all financing parties – the consortium partners and the European Commission.

The Communication, Dissemination and Capacity Building Work Package consists of 8 deliverables accompanied of 8 main related tasks in line with the major objectives of SophiA.

This document presents several actions and activities methods that will ensure maximal dissemination of the project’s results. It contains a description of all dissemination activities that will occur during the project. It is a living document, regularly updated throughout the project by the WP8 leader as part of D8.2 Communication, Dissemination and Capacity Building Strategy Plan Review (M12, M24, M36). It is expected that a significant effort will occur at the beginning of the project to establish the visual identity and during the final year when all main results will have been achieved.

This deliverable (D8.1) provides guidelines for all communication, dissemination and capacity building actions planned for the project. The strategy will identify the target groups, perform specified key messages for each group through relevant channels to create a widespread impact with all key actors. It will also ensure a plan to disseminate and transfer knowledge obtained from the project results to each target audience and finally define a capacity building plan of the project.

1. INTRODUCTION

SophiA aims to provide sustainable off-grid energy supplies and water free of bacteria and viruses for rural and remote health facilities in Africa, thereby accelerating the sustainable development, growth and economic transformation, and ensuring improved access to energy and health services for all.

Using various technologies, such as photovoltaics, solar thermal, electrical and thermal storage, water treatment and natural refrigerants with low global warming potential, SophiA will develop and manufacture locally innovative, modular, affordable and efficient solar powered systems for providing:

- safe and clean drinking water, free of bacteria and viruses;
- hot water and when needed also steam;
- cooling of surgical or intensive care units;
- cooling of medicines at +5 °C; and food, when needed;
- low temperature storage of blood plasma at -30 °C;
- ultra-low temperature storage of sensitive medication (e.g. some Covid-19 or Ebola vaccines) at -70 °C.
- electricity supply for use during power grid failure.

In addition, PV MedPort, a simple and 100% solar powered solution will be developed and tested as a mobile health care station in small remote areas in 4 different geographical conditions in Africa.

SophiA systems will be manufactured in Africa and will provide for the first-time innovative solutions based on climate-friendly natural refrigerants to cover cooling demand for three different temperature ranges (-70 °C, -30 °C and +5 °C). The systems will be tested and demonstrated at four rural hospitals in remote regions throughout the African continent covering the major geographical regions and different climatic condition in Burkina Faso, Cameroon, Malawi and Uganda.

This report describes the initial communication, dissemination and capacity building strategy. It describes the main tools and channels used in the project to address different target audiences. It is a living document that will be updated regularly to incorporate the project developments.

2. COMMUNICATION, DISSEMINATION AND CAPACITY BUILDING WORK PACKAGE

The project progress and results will be communicated and disseminated to our target and key actors. The communication, dissemination and capacity building strategy plan developed within WP8 will ensure that the results reach the right target audience in a format and at a time that will increase awareness about SophiA project.

The main objectives WP8 are:

- raise interest about SophiA concepts to potential stakeholders in Europe and Africa;
- give visibility to SophiA objectives, activities and benefits;
- raise awareness about SophiA aims, evolution and results through different communication channels;
- show external actors how they will/could benefit from the innovative results of SophiA project and/or how they can integrate these results in their future research activities or commercial products;
- strengthen the partners' reputation in their communities on regional, national, and international level;
- engage key stakeholders and decision makers from Uganda, Cameroon, Burkina Faso, Malawi and other African countries;
- facilitate know-how and technology transfer;
- pave the way for a future uptake of SophiA through addressing the different target groups with tailored methods.

2.1 WP 8 deliverables and tasks

A good coordination between the three activities shown in Figure 1 will ensure the achievement of projects targets.

The tasks planned within WP8 are covering the entire project period of 48 months and support all other on-going activities:

- Task 8.1: Development of the Communication, Dissemination and Capacity Building Strategy Plan (IIR, all partners) (M1-M4);

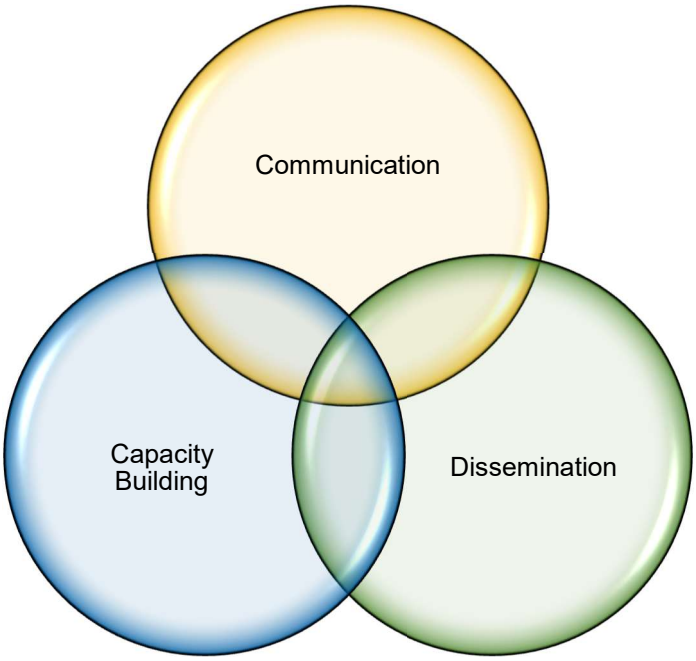

Figure 1 Combination between communication, dissemination and capacity building during the project lifetime

- Task 8.2: Development of the visual identity, website, production of communication supports and delivery of communication activities (IIR, all partners) (M1-M48);
- Task 8.3: Organisation and/or participation in workshops, conferences, exhibitions and trade shows in national, regional and international events (IIR, all partners) (M12-M48);
- Task 8.4: Organisation of Demonstration Site Launch Days and seminars (IIR, all partners) (M24-M48);
- Task 8.5: Elaboration of a handbook for building SophiA systems on-site (Everflo, all partners) (M18 – M46);
- Task 8.6: Educational and Technical training sessions (2iE, all partners) (M24-M48);
- Task 8.7: Scientific publications, articles in specialised magazines and press releases (IIR, all partners) (M12-M48);
- Task 8.8: Development of the Knowledge Exchange Network (SEZ, all partners) (M6-M48).

The deliverables planned within WP 8 are presented in Table 1.

Detailed actions within different tasks for communication, dissemination and capacity building are presented in Figure 2.

Table 1 List of deliverables planned within WP8

Deliverables	Type	Due date	Lead
D8.1 Dissemination, Communication and Capacity Building Strategy (IIR, M4)	Public	M4	IIR
D8.2 Dissemination, Communication and Capacity Building Strategy Plan Review (M12)	Public	M12	IIR
D8.3 Dissemination, Communication and Capacity Building Strategy Plan Review (M24)	Public	M24	IIR
D8.4 Dissemination, Communication and Capacity Building Strategy Plan Review (M36)	Public	M36	IIR
D8.5 Final Dissemination, Communication and Capacity Building Strategy Plan (M48)	Public	M48	IIR
D8.6 SophiA training manuals	Confidential	M48	2iE
D8.7 Handbook for building SophiA systems on-site 1st edition	Public	M31	Everflo
D8.8 Handbook for building SophiA systems on-site 2nd edition	Public	M48	Everflo

Communication

- Target groups (Task 8.1)
- Key messages and information package (Task 8.1)
- Visual identity and branding (Task 8.1 and 8.2)
- Communication tools and support materials: Word and PowerPoint templates, brochures, poster, newsletters, e-newsletters, website, videos, social media (Task 8.1 and 8.2)

Dissemination

- Dissemination events: workshops, conferences, exhibitions, tradeshows and final conference (Task 8.3)
- Demonstration site launch days, seminars (Task 8.4)
- Scientific and technical publications(Task 8.7)
- Press releases (Task 8.7)

Capacity Building

- Handbook for building SophiA systems on-site 1st and 2nd edition (Task 8.5)
- Training sessions and show rooms(Task 8.6)
- Knowledge Exchange Network (Task 8.8)
- Demonstration site launch days, seminars (Task 8.4)

Figure 2 Detailed actions for communication, dissemination and capacity building

2.2 Partners involved in WP8

The communication and dissemination tasks within WP8 (Tasks 8.1, 8.2, 8.3, 8.4 and 8.7) are led by IIR, while capacity building tasks are led by EVERFLO (Task 8.5), 2iE (Task 8.6) and SEZ (Task T8.8). WP8 is based on an interactive collaboration between all partners. An overview about the level of involvement of partners in WP8 activities is given in Table 2.

Partners involved in WP8 will be contacted by email every 6 months before the progress meetings for the update of the communication and dissemination monitoring tool (described in Section 5.2).

Table 2 Partners involvement and roles in WP8

Project Partner – short name	Role
HKA	WP contributor
OST-SPF	WP contributor
MAK	WP contributor
2iE	Task leader
SEZ	Task leader
MPHC	WP contributor
IIR	Work Package leader
OiA	WP contributor
EVERFLO	Task leader
KOVCO	WP contributor
MS	WP contributor
SISO	WP contributor
RS	WP contributor

3. The Communication, Dissemination and Capacity Building Strategy Plan

The first task (Task 8.1) from WP8 is to elaborate the communication, dissemination and capacity building strategy plan and implement its outlined activities, communicate the project results to the relevant stakeholders, manage the project outputs and capacity building trainings. Within WP8 we will identify/update the target groups, perform dedicated key messages for each group through relevant channels and create a widespread impact with all key actors. This deliverable (D8.1) provides guidelines for all communication, dissemination and capacity building actions planned for the project. It also includes actions to transfer knowledge obtained from the project results to each target audience. Moreover, it describes the capacity building plan.

This document presents several actions related to three main activities from WP8 (communication, dissemination and capacity building) to maximise the project scope, framework and results visibility. It contains a description of all dissemination activities that potentially will take place during the project lifetime. The communication, dissemination and capacity building strategy plan will be updated annually (M12, M24 and M36) throughout the project duration by the WP8 leader. It is expected a significant communication effort at the beginning of the project to establish the visual identity, update the main stakeholders and communicate the appropriate key messages through the appropriate channels, nevertheless the promotion efforts will be kept during the entire project lifetime.

3.1 The SophiA DIS&COM group

A “SophiA DIS&COM” group composed of 10 members of the consortium was formed initially to develop the design of communication supports. At the beginning of the project, the group will participate to online meeting every 3 weeks, at least until the website is set-up. Each meeting starts with an agenda prepared by IIR. Also, IIR prepares the meeting minutes to summarize what was discussed and to outline next tasks for the partners.

The group is kept informed of all dissemination activities such as publications, conference papers, press releases, etc. to keep track of activities and ensure all knowledge sharing activities conform to agreed guidelines.

3.2 The communication strategy plan

SophiA project communication is a key element to guarantee a large visibility of the project scope and ensure that relevant stakeholders are reached at a wide extent. Both the communication and dissemination strategies are developed in a way to maximize the use of existing physical meeting points (conferences, trade fairs, seminars, workshops, etc.), software tools (website, publications, etc.), as well as existing communication platforms and media channels.

3.2.1 Target groups and stakeholders

The stakeholders are reached both at local, national, African, EU and global levels, targeting industry players, the scientific community, industries and authorities. Each stakeholder will be addressed properly through specific key messages.

The selected dissemination strategy therefore must be adapted to the needs of the diverse stakeholder groups, requiring a mixture of communication channels and methods. The selected toolbox of communication measures, as described in the following chapters, ensures

continuous and effective interaction with the target group and other stakeholders. It includes a mixture of online and offline publications, physical meetings, available IT platforms, as well as existing and new communication channels.

The following stakeholders were identified already from the proposal phase:

- scientific community – higher education, researchers, students, particularly in the area of renewable energies, energy efficiency, refrigeration and water systems, sustainability, socio-economic research, African and European related HVAC&R systems and components suppliers;
- expert groups (inside and outside consortium);
- industry – manufacturers and suppliers, customers interested in building own SophiA system;
- potential end-users – hospitals and clinics, healthcare organisations, private companies, fisheries, food processing industry;
- public bodies – Ministries from African countries, including Healthcare, Agriculture, Fishing Ministries; regulatory bodies, EC funding bodies;
- health clinics and hospitals – private hospitals, healthcare clinics and stations;

3.2.2 Key message and information package

At the project starting point, a common set of key messages were provided to the different stakeholders previously identified. These will be shared through a number of communication channel such as social media (see section 3.2.4.2) or through the performance of the project communication support materials such as in the project presentation poster (described in section 3.2.5.3). At this stage, it includes a summary about the project and main objectives. It also gives brief information about the partners and project coordinator. This is shared in events such as conferences, exhibitions, workshops, etc. Currently, the project framework and main context was given as a preliminary information package to the readers (see Figure 3). As the project progresses and results are collected, information packages will be continuously updated and shared through the website, regular newsletters and e-newsletters to ensure reaching the different target groups within the appropriate timing.

Figure 3 A first set of information package for SophiA also to be used by partners for the project promotion

3.2.3 Visual Identity and branding

As a first step, and in order to give visibility to the project, a visual entity for SophiA project has been created. It consists of the project logo, a graphical chart and a set of templates for the communication supports materials. These tools will enable all the project official and public project documents to use the same fonts, colours and design. All dissemination materials developed will be used within the project lifecycle based on the project branding.

3.2.3.1 Logotype

The design of the logo is performed in a way that it represents to the best the main project objectives and expected outcomes. The logo is thought to be relevant to SophiA topic, simple and easy to memorize and attract stakeholders' attention. The professional French graphic designer Waooou has been contracted to produce the SophiA logo and some of the communications supports. Discussions about the logo were held with the SophiA DIS&COM group. A first version of the logo was produced based on a collection of key words. Several

meetings with the restricted SophiA DIS&COM group were then held to discuss and comment on the designer logo suggestions. The logo shape and content were refined progressively.

The selected keywords evoking Africa composed of four zones, each with a different colour and symbol:

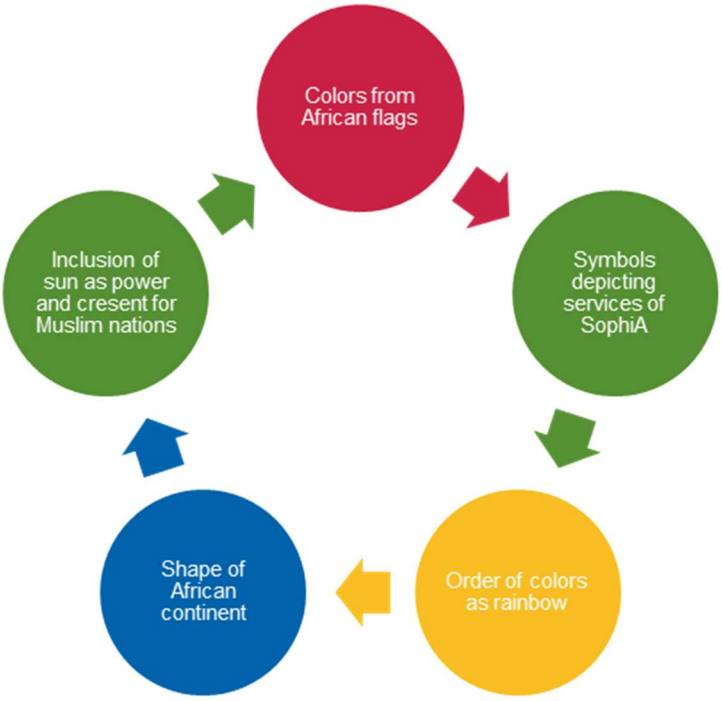

Figure 4 SophiA symbolism

The logos represented in Figure 5, Figure 6 and Figure 7 are the 3 logos developed for the SophiA general logo for the communication, the SophiA water systems and the SophiA refrigerated systems. These logos are available with the colored African map only, the colored African map plus the SOPHIA acronym and “Sustainable Off-grid solutions for Pharmacies and Hospitals In Africa” for “SophiA” as the main text baseline.

- Main logotype

This logo will be used for the general SophiA communications.

Figure 5 SophiA general logo

- Water container logotype

For any communication related to water-generating SophiA systems, a version of the three-part logo shall be used.

Figure 6 SophiA logo for SophiA water systems

- Refrigerated container logotype

Figure 7 SophiA logo for refrigerated SophiA systems

3.2.3.2 Graphic charter

The graphic charter consists of the development of the logo, details on the logo design and dimensions, colour declinations, logo application principles, colour rules of the charter, main and second typographies as shown in Figure 8. Moreover, both EU logo and acknowledgments to EU fundings including SophiA project grant number were also included in SophiA graphic charter.

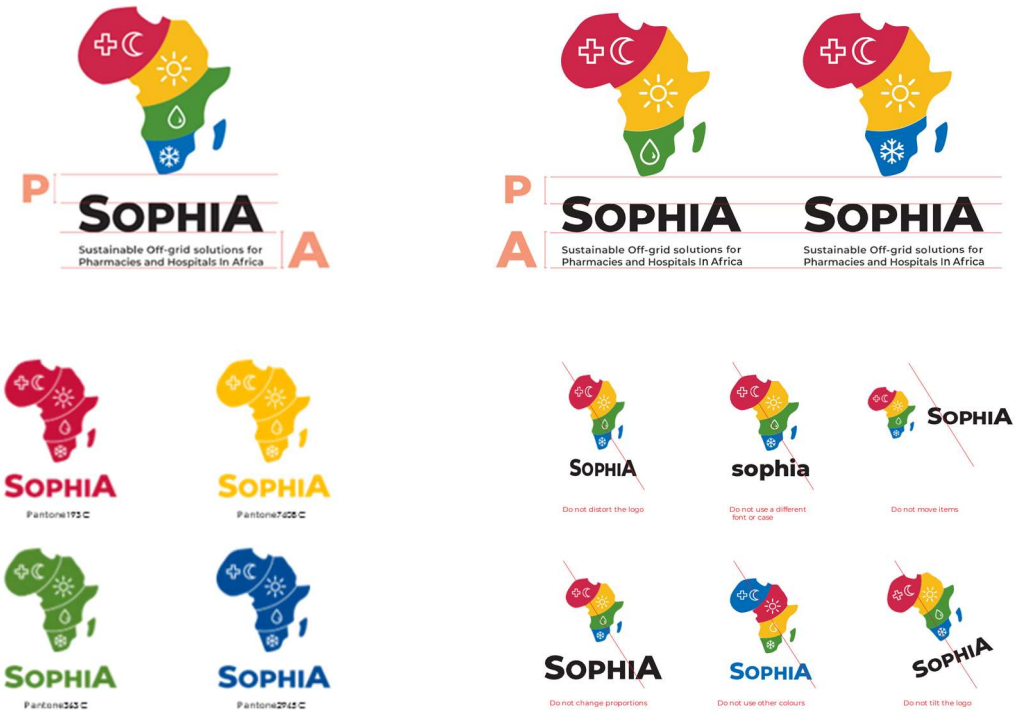

Figure 8 SophiA graphic charter

3.2.4 Communication tools

3.2.4.1 Website

A project website for SophiA project is under development. The website will be a responsive design website and will be regularly updated with the project related information. It will be maintained for at least four years after the project completion. The website by default language will be in English, it will be also available in 2 other languages (French and German). The SophiA website will comprise easily accessible links to latest news, newsletters, partners websites, events and resources (reports, manuals, posters, brochures, newsletters, project reports, public deliverables etc.).

The website technical specifications were produced by the IIR and shared with several website designers. Currently, the website designer has been selected by the IIR. An approximative content defined by the dissemination group was provided to the designer to help him understanding the topic of the project and be able providing with the best design that would picture the concept of the project to the best. An evaluation of the website dissemination level impact is based on the number of visitors and downloads. Therefore, a visitor analytics was requested as an additional option on the website. This option will also allow to categorise the visitors per target group when registering to the website news via global mailing lists. The icons

“subscribe to news” and “follow us in social media” will be put in evidence in the website to enable get more people involved.

The website is expected to be functional by month by end of April 2022. In the meantime, a “Waiting webpage” (Figure 9) is developed as one of the project communication tools while waiting for the SophiA website to be 100% operational and alive. This waiting page includes information about the project framework, short description, main objectives, picture of the consortium, contact details of the coordinator and links to the project social media tools. The visitors are encouraged to stay tuned with the project updates through a subscribe option where they are required to fill in with their contact details. The project logo is displayed together with an animated display of key images related to the project topic (African population, drinking water, solar technologies, vaccination/blood conservations). The waiting webpage is linked to a QR code that we would mention in the project communication support materials. Once the project website is ready, the QR code will direct the visitor to the homepage. The waiting page will then disappear. A domain has been reserved for SophiA project is sophia4africa.eu.

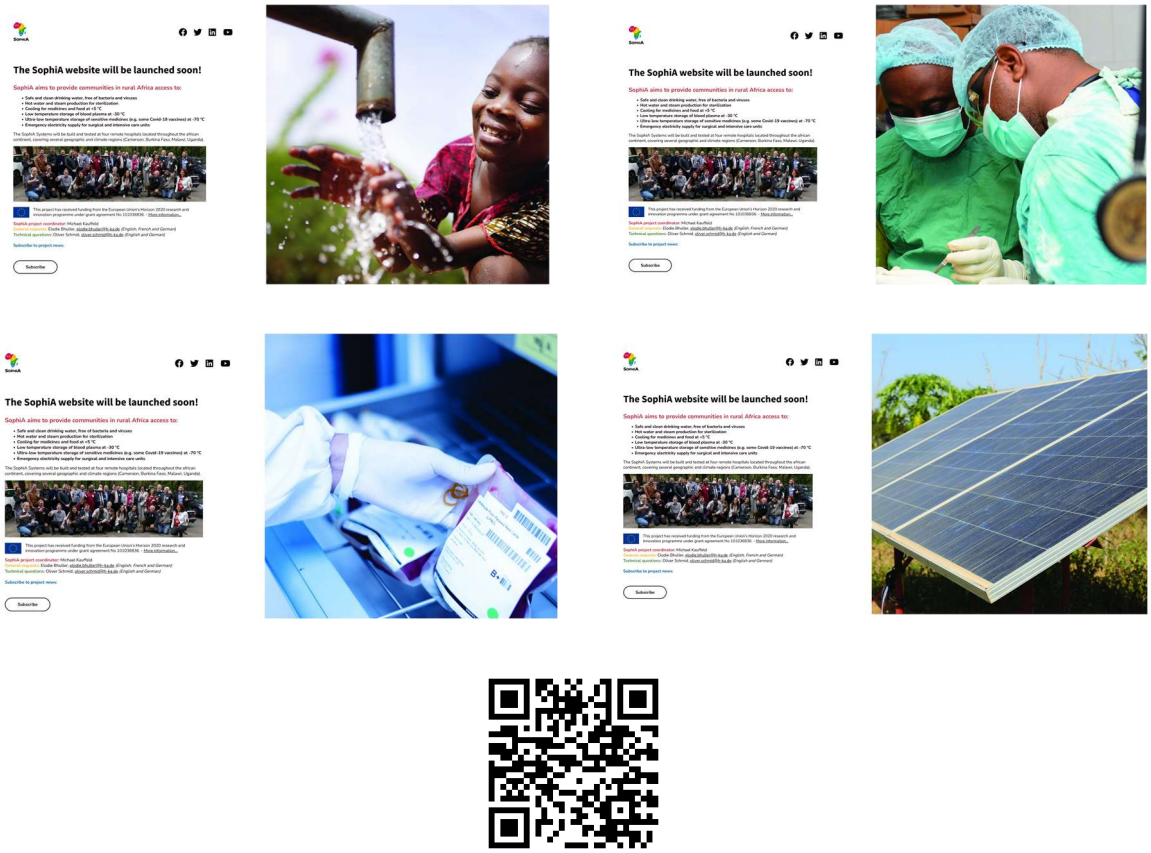

Figure 9 Waiting page for SophiA and QR code

The DIS&COM group has agreed to elaborate a simple website design (Figure 12) where the visitor is easily guided to the different tabs of the webpage. A maximum of 7 tabs are proposed:

the “about us”, “partners”, “demonstrators”, “LCA & sustainability”, “news & events”, “downloads” and “related projects”.

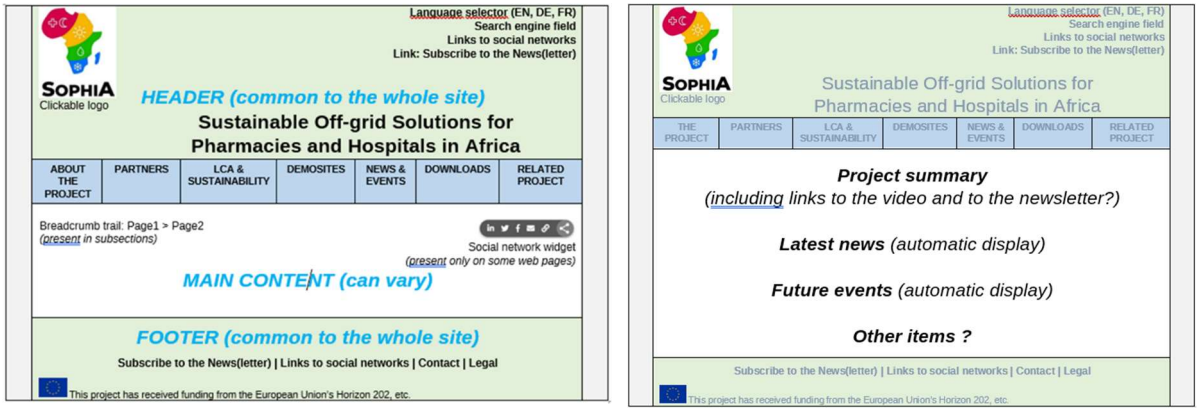

Figure 10 Preliminary structure for SophiA website

The draft structure of the different tabs of the webpage is described below:

- ABOUT US
  - Contains: texts + photos
  - Summary of the Project
  - Governance
  - Introductory Video
  - Project timeline
- PARTNERS

Logos + names of the 13 partners. A click on the logo opens a summary, including a link to the partner’s website.

  - Partner #1
  - Partner #2
  - Partner #3
  - ...
  - Partner #13
- DEMONSTRATORS

Demonstrator Summary (Photos + Map of Europe and Africa, showing the location of demo sites)

- Demosite #1
- Demosite #2
- …
- Demosite #N

- LCA & SUSTAINABILITY
  - Sustainability assessment
  - Socio-economic acceptance / participation
  - Road map for green energy transition in Africa
- NEWS & EVENTS

Contains: text + photos.

  - News (best practices, new demosites, etc.)
  - Past events
  - Upcoming events
- DOWNLOADS

Contains : text + photos + attached documents (PDFs, etc.)

  - Public reports
  - Newsletters
  - Brochures
  - Educational materials
- RELATED PROJECTS

Links to various related projects worldwide (logo+ short summary)

3.2.4.2 Social media

Social media are used as one of the key communication tools to SophiA project to reach the maximum amount of people. Social media are now a common practise to develop business, attract people and increase awareness as these are easy to use and accessible by all. Within the context of SophiA project, social media are used to store and share information about the project to stakeholders (or followers using the social media lexicon), and also to raise awareness about the project concept and objectives. Information may consist of general

project scope, progress, news, main public findings, events where the project is taking part, and some other related subjects to SophiA in order to liaise with similar projects and create synergies. The following social media were selected: LinkedIn, Twitter, Facebook and YouTube. These tools were selected based on their popularity, accessibility and since when combined would cover a large number of stakeholders from different tart groups: LinkedIn is mostly used to target research, academics and industry, Twitter to influence politics and decision makers, Facebook and YouTube to target general public including students, educate and enhance the consumer behaviour. These social media also have analytics tool that would help to track the number of page visitors and downloads that would help to analyse the impact of the shared information.

Social media admins right is maintained by IIR and shared with the project coordinator. The pages were communicated first to partners who have contributed communicating these channels to their networks.

The Facebook, Twitter, Facebook and YouTube channels are set-up at the begging of project and the links to the social medias tool of the project are given as follows:

- SophiA Twitter: https://twitter.com/SophiA4Africa

Figure 11 SophiA Twitter webpage and example of tweets

- SophiA LinkedIn: https://www.linkedin.com/company/sophia4africa/

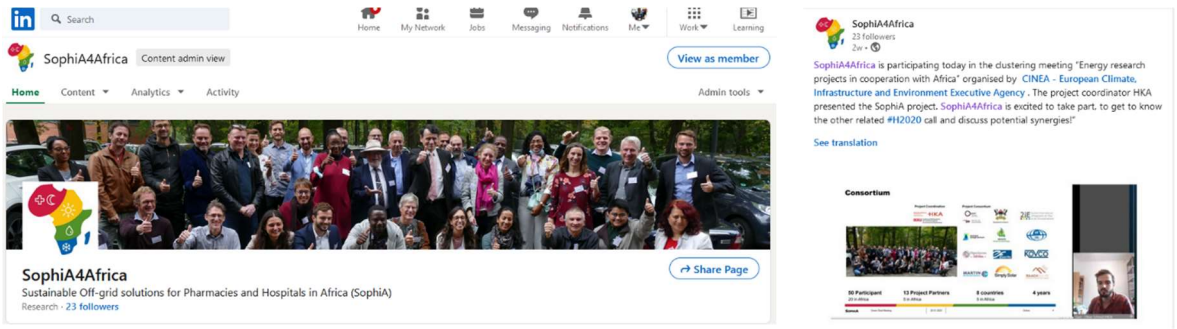

Figure 12 SophiA LinkedIn webpage

- SophiA Facebook: https://www.facebook.com/sophiA4Africa

Figure 13 SophiA Facebook webpage

- SophiA Youtube: https://www.youtube.com/channel/UC5ImLr_7q-qsrJy2zKi5PEA

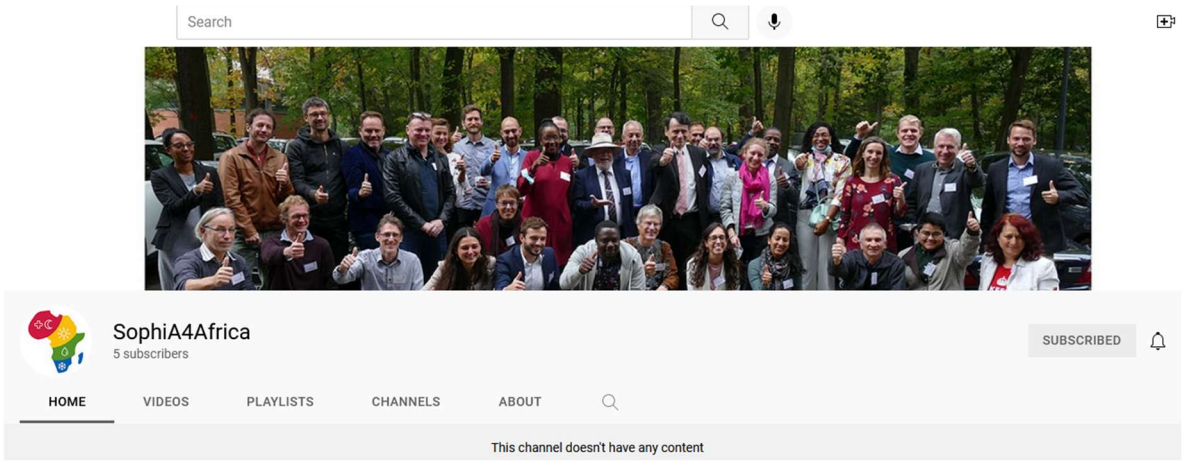

Figure 14 SophiA Youtube webpage

Partners are also encouraged to use SophiA social media through information and posts sharing and also through their own posts where they are encouraged using the developed SophiA Social Media Guideline as shown in Figure 15.

Figure 15 SophiA social media guideline

3.2.4.3 Project videos

Project videos will be produced and published throughout the duration of the project and will be dedicated to the project activities. These will present the project progress. It aims to present the project background and scope to the different stakeholders. Videos will be produced in a way that it would be understood by all. The project videos will contain relevant and clear

messages to raise awareness of all stakeholders. They will constitute a key tool enabling virtual visits to the SophiA facilities and demosites. The videos will consist of:

- One introductory video (approx. 3 mins in length) will explain the SophiA concept. It will be composed of an animation before to raise awareness and interest of stakeholders before the implementation phases.
- At least five tutorial videos: displaying different characteristics of technology (one tutorial video could focus on the solar system, another one on the refrigeration system, water treatment, solar panels and of the overall systems etc.). These tutorial videos will adapt to different audiences and ensure a global reach.
- At least 3 testimonial video clips (30 seconds each) primarily for social media platforms featuring end-user on how SophiA system has helped them solve a problem.

“Voice-Over” will be inserted into some of produced videos in native most spoken languages of the African regions such as Swahili, Bambara, English Pidgin and others recommended local languages dedicated to the general public. Videos will also serve as educational materials.

3.2.5 Communication support materials

The communication supports are tools to be used as promotional materials to both communicate important key messages and information packages of the project and to disseminate the public project results. In all communication supports both SophiA logo and graphic charter will be applied. The DIS&COM group has agreed to select the following communication supports for SophiA: a word template, a PowerPoint template, an A0/A1 format poster and rolled up banner, an A5 brochure, an e-newsletter and newsletters in hard and digital format.

3.2.5.1 Word template for public and confidential reports

A stylised word template has been developed particularly for the confidential and public deliverable reports and which is currently being used for this report.

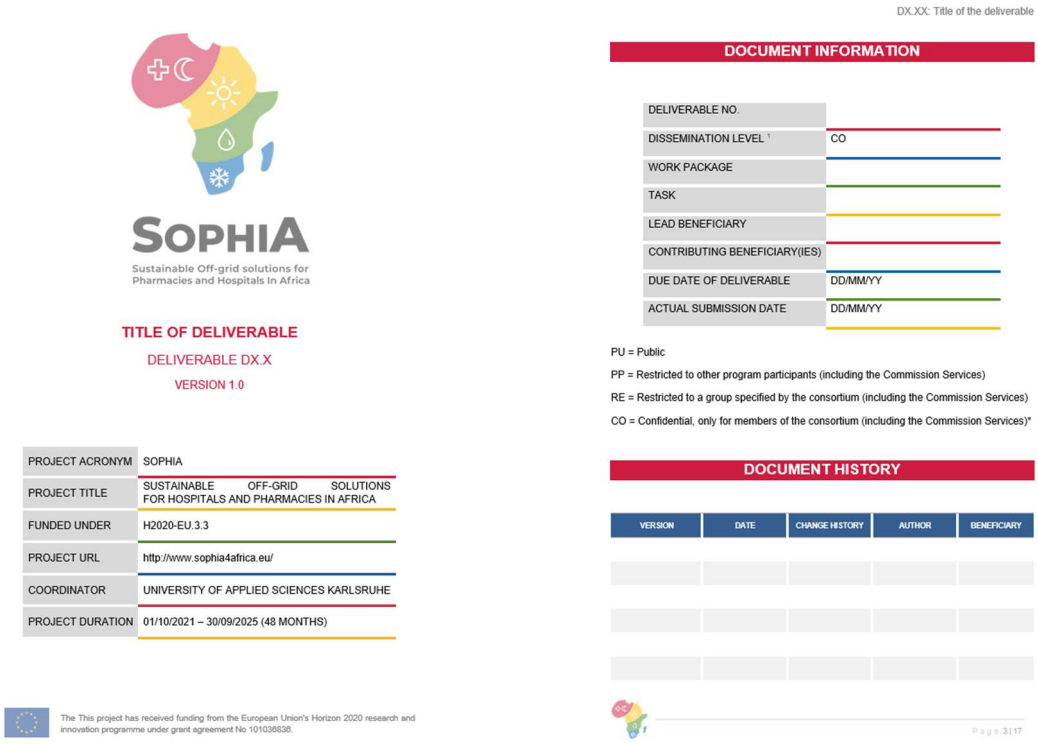

Figure 16 SophiA Word template with applied graphic charter

3.2.5.2 PowerPoint template

The PowerPoint template is also a document that can be used by all the partners. For this purpose, font and paragraph styles are predefined in the template. It was developed for the first kick-off meeting and has since been used and amended multiple times. A first draft template (Figure 17) for presentation slides is available and has been used for the kick-off meeting in Karlsruhe and the progress monthly meetings.

Figure 17 SophiA PPT template

3.2.5.3 Poster templates and rolled up banner

An A0/ A1 SophiA promotional posters template (Figure 18) has been initially developed and will be reviewed along the project duration. Posters will be displayed at events and trade fairs along with the distribution of the project brochures and newsletters. The content of the poster includes description of the project as well as its main objectives and display the partners' logos. Later, the contents of the poster will be updated with results and discussions obtained. A scientific/technical poster will be also developed with more schematic images to demonstrate the SophiA main ideas. A rolled banner template with similar content of the poster will be also developed in order to be displayed in strategic location for more visibility of project. The posters and rolled up banners will contain a QR code that will redirect to the project website for detailed information about the project scope and updates.

Figure 18 SophiA poster template

3.2.5.4 Brochure

An electronic brochure template in A5 format (4 pages) will be produced to provide a quick overview of the project, main objectives, and expected results. The brochure will also reference the 13 partners with logos and short descriptions. The website domain will be also included in order to direct the reader to the SophiA webpage and increase the number of subscribers. A digital brochure available for download from the website and it will be made available on hard copy for distribution only when participating in trade fairs, workshops, conferences, and synergy project meetings.

3.2.5.5 E-newsletter

E-newsletters will be produced and published periodically and exclusively online (every 3 months). The content would be a flash information about the project news, progress, participation to conferences etc.. The E-news will be managed using Mail Chimp and automatically sent to the website subscribers. It will be also published on SophiA social media tools to reach a widespread number of stakeholders. A total number of 14 E-newsletters are expected to be produced starting from M9 (see Figure 21).

3.2.5.6 Newsletter

The newsletters will be produced every 6 months to maintain a permanent and regular information about the project progress and achieved milestones. There will be a total number of 7 newsletters starting from M12. Its content is more developed than that of the E-newsletter providing more detailed information i.e. about the project progress and achievements. It could be also a collection of some of the previously published E-newsletters. Both hard and digital templates of the newsletter will be produced. Hard copies newsletters will be printed on demand and be distributed in events, while digital copies will be made available for download through the project website.

3.2.5.7 Promotional items

The first promotional item is a thermal bottle developed and sponsored by SophiA partner Everflo. It was given to all the partners at the kick-off meeting. The partners will discuss the creation of additional promotional items.

Figure 19 The SophiA Bottle on the Tour

Every partner received this bottle promotional item during the kick-off meeting except the partner attending the meeting online. However, the bottles have been sent to them via post-mail. A “Sophia Bottle on the Tour” social campaign has started on the SophiA Twitter showing the Sophia Bottle travelling around the world spreading the SophiA message. When African partners will all receive theirs bottles, the SophiA bottle will travel in Africa.

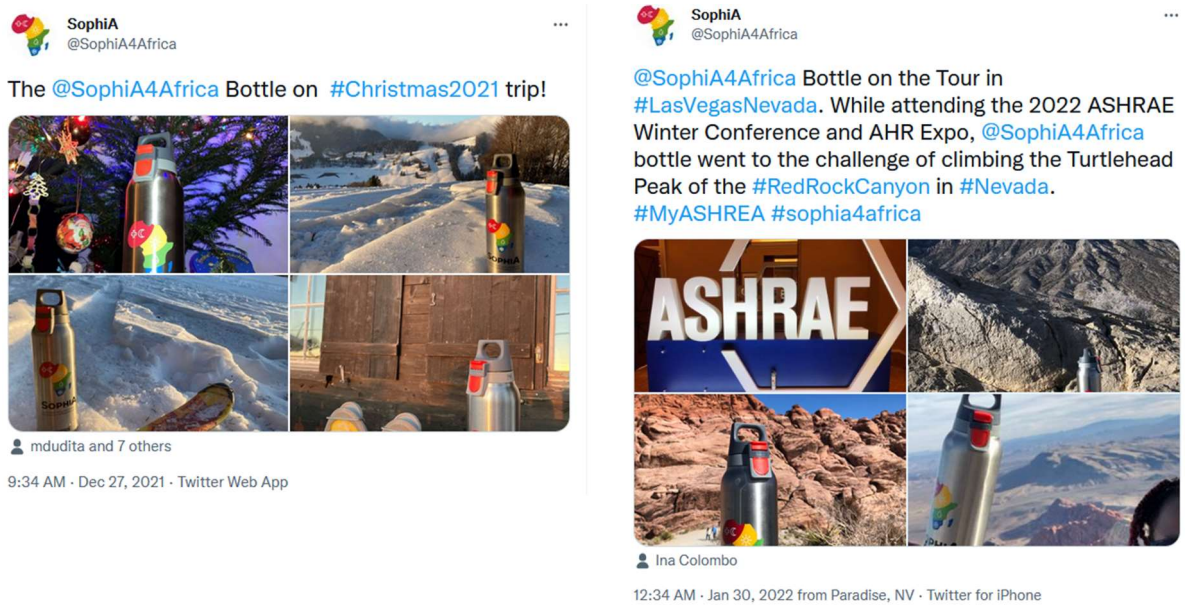

Figure 20 SophiA Bottle on the tour

3.2.6 Communication timeline

Figure 21 illustrates the suggested communication timeline, including E-newsletter, Newsletters, videos, website and brochures.

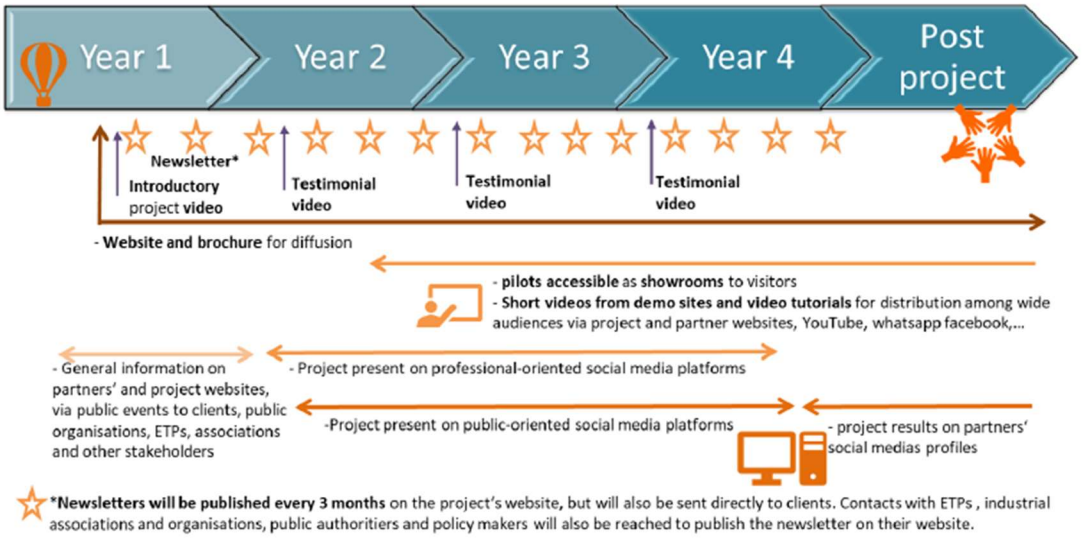

Figure 21 Suggested timeline for the communication materials

3.3 The Dissemination Strategy Plan

The dissemination strategy aims to publish all project public results and outcomes. It provides specific messages to specific target groups with a particular background. These groups consist mainly of scientific, developers, operators and industrial communities who shall make

beneficial use of the disseminated results and data to further develop their own studies (scientists) or develop a final product and make it available for the end-user end users and general public. The dissemination activities can be performed through the participation to scientific events (conferences, seminars, workshops, etc.) or through publication in peer-reviewed journals, technical magazines, press release… The dissemination constitutes a bridge to the project findings to be further explored.

3.3.1 Dissemination events at a national, regional and international levels:

It is planned that the project technical partners will start participating to scientific events once the first results are collected. This activity includes the participation to workshops and academic conferences. There is a large range of events related to the project scope namely conferences and events on the cold chain, natural refrigerants, energy storage, refrigeration and heat pumps, renewables, energy efficiency, water and solar technology energies. The consortium will try to target African and also European related-topic regional events to comply with the project principles by limiting the carbon footprint when it comes to traveling if possible. However, the participation in international relevant events will not be excluded.

Participation in scientific events is proposed at three levels:

- At the national level: dissemination of the project results in the partners respective EU countries (3 suggested events per year).
- At the regional level: dissemination of the project results in events taking place in the different European West Africa, Central Africa, Southern Africa zones (2 suggested events per year). Also, those organised by the EU in order to create synergies with other projects, share results and exchange knowledge.
- At the international level: dissemination of the project results in events outside Europe and Africa (2 suggested events per year).

Participation to fairs and exhibitions at a larger extent would be mainly accomplished by non-technical partners such as the IIR as the communication and dissemination leader. This will represent the opportunity to promote SophiA to a broad audience by displaying the project promotional materials at a larger scale and reach another category of stakeholders which consists mainly of policy makers, industrials, end-users and also students.

Dedicated SophiA workshops could be organised to present a status about the project progress in trade fairs, exhibitions and academic events such the IIR conferences and co-sponsored conferences. Partners could also participate and present conference papers

(conference proceedings) in academic conferences preferably indexed in Scopus or Web of Science.

In particularly in IIR conferences, the general public and external experts will be autorised to participate with no registration fees required (i.e none conference participants) and take part of the discussions, normally the day before the scientific event registrations.

A final conference will be organised hosted by an African SophiA partner gathering the project African national and regional representatives, Europeans and potentially some international stakeholders, and other projects within the same scope. The conference will aim to disseminate the main findings and results by the last quarter of the project life. In order to reach abroad public and to increase the dissemination impact the conference will include targeted audience like utilities, municipalities, companies, clusters/networks as well as policy makers.

During the Demonstration Site Launch Day in each of these countries, consortium will also use this opportunity to organise international seminars on the Cold Chain and other specific related topics.

The SophiA consortium has created an extensive list (see Table 5) of potential events to attend promoting and disseminating the project findings. The list contains also information about the events date, location, type, type of the project promotion, partner involved and number of people potentially reached including the decision makers. Currently, the list was potentially performed for the next two years, it will be updated by partners as more events are announced.

Table 3 List for the potential events for SophiA until 2023

Year	Date	Location	Event	Type of event	Type of promotion	Partners	People reached	Decision makers
2021	November 16-18	Paris, France	SIFA https://www.expo-sifa.com/en/	Trade fair	Display of COM supports	IIR	3600	
	December 1-3	Belgrade, Serbia	52nd International HVAC&R Congress and Exhibition http://kgh-kongres.rs/index.php/en/	Exhibition	SophiA short presentation Display of COM supports	IIR	4000	
	December 8	Kampala, Uganda	SophiA launch day in Makerere University	Workshop	SophiA workshop Display of COM supports	MAK	60	
	December 9	Osnabrück, Germany	"Es wird Zeit für Afrika" (It is time for Africa) https://eurafricainstitute.org/	Conference	SophiA short presentation	HKA	40	5
2022	January 29-Februray 2	Las Vegas-USA	ASHRAE's Winter Conference 2022 https://www.ashrae.org/conferences/2022-winter-conference-las-vegas	Exhibition	Display of COM supports	IIR	5000	2
	March 3-5	Ouagadougo, Burkina Faso	International Exhibition of Air Conditioning and Refrigeration	Exhibition	SophiA short presentation Display of COM supports	2iE	1000	6
	March 1-3	Cape town, South Africa	Africa Energy Indaba 2022 https://africaenergyindaba.com/	Conference	Display of COM supports	EVERFLO	5000	10
	April 11-13	Newcastle, UK	7th IIR Conference on Sustainability and the Cold Chain (ICCC 2022) https://ior.org.uk/events/ICCC2022	Conference	SophiA workshop Display of COM supports	IIR, HKA, MAK	300	5
	April 17-19	Cartagena, Spain	9th Ibero-American Congress of Refrigeration Science and Technology (CYTEF 2022) https://www.cytef2022.com/	Conference	SophiA short presentation Display of COM supports	IIR	2000	2
	May 5	Yaoundé, Cameroon	World Hand Hygiene Day	Others	SophiA short presentation Display of COM supports	MPHC	5000	3
	May 17-19	Ruanda, Kigali	Sustainable Energy for All Forum 2022-2023 https://www.seforall.org/forum	Seminar	Display of COM supports	MAK	5000	10
	May 19-21	Nairobi, Kenya	Power and Energy Africa – Kenya	Conference	Others	MAK	3000	10

			https://www.expogr.com/kenyaenergy/					
	June 1-3	Johannesbourg, South Africa	Frigair HVAC+R Expo 2022 https://frigairexpo.co.za/	Exhibition	Display of COM supports	EVERFLO, KOVCO	5000	5
	June 13-15	Trondheim, Norway	15th IIR-Gustav Lorentzen Conference on Natural Refrigerants (GL 2022) https://www.sintef.no/projectweb/gustavlorentzen_2022/	Conference	SophiA workshop Display of COM supports	IIR, HKA, MAK	300	2
	June 15-16	Toronto, Canada	International Conference on Water Treatment for Hospitals and Health Care Facilities https://waset.org/water-treatment-for-hospitals-conference-in-june-2022-in-toronto	Conference	Display of COM supports	HKA	300	2
	June 25-29	Toronto, ON, Canada	ASHRAE 2022 Annual Conference https://www.ashrae.org/conferences/2022-annual-conference-toronto	Conference	Display of COM supports	IIR	5000	2
	June 26	Worldwide	World Refrigeration Day 2022 https://worldrefrigerationday.org/about/	Others	SophiA short presentation	IIR, HKA	10000	10
	July 5-7	Nigeria	Mega Clima Nigeria Expo 2022 trade Show http://www.westafricahvacexpo.com/	Trade fair	SophiA short presentation	IIR, MAK, MPHC	5000	5
	July 10-14	West Lafayette, Indiana, USA	19th International Refrigeration and Air Conditioning Conference at Purdue https://engineering.purdue.edu/Herrick/Conferences	Conference	SophiA short presentation Display of COM supports	IIR	7000	2
	September 1-3	Ivory Coast	Ivory Coast HVAC+R https://10times.com/ivory-coast-hvac-r	Exhibition	SophiA short presentation Display of COM supports	IIR, 2iE	5000	5
	September 15	Karlsruhe, Germany	Energy4u	Conference	SophiA presentation	HKA	200	30
	September 16-17	Zürich, Switzerland	International Conference on water Treatment & Water Pollution http://www.icwpt.net/	Conference	Display of COM supports	HKA	300	2

	October 11-13	Nuremberg, Germany	Chillventa https://www.chillventa.de/en	Trade fair	SophiA short presentation Display of COM supports	IIR	5000	3
	October 15	Yaoundé, Cameroon	Global Handwashing Day	Others	SophiA short presentation Display of COM supports	MPHC	5000	2
	October 31-November 4	To be confirmed	34th Meeting of the Parties to the Montreal Protocol (MOP)	Others	Display of COM supports	IIR	5000	50
	October	Ouagadugou, Burkina Faso	Semaine des énergies et énergies renouvelables d'Afrique (SEERA)	Conference	SophiA short presentation Display of COM supports	2iE, IIR	5000	5
	November	Lomé, Togo	Société Ouest Africaine de physique (SOAPHYS)	Conference	SophiA short presentation Display of COM supports	2iE	300	2
	Mid-November	Dresden, Germany	DKV Tagung 2022 https://dkv.org/index.php?id=1&no_cache=1	Conference	Display of COM supports	HKA	2000	2
	To be confirmed	Brussels, Belgium	EU Sustainable Energy Week 2022 https://eusew.eu/	Conference	Display of COM supports	IIR	5000	30
2023	March 13-17	Frankfurt, Germany	ISH world's leading trade fair for HVAC + Water	Trade fair	Display of COM supports	HKA	5000	
	April	Shanghai, China	3rd IIR International Conference on the Application of HFO Refrigerants	Conference	SophiA short presentation Display of COM supports	IIR, HKA	1000	3
	May 15-18	Chicago, USA	14th IEA Heat Pump Conference (HPC 2023)	Conference	SophiA short presentation	IIR	5000	10
	August 21-25	Paris, France	26th IIR International Congress of Refrigeration (ICR 2023) http://www.icr2023.org/	Conference	SophiA workshop Display of COM supports	All partners	1200	20
	September	London, UK	13th International Conference on Compressors and their Systems 2023	Conference	SophiA short presentation Display of COM supports	IIR	1000	2

3.3.2 Scientific and technical publications

The aim of this task is to broadly disseminate the main project results to specific groups i.e. scientific communities, operators and technologies developers. It is also intended to target the EU young researchers and engineers performing research within the same field in order to help them improving their professional skills and thus increase long-term impact. The activity outputs consist of scientific publications in high-quality journals, organizing special issues in relevant journals, performing press release about the project activities and also providing internship opportunities for the future researchers' generation.

3.3.2.1 Peer-reviewed journals

Scientific articles written by the project partners will be published in peer-reviewed journals with high impact factors in Open Access as required by the EU commission. A list of potential peer-reviewed journals (Annex1) was performed by all partners first based on the applicability and relevance of the journal scope with that of SophiA and its expected results. The impact factor was also an important criteria for the journal selection. The list also includes information about the Citing Score, Impact Factor and the cost of Open Access. It is here proposed that the consortium would submit at least 8 journal papers in open access. Book, monograph chapter in books and thesis could be considered as scientific articles.

3.3.2.2 Technical journals/magazines

Articles related to technology will be published in specialised technical magazine and/or online journals so-called trade press which have a similar technological background as SophiA. It should be stated that contrary to the peer reviewed journals, articles in specialized magazines require no high level of detail and technical knowledge. Publications will be attempted at the identified relevant EC communication channels. It will be targeted to the field operators, experts in the field and the general public. Also here, a list of potential specialised magazines for SophiA (Annex 2) has been provided cooperatively by the project partners.

3.3.3 Press release

A press release consists of a written communication that reports brief information about a specific event (attended or organised by the consortium), circumstance or product launch. The press release is sent to national, regional and international journals, newspapers and newsletters publishers related to relevant topics that fits the SophiA project scope. The partners have also contributed providing an internal press contact list of about 300 potential journal details.

To the date, one press release shown in Figure 22 covering the SophiA project kick-off event has been produced by the coordinator and distributed to the press contact list in 3 project official languages (English, French and German). It is intended that the consortium produces at least 4 press releases per year regarding the progress and milestones of the project, in different languages.

Press Release – October 20, 2021

New EU funded project began on October 1st, 2021: "SophiA - Sustainable off-grid solutions for pharmacies and hospitals in Africa"

With a budget of 8 million euros over four years, SophiA will develop containerized solutions for hospitals using natural refrigerants, solar thermal and photovoltaics to enable more and more African people to access carbon-neutral energy for electricity, heating and cooling of medicine and health care units as well as safe and clean drinking water, increasing the quality of life in a sustainable way.

Tags: Horizon 2020, EU Green Deal, Africa EU Partnership, hospitals, water, solar energy, electricity, heating and cooling, natural refrigerants

Funded by the European Union's Horizon 2020 research and innovation programme, and coordinated by Karlsruhe University of Applied Sciences (HKA), SophiA had its first consortium meeting on October 12-13, 2021. More than 50 participants representing the 13 project partners, as well as members of the Advisory Board and Friends of SophiA, attended the meeting organized as a hybrid event in Karlsruhe and online. At this official launch of the project, participants were welcomed by Dr. Med. Frank Mentrup, Lord Mayor of the City of Karlsruhe, Prof. Dr. Franz Quint, Prorector for Research, Cooperations and Quality Management at HKA, and representatives of the European Climate, Environment and Infrastructure Executive Agency (CINEA).

SophiA in a nutshell

SophiA aims to provide sustainable off-grid energy supplies and water free of bacteria and viruses for rural and remote health facilities in Africa, thereby accelerating the sustainable development, growth and economic transformation, and ensuring improved access to energy and health services for all.

Using various technologies, such as photovoltaics, solar thermal, electrical and thermal storage, sophisticated water treatment and natural refrigerants with low global warming potential, SophiA will develop and manufacture locally innovative, modular, affordable and efficient solar powered systems for providing:

- electricity supply for use during power grid failure;
- safe and clean drinking water, free of bacteria and viruses;
- hot water and when needed also steam;
- cooling of surgical or intensive care units;
- cooling of medicines at +5 °C; and food, when needed;
- low temperature storage of blood plasma at -30 °C;
- ultra-low temperature storage of sensitive medication (e.g. some Covid-19 or Ebola vaccines) at -70 °C.

In addition, PV MedPort, a simple and 100% solar powered solution will be developed and tested as a mobile health care station in small remote areas in 4 different geographical conditions in Africa.

SophiA systems will be manufactured in Africa and will provide for the first time innovative solutions based on climate-friendly natural refrigerants to cover cooling demand for three different temperature ranges (-70°C, -30°C and +5°C). The systems will be tested and demonstrated at four rural hospitals in remote regions throughout the African continent covering the major geographical regions and different climatic condition in Burkina Faso, Cameroon, Malawi and Uganda.

Joining forces for a clean energy transition, the multinational and multidisciplinary SophiA team will use a holistic approach for developing tailored solutions to provide green energy and clean water to hospitals in Africa, without the need to re-design the existing infrastructures.

SOPHIA

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036836

SophiA consortium

SophiA involves 13 partners from Europe (France, Germany, Switzerland) and Africa (Burkina Faso, Cameroon, Uganda and South Africa): Karlsruhe University of Applied Sciences (HKA - IKKU; coordinator); University of Applied Sciences of Eastern Switzerland (OST - SPF); Makerere University; Institut International d'Ingénierie de l'Eau et de l'Environnement; Steinbeis Europa Zentrum; Ministry of Public Health in Cameroon; International Institute of Refrigeration; Opnieren in Afrika; Everflo; Kovco; Martin Systems GmbH; Simply Solar GbR; Raach Solar.

SophiA Project Coordinator

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SOPHIA

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Figure 22 First SophiA press release dedicated to the SophiA kick-off meeting

3.3.4 Dissemination timeline

Figure 23 illustrates the suggested communication timeline, including scientific publications, articles in technical journals/magazines and press releases.

Figure 23 Suggested timeline for the dissemination materials

4. CAPACITY BUILDING AND KNOWLEDGE EXCHANGE NETWORK

The building capacity strategy aimes to raise interest about SophiA technologies and to ensure the technical understanding of potential end users of the different SophiA components. Moreover, a Knowledge Exchange Network will be created. This will include participants and partners of other (sister) projects, organisations, companies, academic groups, clusters and initiatives with similar goals, activities or technologies as SophiA. Within the SophiA Knowledge Exchange Network Active, collaboration, knowledge sharing, learning and building towards common goals will be encouraged.

4.1 Capacity building strategy

A draft capacity building strategy is included this document. This will be adapted during the project, considering the (new) stakeholders needs. The initial stakeholders groups are:

- students from SophiA academic partners;
- local and regional stakeholders from hospitals, water sanitation and agriculture from West, East, Central and Southern African regions;
- start-ups, innovators, technological companies and other industrial players.

Depending on the audience adressed, the following activities are planned:

- educational and training sessions about SophiA solar, water and refrigeration technologies;
  - elaboration of a training manual;
  - development of training support materials;

  - Train-the-Trainer courses;
- handbooks for building SophiA systems on site;
- demonstration site launch days and seminars.

4.1.1 Educational and training sessions

The educational and training materials will be developed by the main partners involved in the design of SophiA technologies. This includes HKA, Simply Solar and OST-SPF from Europe, and 2iE, Makerere University and Everflo from Africa. Depending on the needs, other partners can and will be involved any time during the project.

A first activity is planned for solar thermal - a technology used in SophiA to provide hospitals with hot water/steam by using solar energy. Educational and training materials regarding solar thermal will be developed with the aim of improving the knowledge in Africa about this topic. Students and locally manufacturer of solar thermal collector are first targeted. In case of the local manufacturers, the trainings are aimed to assist them in the process of upgrading their products and increase solar collectors' quality, performance and durability. Participants' selection will be made by 2iE. Online courses will be provided in a first phase by OST-SPF in collaboration with Simply Solar.

Following the activity to solar thermal can be an activity to solar electricity. Students and locally manufacturer of photovoltaic systems are first targeted. In case of the local manufacturers, the trainings are aimed to assist them in increasing photovoltaic systems quality, performance and durability. Participants' selection will be made by 2iE. Online courses will be provided in a first phase by OST-SPF in collaboration with Raach Solar.

Together with the handbook (see 4.1.2) a training on the use of the SophiA system will be developed. The target group of the training, which will probably last three hours, is the staff of the hospitals using the SophiA system. The training materials will be developed by the main partners involved in the design of SophiA technologies. The course will be conducted at least twice at each SophiA system site. At least the second time, the course will be conducted mainly by the hospital staff with the support of the SophiA partners with regard to train the trainer.

In accordance with the handbook, a training course (see 4.1.2) is to be developed for the technical staff of the hospitals that will maintain the SophiA systems. The course, which is expected to last two days, will include understanding the functions of the various technologies and the system as a whole, checking and maintaining various components, practicing replacement of individual components, problem solving, etc. The training materials will be developed by the main partners involved in the design of SophiA technologies

A Winter/Summer School is being considered. The aims to bring together 20 university students from various disciplines and countries (Africa and Europe) to focus on the overarching topic of decentralized Water and Energy supply. For one week, students and faculty come together at a university near a SophiA system. The students will work transdisciplinary and will develop research projects that can feed into practical contributions towards the further development of the SophiA system and a more sustainable ecosystem, with a special focus on Water and Energy supply. Participants' selection and development of Winter/Summer School will be made by 2iE, OST-SPF, HKA and further SophiA partners.

4.1.2 Handbook for building SophiA systems on site

Two handbooks will be set up to support local production of SophiA systems, and thus contribute to a sustainable local economic development. The handbooks are addressed to both European and African companies which intend to commercialise the SophiA systems.

To have the knowledge of the project available as soon as possible, two editions will be released. The first edition will describe the initial technology used for the containers from the initial field test. The second edition will include the improvements from the second field test campaign as well as lessons learnt during this field test campaign.

Both handbooks will include a validated set of procedures and guidelines for building SophiA systems on-site. They will also have a section devoted to the maintenance of the system. The value chain approach and the most suitable manufacturing chain that have been identified, based on the local context and local material supply chain will be considered.

The handbooks will be included in some of the technical trainings. Small educational set-ups will be used to explain the concepts from handbooks. They will also be used in the trainings described in Section 4.1.1.

4.1.3 Demonstration site launch days and seminars

After commissioning the SophiA systems in Burkina-Faso, Cameroon, Malawi and Uganda, the project partners will organise a Demonstration Site Launch Day in each of these countries. National, regional and international participants will be invited to these events. This includes policy makers, municipalities, companies, planners, researchers, developers, operators, end users, journalists and the general public. The consortium will also use this opportunity to organise international seminars on the Cold Chain. This will be done by the IIR Working Group “Cold Chain in Hot Counties”.

Sophia systems will also be used as a pedagogic tool for Master students in Energy, Mechanical Engineering as well as Water Engineering from the educational partners from SophiA.

4.1.4 SophiA showrooms

After the project ends, the fours SophiA systems from the established demo-sites will be used as showrooms. They will allow to demonstrate the SophiA concepts and systems in action for customers, organisations and other stakeholders interested to experience the technologies first-hand. SophiA communication and dissemination materials will be available in these showrooms. The showrooms are aimed to be a door-opener for the SophiA systems uptake and knowledge exchange. Moreover, they will support the integration into other local hospitals and other local markets.

4.2 SophiA Knowledge Exchange Network

SophiA project will build an expert group called Knowledge Exchange Network under the activities of Task 8.8, led by SEZ and with the support of all partners. The Knowledge Exchange Network will include participants and partners from other projects, organisations, companies, academic groups, clusters and initiatives with similar goals, activities or technologies as SophiA. The aim is to encourage active collaboration, knowledge sharing, learning and building towards common goals. As stated in the GA, the main objectives of the Knowledge Exchange Network are:

- To identify and promote successful case studies and best practices from SophiA project and also from similar projects or clusters. Other related projects will be encouraged to do the same as part of their activities.
- To exploit synergies between projects, particularly in the dissemination and communication activities. This will be done in the form of joined events or workshops, participation to each other's activities, collection and sharing of best practices and communication materials such as brochures, articles, etc.
- To identify the best technical methods such as design tools, design practices, monitoring procedures, maintenance and operation, training, etc., within the topics of SophiA. This will involve networking with technical groups or organisations, related stakeholders or similar initiatives which have similar goals or technologies as SophiA.

- To collect and promote commercial and business model best practices. As part of WP7 which includes the business models definition, SophiA will communicate with external projects and initiatives and aim to identify and promote business-related best practices.
- To discuss standardization activities which could lead to a faster market uptake. Towards the latter half of the project, SophiA will engage the Knowledge Exchange Network experts to discuss and identify measures related to standardization, regulation and commercialization topics relevant for a wider uptake of SophiA systems.

The first step is the formation of the Knowledge Exchange Network itself. Although Task 8.8 is planned to start first in M6, already some activities occurred in the first months of the project. An initial group of the Knowledge Exchange Network was already formed during the first consortium meeting. This group, also called "Friends of SophiA", will be continuously enlarged by contacting and inviting experts from similar projects, clusters, entrepreneur communities, academic communities and other stakeholders. Yearly meetings, workshops and discussions will be organized.

In addition, the consortium will participate, upon invite from CINEA, to common dissemination and information activities with other EC funded projects. These activities can increase the visibility and synergies between H2020 funded projects. The following projects were already identified:

- AfriAlliance (ID 689162)
- INNOPATHS (ID 730403)
- ENRICHinAfrica (ID 101004709)
- AEDIB|NET (ID 101017105)
- Other projects funded under topic LC-GD-2-3-2020
- ENERGICA (ID 101037428)
- REFECT AFRICA (ID 101036900)
- SESA (ID 101037141)
- STEAMBioAfrica (ID 101036401)
- H2020 LEAP- RE project funded under LC-SC3-JA-5-2020

Since the start of the SophiA project on 1 October 2021, consortium partners have participated to different events and informed themselves about different similar projects. For example, on

18th November 2021, members of HKA, SEZ, EVERFLO participated to the first ENRICH in Africa Congress which took place in South Africa and online. SEZ is a project partner in both ENRICHinAfrica and AEDIB|NET projects and therefore will actively promote opportunities for collaboration between these projects and not only. Also, on 25th January 2021, partners from HKA, OST-SPF, MAK, IIR and SEZ have participated to the online clustering event "Energy research projects in cooperation with Africa". This was organised by CINEA and involved projects funded under the H2020-LEAP-RE and LC-GD-2-3-2020 calls. Among others, the possibility to jointly apply to the Horizon Results Booster (HRB) was discussed. The HRB is an initiative supported by the European Commission, aiming to maximise the impact of research projects funded by Horizon 2020 and Horizon Europe.

Starting with M6, SEZ and other project partners will set a timeline of activities for the Knowledge Exchange Network, as well as prepare communication materials and guidelines. The Knowledge Exchange Network will meet once a year, online and when possible on-site in combination with other project activities, workshops or events. Where deemed useful and necessary for members of the Network, different speakers or experts will be invited to join the meetings. Between meetings, SophiA partners will seek other ways to maintain the contact and collaboration with the Knowledge Exchange Network members. This will include, for example, the distribution of communication material including news or articles.

4.3 Capacity building timeline

Figure 24 illustrates the suggested capacity building timeline, including educational and technical session, showrooms, handbooks and knowledge exchanges.

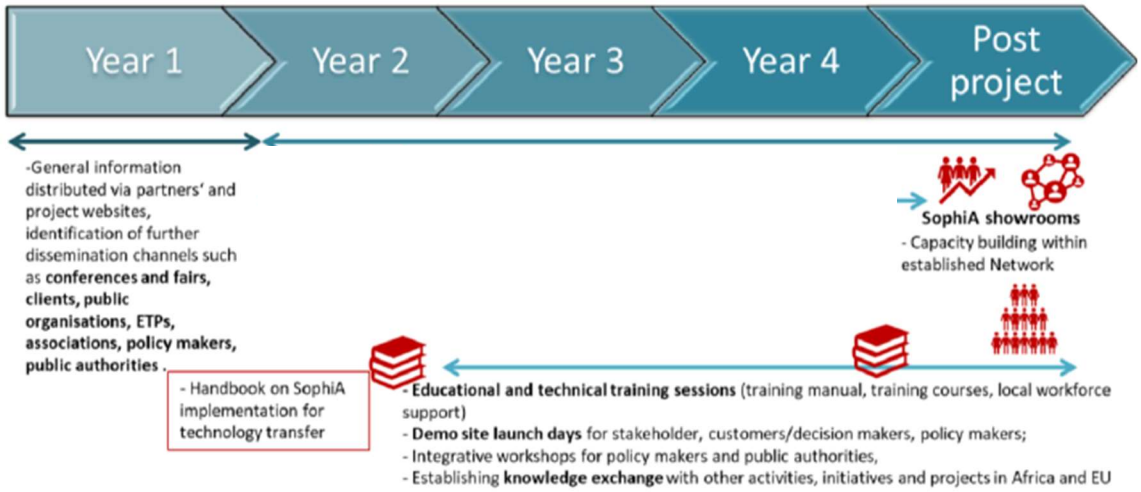

Figure 24 Suggested timeline for the capacity building materials

5. ADMINISTRATION AND PROCEDURES

5.1 Key performance indicators

Based on the Description of Action (DoA), the key performance indicators (Table 4) for the communication, dissemination and capacity building Work Package are the followings:

Table 4 Communication, dissemination, and capacity building activities, timeline and KPIs

Type	Activities	Timeline	KPIs
Communication	Project visual identity, and branding	M1-M3	>30,000 views in the media, online and on printed materials
	Website	M3-M6	>30,000 page visits
	Social media	M1 -M48	Facebook, Twitter, LinkedIn accounts with at least 300 followers in each., 1 YouTube channel with at least 80 followers. At least 500 posts
	Project videos	M6-M36	1 project video, 5 tutorial videos, 3 testimonial videos
	Support materials	M4-M48	2 posters, 1 rolled up banner for each partner, 1 brochure (1500+ copies of brochures distributed), 7 Newsletters, 14 E-newsletters.
Dissemination	Dissemination Events	M6-M48	Participating to 10+ conferences Publications in 10+ conferences proceedings with 500 stakeholders reached At least 3 events/per year at national level per partners. At least two events in each of: EU zone, West Africa, Central Africa, Southern Africa and international level. Min.500 participants reached.
	Direct contact with Ministries, public bodies and decision makers	M12-M48	At least 8 meetings with relevant Ministries
	SophiA final event	M46	One final event. Min. 100 participants
	Publications	M3-M48 M36-M48 M24-M48	At least 7 academic articles publication in peer review journals At least 30 articles publications in technical journals/magazines, trade press including 5 in EC communication channels
	Press releases	M1-M48	4 press releases/years

Capacity building	Demonstration site launch days, seminars	M24-M48	4 demo. launch days with 30+ participants in each
	Handbook for building SophiA systems on site	M18 – M46	1 handbook (2 editions)
	Educational and training sessions	M24-M48	Min. 60 local and regional operators reached 30% women participation SophiA technology in at least 2 university courses
	SophiA Knowledge Exchange Network	M6-M48	Yearly meetings, 20+ participants. Collaboration through joint activities with at least 3 other projects.
	SophiA Showrooms	M48	4 established showrooms (Burkina Faso, Uganda, Cameroon and Malawi) after project end.

5.2 Dissemination monitoring tool

To allow an effective planning, execution, and continuous reporting of dissemination activities, a dissemination monitoring tool will be created and partners will be required to fill in the content on a 6 months basis before progress meetings. For this purpose, an Excel file will be developed by the WP8 leader (IIR) and distributed to partners for a continuous reporting of the attended dissemination events, submitted scientific articles and list of media contribution. The document will consist of a simple tool easy to use and instructions will be provided. Assistance to the 13 partners will be provided when needed. The document will be uploaded to MS Teams to make sure a simultaneous update of the file from all partners. The main objective of this tool is to keep a good track of all dissemination activities of the project. It will also serve to analyse the actual state of the art when compared to the original dissemination plan. The final established list of dissemination activities will be included in the Final Communication, Dissemination and capacity building report (D8.5, M48).

The structure of the Excel dissemination monitoring tool is described in Annex 3.

6. CONCLUSIONS

This report describes the initial communication, dissemination and capacity building strategy plan lead by the IIR as work package leader. The aim of this strategy plan is to ensure that information is shared with appropriate audiences on a timely basis and using the most effective means. The strategy on the communication, dissemination and capacity building adopted by the SophiA partners will ensure the maximum return on investment provided for all financing parties – the SophiA consortium partners and the European Commission.

The communication strategy plan highlights the target group and stakeholders and the general SophiA key message. Based on the graphic charter, the Sophia logos have been developed and are already used for some of the communication tools such as the SophiA social media (website and videos are under development) and support materials such as the Sophia Word, PPT, poster templates and the promotional item bottles (brochures, newsletter and e-newsletter are under development).

Under the dissemination strategy plan, it is planned that the SophiA project will be promoted at national, regional and international events such as conferences, workshops, exhibitions and trade fairs. A final Sophia conference will be scheduled at the end of the project to disseminate the main findings and results. Technical and scientific publications will be drafted by the different project partners to trade press and peer-reviewed journals. Written press releases will be used to reach the general public via various journals, newspapers and newsletters publishers.

Finally, after the demonstration site launch days, seminars and educational training sessions will be organised in order to train the interested stakeholders on the different incorporated Sophia systems using the elaborated two handbooks which validate set of procedures and guidelines for building SophiA systems. In parallel, to encourage active collaboration, knowledge sharing and learning a Knowledge Exchange Network will be set-up. Those actions will be developed under the capacity building strategy plan.

This strategy plan will be a living document, regularly updated throughout the project by the WP8 leader as part of D8.2 Communication, Dissemination and Capacity Building Strategy Plan Review (M12, M24, M36) based on the information provided by the partners in the dissemination monitoring tool. The final Communication, Dissemination and Capacity Building Strategy Plan (M48) will summarise the D8.1 objectives' achievements.

7. ANNEXES

7.1 Annex 1

Table 5 List of potential peer-reviewed journals

Entity	ISSN	Field	Impact Factor	CiteScore	Website	Open Access Fees
International Journal of Refrigeration	0140-7007	Refrigeration, and Food Storage and Transport	3.629	6.5	www.journals.elsevier.com/international-journal-of-refrigeration	$2,500
Applied thermal Engineering	1359-4311	Processes. Technologies. Systems. Production. Storage.	5.295	10.1	https://www.journals.elsevier.com/applied-thermal-engineering	$3,350
International Journal of Air-Conditioning and Refrigeration	2010-1325 2010-1333	HVACR		2.4	https://www.worldscientific.com/worldscinet/ijacr	US$2,000 plus VAT
Food Control	0956-7135	Food Science and Technology	5.548	9	https://www.journals.elsevier.com/food-control	$4,300
International Journal of Heat and Mass Transfer	0017-9310	Heat and mass transfer	5.584	9.6	https://www.journals.elsevier.com/international-journal-of-heat-and-mass-transfer	$3,000
International Journal of Thermal Sciences	1290-0729	Physics of processes involving heat transfer	3.744	6.5	https://www.journals.elsevier.com/international-journal-of-thermal-sciences	
Journal of Food Science and Technology	1365-2621	Food Science and Technology	3.713		https://ifst.onlinelibrary.wiley.com/journal/13652621?tabActivePane=undefined	$3,300
Energy	0360-5442	Energy engineering	7.147	11.5	https://www.journals.elsevier.com/energy	$3,600
Energy Conversion and Management	0196-8904	Energy management	9.709	15.9	https://www.journals.elsevier.com/energy-conversion-and-management	$3,560
Scientific African	2468-2276	Dedicated to access to African research, increasing intra-African scientific collaboration		0.9	https://www.journals.elsevier.com/scientific-african	$200

Entity	ISSN	Field	Impact Factor	CiteScore	Website	Open Access Fees
Scientia	2059-8971 2059-898X	Science communication publication			https://www.scientia.global/	
ASHRAE Journal	00012491, 03649962	HVAC&R technology	0.418		https://www.ashrae.org/technical-resources/ashrae-journal	
HVAC&R Research	1078-9669	Advancement of HVAC&R technology	1.224		https://mc.manuscriptcentral.com/ashrae	
Water Research	0043-1354	Water treatment	11.2	15.6	journals.elsevier.com/water-research	
Desalination	0011-9164	Water desalination	9.5	14.3	journals.elsevier.com/desalination	
Journal of Environmental Management	0301-4797	Environmental management applications	6.7	9.8	journals.elsevier.com/journal-of-environmental-management	
Water	2073-4441	water science & technology	3.1	3.7	https://www.mdpi.com/journal/water	
Desalination & water Treatment	1944-3986	water treatment & management	1.2	1.6	https://www.deswater.com/home.php	
International Journal of Energy and Environmental Engineering		Energy and Environmental Engineering	3.1		https://www.springer.com/journal/40095/contact-the-journal	
Energy, Sustainability and Society	2192-0567	natural scientists, engineers, social & political scientists		2.78	https://energsustainsoc.biomedcentral.com/	
Energy for Sustainable Development	0973-0826	Energy in developing countries, sustainable development, policies and interaction	5.223	7.4	https://www.journals.elsevier.com/energy-for-sustainable-development	$2 750

7.2 Annex 2

Table 6 List of the specialized magazines

ENTITY	FIELD	LANGUAGE	COUNTRY	WEBSITE
AICARR	HVACR	IT	IT	https://www.aicarr.org/Pages/EN/Resources%20and%20Publications/AiCARR_Journal.aspx
AFEC Noticias	HVACR	ES	ES	www.afec.es www.afec.es/afecfr/boletines
African Heating & Cooling	HVACR	EN	ZA	www.brookepattrick.co.za
ASHRAE Journal	HVACR	EN	USA	https://www.ashrae.org/technical-resources/ashrae-journal
Cold Chain	Refrigeration	EN	ZA	www.refrigerationandaircon.co.za
Cold Link (The)	Refrigeration	EN	ZA	www.coldlink.co.za
Cold link Africa	Refrigeration	EN	SF	https://coldlinkafrica.co.za
Containers	Storage	FR	FR	https://containerjournal.com/
CIBSE Journal	HVACR	EN	EN	https://www.cibse.org/about-cibse/contact-cibse
Eurovent-Cecomaf Review	Certification	EN	BE	www.eurovent-cecomaf.org/web/eurovent/web/review.asp
Frío y Clima	HVACR	ES	ES	www.anefryc.com
Frío-Calor Aire acondicionado	HVACR	ES	ES	vifeca@teleline.es
Fruit World International	HVACR	EN	CH	www.agropress.com
Industria & Formazione	HVACR	EN	IT	www.centrogalileo.it
Industrie agro-alimentaires	Food	FR	FR	https://www.ria.fr/
Industrie alimentari	Food	IT	IT	www.chiriottieditori.it
Kulde Scandinavia (og varmepumper)	Refrigeration	EN	NO	www.kulde.biz
DKV	HVACR	DE	DE	https://dkv.org/index.php?id=1&no_cache=1
Low Temperature Medicine	Health/Refrigeration	EN	JP	homepage2.nifty.com/cryomedicine

ENTITY	FIELD	LANGUAGE	COUNTRY	WEBSITE
Morozhenoe & Zamorozhenn'ie Produkty (Ice-cream & frozen Food)	Refrigeration	EN	RU	http://holod-delo.ru/ice-cream/index.htm
RACA J.	Refrigeration	EN	ZA	www.refrigerationandaircon.co.za
Recherche agronomique Suisse	food engineering	EN	CH	/
Refrigeration and Air Conditioning (RAC)	HVACR	EN	GB	www.emapconstructionnetwork.co.uk
REHVA Journal	HVACR	EN	BE	www.rehva.com
Revue générale du Froid	RPF	FR	FR	www.aff.asso.fr
Revue polytechnique (La)	Engineering	EN	CH	www.revue-polytechnique.ch
RPF	Refrigeration	EN	FR	www.pyc.fr/Web/Revues/RPF/LaRPF.htm
ScanRef	Refrigeration	EN	DK	/
Technika Chlodnicza i Klimatyzacyjna	Engineering	EN	PL	www.tchick.com.pl/www.masta.com.pl
Vytapeni Vetrani Instalace	Technical	EN	CZ	www.send.cz
RCC K&L Refrigeration & Climate Control Koude & Luchtbehandeling	Refrigeration	NL	NL	https://www.koudeenluchtbehandeling.nl/
Prozesstechnik	Technical	DE	DE	https://www.prozesstechnik-portal.com/
DKV Aktuell	Refrigeration	DE	DE	https://dkv.org/index.php?id=7
KI Kälte Luft Klimatechnik	Refrigeration	DE	DE	https://www.ki-portal.de/
Die Kälte + Klimatechnik	Refrigeration	DE	DE	www.diekaelte.de
KKA Kälte Klima Aktuell	Refrigeration	DE	DE	https://www.kka-online.info/
CCIZeitung	Refrigeration	DE	DE	https://cci-dialog.de/zeitung/
hkgebäudetechnik	Engineering	CH	DE	https://www.gebaeudetechnik.ch/
Vom Wasser	Water research	DE	DE	
Resource magazine-ASABE	Engineering	USA	EN	https://asabe.org/Resource
Resource magazine-ASABE	Engineering	EN	USA	https://asabe.org/Resource

7.3 Annex 3

The structure of the dissemination monitoring tool is described below:

- The list records all relevant details for the following types of dissemination activities:
  - Organisation of a Conference
  - Organisation of a Workshop
  - Organisation of Training
  - Participation to a Conference
  - Presentation at a Conference
  - Participation to a Workshop
  - Participation in activities organized jointly with other H2020 projects
  - Participation to an Event other than a Conference or a Workshop
  - Press release
  - Non-scientific and non-peer-reviewed publication
  - Exhibition and Trade Fair
  - Distribution of brochures, newsletter
  - Social Media
  - News on Website
  - Communication Campaign (e.g. Radio, TV)
  - Video/Film
  - Brokerage Event
  - Pitch Event
  - Other
- List of dissemination events

The list of dissemination events will constitute a worksheet of the excel document and will contain the following information, per dissemination activity:

- Number of dissemination activity (starting from 1)
- Date (start, launch date)
- Date (end date)
- Type of activities

- Type of audience (Scientific community, Industry, Civil society, General Public, Policy makers, Media, Investors, Customers, Others)
- Type of audience 2 (complementary)
- Type of audience 3 (complementary)
- Title of dissemination activity
- Description of dissemination activity
- Name of publication, event
- Link (only for those with corresponding URL)
- Organiser / publisher
- Place
- Language(s)
- Size of audience
- Countries addressed
- Participating partner(s)
- Relevant pages (if available)
- WP(s) involved
- Date of approval – for dissemination activities requiring approval processes

- List of scientific publications

A second Excel worksheet will be created to record all publications arising from SophiA project. It will record all submitted journal papers as well as their status (submitted, accepted, rejected), it will also contain relevant details about the type of publications:

- Article in peer-review journal
- Article in technical specialised journals/magazines and trade press
- Publication in academic conference, conference proceedings
- Book / Monograph
- Chapter in a Book
- Thesis / Dissertation
- Other

- The list is drafted based on the official EU categories for scientific publications, as contained in the Participant Portal. It contains the following information, per publication:

- Number of scientific publication (starting from 1)
- D.O.I number
- Type of publication
- Title
- Author(s)
- Participating partner(s)
- Link
- Publisher
- Place of Publication
- Year of Publication (20xx)
- Repository Link
- Title of Journal / Proceedings / Book series
- Number, date or frequency of the Journal / Proceedings / Book
- Relevant Pages
- ISBN number
- Is the publication available in Open Access, or will it be made available?
- Yes – available in Green Open Access
- Yes – available in Gold Open Access
- No
- WP(s) involved
- Approved by (insert date)

- List of media contribution

The media contribution will be recorded in a third worksheet completing the reporting tool. It will contain information about all produced articles, press releases, newsletters, and other written content for public dissemination in pdf format. This is to record dissemination activities from online and other sources that could be removed by the publisher after a certain period, to avoid URL links not working / being broken, and so to ensure that there is a proof of past activities.

It should be also noted that all partners will be asked to upload the produced documents in a pdf format on Teams for the project produced documents records.

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