InChildHealth Deliverable
D7.1 Dissemination, Communication and Exploitation Plan

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Action coordinator's scientific representatives
PI, Prof. Heidi Salonen
heidi.salonen@aalto.fi
AALTO –KORKEAKOULUSÄÄTIÖ,
Aalto University School of Engineering
Department of Civil Engineering

Scientific Coordinator
Dr. Emmanuelle Castagnoli
emmanuelle.castagnoli@aalto.fi
AALTO –KORKEAKOULUSÄÄTIÖ,
Aalto University School of Engineering
Department of Civil Engineering

Authors in alphabetical order		
Name	**Beneficiary**	**e-mail**
Marina Almeida-Silva, main author and WP leader	IPL	marina.silva@estesl.ipl.pt
Emmanuelle Castagnoli	Aalto	emmanuelle.castagnoli@aalto.fi
Stephan Dasen	CSEM	stephan.dasen@csem.ch
Lila Diapouli	NCSR "D"	ldiapouli@ipta.demokritos.gr
Marko Dorrestijn	CSEM	marko.dorrestijn@csem.ch
Kostas Eleftheriadis	NCSR "D"	elefther@ipta.demokritos.gr
Claudia Magdalena Fabian	AIT	fabian@zsi.at
Robert M.W. Ferguson	UEssex	rmwfer@essex.ac.uk
Tuija Heikura	Aalto	tuija.heikura@aalto.fi
Mihalis Lazaridis	TECH UN CRETE	mlazaridis@tuc.gr
Raquel Obregon	SENSING SOLUTIONS SL	robregon@sens.solutions
Aino-Kaisa Rantala	UOULU	aino-kaisa.rantala@oulu.fi
Heidi Salonen	Aalto	heidi.salonen@aalto.fi
Teresa Schaefer	AIT	schaefer@zsi.at
Ulla Haverinen-Shaughnessy	UOULU	Ulla.Haverinen-Shaughnessy@oulu.fi

Abstract
The deliverable will contain the communication, dissemination and exploitation objectives, the specific target audiences and the planned appropriate channels for reaching the right audiences and getting the specific key messages across in the right timeframe.

Contents

1 Introduction

A communication, dissemination and exploitation plan is an essential component of any European project. It outlines the strategies and actions that will be taken to share the project results and outcomes with the relevant stakeholders, including the scientific community, policymakers, industry partners, and the general public. Below are some steps to create a successful dissemination plan for your European project:

— Define your project objectives: Before you start developing your dissemination plan, it is essential to define the goals of your project. This will help you to identify the target audience, key messages, and dissemination channels.

— Identify your target audience: Depending on the nature of your project, your target audience may include researchers, policymakers, industry partners, and the general public. Identify the key stakeholders and tailor your dissemination strategy to meet their specific needs and interests.

— Develop your key messages: Your key messages should be clear, concise, and easy to understand. They should highlight the main objectives of your project and communicate the impact and potential benefits of your research.

— Choose your dissemination channels: There are various dissemination channels available, including scientific publications, conference presentations, workshops, social media, and webinars. Choose the channels that are most suitable for your target audience and key messages.

— Monitor and evaluate: Regular monitoring and evaluation of your dissemination plan will help you to identify the effectiveness of your strategy and make any necessary adjustments.

A well-designed communication, dissemination and exploitation plan is critical to ensure that the outcomes and impact of your European project are effectively communicated to the relevant stakeholders.

2   **InChildHealth Project - Overview**

InChildHealth will integrate technical, medical, environmental and social science research to identify determinants for Indoor Air Quality (IAQ): chemicals, particle concentrations, microorganisms and physical parameters. We will evaluate the health impact of these determinants, focusing on respiratory infections, respiratory, eye and skin symptoms, asthma control, absenteeism and neurological and cognitional symptoms in environments occupied by school-age children. InChildHealth will target children aged 6-13 and consider mainly schools, but also homes, sports facilities and transport modes. The project will also address climate change as a public health priority influencing IAQ since we will cover indoor pollutants linked with this menace (e.g., mycotoxins) and pollutants emerging from environmental catastrophes, such as wildfires (e.g. Polycyclic Aromatic Hydrocarbons - PAHs). All project efforts will converge in a scientifically based, versatile Integrated Risk Assessment Tool, which will provide information on the interactions between the sources, emissions, concentrations, exposure, body and disease burden for environments occupied by children. Our findings will be disseminated as guidelines, recommendations and training material partly developed with children and teachers in a citizen science approach. In addition, we will develop user-friendly and low-cost monitoring technologies and both technical and behavioural measures to improve IAQ and reduce disease burdens.

3 Communication and Dissemination Goals

The communication and dissemination goals may include aiming to improve legislation, informing public policy on a particular topic, improving public services, attempting to shape the opinions of certain stakeholders or to raise public awareness of a specific issue. It is important to differentiate between the project objectives and communication objectives. In addition, it is necessary to distinguish between internal and external communications objectives. Both need to be addressed: communication between the partners as well as communication, which is targeted to stakeholders outside your partner organisations, including the general public.

The major challenge of the communication and dissemination activities is to create approaches to captivate the attention and interest of a broad target audience, which varies in age, profession, nationality and level of interest and knowledge about the subject of the project (Fig. 1).

Cities	Schools	Business	Scientific	Citizens	Press/Media
- National, Regional and Local authorities - Policy makers	- Students - Teachers - Parents - Maintenance managers	- Industry - Start Ups - Affiliated organizations	- Researchers and Academics in air quality, exposure, health.	- End-users directly impacted by the project - The city-area community	- Specialized media related to air quality, children's health

Figure 1 – Target Groups and/or indirectly involved in the project.

The stakeholders should become aware of the project's scope and agenda and how these are connected to their own needs and priorities. Therefore, one major challenge for the communication and dissemination activities of InChildHealth is to make the stakeholders comprehend the project's relevance to their needs.

The starting point to define the communication and dissemination goals is to understand and define what we and our partners want to achieve and develop project-specific communications aims. The communications objectives need to be SMART:

S – Specific
M – Measurable
A – Appropriate
R – Realistic
T – Timed

Based on this, the communication and dissemination effort of InChildHealth aims to accomplish the following goals (qualitative and quantitative):

⎯ Publish and disseminate the results of the project;

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- Raising awareness about relevant topics under the project;
- Attract the major stakeholders to events and activities organised by the partnership;
- Contribute to the transfer and importation of the identified Good Practices and main achievements of the project;
- To be perfectly adapted to the needs of the target groups, so that a strong communication strategy will be essential to ensure that the target groups will be involved in the project and contribute to the development of tools, from the beginning;
- To ensure that the tools will be applied in the school sector after the completion of the project, so that the presentation of their capabilities to a large number of people is essential;
- To have an appealing image and to be user-friendly.

The effective and targeted dissemination of outputs from the Inchildhealth is vital to ensuring that our results are understood and used for the protection of human health by key audiences, including policy makers, the scientific community, and other stakeholders.

The **primary objectives** of the strategy are to:

1. Build a **bridge between science and policy** through continuous dialogue and engagement between researchers engaged in cutting-edge scientific research and professionals involved in all stages of chemical and biologic risks governance;

2. Channel **new knowledge to policy makers** on current open questions regarding the impacts of chemicals and microorganisms´ exposure on human health and facilitate the exploitation of this knowledge in risks´ legal framework;

3. Foster **stakeholder engagement** in Inchildhealth, so that stakeholders can boost our research agenda and exploit our results in their own activities related with indoor air quality policies;

4. Make Inchildhealth data available in specific platforms for re-use and in particular for combination with other data sets, to promote the exploitation and outreach of results by other researchers;

5. Undertake targeted **training and capacity building** with the aim of harmonising exposure assessment methods and approaches across Europe, in order to contribute to scientific excellence in Europe and to produce a coherent and robust dataset as a basis for policy making;

6. **Raise public awareness** concerning relevant topics within the cluster and the EU´s efforts towards it, providing insights into possible behavioural changes, that can reduce chemical and microorganisms´ exposure and improve health and well-being;

7. **Broad dissemination** about the individual project's results and activities allowing the resources capitalization;

8. Communicate effectively with **participants** to ensure their understanding of broader project objectives and their own role and contribution in Inchildhealth research, follow up by explaining results to participants in a manner that is sensitive to their needs and technical understanding;

9. Raise awareness regarding the project scope and initiatives and concerning the role of exposure assessment and risk characterization activities in protecting human health and foster the SDGs achievement.

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4 Communication and Dissemination Tools

The communication strategy will use diverse channels of communication, enabling an adequate dissemination of the project activities.

4.1 InChildHealth Image and Logo

Since this project will be facing a wide range of target groups it is crucial for it to have an appealing graphical identity. We firmly believe in the importance of having a strong and clear image as it will have a direct impact on raising awareness and on bringing all the stakeholders on board, as well as assuring an enduring life for the project. All actions carried out under the project have to present the logo of the InChildHealth project and source of funding (European Union). The InChildHealth logo was developed and is presented in Figure 2. The InChildHealth logo and the logos of all institutions are available in the InChildHealth shared in the project collaboration platform.

Figure 2 – InChildHealth Logo.

4.2 InChildHealth Online

LinkedIn: a discussion group on LinkedIn have been set at the following url:
https://www.linkedin.com/company/inchildhealth/

The Privacy Policy are available in: https://privacy.linkedin.com/

Instagram: the official Instagram account has been created. The official Instagram page is https://www.instagram.com/inchildhealth/

The Data Policy are available in: https://help.instagram.com/519522125107875/?helpref=uf_share

Twitter: the official twitter account has been created. The official twitter page is https://twitter.com/InChildHealth

Webpage: https://inchildhealth.eu/

The Privacy Policy are available in: https://help.instagram.com/519522125107875/?helpref=uf_share

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5 The InChildHealth Toolkit

A dissemination and communication toolkit is a collection of resources and tools that can be used to promote the dissemination and communication of research outcomes and findings. The InChildHealth toolkit includes a variety of materials such as templates, guidelines, presentations, infographics, and social media messages.

5.1 Key Messages

Start by developing key messages that effectively communicate the research outcomes and findings. The key messages should be tailored to different stakeholder groups, including policymakers, industry partners, and the general public. Here are some examples of key messages that may be relevant:

- For a scientific audience: "Our research findings demonstrate a statistically significant correlation between X and Y, which suggests that X may be a contributing factor to Y."
- For policymakers: "Our research highlights the need for policy changes in the area of X to improve outcomes for Y."
- For industry partners: "Our research identifies potential opportunities for innovation and development of new products/services in the area of X."
- For the general public: "Our research has discovered new insights into the causes and treatments of X, which could help improve the health and well-being of individuals and communities."
- For donors and funding agencies: "Our research has made significant contributions to the understanding of X and has the potential to lead to further breakthroughs in this area."

These messages are just examples, and the key messages will need to be tailored to the specific research project and audience. The messages should be concise, clear, and highlight the most important findings and implications of the research.

5.2 Templates

Develop templates that can be used to create consistent and visually appealing materials, such as presentations, posters, and reports. The templates include the project branding and be adaptable to different audiences.

Word file	PPTX file
Font: Carlito Header 1: **16 pt and bold** Header 2: **14 pt and bold** Header 3: **12 pt and bold** Body/Normal: 11 pt	Font: Carlito Header 1: 40 pt and bold Header 2: 36 pt and bold Header 3: 30 pt and bold Body/Normal: 18-24 pt

All templates will be available in our TEAMS shared folder.

5.3   Guidelines

Develop guidelines for creating effective communication materials. The guidelines should cover topics such as writing style, tone, use of images and graphics, and data visualization.

— **Know your audience**: Understand the needs, interests, and preferences of your audience to ensure that the communication material resonates with them. The Audience and Targets must be clearly identified.

— **Keep it simple**: Use clear and concise language that is easy to understand, avoiding jargon or technical terms that may confuse non-experts. This is essential to catch the attention of our target group, unless we are communicating for our peers (scientific community).

— **Use a consistent tone**: Use a tone that is appropriate for your audience and consistent throughout the communication material. For example, when creating communication materials for students, it is important to use a tone that is engaging, approachable, and relatable. Here are some examples of an appropriate tone for students:

   o Conversational: Use language that sounds like a conversation between friends, avoiding overly formal or technical terms. Example: "Hey guys, have you ever wondered how the internet works? Well, today we're going to dive into the exciting world of internet technology!"

   o Enthusiastic: Use an enthusiastic tone to capture the student's attention and keep them engaged. Example: "Get ready to explore a whole new world of scientific discovery! Today we're going to uncover the secrets of the human brain!"

   o Informal: Use an informal tone that resonates with students and makes them feel comfortable. Example: "We're going to take a deep dive into the world of music theory, but don't worry, we're going to keep it fun and easy to understand!"

   o Empathetic: Show empathy and understanding of the challenges that students may face, such as exam stress or study overload. Example: "We know that studying can be tough, but we're here to help make it easier and more enjoyable!"

   o Inspiring: Use an inspiring tone to encourage students to pursue their passions and explore new ideas. Example: "You never know where your interests and passions may take you. So, let's explore and see what amazing discoveries we can make!"

— **Use visuals**: Use visuals such as graphs, charts, or images to illustrate key points and make the content more engaging. Always use your own materials, unless you do not have such materials and in that case you may use online platforms with free images and photos. Examples: https://unsplash.com/; https://www.pexels.com/

— **Highlight key messages**: Use headings, subheadings, and bullet points to highlight key messages and make the content easier to navigate.

— **Be accurate**: Ensure that all information presented in the communication material is accurate and reliable.

— **Use an appropriate format**: Choose a format that is appropriate for the content and the audience, such as a report, presentation, infographic, or video.

— **Follow branding guidelines**: Use consistent branding elements such as logos, colors, and fonts to ensure that the communication material is recognizable and associated with the project. All communication materials **must display the InChildHealth logo + EU co-funded logo (+ other sources of funding)**. As an extra it could be also important to add the logos of the entire consortium.

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— **Provide context**: Provide context for the research by explaining the background, methodology, and implications of the findings.

— **Include a call to action**: Encourage the audience to take action based on the research findings, such as sharing the material, attending an event, or contacting policymakers.

5.4 Social Media Messages

Develop social media messages that can be used to promote the research outcomes and findings on various social media platforms. The messages should be short, engaging, and include relevant hashtags and links. Here are some examples of social media messages that could be targeted towards policy makers:

— Highlighting the importance of research: "Evidence-based policies lead to better outcomes for our communities. That's why we're working hard to bring you the latest research and data on [insert topic]. #PolicyMakers #Research #DataDriven"

— Advocating for change: "We need to address [insert issue] in our community. By working together, we can make a positive change that benefits us all. Let's take action today. #PolicyMakers #Advocacy #Community"

— Promoting events: "Join us for an exciting discussion on [insert topic] with leading experts and policy makers. Register now to secure your spot. #PolicyMakers #Event #ExpertDiscussion"

— Highlighting success stories: "Our policies have led to positive outcomes for our community. By working together, we can achieve even more. Let's keep pushing forward. #PolicyMakers #SuccessStories #Community"

— Urging action: "The time for action is now. Let's work together to address [insert issue] and make a positive impact on our community. #PolicyMakers #CommunityImpact #ActionNeeded"

— Sharing insights from research: "New research shows that [insert finding] can lead to positive outcomes for our community. Let's use this knowledge to inform our policies and make a difference. #PolicyMakers #ResearchInsights #CommunityImpact"

— Acknowledging challenges: "We know that [insert challenge] is a complex issue, but by working together, we can find solutions that benefit us all. Let's keep the dialogue going. #PolicyMakers #Collaboration #ChallengeAccepted"

5.5 Video and Multimedia Resources

Develop video and multimedia resources that can be used to communicate the research outcomes and findings in an engaging and accessible format. These resources can include animated videos, podcasts, and webinars.

In conclusion, a dissemination and communication toolkit is a valuable resource for promoting the dissemination and communication of the project outcomes and findings, helping to ensure they are effectively mainstreamed to the relevant stakeholders.

6 Exploitation

Our planned exploitation activities involve measures to enable relevant actors and organisations to contribute to the creation of the desired economic, environmental, and societal impacts from the INCHILDHEALTH results, and we identify such activities as another priority of INCHILDHEALTH.

6.1 Expected Exploitation Results and Target Groups

In the below table the identified target groups are listed, linking them to specific outputs of the project, means of exploitation and the results of a stakeholder analysis, listing a) the target group rationale to engage in the results and b) the incentives to engage.

Target group	Relevant Outputs (Ot.)	Means of exploitation	Stakeholder analysis
Researchers and IAQ professionals	All project outputs (Ot. 1-15)	Publications by consortium partners. Further research favoured by open science strategy. Application of guidelines in choices that influence IAQ.	-**rationale to engage:** The project publications will be mainstreamed through the scientific community that share the same research scope to boost collaboration and future research projects. Additionally, young career scientists can be attracted by the topic and be engaged on research activities about IAQ. Specialists (exposure assessors), stakeholders, public authorities, researchers, educational entities, and decision-makers will be also engaged to easier future implementation of preventive/corrective measures regarding IAQ in schools and other indoor settings. -**incentives to engage:** We will promote contacts with target audience through the organization of informative sessions with public authorities, researchers, educational entities, and decision-makers to raise awareness on the network, our impact and the potential exploitation of our results. Some of these consultations will target fostering collaboration with other EU projects funded in this call (Ideal Cluster).
Children (can also represent patients)	Training material, behavioural	Participate in IAQ and health school activities. Spreading	-**rationale to engage**: The project develops citizen science activities that actively involve school children in the investigation of IAQ and

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	measures and alert system (Ot.12-15)	IAQ awareness and training material to other children. Learning how to influence own living environment.	health. These hands-on activities will be supported via training material and workshop formats specifically tailored to the age of pupils and curricula of the different countries involved in the field studies. The children will work out their own material on how to explain the IAQ issue to other children and especially which measures to take to prevent exposure to IA pollution. Strong awareness raising and learning related to IAQ is expected from the active involvement. The developed citizen science activities, the training material, workshop formats will be shared on the InChildHealth website for other schools and pupils to be engaged in IAQ in the future. -**incentives to engage**: The starting point for the pupils' engagement are the specific interests and needs of the schools involved. We will approach the schools with a set of citizen science modules which can be adapted to the specific needs and interests. Also some pupils will be involved in setting up their own research project with regard to IAQ and health, thus even more linking activities to their own needs and observations.
School community	IAQ guidelines, training material, behavioural measures (Ot. 4, 10-15)	Implementation of simple behavioural measures in classrooms and homes. Introduction of IAQ topics in school curricula. More informed choices for children. Spreading IAQ awareness and training material to other schools.	-**rationale to engage**: Scientific insights of InChildHealth form the epidemiological study, exposure assessment, intervention testing and the risk assessment tool will be disseminated broadly for other schools to learn how to avoid exposure to IA pollution. With this aim the translation of scientific outcomes into easily understandable IAQ guidelines and training material is key in order to trigger the implementation of measures to avoid IA pollution. Also, the citizen science activities, training material and workshop formats will be – as described above – disseminated broadly for other schools to get involved in hands-on educational sessions on IAQ and health.

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			-**incentives to engage**: Important for both, the knowledge transfer on IAQ and health, as well as the knowledge transfer on citizen science activities to the school community is the translation of outcomes into easy-to-understand guidelines, documents, communication material etc.
Building owners and managers	IAQ guidelines, new technologies to improve IAQ, Integrated Risk Assessment tool (Ot. 1-4, 6-12, 15)	Management, service, refurbishing, and construction of buildings. Selection of safe interior materials and cleaning procedures. Design, use and effective prediction of improved ventilation or technical control strategies (sensors). Information used to define causes of IAQ problems.	-**rationale to engage**: The project develops a user friendly air quality management Tool which can be used by the scientific community and end users such as building owners; public authorities and policy makers can use the Tool to receive information for human exposure and health risk from air pollutants indoors ; plans for air pollution reduction can be utilised for indoor air quality ; the project can deliver data on air pollution characteristics and health indicators that apply to indoor air quality. -**incentives to engage**: Health personnel and the general public can get a software Tool which is capable to characterize health risk from air pollution; the Tool can be used in future research projects and from the research community. RDI collaboration with InChildHealth scientists.
Manufacturing companies	IAQ guidelines, measurement protocols (Ot. 1-5, 15)	Development of safer products less prone to degradation and emissions.	-**rationale to engage**: The project develops inexpensive and user-friendly sensors and optimal ventilation technologies; building material manufacturers can utilize the emission test results to develop low-emission materials that perform as truly low-emission materials in real-life environments as opposed to performing well only in lab tests; the project provides information on sensors that have been found to be good and usable, and IAQ measurements that are relevant when evaluating comfort and health hazards for space users. -**incentives to engage**: Sensor and ventilation manufacturers involved will receive new

			information on their products developed and tested during the project; competitive advantage in the market; RDI collaboration with InChildHealth scientists.
Companies (technology, construction, consultants)	IAQ guidelines, new technologies to improve IAQ, measurement protocols (Ot. 1-12, 15)	Business activities. Design and use of improved ventilation, technical control strategies or sensors. Adoption of ventilation systems in public buildings and retrofit of private homes.	-**rationale to engage**: construction companies can utilize state-of-the-art IAQ guidelines and technology to produce healthy buildings, which can be utilized to gain competitive advantage in the market; new information about HVAC and the capability of ventilation filters to infiltrate pollutants; the project produces valuable new ventilation technology that can be used to improve IAQ of also private homes by way of retrofitting; IAQ can be measured with new, low-cost and user friendly sensors in real time thus making it possible to control the ventilation and IAQ of buildings; new sensor information also gives the possibility for building maintenance / owners to immediately react to possible IAQ problems -**incentives to engage**: competitive advantage in the market; RDI collaboration with InChildHealth scientists; ICH should offer good yet affordable sensors containing devices that sufficiently fulfil the requirements related to IAQ.
AIT, UEssex, SENSSOLU-TIONS and NCSR "D"	Rapid pathogen detection system (Ot. 8), real time monitoring solutions (Ot. 9)	Trade secret of the algorithmic models for VOC fingerprinting for *AMR-S3DP*. Brand registry, commercialization by SENSSOLUTIONS. Design market-ready *LAMP*-detection system with a license partner. Commercialisation of the *AirSensis* air quality monitor by NCSR "D" in collaboration with	-**rationale to engage**: (remember to add content about the cleaning process related choices, how they affect the IAQ) The project develops sensors to monitor micro-organisms in the environment. The results will give us information about which micro-organisms are present in the classroom environment. -**incentives to engage**: RDI collaboration with InChildHealth scientists. Development of new sensors to monitor and detect micro-organisms in real time.

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		Msensis/Airsensis company. The commercialization strategy consists of firstly, selling directly to the customers through the internet, and secondly, seeking reselling partners.	
Policymakers, authorities (incl. cities)	IAQ guidelines, measures to improve IAQ, Integrated Risk Assessment tool (Ot. 1-7, 15)	Research-based information for planning, interventions, and legislation (EU framework). Legislation updates for energy-efficient buildings, climate change, new materials, and chemicals. New technologies available for the assessment of multipollutants in the future legal frameworks. Inputs to standards defining AQ conditions.	-**rationale to engage**: The project will allow to revise and test the legal framework in place in each country and to evaluate the efficacy to ensure a proper IAQ in this specific setting. The suggested microbes to be selected as targets from the schools´ environment will be analysed and conclusions about their adequacy will be obtained. If suitable it will help exposure assessors to assess schools´ environments and to implement more effective control measures. -**incentives to engage**: Public authorities and city councils can get a software Tool which is capable to characterize health risk from air pollution.
Associations (professionals, patients)	IAQ guidelines, measures to improve IAQ, Integrated Risk Assessment tool (Ot. 1-7, 13- 15)	Material and guidelines to increase the knowledge of their members, e.g., in choices that influence IAQ. Learning the connection between IAQ and health effects.	-**rationale to engage**: Schools get up-to-date information about the indoor air quality of their own school building and the association with children's health, absences, learning and general well-being. The representatives of the schools are invited to the final seminar of the study, where the results are presented and where they have an opportunity to ask questions about the results of the study. The results will be used to improve the quality of indoor air in schools and the well-being of children. -**incentives to engage**: We encourage families to participate and stay involved in the entire

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			study by raffling one wristband to an amusement park and five movie tickets regularly every week throughout the study.

Commercial exploitation: An important objective of the project is to develop technologies offering solutions for monitoring and/or improving Indoor Air Quality.

INCHILDHEALTH's Work Package leaders are responsible for surveying the IP management. Decisions on protection, filing and exploitation of foreground IP are taken by the WP Leaders within 15 days from the date of receipt of the query. The consortium follows relevant legislation and the requirements posed by the Horizon Europe Grant Agreement, as well as the Consortium Agreement, which contains additional aspects agreed upon. As a basic ownership principle, the party that has generated the results will be the owner of the results. Dissemination activities are monitored so that they remain compatible with the protection of IP rights, confidentiality, ethical considerations, and the legitimate interests of the owner(s) of the results. The project has agreed on the use of a practical tool, shared in the collaborations space, as a practical means to inform other partners well ahead of time on plans and intentions to publish, thus giving more time than indicated in the Consortium Agreement for others to check that no commercialisation actions are compromised. Before publication and open access sharing, the consortium has the possibility of registering IP included in the results.

INCHILDHEALTH's specific outputs expected to have greatest potential value for exploitation include (i) AMR-S3DP, (ii) Aero-S3DP, (iii) the DELTA wearable device, and (iv) portable AirSensis system. At the time of writing, the corresponding foreground IP holders are (i) SENS, (ii) CSEM and (iii) NCSR "D". Partner specific updated plans for exploitation are detailed below:

SENSSOLUTIONS	*AMR-S3DP*	Start TRL: 3	End TRL: 7
AMR-S3DP has been developed for monitoring *Clostridium difficile, Klebsiella pneumoniae* and MRSA. The sensor array and machine learning algorithms will be trained, calibrated, validated, and used to monitor "VOC fingerprints" of the main bacteria and fungi of interest in field studies. **Target market and user group:** Public and private buildings and the building workers. **Analysis of market evolution since proposal submit:** Market for AMR-S3DP is increasing continuously. We can offer a validated solution to detect various microorganisms in real time and without sample destruction and manipulation. The TRL expected at the end of the project will be TRL7.			

SENSSOLUTIONS	*Aero-S3DP*	Start TRL: 5-6	End TRL:8
Aero-S3DP monitors NO2, SO_2, CO, CO_2, VOC, PM1, PM2.5, PM4, PM10, and new technologies will be added to detect NH_3, H_2S, CH_4, O_3 and radon. It will be deployed in field studies and commercialised for the nine first contaminants and customizable with additional ones. It will be powered by a cybersecure IoT platform with machine learning algorithms to provide indoor occupants with information about AQ and recommendations for their health and ventilation system usage and/or to activate alarm systems for surface maintenance. **Target market and user group:** Public and commercial buildings and the building workers/owners			

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Analysis of market evolution since proposal submit: Market for Aero-S3DP is increasing. We can offer a validated solution with more pollutants compared to other commercial systems. The TRL expected at the end of the project will be TRL8.

SENSSOLUTIONS	*Mini-Aero*	Start TRL:7	End TRL:8-9

We will provide and test in the field a portable adaptation of the low-cost mini-Aero (a current commercially available technology) able to store daily data through SENSSOLUTIONS Cloud when reaching an online connection. The *Mini-Aero* includes monitoring of CO_2, PM, non-methane VOCs, temperature and humidity, and GPS location

Target market and user group: Public and private buildings and the building workers/owners

Analysis of market evolution since proposal submit: The Market for Mini-Aero is increasing. We offer a portable validated solution to monitor the principal pollutants in the air that can affect the human health. The TRL expected at the end of the project will be TRL8-9.

AIT/ UEssex /CSEM	*LAMP*	Start TRL: 2	End TRL: 4/6

This system has multiple components already established in the field (TRL 7-9). We will combine these components to a new user-friendly system to reduce operators' costs and analysis time. We will reach TRL 6 for the analytic pipeline and provide a laboratory prototype (TRL 4) for a fully automated system.

Target market and user group: Public and commercial buildings and the building workers/owners, national, local and regional authorities, government agencies and regulators.

Analysis of market evolution since proposal submit: (e.g. changes in the global market, competitors actions, developments in competing technologies etc.) There is a product designed for sampling fungal crop pathogens manufactured by Agri Samplers Ltd, as well as some other similar devices developed for crop pathogens. The underlying molecular methods are different to ours and this product is also developed for outdoor sampling and targeted at arable farmers (e.g. the current targets are Potato late blight, Sclerptonoa, Yellow and brown rust, and Septoria). So this is not a direct competitor to our system as it would not be suitable for indoor air sampling (for example size and portability) even if assays for human pathogens were developed.

IST ID / SENSSOLUTIONS	*Information and alert system*	Start TRL: 2	End TRL:6

The concept of this system was already tested in previous studies, but the new data management platform needs to be implemented from the start.

Target market and user group: Public, commercial and private buildings and the building workers/owners.

Analysis of market evolution since proposal submit: Alert systems are gaining a special attention and interest. We offer a rapid alert system for the detection of pollutants.

NCSR "D"	*AirSensis*	Start TRL: 4	End TRL:6

AirSensis records temperature, humidity, PM10, PM2.5, CO, NO_2 and CO_2, can be connected to the internet and functions with a battery. AirSensis will be given additional features like portability and GPS.

D7.1 Dissemination, Communication and Exploitation Plan

Target market and user group: Scientists, Public and commercial buildings, Local and Regional authorities

Analysis of market evolution since proposal submit: The global market in low-cost sensing systems is increasing; key advantages of the AirSensis system (including the portable version) are the robust validation of its measurements, the QA/QC procedures provided with the system and the flexibility in data analytics provided in the data platform. The AirSensis system is expected to reach TRL6-8 by the end of the project.

TECH UN CRETE / NCSR "D"	*Integrated Risk Assessment Tool*	**Start TRL:2**	**End TRL:6**

The tool starts from TRL 2, and it will reach TRL 6, since we will also demonstrate its use.
Target market and user group: National, Regional and Local authorities, Educators, Scientists **Analysis of market evolution since proposal submit:** This tool will be provided free of charge. Risk assessment online policy tools are proving more and more useful for policy making, awareness raising and educational purposes. The Tool is expected to reach TRL6 by the end of the project.

UOULU / CSEM	*HVAC and filtration*	**Start TRL:4-5**	**End TRL:6**

Central and localized HVAC and filtration systems will use existing technology, but we will enhance the systems and optimize their use to improve IAQ and health. The systems will be validated using custom-built non-commercial wearable devices to collect raw physiological signals of children at TRL 6-7.
Target market and user group: Public and commercial buildings and the building users. The DELTA wearable device can be valorised as a standalone device for fitness and wellness activities as well as an ambulatory medical device.
Analysis of market evolution since proposal submit: Market for smart and sustainable (low carbon) technologies that promote health and wellbeing is increasing. We can offer validation of the effectiveness of the existing technologies as well as recommendations for further development based on our testing and research. CSEM cannot have a commercial exploitation of the DELTA wearable device. However, it can valorise its technology through licencing. CSEM's cutting-edge PPG technology has already attracted several manufacturers.

In summary, this plan lays down the main principle of the communications, dissemination, and exploitation activities in INCHILDHEALTH. Once the deliverable is submitted, the Plan will be reviewed and updated at the Consortium Meetings regularly. In the following years, special emphasis will be placed on the innovation process of the various devices developed in the project.