LIFEINDEXAIR



LIFE Index-Air management guidelines

Management Protocol | Contingency Plan (Deliverable E1.1)

Monitoring Protocol (Deliverable E2.1) | Quality Assurance Plan

November 2016

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This document contains:

Management Protocol

Deliverable E1.1 – Contingency Plan

Deliverable E2.1 – Monitoring Protocol

Quality Assurance Plan

Executive Summary

The LIFE Index-Air Management Guidelines document is produced in the context of Action E – Project Management and includes the Management Protocol, Monitoring Protocol, Quality Assurance Plan and Contingency Plan.

The objectives of Action E are firstly to provide the overall internal management of the project, and on the other hand, to execute the administrative control of the project and the liaison with the LIFE Programme, therefore ensuring the overall co-ordination, quality and progress monitoring of LIFE Index-Air towards the defined project objectives.

It is a collection of provisions agreed and adopted by the LIFE Index-Air consortium to ensure the quality of the project implementation process, project workflow and meetings, aiming at creating reports, workshops, and dissemination activities. The Management Guidelines document helps ensuring the good delivery of LIFE Index-Air to the LIFE Programme, and is a facilitator for improving relationships within the project and with the funders. It constitutes a document to be used internally as a reference guide by the consortium members, communicating all relevant principles of project operation to all LIFE Index-Air project partners.

The main objective of this Management Guidelines is to ensure the consortium internal efficiency and quality of the project results, while maintaining consensus and satisfaction of all involved parties.

This Management Guidelines and all related documents (forms / templates) will be available to the project participants on the LIFE Index-Air storage platform (provided by IST) in the relevant folder.

This Management Guidelines will be maintained, and updated whenever needed, throughout the entire duration of the LIFE Index-Air by the Project Manager (PrM).

Therefore, progress and changes in the project will be documented in a sequence of Management Guidelines versions.















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1 Management Protocol















1.1 Introduction

The objective of the LIFE Index-Air management protocol is to provide the overall internal management of the project ensuring the overall co-ordination of LIFE Index-Air towards the stated project objectives.

It shall communicate all relevant principles of project operation to all LIFE Index-Air project partners. Therefore, the management responsibilities, roles, and technical organisation are described, details on meetings, communication infrastructure, project reporting, document structuring and archiving are specified, along with paragraphs dedicated to project organisational aspects, project management, as well as deliverable production and quality assurance.

The management protocol will be maintained and updated if needed within the project lifecycle.

1.2 Language of the project

The official language of the project is the English language.

The communication with the stakeholders should be the national language.

The external documents will be delivered in English, with exception to the Layman Report and other specific documents produced to be delivered to the schools, students, parents and local community that will be produced in English, Portuguese, Greek and Finnish.

1.3 Project Organization and Management

The LIFE Index-Air project coordination is provided by Instituto Superior Técnico (IST). The Project Manager (PrM) is in charge of following up the implementation of the LIFE Index-Air Management Guidelines, in terms of management procedures, quality assurance and progress monitoring. However, all hierarchical levels of project management must be involved in the actual use of the system and contribute to the achievement of the objectives set forth.

The list of all partners of the LIFE Index-Air consortium is detailed in Table 1.

Table 1: List of Partners

No.	Partners	Acronym	Country	NUTII
1	Instituto Superior Técnico	IST	Portugal	PT17
2	National Centre for Scientific	NCSR-D	Greece	EL30
	Research "Demokritos"			
3	National Institute for Health and	THL	Finland	F11D
	Welfare			
4	Technical University of Crete	TU-Crete	Greece	EL43
5	Universidade de Aveiro	UAVR	Portugal	PT16













In accordance with the LIFE Index-Air objectives, the work is structured and carried out in 5 main actions (Figure 1):

- A. Preparatory actions;
- B. Implementation actions;
- C. Monitoring the impact of the actions;
- D. Public awareness and dissemination of results;
- E. Project management and monitoring of the project results.













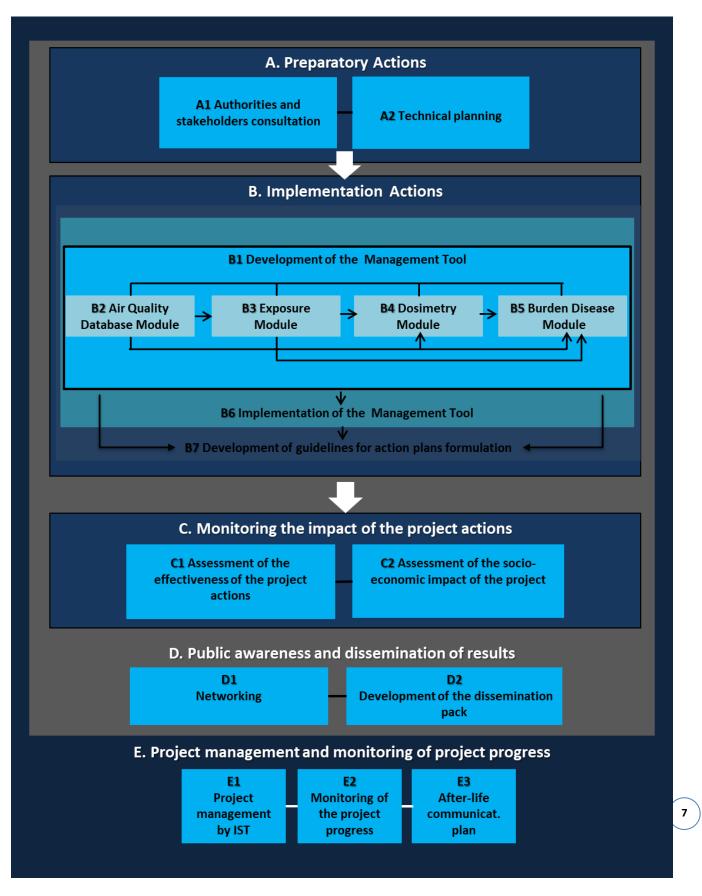


Figure 1: Structure of the LIFE Index-Air project











Table 2: Actions and responsible partners

Actions	Title	Lead partner	
Action A	Preparatory actions		
Action A.1	Authorities and stakeholders consultation	IST	
Action A.2	Technical planning	IST	
Action B	Implementation Actions		
Action B.1	Development of the LIFE Index-Air Management Tool	NCSR-D	
Action B.2	Air quality database module	IST	
Action B.3	Exposure module	UAVR	
Action B.4	Dosimetry module	TU-Crete	
Action B.5	Burden disease module	THL	
Action B.6	Implementation of the Management Tool NCSR-D		
Action C	Monitoring of the impact of the project actions		
Action C.1	Assessment of the effectiveness of the project	IST	
ACTION C.1	actions		
Action C.2	Assessment of the socio-economic impact of the	IST	
ACTION C.2	project		
Action D	Public awareness and dissemination of results		
Action D.1	Networking	IST	
Action D.2	Development of the dissemination pack	IST	
Action E	Project management		
Action E.1	Project management by IST	IST	
Action E.2	Monitoring of the project progress	IST	

A specific project organisation structure presented in Figure 2 is adopted, comprising:

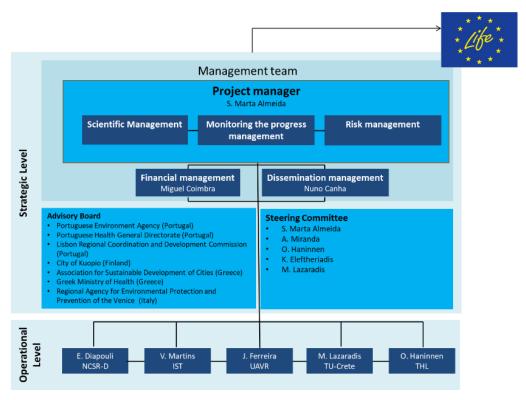


Figure 2 – LIFE Index-Air Project Organizational Structure















The responsibilities of each level of the organisational structure are presented in Table 3.

Table 3: Responsibilities of each level of the organisational structure

Level	Responsibilities
PROJECT MANAGEMENT	- completion of scientific milestones and deliverables of the
(5.4)	project;
Project Manager (PrM): Marta Almeida	- compilation of the condensate periodical reports and for
	the compilation of mid and final reports to the Commission (in collaboration with the action and dissemination team);
	- ensure the punctual delivery of the reports;
Dissemination Manager: Nuno Canha	- chair of the management team;
Financial Manager: Miguel Coimbra	- scientific, monitoring the progress and risk management;
	- development of the monitoring protocol;
	- development of the contingency plan;
	- maintain the constant communication with the rest of the
	Project Management Team;
CTEEDING COMMITTEE (CC)	- plan and organize the meetings of the partners.
STEERING COMMITTEE (SC)	- planning concerning the implementation of the project;
Marta Almeida	- approval of project reports, outputs and actions;
Ana Miranda	-monitoring of the progress of the project;
Otto Haninnen	- approval of unexpected expenditures necessary for the implementation of the action;
Kostas Eleftheriadis	- verification of the project's coherence with established
Mihalis Lazaridis	aims and schedules;
	- risk prevention and mitigation measures;
	- conflict resolution;
	- dismissal of any partners in breach of its contractual
	obligations.
Operational Level (OL)	-coordinating all activities of the Actions;
Lila Diapouli	- interacting regularly with activity partners involved in the
Vânia Martins Joana Ferreira	Actions; - achieving the goals;
Mihalis Lazaridis	- proactively monitoring the Actions progress;
Otto Haninnen	- reporting to the PrM the progress of the work and any
Otto Hammen	potential issues that may arise in the future.
EXTERNAL ADVISORY BOARD (EAB)	- guide the Steering Committee in its technical decisions;
	- guide project in order to customize project outputs
	according to end-users needs, to guarantee that they will be
	used after the end of the project.

The Financial Manager will:

- establish and maintain financial records;
- prepare and submit cost claims;
- ensure that incurred expensed are in line with internal financial procedures and programme's requirements;
- follow-up the payments.















All partners will keep updated records of their financial statements and will report to the IST Financial Manager whenever necessary.

Table 4 presents the list of the External Advisory Board's members.

Table 4: LIFE Index-Air Advisory Board

Country	Institution
Portugal	Portuguese Environment Agency
	Portuguese Health General Directorate
	3. Lisbon Regional Coordination and Development Comission
Finland	4. City of Kuopio
Greece	5. Association for Sustainable Development of Cities
	6. Greek Ministry of Health
Italy	7. Regional Agency for Environmental Protection and Prevention of the Venice

1.4 Conflict resolution

Conflicts should be resolved at the lowest possible level; those which cannot be solved will be taken through a "facilitated negotiation".

The conflict resolution process followed by the consortium is shown in Figure 3.

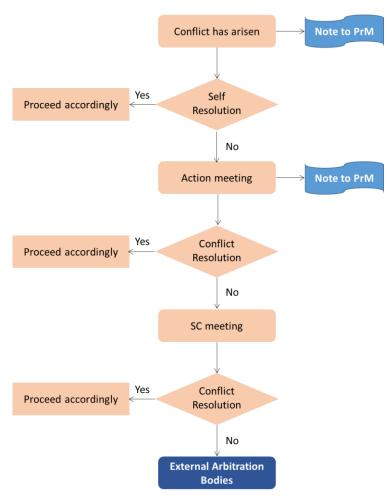


Figure 3 - Conflict resolution process













1.5 Meetings

In order to co-ordinate and manage the various activities of the LIFE Index-Air project, 1-2 days meetings will be held at a regular time basis, 2 times/year. These meetings will allocate time for the Steering Committee (SC) and Operational Level (OL). Local External Advisory Board (EAB) members will be invited to participate in EAB meetings.

In terms of attendance, and for all LIFE Index-Air SC meetings, the presence of the Project Manager and designated representatives of each beneficiary is required.

The PrM will be in charge of setting up and updating (each year) a calendar of meetings, that may include dedicated meetings to be identified at each SC meetings for the period up to the next SC meeting (in principle, for the next 6 following months). Further project meetings may be planned if urgent issues will need to be resolved. Table 5 presents the calendar of the meetings foreseen in the proposal.

Date Place Organizer 19-20 Oct 16 NCSR-D M1 Athens M6 27-28 Mar 17 Lisbon IST M13 17-18 Oct 17 Crete TU-Crete M22 9-10 Jul 18 Aveiro **UAVR** M25 24-25 Oct 18 Lisbon IST M30 27-28 Mar 19 **UAVR** Aveiro M37 8 Oct 19 NCSR-D Athens M37 8 Oct 19 THI Kuopio M38 4-5 Nov 19 Lisbon IST

Table 5: Calendar of the meetings

The project intends to run online electronic meetings whenever feasible and appropriate using information and communication technologies available. Face to face meetings will be organised by the project partners in rotation. The following subsections clarify who will make invitations, how meeting decisions are to be taken, and how meetings are to be recorded. When specific decisions have to be taken in the short term, extraordinary meetings may be held by audio-conferencing, including management aspects that may have as consequence the request of an amendment to the Grant or Consortium Agreement; in this case, the voting shall be held via email.

1.5.1 Meeting requests

Meetings are convened by the corresponding chair: the leader for a meeting or workshop, and the PrM for a SC meeting. The host of the meeting will provide logistics and accommodation information to the participants.

Table 6 to Table 8 summarize the main issues about preparation and organization of meetings.

Table 6: Convening meetings

	Ordinary meeting	Extraordinary meeting
Steering		At any time upon written request of the
Committee	At least twice a year	Operational Level or 1/3 of the Members of
		the Steering Committee
Technical	At least twice a year	At any time upon written request of any
Committee	At least twice a year	Member of the Operational Level
Other meetings		At any time upon written request of
		partner who chair the meeting













Table 7: Notice of a meeting

	Ordinary meeting	Extraordinary meeting
Steering Committee	45 calendar days	15 calendar days
Operational Level	45 calendar days	15 calendar days
Other meetings		7 calendar days
	14 calendar days	In case that all called partners to the
		meeting agree, the meeting could be
		noticed in a shorter time

Table 8: Agenda definition

	Ordinary meeting	Extraordinary meeting
Steering Committee	21 calendar days Partners may add items to the agenda until 14 calendar days before the meeting	10 calendar days Partners may add items to the agenda until 7 calendar days before the meeting
Operational Level	21 calendar days Partners may add items to the agenda until 14 calendar days before the meeting	10 calendar days Partners may add items to the agenda until 7 calendar days before the meeting
Other meetings	7 calendar days Partners may add items to the agenda until 3 calendar days before the meeting.	7 calendar days or at the same time of the meeting notice. Partners may add items to the agenda until 3 calendar days before the meeting.

1.5.2 Meeting resolutions

Any decision discussed in a project meeting will require a quorum of at least two thirds (2/3) of the called partners to allow taking such decision forward.

The consortium will follow a consensus-based decision-making process.

Without prejudice to decisions rules of the Consortium Agreement, decisions taken in the meetings are aimed to be adopted unanimously. If voting is required, each organisation is granted one vote.

Decisions shall be taken by a majority of two-thirds (2/3) of the votes cast.

Whenever possible, the meeting invitation/agenda will indicate what decisions will be discussed. Non attending parties have to identify a partner that will represent their interest during the decision process. This has to be previously communicated to the PrM via email.

1.5.3 Meeting minutes

The following rules will apply to minutes:

Recording: Minutes must be recorded for every official project meeting by a rapporteur.

Rapporteur: Member of the organizing team of the meeting that will record the interventions and achievements of the meeting and prepare the minutes of the meeting according the "LIFE Index-Air Minutes Template". The *rapporteur* is appointed at the start of the meeting.















Consolidation / Approval of the minutes: As a general procedure, the draft meeting minutes will be sent to all Members by the chairperson of the meeting within 10 calendar days of the meeting. The minutes shall be considered as accepted if, within 10 calendar days from sending, no Member has sent an objection in writing to the chairperson.

Circulation of the final minutes: The chairperson will send the final version of the minutes by email to all the partners that were called to the meeting and to the PrM.

Content: The minutes must at least contain:

- The meeting attendance list;
- The approved meeting agenda, including date and venue;
- Decisions taken, including motivations as far as possible;
- An action list containing for each action, a responsible and a time schedule (if an action was given to a person not attending the meeting, a person for contacting that person needs to be given);
- A list of agreed upcoming events;
- If appropriate, a list of related documents (annexes).

1.6 Events

For the LIFE Index-Air events that shall call for the attendance of an external audience (i.e. those not belonging to the beneficiary institutions) some additional principles and guidelines will be used.

1.6.1 Event type

The following type of events will be planned:

- Meetings with stakeholders;
- Open Forum Discussions;
- Seminars:
- (potentially) Joint workshops organised with projects funded under the same Call and objective than LIFE Index-Air;

1.6.2 Event preparation

For the organisation of events, the meeting guidelines stated in Section Meetings will apply. In addition to that, the following guidelines apply:

- Prior to any event, objectives must be stated. E.g. information exchange, presentation and discussion of work, co-ordination of activities of different or member projects, promotion of work towards public body representatives, etc.;
- Following the event objectives, target participants must be specified and invited;
- It is encouraged to fix/confirm the objectives explicitly at the beginning of the event, and to end the event with clear synthesised conclusions with respect to the event objectives.

1.6.3 Event reports/minutes

Depending on the type of event, the event report/meeting minutes may differ from the guidelines stated previously, but any workshop report must be understandable for non-attending readers, and will feature an executive summary to improve readability.















1.7 ICT support to the project

This section relates to the organisational aspects of ICT usage and support for communication and information spread within in the Consortium during the course of the project.

The specifications of the developed LIFE Index-Air website and social Media are described in the LIFE Index-Air Communication and Dissemination Plan.

1.7.1 Project website

The LIFE Index-Air website (<u>www.lifeindexair.net</u>) will consist of the sections: Home, Project objectives, activities and results, News & Events, Partners, Library, Contact, Search, LIFE Index-Air storage platform.

1.7.2 Social media

Social media will be used to disseminate the results of the project:

Facebook: https://www.facebook.com/LIFEIndexAir

LinkedIn: https://www.linkedin.com/groups/12038573

Instagram: https://www.instagram.com/LIFE.Index.Air/

Twitter: https://twitter.com/LIFEIndexAir

1.8 Documents and data storage platform

A platform will be used to store the documentation (drafts and final) produced during the project. All members of the LIFE Index-Air consortium will be registered on the platform and have access to all documents. A separate folder accessible to the LIFE team and to the External Experts will be created to serve as a repository of the final deliverables, which are thus made accessible to them.

When uploading a document on the LIFE Index-Air storage platform, the issuing member will inform all members concerned by e-mail.

1.9 Electronic Communication

Electronic mail is used extensively by the partners to communicate and exchange documents with each other.

Based on the list of project participants maintained by the PC and considering the project structure, the following MAILING LISTS are present in Annex 2 and in the LIFE Index-Air Storage Platform:

- LIFE Index-Air partners' mailing list, with all official members and all their teamwork components;
- LIFE Index-Air external advisory board's mailing list;
- LIFE Index-Air schools' mailing list;

If required, the consortium will use SKYPE (www.skype.com) teleconference services for *adhoc* meetings as an alternative to face to face meetings. It provides several modes of communication regardless of the application used, e.g. chat, voice, message board, data conferencing and file transfer. It can be used in a multiple-user mode so groups can hold online conferences.













1.9.1 Guidelines for Effective Electronic Communication

To reduce the information exchange effort, project information will be exchanged by using electronic communications. The intention of the guidelines below is to make efficient use of electronic communications (by e-mail) in the project, in order to:

- Ensure that all partners get the information they need in a timely manner,
- Avoid e-mail spamming and information overload,
- Minimise travelling costs.

Note: to allow some flexibility however, only the rules in **bold** are mandatory.

General rules:

- Only relevant information (strictly related to the LIFE Index-Air project) is sent to the appropriate project participants, using the relevant mailing list.
- Each mail will have a specific subject (field "Subject"), with the following elements:
 - The project acronym (LIFE Index-Air) followed by word "ACTION" whenever an action is needed from the recipient(s)
 - The required action,
 - The deadline, preceded and followed with a hyphen "<>",

Examples of a subject field:

- LIFE Index-Air ACTION: Propose dates for 2 workshop <7 Sept 2016>.
- LIFE Index-Air: Success of National Workshops!
- Each mail must contain one topic only. The topic must be clearly expressed in the subject field.
- If it is not practical to separate multiple topics, then the different topics in the e-mail must be separated by clear heading.
- Communication of relevance to a particular group (such as comments and votes) will be given as
 group replies so as to give all group members the opportunity to receive a clear view of every
 partner's opinion, in an effort to speed up and harmonise the agreement process;
- Deadline for reply. In the case of no response to a message within ten (10) calendar days, response will be considered as positive.
- e-Mail messages sent in response to a message should quote the relevant parts of the initial message, in such a way that the recipient can easily and clearly understand what the initial message was about (what issues were raised) and what the added comments are;
- **Documents of project-wide relevance are stored on the storage platform.** They are not generally and necessarily distributed by e-mail to the whole project membership. Project participants are notified by e-mail and invited to consult the documents on the platform.

1.10 Software tools / document formats

LIFE Index-Air will employ the Microsoft Office packages with Word (version 2010 or newer) for documentation, PowerPoint (version 2010 or newer) for presentation, and Excel (version 2010 or newer) for tables. Project document templates are made available in these document formats.

Documents will be exchanged by e-mail and are archived on the LIFE Index-Air storage platform.















Use of PDF Acrobat format is also recommended as far the documents are sent for information and with no need / requirement to change, typically so as to reduce the size of the attachment of mails.

1.11 Project documentation

1.11.1 Technical Deliverables

A deliverable template (initially referring to all deliverables except if explicitly mentioned) is available in Annex 3 and in the LIFE Index-Air storage platform. This template is to be used for all technical deliverables. It may also be used for non-technical reports and other project documents. The first two pages contains information that are necessary for the identification of the document including its status, author(s) and contributors, the institutions they belong to, version history and date. For official deliverables, the title page must contain the name of the deliverable.

For public deliverables, these initial pages will be substituted for public release versions, avoiding project terminology and, whenever possible, making use of pictures/ graphic design for a more attractive appearance.

1.11.2 Document naming convention

The deliverable's files will be named according to the following rule:

DocRef#_LIFE-Index-Air_ DocName_V.X.X.filetype

Where:

- "DocRef#" is the Deliverable number
- "DocName" is the title of the document
- "VX.X." is the version of the document. First version submitted to the LIFE team will be version 1.0. Previous versions will be V0.X. Each time a version is submitted to the LIFE team the main number will be changed: V2.0, V3.0...

For example:

D1.3.2_LIFE-Index-Air_Report Networking Activities v1.0.pdf

1.11.3 Quality assurance plan

The procedures for deliverable Quality Assurance (QA) are defined as follows:

- Status Draft is achieved when the primary author of a deliverable has defined the Table of Content (ToC) of the document, which is then ready to be sent to other contributors with preferably explicit information of what type of contribution and where in the document;
 - Sending time (latest): Mx + 30 days (Mx: start of the corresponding task)
- Status Working Document is achieved when the primary author of a deliverable has reviewed the document and approved it internally and makes it available to other partners for comments; Note that for both Draft and Working Document status, it is not required that the document has been fully completed;
 - Sending time: at any time during the task development, and at the latest at My 30 days (My: end of the corresponding document delivery deadline)













- Status Released is achieved when the edition process is finished and the document is ready to be reviewed by at least TWO designated project partners (other than the document editor and authors), or peer-reviewers appointed by the SC:
 - o Review and approval (or request for revision) has to be done within 10 days after sending time.
 - o Potential revision is then to be done between 7 days and 15 days.
- Status **Delivered** is achieved when a deliverable is approved by the SC and given to the PrM for submission to the LIFE team. The issuing date is that of the approval by the SC. Once a document reaches Delivered status, it has to be uploaded to the Participant Portal.
 - o Sending time: My -2 days (My: end of the corresponding document delivery deadline)
- Status LIFE Approved is achieved when the LIFE team has approved and accepted the
 deliverable.

When reviewing a document, comments are made in writing to the editor(s). Moreover, it is recommended that electronic annotation techniques (Comment function in MS Word 2010 or newer) be used as much as possible.

Document status of every distributed version must be clearly visible in the front page (except for public release versions).

1.12 Project Reports

The reports template is available for all partners on Annex 4 and LIFE Index-Air storage platform.

1.13 Document Template (PowerPoint)

All (public and internal) presentations will be based on the official Powerpoint template available for all project partners on Annex 5 and in LIFE Index-Air storage platform.















1.15 Dissemination and capitalization of results

The lead beneficiary and the other partners should take into account that the results must be accessible to the general public and, in particular, to all the stakeholders, therefore the beneficiaries commit to freely disseminate the results of the project. Moreover, the partners commit to play an active role in actions of capitalization, dissemination and exploitation of the results obtained within the project.

Any piece of communication has to show the logo of the LIFE Index Air project and the LIFE Programme logo. The dissemination of results should indicate that the exposed opinions only reflect the views of the partners, and therefore do not represent the official opinion of the Programme Management Bodies.

The partners accept that the Programme Management Agencies disseminate information from the project as part of the spread and capitalization actions of the Programme in general (the name of the entity and data of the Main Beneficiary and of other partners, the amount granted, the products and results obtained).

1.16 Intellectual property Rights

All products (material and intellectual) achieved in the project framework belong to the project partners. The Management Bodies of the LIFE Programme reserve the right to use them in the context of advertising and capitalization programme. The rights of pre-existing intellectual and industrial property that are placed at the disposal of the project will be fully respected.

1.17 Confidentiality

The partners undertake to take the necessary measures to ensure that the project responsible persons respect the confidentiality of the information and that it is not disclosed without prior consent of the Principal Beneficiary and of the author of the information.

1.18 Ethics Management

The LIFE Index-Air project will involve the collection of data in schools and the application of questionnaires to parents.

Before starting the project activities an Informed Consent will be delivered to the schools staff, students and parents in Portuguese. The informed consent form will consist of two parts: the information sheet and the consent certificate.

1.19 Horizontal principles

1.19.1 Sustainable Development

The increase of atmospheric aerosols is directly related to the climate changes. Aerosols interact both directly and indirectly with the Earth's radiation budget and climate. As a direct effect, the aerosols scatter sunlight directly back into space. As an indirect effect, aerosols in the lower atmosphere can modify the size of cloud particles, changing how the clouds reflect and absorb sunlight, thereby affecting the Earth's energy budget. Within LIFE Index-Air project PM10 and PM2.5 will be chemically characterized and the impact of their emission sources on the population exposure and on human health will be estimated. However, there are co-benefits to addressing particulate air pollution that go beyond the positive impact on health, once reducing certain air pollutants can make an important contribution to climate mitigation. According to the















World Meteorological Organization, in collaboration with the United Nations Environment Programme (UNEP-WMO), the current scientific understanding of the aerosol-radiation effects is accurate enough to promote the evaluation of measures for limiting the emissions of the light-absorbing fraction of the aerosol (the "black carbon", BC) which has now been recognized as the second most important warming agent at the global scale beside CO₂ [3]. Therefore, applying the mitigation actions provided by the management tool, developed within this project, will play an important role in the global scale issue of climate change.

LIFE Index-Air consortium is deeply committed to contribute for a Low Carbon Economy and believe that one step to achieve this is to guarantee a Green Procurement, even though this is still a voluntary instrument in EU. The leader of each Work Package activity will be responsible to guarantee a selection of products and services that minimise environmental impacts, requiring to the companies or organisations their certifications under the EMAS and/or ISO 14001 regimes. In cases that this is not possible, each Work Package activity leader will choose environmentally friendly goods and services in what it is call Green Procurement, trying to assure that the companies or organisations carry out, as much as possible, an assessment of the environmental consequences of a product at all stages of its lifecycle. This means considering the costs and environmental impacts of securing raw materials, and manufacturing, transporting, storing, handling, using and disposing of the product.

The carbon footprint measures the impact of project activities on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide (CO₂).

A reduction in global greenhouse gas emissions is not only the goal of environmentalists but also of pretty much every government in the world.

The most effective way to decrease a carbon footprint is either decreasing the amount of energy needed for production or to decrease the dependence on carbon emitting fuels. Several measures will be applied during the project implementation, in order to decrease to the lowest possible level the project's carbon footprint:

- An online communication platform will be established in the starting phase of the project which will be used for web-based meetings and presentations for all purposes. This will reduce de travel costs caused by meetings in person.
- Use of recycled paper in the written material that will be produced during the project's dissemination activities.
- Reduction of the paper used.
- All the material will be provided in a digital version, decreasing the number of prints.
- Green procurement will be used whenever possible.
- Use of public transports will be promoted not only within the project team but also for all the community that will participate in LIFE Index-Air events.
- The calendar of meetings and events was organized in a way that will reduce the number of travels.
- LIFE Index-Air will promote the implementation of measures reducing air pollutant emissions,
 which are expected to also reduce CO₂ emissions.
- For caterings: Locally supplied food, preferably from sustainable agriculture sources and fair trade. Beverages will be provided in glass jars and use of plastic utensils will be avoided as much as possible.

1.19.2 Equal opportunities and non-discrimination policy

Project partners are committed to equality, sustainability and the provision of opportunity for all. No individual involved in project activities (whether it's a project beneficiary, an associate beneficiary or a















stakeholder) will be discriminated on grounds such as age, gender, disability, ethnicity, national origin, sexual orientation, and religious or political beliefs. The dissemination and transfer practice is based on this principle too, so everyone can profit from ensured accessibility as a condition for sound development in equal measure. LIFE Index-Air's outcomes will adopt a neutral language format and clear to all the target audiences. All events will be held in places that allow access to people with reduced mobility. Moreover, additional staff recruitment and/or any external service will not made (directly or indirectly) on the basis of personal characteristics described previously, but rather on the ability to do the job or the service.

1.19.3 Equality between men and women

Individuals acting on behalf of the project partners have been appointed based on strictly professional merits and adequateness for the role and actions to be implemented. There have not been biased appointments to deliberately favour gender equality..















2 Contingency Plan

(Deliverable E1.1)















The need of drawing up a contingency plans emerged from a thorough analysis of the risks that the project faces. A contingency plan is sometimes referred to as "Plan B," because it can be used as an alternative for action if expected results fail to materialize.

2.2 Identification of risks and mitigation measures

The list of risk of the project has been identified and the associated contingency plans have been defined in Table 9. This list will be reviewed and updated in every SC meeting in order to discharge risks or identify new ones, revaluate their impact and likeliness and adapt the associated contingency plans.

Table 9: LIFE Index-Air risks and contingency plan

Risk	Description of risk	Proposed risk-mitigation measures
number		
R1	Activities delay	Constant on time control by the coordinator of the
		goals to be achieved;
		On time Project plan bringing-up;
		Identification of on time dedicated
		countermeasures;
		Application of on time dedicated countermeasures;
		Check of the effect of on time dedicated
		countermeasures.
R2	Poor communication between	Periodic skype and phone meetings with task
	partners	leaders.
R3	One or more partners leave the	Effective management procedures will be applied to
	consortium producing a delay	timely intercept problems, remove or reallocate
	or even prevent reaching some	partners and, if needed, replace them with new
	of the project objectives	partners with suitable skills.
R4	Confusion in the decision	Definition of clear tasks and subtasks to be
	making process	accomplished;
		Identification of precise responsibilities for each task
		or subtask;
		Assertive approach taken by the Coordinator during
		the meetings and decision making moments.
R5	Confusion of roles in the	Pro-active approach taken by the coordinator during
	distribution of tasks	the distribution of the tasks;
		Clear distribution of responsibilities among the tasks'
		participants during the meetings.
R6	Unexpected delay achieving	Leaders will monitor partners' progress to detect
	milestones, delaying project	any delay at early stages;
	objectives	Re-plan the activities and the resources to finalize
		the milestones asap.
R7	The complexity associated to	The selected partners have strong and already
	the integration of multiple	validated competences regarding methodologies
	methodologies	both for sampling, analysis and modelling.













Risk	Description of risk Proposed risk-mitigation measures				
number					
R8	Dissemination strategy not appropriate. Scarce visibility of results	Discuss among all the partners and redesign the dissemination strategy in order to reach the right result in all participating countries.			
R9	Lack of receptivity from the schools managers to the project activities	Discuss among all the partners and redesign. Preparation of creative materials and activities to engage the schools' communities.			
R10	Poor knowledge of the school staff and/or parents	Discuss among all the partners and redesign. Increase the awareness for the school staff and parents.			
R11	Difficulties in the integration of all modules in Management Tool	The operational platform should be adapted and redesigned.			
R12	Lack of knowledge to use the Management Tool	Development of a manual and increase the number of workshops.			
R13	Lack of interest on the tool utilization by the stakeholders	The collaborative environment where all the stakeholders co-create the solutions leads to a natural acceptance by the users who will be empowered not only to test, evaluate and report their own experience with the LIFE Index-Air framework, but mainly to live with it and smoothly accept and incorporate the project framework in their everyday lives			
R14	Lack of funds to implement the measures	The project will identify actions to be implemented. The project will demonstrate the tool's capabilities in relation to policy making and protection of public health in order to convince stakeholders to invest.			
R15	Lack of collaboration between the different stakeholders	Discuss among all the partners and redesign. Increase networking activities in Action D1 and Action D1.			
R16	Language barriers	The working language of the project is English. However, the meetings and discussions with the stakeholder will be made principally in the language of the country that will host the event. Some specific disseminating materials will be translated to national languages.			
R17	No use of the results beyond the lifespan of the project	The afterlife plan will be prepared from the beginning of the project in order to potentiate the use of the outputs beyond the lifespan of the project.			















3 Monitoring Protocol

(Deliverable E2.1)













3.1 Introduction

The Monitoring Protocol is an important tool for the project management. The objectives of the Monitoring Protocol are:

- to identify the list of Deliverables and Milestones and associated responsible;
- to present flow diagrams, depicting graphically the relation between the critical project checkpoints, the respective documents and the precise roles/persons involved in their process;
- to identify key indicators against which the project will monitor its progress.

To monitor the project progress, the leader of each Action will send reports, every 3 months, to the PrM, in order to assure the correct implementation of the activities.

Conclusions and recommendations for corrective actions will be communicated to relevant Action leaders, who will need to respond on how and when the recommendations will be implemented.

Every 3 months the PrM will review the project progress and the implementation of corrective measures if needed.

The Steering Committee will approve the Monitoring Protocol and every 6 month will revise the project achievements through the milestones and deliverables assessment.

3.2 Gantt Chart, Deliverables, Milestones and Deadlines

In Figure 4 the Gantt Chart illustrates the LIFE Index-Air schedule and Table 10 and Table 11 identify the list of Milestones and Deliverables and the involved partners. Table 12 presents by chronological order all the deadlines and the status of the tasks execution. All these figures and tables can be consulted in LIFE Index-Air_TIMELINE AND DEADLINES.XLSX which is in the LIFE Index-Air Storage Platform















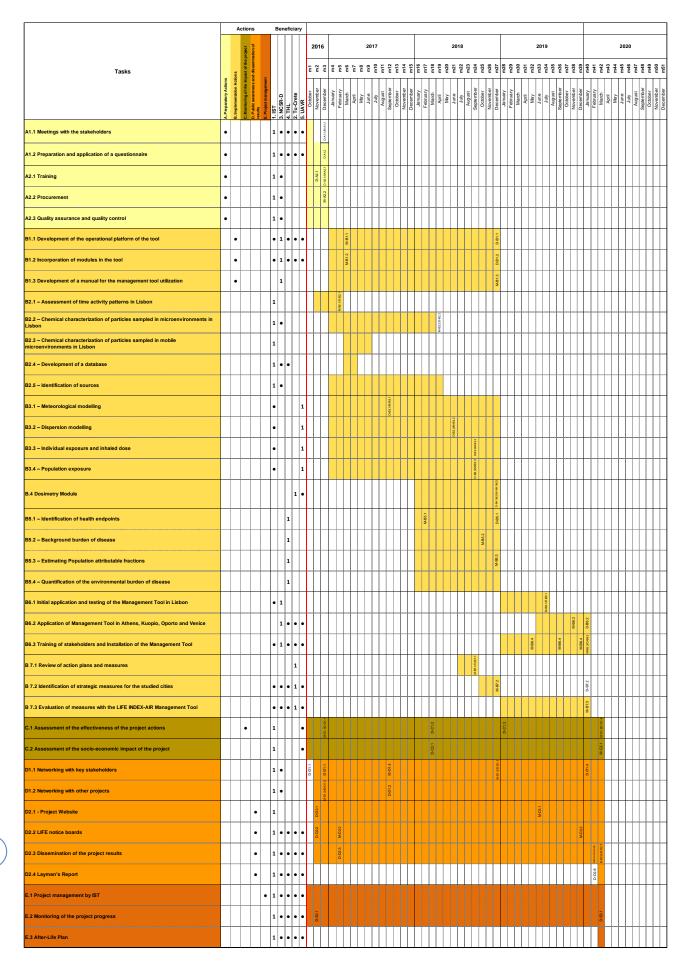


Figure 4: LIFE Index-Air Gantt Chart















Table 10: LIFE Index-Air Milestones

Name of the milestone	Number of the associated action	Deadline	Staus	Leader
M-D1.1 – Organization of the 1st working meetings with stakeholders	D1	31-10-2016		IST
M-A1.1 – Organization of a training course for technical staff in Lisbon	A2	15-12-2016		IST
M-A1.2 – Completion of the technical requirements	A2	30-12-2016		IST
M-C1.1 Definition of indicators	C1	30-12-2016		IST
M-D1.2 – Promote the online open forum with the stakeholders, policy makers, partners and beneficiaries	D1	30-12-2016		IST
M-D1.3 – Feedback from other projects' teams	D1	30-12-2016		NCSR-D
M-A1.1 - Stakeholders consultation concluded	A1	31-12-2016		IST
M-B2.1 — Time activity pattern for 4000 children	B2	28-02-2017		IST
M-B1.1 – Design of the tool's operational platform	B1	31-03-2017		NCSR-D
M-B1.2 - Meeting in Athens Lisbon to present and discuss the requirments of the operational platform	B1	31-03-2017		NCSR-D
M-B3.1 – Compilation of input data and modelling	В3	29-09-2017		UAVR
M-D1.4 – Organization of the expert meeting	D1	30-09-2017		NCSR-D
M-B1.3 – Incorporation of all modules in the operational platform	B1	29-12-2017		NCSR-D
M-B5.1 – Source data collection	B5	28-02-2018		THL
M-B2.2 — Database completed with measured and historical data	B2	30-04-2018		IST
M-B3.2 – Setup of the exposure model	В3	29-06-2018		UAVR















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В3	28-09-2018	UAVR
В3	28-09-2018	UAVR
В7	30-09-2018	TU-Crete
B5	31-10-2018	THL
B4	31-12-2018	TU-Crete
B4	31-12-2018	TU-Crete
B5	31-12-2018	THL
В7	31-12-2018	TU-Crete
D1	31-12-2018	NCSR-D
D2	28-06-2019	IST
В6	31-07-2019	NCSR-D
В6	29-11-2019	NCSR-D
В6	31-01-2020	NCSR-D
В6	31-01-2020	NCSR-D
В7	31-01-2020	NCSR-D
D1	31-01-2020	IST
D2	24-02-2020	IST
D2	28-02-2020	IST
	B3 B7 B5 B4 B4 B5 B7 D1 D2 B6 B6 B6 B6 B7 D1 D2	B3 28-09-2018 B7 30-09-2018 B5 31-10-2018 B4 31-12-2018 B5 31-12-2018 B7 31-12-2018 D1 31-12-2018 D2 28-06-2019 B6 31-07-2019 B6 31-07-2019 B6 31-01-2020 B7 31-01-2020 D1 31-01-2020 D2 24-02-2020













M-D2.3 – Organization of 3 open-forum meetings	D2	28-02-2020	IST
M-C1.2 Assessment of the project effectiveness	C1	31-03-2020	IST
D-C2.1 Assessment of the socio-economic impacts of the project	C2	31-03-2020	IST

Table 11: LIFE Index-Air Deliverables

Name of the deliverable	Number of the associated action	Deadline	Status	Leader
D-D1.1 – Minutes of the 1st working meetings with stakeholders	D1	31-10-2016		IST
D-A1.1 - Report on stakeholders consultation	A1	30-11-2016		IST
D-D2.2 – Notice boards	D2	30-11-2016		IST
D-D2.1 – LIFE INDEX-AIR website	D2	30-11-2016		IST
D-E1.1 Contingency plan	E1	30-11-2016		IST
D-E2.1 Monitoring protocol	E2	30-11-2016		IST
D-A2.1 – Technical guide	A2	15-12-2016		NCSR-D
D-C1.1 Monitoring protocol	C1	30-12-2016		IST
D-A1.2 - Report on questionnaire results	A1	31-12-2016		THL
D-B2.1 – Technical report on time activity patterns	B2	28-02-2017		IST
D-D2.3 – Promotional material	D2	28-02-2017		IST
D-B3.1 – Technical report on the setup of the air modelling system	В3	29-09-2017		UAVR













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D-D1.2 – Minutes of the expert meeting	D1	30-09-2017	NCSR-D
D-B1.2 – Manual for the management tool utilization (book and video)	B1	29-12-2017	NCSR-D
D-B1.1 – LIFE INDEX-AIR management tool	B1	29-12-2017	NCSR-D
D-C1.2 Mid-Term report on the effectiveness of the project based on the performance indicators	C1	30-03-2018	IST
D-B2.2 – Technical report on PM chemical characterization in different micro-environments and sources identification	B2	30-04-2018	IST
D-B3.2 – Technical report on the setup of the exposure model (and input data)	В3	29-06-2018	UAVR
D-B3.3 - Technical report on the modelling evaluation exercise (comparison with monitoring data)	В3	28-09-2018	UAVR
D-B3.4 - Technical report on the air quality and exposure modelling results for Lisbon	В3	28-09-2018	UAVR
D-B7.1 Report with the revision of action plans and measures to improve air quality in terms of PM	В7	30-09-2018	TU-Crete
D-B4.1 – OP module for dose calculations	B4	31-12-2018	TU-Crete
D-B4.2 – Technical report on dose calculations for children	B4	31-12-2018	TU-Crete
D-B5.1 – Technical report on environmental burden of disease	B5	31-12-2018	THL
D-D1-3 - Minutes of the online meetings with stakeholders	D1	31-12-2018	NCSR-D
D-C1.3 Progress report on the effectiveness of the project based on the performance indicators	C1	31-01-2019	IST
D-B6.1 – Technical report on the implementation of the managment tool in Lisbon	В6	31-07-2019	NCSR-D
D-B6.2 – Technical report on the implementation of the managment tool in Athens, Kuopio, Oporto and Venice	В6	31-01-2020	NCSR-D
D-B6.3 – Report of the stakeholders' training courses	В6	31-01-2020	NCSR-D
D-B7.2 Five independent documents with guidelines for action plans formulation for	В7	31-01-2020	TU-Crete















Lisbon, Oporto, Athens, Kuopio and Venice			
D-D1.4 – Minutes of the 2nd meetings with stakeholders	D1	31-01-2020	IST
D-D2.4 – Proceedings of the international conference	D2	24-02-2020	IST
D-D2.5 – Technical guide with project outputs and recommendations	D2	24-02-2020	IST
D – D2.8 – Layman's report	D2	24-02-2020	IST
D-C1.4 Final report on the effectiveness of the project based on the performance indicators	C1	31-03-2020	IST
D-C1.1 Report on socio-economic impacts of the project	C2	31-03-2020	IST
D-D2.6 - 6 Scientific publications	D2	31-03-2020	IST
D-D2.7 – 9 Articles in media	D2	31-03-2020	IST
D-E1.2 Financial reports	E1	31-03-2020	IST
D-E1.1 After-LIFE plan	E3	31-03-2020	IST















Table 12: LIFE Index-Air Deadlines

							Actions			
	Year	Month	Activity	А	В	С	D	Е	Status	Leader
M1	2016	11-Oct-16	Kick-off meeting in Brussels					A-E.1		IST
M1	2016	18-19 Oct-16	SC + OL + EAB meeting in Athens					A-E.1		NCSR-D
M1	2016	31/Oct/16	Preparation of a mailing list for Portugal	A-A1.1						IST
M1	2016	31/Oct/16	Preparation of a mailing list for Greece	A-A1.1						NCSR-D
M1	2016	31/Oct/16	Preparation of a mailing list for Finland	A-A1.1						THL
M1	2016	31/Oct/16	Meetings with the stakeholders in Lisbon (At least 1)	A-A1.1			A-D1.1			IST
M1	2016	31/Oct/16	Meetings with the stakeholders in Athens (At least 1)	A-A1.1			A-D1.1			NCSR-D
M1	2016	31/Oct/16	Meetings with the stakeholders in Kuopio (At least 1)	A-A1.1			A-D1.1			THL
M1	2016	31/Oct/16	5 Meetings in schools & Minutes	A-A1.1						IST
M1	2016	31/Oct/16	Questionnaire to be applied to the stakeholders	A-A1.2						TU-Crete
M1		31/Oct/16	Minutes of the 1st working meetings with stakeholders in Lisbon	A-A1.1			D-D1.1			IST
M1	2016	31/Oct/16	Minutes of the 1st working meetings with stakeholders in Athens	A-A1.1			D-D1.1			NCSR-D
M1	2016	31/Oct/16	Minutes of the 1st working meetings with stakeholders in Kuopio	A-A1.1			D-D1.1			THL
M1	2016	31/Oct/16	Procurement of consumables (laboratory products, 2 pumps for personal samplers, sampling site materials, 2 PM2.5 heads for personal samplers, 1 PM10 head for personal sampler, filters, petridishes, 2 PM2.5 inlets) and equipment (3 PM medium volume samplers)	A-A2.2						IST
M1	2016	31/Oct/16	Procurement of consumables (material for instrumentation and analysis) and equipment (computer spare parts)	A-A2.2						NCSR-D
M1	2016	31/Oct/16	Procurement of equipment (computer spare parts)	A-A2.2						TU-Crete
M2	2016	18/Nov/16	Technical guide - Chemical analysis of filters	D-A2.1						NCSR-D
M2	2016	30/Nov/16	Application of questionnaires to the stakeholders in Portugal and Venice	A-A1.2						IST
M2	2016	30/Nov/16	Application of questionnaires to the stakeholders in Greece	A-A1.2						NCSR-D
M2	2016	30/Nov/16	Application of questionnaires to the stakeholders in Finland	A-A1.2						THL
M2	2016	30/Nov/16	LIFE INDEX-AIR website				D-D2.1			IST
M2	2016	30/Nov/16	Notice boards				D-D2.2			IST
M2	2016	30/Nov/16	Monitoring protocol					D-E2.1		IST















M2	2016	30/Nov/16	Contigency Plan					A-E.1	IST
M2	2016	30/Nov/16	Questionnaire about activity patterns		A-B2.1				IST
M2	2016	30/Nov/16	Facebook, Tweeter, LinkedIN				A-D2.3		IST
M2	2016	30/Nov/16	List with the relevant projects updated				A-D1.1		IST
M2	2016	30/Nov/16	Contact with the other projects				A-D1.1		IST
M3	2016	15/Dec/16	Technical guide - Sampling and gravimetrical analysis + consolidation of the technical guide	D-A2.1					IST
M3	2016	15/Dec/16	Organization of a training course for technical staff in Lisbon	M-A2.1					IST
M3	2016	30/Dec/16	Report on questionnaire results	D-A1.2					THL
M3	2016	30/Dec/16	Report on stakeholders consultation	D-A1.1			D-D1.1		IST
M3	2016	30/Dec/16	Stakeholders consultation concluded	M-A1.1					IST
M3	2016	30/Dec/16	Monitoring protocol			D-C1.1			IST
M3	2016	30/Dec/16	Quality assurance and quality control of sampling equipment	A-A2.3					IST
M3	2016	30/Dec/16	Quality assurance and quality control of all analytical techniques	A-A2.3					NCSR-D
M3	2016	30/Dec/16	Completion of the technical requirements	M-A2.2					IST
M3	2016	30/Dec/16	Definition of indicators			M-C1.1			IST
M3	2016	30/Dec/16	Online Foruns with stakeholders				M-D1.2		IST
M3	2016	30/Dec/16	Feedback from other projects' teams				M-D1.3		IST
M4	2017	02/Jan/17	Start PM2.5 and PM10 sampling and gravimetric analysis of filters sampled in schools, homes and outdoor		A-B2.2				IST
M4	2017	31/Jan/17	Start PM2.5 and PM10 chemical analysis of filters sampled in schools, homes and outdoor		A-B2.2				NCSR-D
M5	2017	15/Feb/17	Time activity pattern for 4000 children		M-B2.1				IST
M5	2017	28/Feb/17	Technical report on time activity patterns		D-B2.1				IST
M5	2017	28/Feb/17	Informative pamphlets (1000) + E-newsletter, bookmarks (700), notebooks (700), pens (700), USB (250)				D-D2.3		IST
M5	2017	28/Feb/17	Seminars for primary educational teachers and children families in Lisbon (50 participants)				M-D2.2		IST
M5	2017	28/Feb/17	Seminars for primary educational teachers and children families in Athens (50 participants)				M-D2.2		NCSR-D
M5	2017	28/Feb/17	Seminars for primary educational teachers and children families in Kuopio (50 participants)				M-D2.2		THL













M6	2017	31/Mar/17	Design of the tool's operational platform	M-B1.1				NCSR-D
M6	2017	30/Mar/17	Meeting in Athens Lisbon to present and discuss the requirments of the operational platform	M-B1.2				NCSR-D
M6	2017	01/Mar/17	Start sampling of PM from mobile ME	A-B2.3				IST
M6	2017	15/Mar/17	Start of chemical analysis of filters from mobile ME					
M6	2017	29-30 Mar -17	SC + OL + EAB meeting in Lisbon				A-E.1	IST
M7	2017	30/Apr/17	Development of a database	A-B2.4				IST
M8	2017	30/May/17	Data from Athens, Oporto and Venice incorporated in the database	A-B2.4				NCSR-D
M8	2017	30/May/17	Data from Kuopio incorporated in the database	A-B2.4				THL
M8	2017	30/May/17	End sampling of PM from mobile ME	A-B2.3				IST
M9	2017	30/Jun/17	End of chemical analysis of filters from mobile ME	A-B2.3				NCSR-D
M10		01/Jul/17	-					
M11		01/Aug/17	-					
M12		29/Sep/17	Technical report on the setup of the air modelling system	D-B3.1				UAVR
M12	2017	29/Sep/17	Compilation of input data and modelling	M-B3.1				UAVR
M12		29/Sep/17	Expert meeting in Zurich during EAC			M-D1.4		NCSR-D
M12	2017	30/Sep/17	Minutes of the expert meeting			D-D1.2		NCSR-D
M12		27-28 Sep-17	SC + OL + EAB meeting in Kuopio				A-E.1	THL
M13	2017	01/Oct/17	-					
M14	2017	01/Nov/17						
M15	2017	31-Dec-17	End PM2.5 and PM10 sampling and gravimetric analysis of filters sampled in schools, homes and outdoor	A-B2.2				IST
M16	2017	01/Jan/18	-					
M17	2018	28/Feb/18	Source data collection - BoD module	M-B5.1				THL
M18	2018	14-15-Mar-18	SC + OL + EAB meeting in Crete				A-E.1	TU-Crete
M18	2018	30/Mar/18	Mid-Term report on the effectiveness of the project based on the performance indicators		D-C1.2			IST
M18	2018	31/Mar/18	Report on socio-economic impacts of the project		D-C2.1			IST
M18	2018	31/Mar/18	End PM2.5 and PM10 chemical analysis of filter sampled in schools, homes and outdoor	A-B2.2				NCSR-D













M19	2018	15-Apr-18	Data from Lisbon incorporated in the database			
M19	2018	30/Apr/18	Database completed with measured and historical data	M-B2.2		IST
M19	2018	30/Apr/18	Technical report on PM chemical characterization in different micro- environments in Lisbon and sources identification	D-B2.2		IST
M20	2018	01/May/18	-			
M21		29/Jun/18	Technical report on the setup of the exposure model (and input data)	D-B3.2		UAVR
M21		29/Jun/18	Setup of the exposure model	M-B3.2		UAVR
M22	2018	01/Jul/18				
M23	2018	01/Aug/18				
M24	2018	28/Sep/18	Technical report on the modelling evaluation exercise (comparison with monitoring data)	D-B3.3		UAVR
		28/Sep/18	Technical report on the air quality and exposure modelling results for Lisbon	D-B3.4		UAVR
M24	2018	28/Sep/18	Modelling evaluation results	M-B3.3		UAVR
M24	2018	28/Sep/18	Exposure model results for Lisbon	M-B3.4		UAVR
M24	2018	30/Sep/18	Report with the revision of action plans and measures to improve air quality in terms of PM	M-B7.1		TU-Crete
M24	2018	30/Sep/18	Review of action plans and measures to improve air quality in terms of PM	D-B7.1		TU-Crete
M25	2018	24-25-Oct-18	SC + OL + EAB meeting in Lisbon		A-E.1	IST
M25	2018	31/Oct/18	Internal BoD database	M-B5.2		THL
M26	2018	01/Nov/18				
M27	2018	31/Dec/18	Identification of measures adapted to the peculiar features of the studied cities	M-B7.2		TU-Crete
M27	2018	31/Dec/18	OP module for dose calculations	D-B4.1		TU-Crete
M27	2018	31/Dec/18	Technical report on dose calculations for children	D-B4.2		TU-Crete
M27	2018	31/Dec/18	Development of the OP module for PM dose calculation	M-B4.1		TU-Crete
M27	2018	31/Dec/18	Completion of the dosimetry tool application to children	M-B4.2		TU-Crete
M27	2018	31/Dec/18	Technical report on environmental burden of disease	D-B5.1		THL
M27	2018	31/Dec/18	PAF and EBoD estimates	M-B5.3		THL
M27	2018	31/Dec/18	Incorporation of all modules in the operational platform	M-B1.3		NCSR-D













M27	2018	31/Dec/18	LIFE INDEX-AIR management tool	D-B1.1				NCSR-D
M27	2018	31/Dec/18	Manual for the management tool utilization (book and video)	D-B1.2				NCSR-D
M27	2018	31/Dec/18	Manual for the management tool utilization	A-B1.3				NCSR-D
M27	2018	31/Dec/18	Online meetings with teams from other projects			M-D1.5		NCSR-D
M27	2018	31/Dec/18	Minutes of the online meetings with stakeholders			D-D1.3		NCSR-D
M28	2019	01/Jan/19	Start implementation of the managment tool implemented in Lisbon	A-B6.1				NCSR-D
M28	2019	31/Jan/19	Progress report on the effectiveness of the project based on the performance indicators		D-C1.3			IST
M29		01/Feb/19						
M30	2009	27-28 Mar-19	SC + OL + EAB meeting in Aveiro				A-E.1	UAVR
M30	2019	01/Mar/19	Awareness Campaign in school from Lisbon (5 schools; 200 participants per school)			A-D2.3		IST
M30	2019	01/Mar/19	Awareness Campaign in school from Athens (3 schools; 200 participants per school)			A-D2.3		NCSR-D
M30	2019	01/Mar/19	Awareness Campaign in school from Kuopio (3 schools; 200 participants per school)			A-D2.3		THL
M30	2019	01/Mar/19	Awareness Campaign in school from Chania (3 schools; 200 participants per school)			A-D2.3		TU-Crete
M31		01/Apr/19						
M32	2019	1-May-19	Training courses organized in Lisbon - management tool	M-B6.4	L			NCSR-D
M33	2019	01/Jun/19	Awareness Campaign in school from Lisbon (5 schools; 200 participants per school)			A-D2.3		IST
M33	2019	01/Jun/19	Awareness Campaign in school from Athens (3 schools; 200 participants per school)			A-D2.3		NCSR-D
M33	2019	01/Jun/19	Awareness Campaign in school from Kuopio (3 schools; 200 participants per school)			A-D2.3		THL
M33	2019	01/Jun/19	Awareness Campaign in school from Chania (3 schools; 200 participants per school)			A-D2.3		TU-Crete
M33	2019	01/Jun/19	Start implementation of the managment tool implemented in Athens and Kuopio	A-B6.2				NCSR-D
M33	2019	28/Jun/19	Organization of a seminar in an university - Lisbon (30 participants)			M-D2.1		IST
M33	2019	28/Jun/19	Organization of a seminar in an university - Athens (30 participants)			M-D2.1		NCSR-D













M33	2019	28/Jun/19	Organization of a seminar in an university - Kuopio (30 participants)		M-D2.1	THL
M34	2019	31/Jul/19	Managment tool tested and implemented in Lisbon	M-B6.1		NCSR-D
M34	2019	31/Jul/19	Technical report on the implementation of the managment tool in Lisbon	D-B6.1		IST
M35	2019	01/Aug/19	Start implementation of the managment tool implemented in Oporto and Venice	A-B6.2		NCSR-D
M36	2019	15-Sep-19	Training courses organized in Athens and Kuopio - management tool	M-B6.4		NCSR-D
M37	2019	01/Oct/19				
M38	2019	29/Nov/19	Managment tool implemented in Athens and Kuopio	M-B6.2		NCSR-D
M39	2019	1-Dec-19	Training courses organized in Oporto and Venice - management tool	M-B6.4		NCSR-D
M39	2019	1-Dec-19	Seminars for primary educational teachers and children families in Lisbon (50 participants)		M-D2.2	IST
M40	2020	31/Jan/20	Managment tool implemented in Oporto and Venice	M-B6.3		NCSR-D
M40	2020	31/Jan/20	Technical report on the implementation of the managment tool in Athens, Kuopio, Oporto and Venice	D-B6.2		NCSR- D/THL/IST
M40	2020	31/Jan/20	Report of the stakeholders' training courses	D-B6.3		NCSR-D
M40	2020	31/Jan/20	Guidelines for action plans formulation for Lisbon	D-B7.2		IST
M40	2020	31/Jan/20	Guidelines for action plans formulation for Athens	D-B7.2		NCSR-D
M40	2020	31/Jan/20	Guidelines for action plans formulation for Kuopio	D-B7.2		THL
M40	2020	31/Jan/20	Guidelines for action plans formulation for Venice	D-B7.2		IST
M40	2020	31/Jan/20	Guidelines for action plans formulation for Oporto	D-B7.2		UAVR
M40	2020	31/Jan/20	Evaluation of the impacts of strategic measures with the tool	M-B7.3		NCSR-D
M40	2020	31/Jan/20	Meetings with the stakeholders in Lisbon		A-D1.1	IST
M40	2020	31/Jan/20	Meetings with the stakeholders in Athens		A-D1.1	NCSR-D
M40		31/Jan/20	Meetings with the stakeholders in Kuopio		A-D1.1	THL
M40		31/Jan/20	Minutes of the 2nd working meetings with stakeholders in Lisbon		D-D1.4	IST
M40		31/Jan/20	Minutes of the 2nd working meetings with stakeholders in Athens		D-D1.4	NCSR-D
M40		31/Jan/20	Minutes of the 2nd working meetings with stakeholders in Kuopio		D-D1.4	THL
M40		31/Jan/20	Organization of an open forum in Athens (100 participants)		A-D2.3	NCRS-D
M40		31/Jan/20	Organization of an open forum in Kuopio (100 participants)		A-D2.3	THL
M41		24-28-Fev-20	SC + OL + EAB meeting in Lisbon		A-E.1	IST
M41	2020	24-28-Fev-20	Organization of an international conference + open Forum meeting in		M-D2.4	IST















			Lisbon (500 participants)			[
M41	2020	24/Feb/20	Proceedings of the international conference		D-D2.4		IST
M41	2020	24/Feb/20	Technical guide with project outputs and recommendations		D-D2.5		IST
M41	2020	24/Feb/20	Layman's report		D-D2.8		IST
M41	2020	24/Feb/20	Seminars for primary educational teachers and children families in Athens (50 participants)		M-D2.2		NCSR-D
M41	2020	24/Feb/20	Seminars for primary educational teachers and children families in Kuopio (50 participants)		M-D2.2		THL
M42	2020	31/Mar/20	Report on Socio-economic impacts of the project	M-C2.1			IST
M42	2020	31/Mar/20	Assessment of the socio-economic impacts of the project	M-C2.1			IST
M42	2020	31/Mar/20	Assessment of the project effectiveness	M-C1.2			IST
M42	2020	31/Mar/20	Final report on the effectiveness of the project based on the performance indicators	D-C1.4			IST
M42	2020	31/Mar/20	6 Scientific publications		D-D2.6		IST
M42	2020	31/Mar/20	9 Articles in media		D-D2.7		IST
M42	2020	31/Mar/20	After-LIFE plan			D-E3.1	IST













3.3 Flow diagrams

Flow diagrams, depicting graphically the relation between the critical project checkpoints, the respective documents and the teams involved in their process were developed.

3.3.1 Action A1 – Authorities and stakeholders consultation

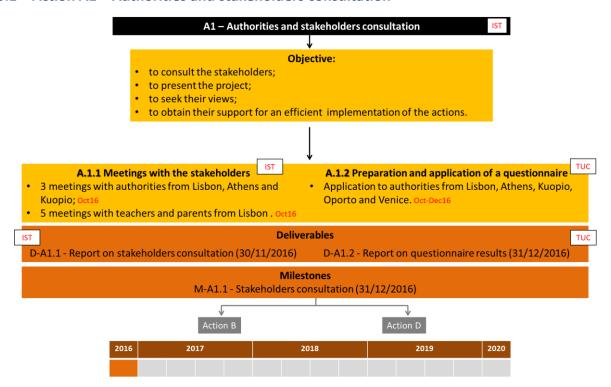
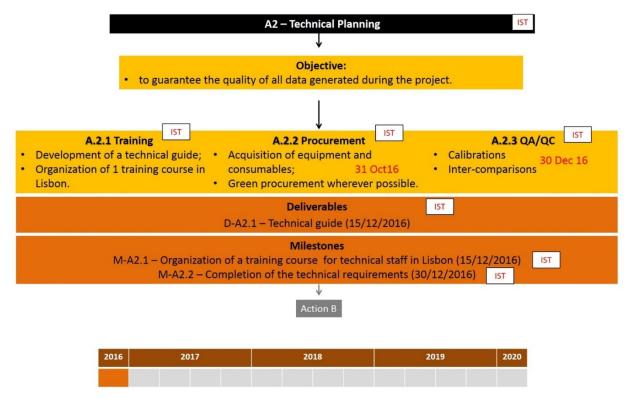


Figure 5: LIFE Index-Air Action A1

3.3.2 Action A2 – Technical Planning

















3.3.3 Action B1 – Development of the LIFE Index-Air Management Tool

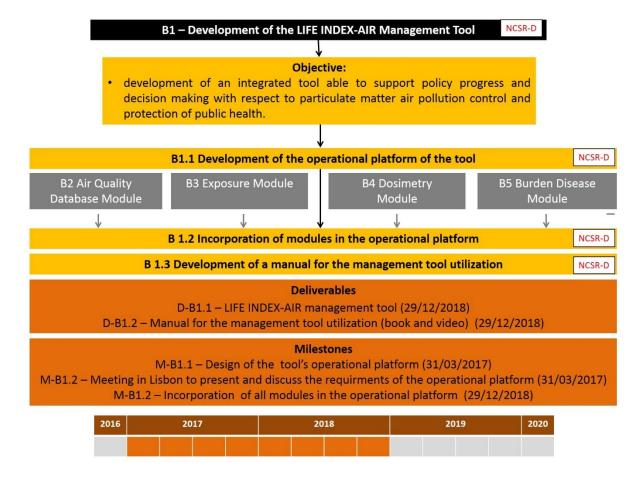


Figure 7: LIFE Index-Air Action B1











3.3.4 Action B2 – Air Quality Database Module

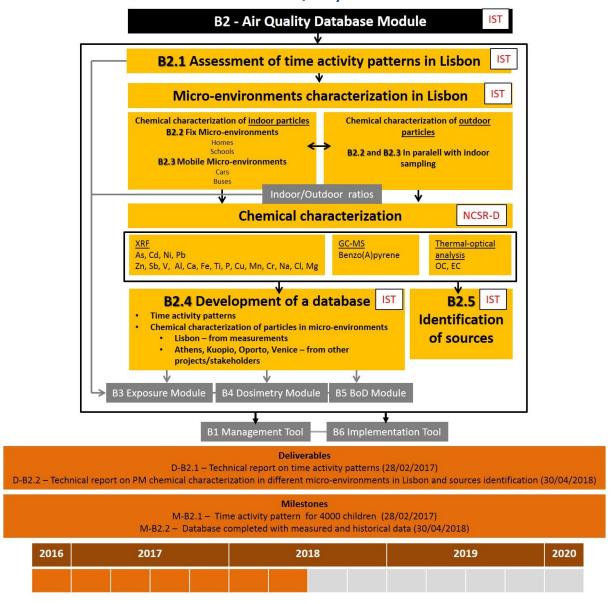


Figure 8: LIFE Index-Air Action B2













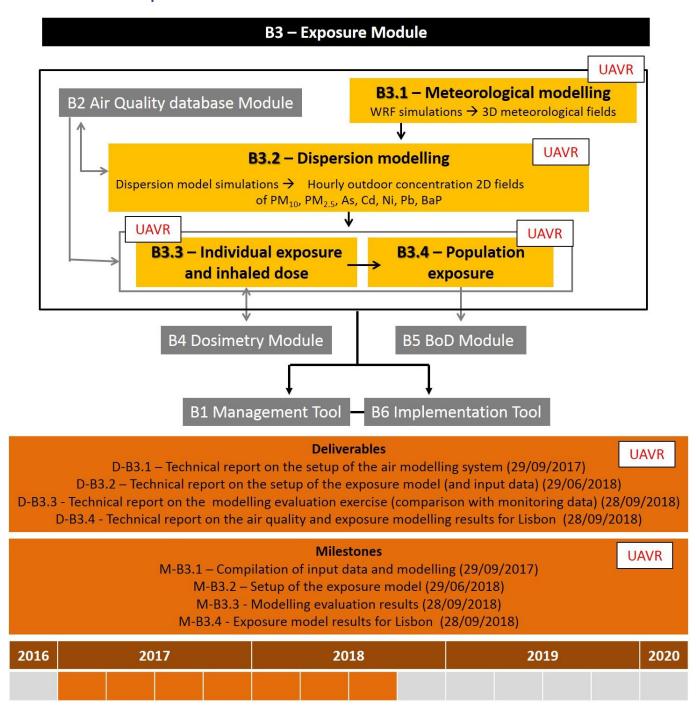


Figure 9: LIFE Index-Air Action B3











3.3.6 Action B4 – Dosimetry Module

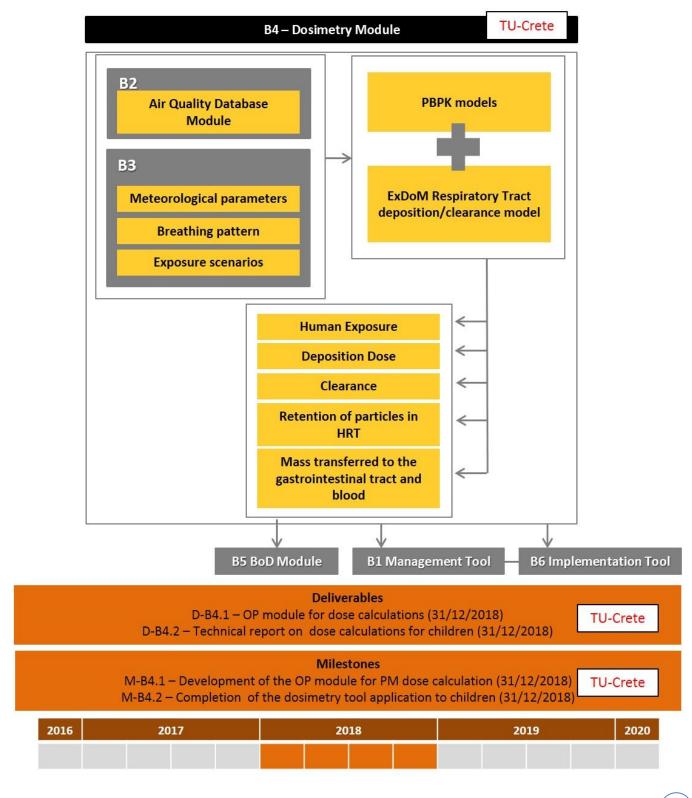


Figure 10: LIFE Index-Air Action B4















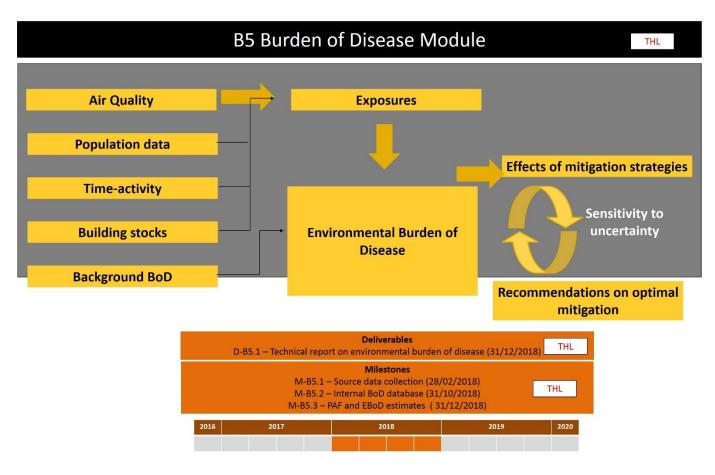


Figure 11: LIFE Index-Air Action B5









3.3.8 Action B6 – Implementation of the Management Tool

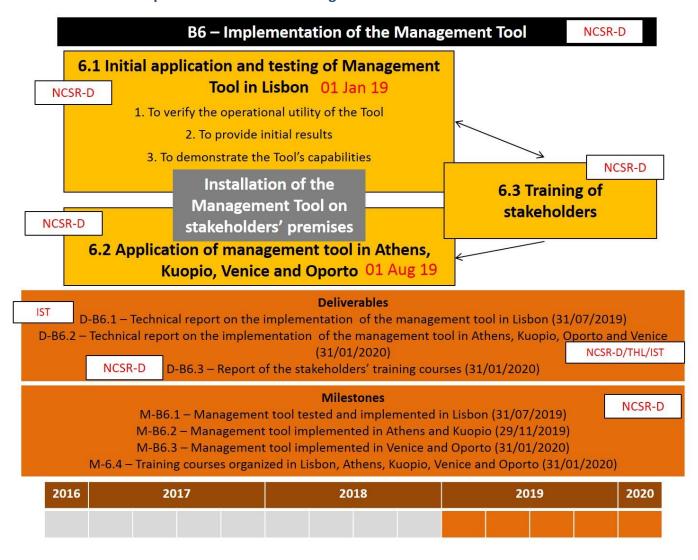


Figure 12: LIFE Index-Air Action B6













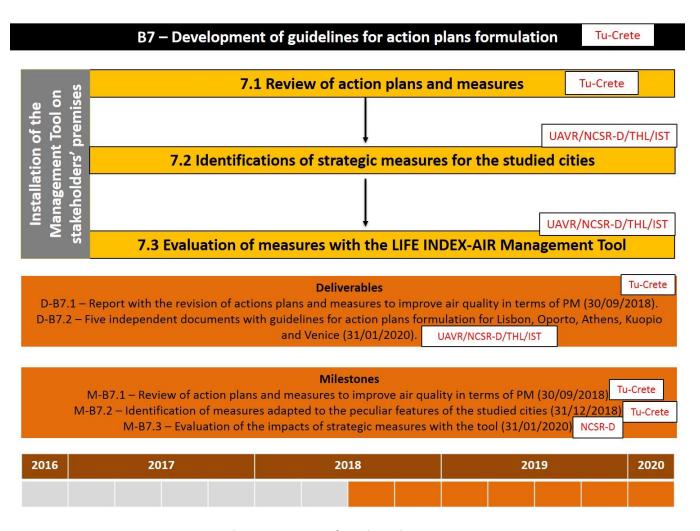


Figure 13- LIFE Index-Air Action B7











3.3.10 Action D1 - Networking

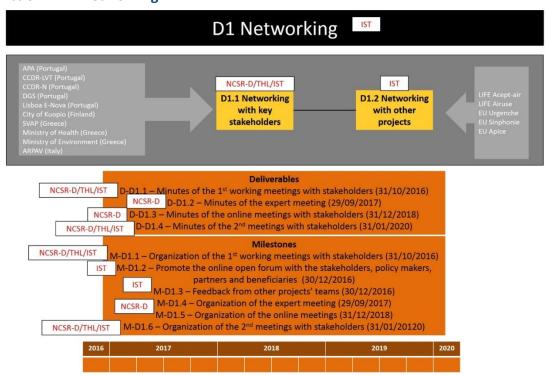


Figure 14: LIFE Index-Air Action D1

3.3.11 Action D2 - Development of the dissemination pack

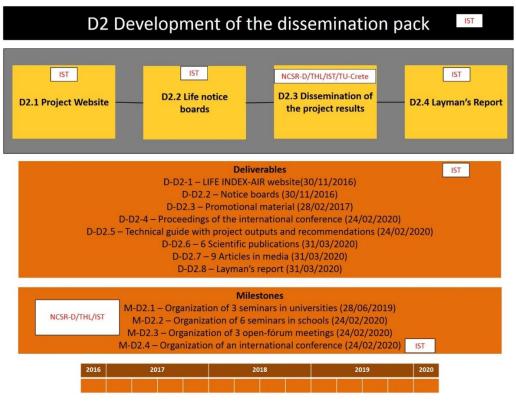


Figure 15: LIFE Index-Air Action D2

3.4 Key indicators

Key indicators for project implementation monitoring were identified and presented in Table 13. The table can be consulted in the LIFE Index-Air Storage Platform.















Table 13: LIFE Index-Air Indicators

	Period after the project end to be taken into account (mandatory)					
Α	В	С	D	F	G	J
Numbers	Key indicators and parameters	Descriptors	Impact units	State-of-play at the beginning of the project period at project level	State-of-play at the end of the project period at project level	State-of-play 5 years after the project end at project continuation, replication and/or transfer level (Indicator 15.5)
				Values	Values	Values
4.	Environment and health (including chemicals and noise)					
4.1	Chemicals with an environmental and/or health impact					
4.1.1	PM chemical monitoring data	Monitored micro-environments within the project	Number of micro- environments	1.00	110.00	110.00
4.1.2	Chemical monitoring data available, acessible, comparable and interoperable	Databases built within the project	Number of databases	1.00	1.00	1.00
4.1.3	Chemical monitoring data available, acessible, comparable and interoperable	Cities with outdoor concentrations of chemicals constituents for PM2.5 and PM10 in the database	Number of cities	1.00	5.00	9.00
4.1.4	Chemical monitoring data available, acessible, comparable and interoperable	Microenvironments with concentrations of chemical constituents for PM2.5 and PM10 in the database	Number of micro- environments	1.00	15.00	27.00
4.1.5	Sources identification of PM chemical compounds	Cities evaluated	Number of cities	1.00	5.00	9.00
4.1.6	Assessment of exposure to PM chemical	Children considered for the	Number of	1.00	4,000.00	4,000.00















	compounds	development of the time budget survey	children			
4.1.7	Assessment of exposure to PM chemical compounds	Children assessed	Number of children	1.00	90,000.00	190,000.00
4.1.8	Assement of internal dose and clearence of PM chemical compounds	Cities evaluated	Number of cities	1.00	5.00	9.00
4.1.9	Burden disease associated with the exposure to PM chemical compounds in indoor and outdoor environments	Cities evaluated	Number of cities	1.00	5.00	9.00
4.1.10	Reduction of the exposure to PM chemical compounds	Guidelines for action plans formulation	Number of guidelines	1	5	9
4.1.11	Reduction of burden disease associated with the exposure to PM chemical compounds in indoor and outdoor environments	Guidelines for action plans formulation	Number of guidelines	1	5	9
4.1.12	Reduction of burden disease associated with the exposure to PM chemical compounds in indoor and outdoor environments	Potential burden disease reduction associated with the proposed strategic measures across the studied cities	DALYs/year	1285	753	257
5.	5. Air					
5.1	Air pollutants - particulate matter					
5.1.1	Reduction of population exposure to PM10	Potential accomplishment of the EU and WHO PM10 limit values associated with the proposed strategic measures across the studied cities	Number of cities	1	5	9
5.1.2	Reduction of population exposure to PM2.5	Potential accomplishment of the WHO PM2.5 limit values associated with the proposed strategic measures across the studied cities	Number of cities	1	5	9
11	Governance					
11.1	Governance bodies involved	Governmental bodies involved in the implementation of the LIFE	Number of governamental	12	28	28















		INDEX-AIR project	bodies			
11.2	Implication of NGO (mandatory) including interventions supporting EU environmental and/or climate change policies and of other stakeholders (at least one mandatory)	NGOs involved in the implementation of the LIFE INDEX-AIR project	Number of NGOs	21	21	37
12	Information and awareness					
12.1	General public reached and/ or made aware					
12.1.1	Website (mandatory)	Web Visitors over time	Number of people	1	10,478	10,978
12.1.2	Website	Downloads over time	Number of downloads	1	1,890	1,990
12.1.3	Social Network	Social Networks: Facebook; Tweeter; LinkdIn	Number of social networks	1	3	3
12.1.3.1	Social Network	Interventions	Number of comments and/or likes	1	2,340	2,730
12.1.3.2	Social Network	Interventions	Number of shares	1	1,950	2,250
12.1.4	Media and press releases	Publications	Number of publications	1	9	13
13	Capacity building					
13.1	Capacity building	Seminairs	Number of people trained/informed	1	390	390
13.2	Capacity building	Open-Foruns	Number of people trained/informed	1	120	120
13.3	Capacity building	Courses	Number of people trained/informed	1	100	100
13.4	Capacity building	Awareness Campaigns	Number of people trained/informed	1	2,800	2,800
13.5	Capacity building	International Conference	Number of participants	1	300	300
13.6	Capacity building	Manuals and technical guides	Number of manuals/technical guides	1	2	2
13.7	Capacity building	Technical reports	Number of	1	15	15















			technical reports			
13.8	Capacity building	Papers	Number of scientific papers	1	6	10
15	Economic growth					
	Reduction of the annual economic cost	Costs associated with premature	US\$ (million)			
15.1	associated with the proposed strategic	death from air pollution in		255.400	154.200	51.100
	measures across the studied cities	selected cities				
15.2	Entry into new geographical areas	Geographical areas (NUT3)	Number of geographical areas	6.000	6.000	10.000
16.1	Number of sucessful installation of the Management Tool	Number of cities where the Managementent Tool will be instaled	Number of cities	1.00	5.00	9.00
16.2	Number of stakeholders informed about the installation of Management Tool features	Number of stakeholders informed about Management Tool features	Number of stakeholders	1.00	300.00	300.00















4 References

- [1] LIFE Index-Air GRANT AGREEMENT
- [2] LIFE Index-Air CONSORTIUM AGREEMENT
- [3] Bond, T.C., et al. (2013). Bounding the role of black carbon in the climate system: A scientific assessment. J. Geophys. Res. Atmos., 118, no. 11, 5380-5552















Annexes

















Annex 1 – LIFE Index-Air Contact Lists

(contacts can be consulted in LIFE Index-Air-Contact list.xlsx)

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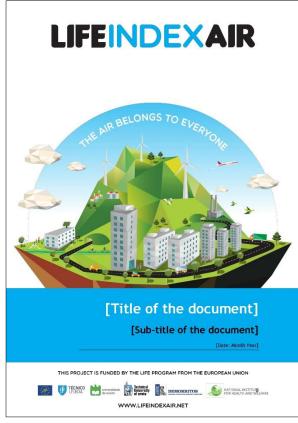


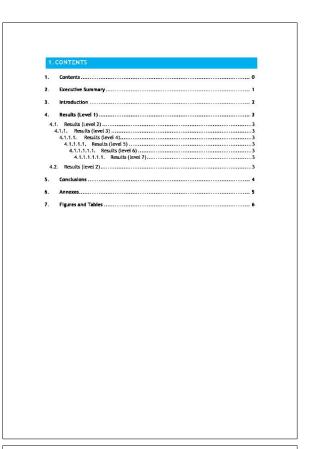


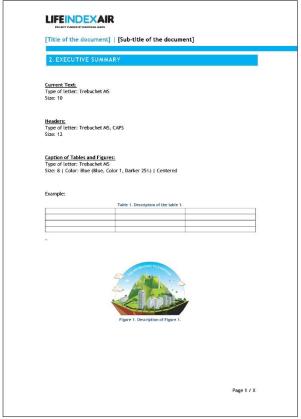




Annex 2 – Deliverable template



















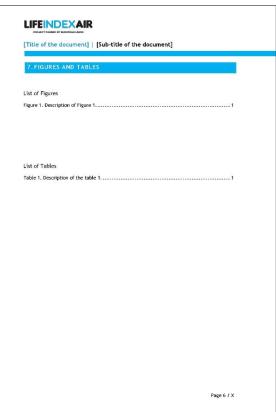








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Annex 3 – Powerpoint template

