



IN-HABIT - INclusive Health And wellBeing In small and medium size ciTies

## D9.2 DATA MANAGEMENT PLAN

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## EXECUTIVE SUMMARY

The Data Management Plan (DMP) is written in the framework of WP9 Project Management and Coordination (Task 9.5 Ethics and Data Management) of the IN-HABIT Project under Grant Agreement No. 869227. The aim of the Data Management Plan is to analyse the main elements of the Data Management Policy (IEC 62.531) that will be used in the IN-HABIT project, to characterise the nature of the produced research data, giving support to project partners and assuring the standardization of data and their availability in the most suitable scientific repository (e.g., Zenodo). Data produced by IN-HABIT will be findable, accessible, interoperable, and re-usable (FAIR).

The Data Management Plan will include:

- Data set reference and name.
- Data set description (origin, nature, usefulness, etc.).
- Standards and metadata.
- Data sharing (access procedures).
- Archiving and preservation (long-term preservation procedures).

An initial version of the DMP will be issued on M6 (February 2021), but the plan will be a living document that will evolve during the project's lifetime (updates on M24, August 2022; and M60, August 2025). The DPM will be updated throughout the duration of the project based on project evolution and periodical Steering Committee and General Assembly decisions. Each time the document is updated all partners will be duly informed about it.



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## ACRONYMS

<b>CCL</b>	Creative Commons License
<b>CERN</b>	European Organization for Nuclear Research
<b>DOI</b>	Digital Object Identifies
<b>DPM</b>	Data Management Plan
<b>EASME</b>	Executive Agency for Small and Medium-sized Enterprises
<b>EC</b>	European Commission
<b>EU</b>	European Union
<b>FAIR</b>	Findable, Accessible, Interoperable and Re-usable
<b>GA</b>	General Assembly
<b>GDPR</b>	Ethics Considerations and General Data Protection Regulations
<b>IA</b>	Innovation Action
<b>IHW</b>	Inclusive Health and Wellbeing
<b>M</b>	Month
<b>NGOs</b>	Non-Governmental Organisations
<b>OAI-PMH</b>	Open Archive Initiative-Protocol for Metadata Harvesting
<b>OpenAIRE</b>	Open Access Infrastructure for Research in Europe
<b>ORD</b>	Open Research Data
<b>PPPPs</b>	Public-Private-People Partnerships
<b>SC</b>	Steering Committee
<b>SDGs</b>	Sustainable Development Goals
<b>SMEs</b>	Small and Medium Enterprises
<b>SMSCs</b>	Small and Medium Size Cities
<b>UCO</b>	University of Cordoba
<b>VIS</b>	Visionary and Integrated Solutions
<b>WP</b>	Work Package



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## 1. INTRODUCTION

This Deliverable is elaborated to translate the core requirements of the adhesion of IN-HABIT to the EC Open Research Data Pilot that enables open access and reuse of research data generated by Horizon 2020 projects. There are two main pillars to the Pilot: developing a Data Management Plan (DMP) and providing open access to research data.

To adhere to the Pilot, research consortia under H2020 must:

- Develop (and keep up to date) a Data Management Plan (DMP).
- Deposit datasets in a research data repository.
- Ensure third parties can freely access, mine, exploit, reproduce and disseminate the project data.
- Provide related information and identify (or provide) the tools needed to use the raw data to validate the research.

The Pilot applies to:

- The data (and metadata) needed to validate results in scientific publications.
- Other curated and/or raw data and datasets (and metadata).

The DMP will function as a guiding document to ensure good data management throughout the lifecycle of the project to make the information collected and produced Findable, Accessible, Interoperable and Re-usable (FAIR).

## 2. SCOPE

The DMP describes how research data are managed both throughout the lifecycle and after the end of the IN-HABIT project. It identifies procedures and minimum requirements to collect, store, analyse, and publish data in a consistent way according to the FAIR principles.

The DMP is a living document that will be regularly updated, deliverables in M24 (August 2022) and M60 (August 2025), but also if new needs in data collection, management, storage, etc. are detected. The EC responsible will be contacted as soon changes in IN-HABIT DMP are introduced. All project partners will be informed of the changes made to this document.



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Common standards, folder structure and identifiers will be agreed in the Steering Committee (SC) meetings and made available via the internal information processes (minutes) and during the meeting of the next General Assembly (GA). In addition, the DMP will be stored in the internal repository of IN-HABIT documents, ensuring this way that all partners have access to the last version.

### 3. DATA SUMMARY

#### 3.1 Purpose of data collection/generation and its relation to IN-HABIT objectives

IN-HABIT will develop and test visionary and integrated solutions (VIS) to foster Inclusive Health and Wellbeing (IHW) in four small and medium size cities (SMSCs) in Europe - Cordoba, Riga, Lucca, and Nitra, with a focus on gender and diversity. These solutions will be co-designed, co-deployed and co-managed through a multi-actor approach and a multi-disciplinary community connecting Academia, Research Organizations, SMEs, Private for Profit, NGOs, Development Agencies, Public Authorities, Citizen groups/local Communities and Media from different EU & non-EU countries. An IN-HUB will be implemented in each city as both, a physical place for meeting and sharing, as well as an organisational structure to facilitate the transformative process. The IN-HUB will include relevant stakeholders and constitute a laboratory of social innovation and social change, and a networking strategy for cooperation and dialogue enhancement.

IN-HABIT's overarching goal is fulfilled through 7 specific objectives. The requirements of data collection/generation of each objective are reported in the following table:

**Table 1. Overall data requirements per project specific objective**

<p><b>1. To enhance the quality, accessibility, safety, inclusiveness, and sense of place of urban public spaces, mobilising undervalued resources to boost IHW, integrating social, digital, cultural, technological, and nature-based innovations.</b></p>	<p>Objective 1 will require the collection and elaboration of text and multimedia data generated through interviews, surveys, focus groups, INHABIT-App and online activities derived of the interaction at level of IN-HUBs and with inhabitants in the 4 cities. This data might be complemented by secondary data collected from reports, statistics, literature, and other publications.</p>
<p><b>2. To promote healthy behaviours and to increase the socio-economic, relational, and psychological</b></p>	<p>Objective 2 will require the collection and elaboration of text and multimedia data generated through interviews,</p>



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<p><b>wellbeing of citizens in neighbourhoods facing problems and experiencing rapid socioeconomic/ demographic changes.</b></p>	<p>surveys, behavioural games, focus groups, INHABIT-App and online activities derived of the interaction at level of IN-HUBs and with inhabitants in the 4 cities. This data might be complemented by secondary data collected from reports, statistics, literature, and other publications.</p>
<p><b>3. To create IN-HUBS, innovative public-private-people partnerships (PPPPs) in each city organised around the focus topic to foster new transition management approaches, based on social and institutional innovations and new governance models, and to develop new business models and financial mechanisms based on the concept of polycentric governance of co-created common pool resources.</b></p>	<p>Objective 3 will require the collection and elaboration of text and multimedia data generated in the meetings, interviews, surveys, focus groups, INHABIT-App, and online activities.</p>
<p><b>4. To develop a gender, inclusion and diversity urban planning framework that will address the whole policy cycle, from planning to implementation and evaluation.</b></p>	<p>Objective 4 will require the collection and elaboration of text and multimedia data generated through interviews, surveys, focus groups, INHABIT-App and online activities derived from the interaction at level of IN-HUBs and with inhabitants in the 4 cities. This data might be complemented by secondary data collected from reports, statistics, literature, and other publications.</p>
<p><b>5. To develop new impact indicators on IHW by means of an innovative impact assessment framework going beyond monetary and biophysical aspects and recognising the complex interrelationships among economic, psychological, social, and relational dimensions of health and wellbeing</b></p>	<p>Objective 5 will require the collection and elaboration of text and multimedia data, including personal data, generated by means of online registration forms as well as by means of individual interviews and group discussions for the co-design of the indicators.</p>
<p><b>6. To create new business models and to replicate, upscale and disseminate the different visionary and integrated solutions for IHW deployed in each city at distinct levels.</b></p>	<p>Objective 6 will require the collection and elaboration of text and multimedia data derived of the business competitions and business coaching activities.</p>
<p><b>7. To put cross-cutting issues such as Responsible Research and Innovation, gender, and open access in the core of IN-HABIT.</b></p>	<p>Objective 7 will collect, elaborate, and publish text and visual data derived from the previous objectives. All the data will be anonymised and safely stored</p>



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### 3.2 Types and formats of data generated/collected

IN-HABIT is a complex project, based on a participatory approach. Its core activities will be based on the work of 4 cities as well as the IN-HUBs created in each of them, so most of the data collected will be originated by the organised interaction with citizens and stakeholders. These data will be integrated by a) scientific literature; b) official statistical data; c) data generated from interviews, surveys, focus groups, behavioural games; d) data collected at the IN-HUBs meetings; e) visual and recording data in meetings and other data gathering activities; f) primary data originating from registration forms in project activities, as well as from communication and dissemination activities (registration in working groups, events, training, services, coaching and research activities, social media content and analytics, communication campaigns and so on); g) data collected through IN-HABIT App and platform and h) image data available on the web.

Data will be generated in the following formats:

- Graphics: jpg, odg, pdf, png, pptx
- Tables: odsu, opj, xlsx
- Text: docx, pdf, txt
- Webinars, videos, podcasts, voice recordings: Mp4, mov
- Other: nb, cpp

### 3.3 The re-use of any existing data, and how

IN-HABIT will capitalize on already existing data and will integrate them with new data. Table below shows the main data on which IN-HABIT will capitalize:

**Table 2 Capitalisation of existing data**

<b>WP1</b>	<ul style="list-style-type: none"> <li>• Existing data available at district, municipal, regional, and national levels</li> <li>• EUROSTAT and national statistical data</li> <li>• Open access datasets from other R&amp;I projects in the scope of IN-HABIT</li> <li>• Existing data available in databases of project partners (the City of Cordoba)</li> </ul>
<b>WP2</b>	<ul style="list-style-type: none"> <li>• Existing data available at municipal, regional, and national levels</li> <li>• EUROSTAT, national and regional statistical data</li> <li>• Existing data available in databases of project partners (the City of Riga)</li> </ul>
<b>WP3</b>	<ul style="list-style-type: none"> <li>• Existing data available at municipal, regional, and national levels</li> <li>• EUROSTAT, national and regional statistical data</li> <li>• Existing data available in databases of project partners (the City of Lucca)</li> </ul>



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<p><b>WP4</b></p>	<ul style="list-style-type: none"> <li>• EUROSTAT and databases of Statistical Office of Slovak Republic</li> <li>• Existing data available in sectoral statistical databases on national level (ministries and other central government bodies)</li> <li>• Existing data available in databases of Regional Self-government bodies and regional and district state government organisations</li> <li>• Existing data available in databases of project partners (the City of Nitra)</li> <li>• Existing data provided by institutional stakeholders of IN-HABIT project</li> </ul>
<p><b>WP5</b></p>	<ul style="list-style-type: none"> <li>• Existing data available at municipal, regional, and national levels</li> <li>• EUROSTAT and other EU agencies</li> <li>• Other geographical data (e.g., from Open Street Map etc)</li> <li>• Existing data available in databases of project partners</li> <li>• Published data from previous research projects and independent organizations (NGOs, private observatories, foundations, international organizations)</li> <li>• Open access datasets from other R&amp;I projects in the scope of IN-HABIT</li> </ul>
<p><b>WP6</b></p>	<ul style="list-style-type: none"> <li>• Existing data available at municipal, regional, and national levels</li> <li>• EUROSTAT and other EU agencies (e.g., European Environment Agency, European Institute for Gender Equality) data</li> <li>• National Statistical Offices data (Census, Labour Force Surveys etc.)</li> <li>• Other geographical data (e.g., from Open Street Map etc)</li> <li>• Existing data available in databases of project partners</li> </ul>
<p><b>WP7</b></p>	<ul style="list-style-type: none"> <li>• Existing administrative data from local public authorities</li> <li>• Secondary data from regional, national, and European public statistic offices, included micro-data</li> <li>• Published data from previous research projects and independent organizations (NGOs, private observatories, foundations, international organizations)</li> <li>• Open access datasets on environment and urban quality, mobility, consumptions, citizens movement and flows, included data collected through satellite, sensors networks, GPS technologies</li> <li>• Existing data from observational programmes such as Copernicus and GEOSS</li> </ul>
<p><b>WP8</b></p>	<ul style="list-style-type: none"> <li>• Website and social media analytics and related data</li> <li>• Existing audio and video material</li> <li>• Existing stats and publications (EUROSTATs, national statistics, scientific publications)</li> <li>• IN-HABIT App: geographic location data, app usage data, UX data</li> </ul>

For all available data, appropriate references to authors and institutions will be given when used.



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### 3.4 Details of data origins

The existing data will originate from several sources, which will include the following: partner's pre-existing data; data from the scientific literature; data from interviews, surveys, focus groups, behavioural games, INHABIT-App, and online activities.

The details of existing datasets used in the research, or production of new data will be reported by the partner in charge of the data. These will identify the source(s) of the data used, refer to any relevant limitations on its use with respect to the purpose in IN-HABIT, clearance of any ethical considerations associated with the data, and ensure that it is cited as guided by the data provider or at least to appropriate standard, such as APA style standard for dataset citation.

### 3.5 Expected size of the data

The expected size of the data is not currently known, but it is likely to be <10 GB with individual files being  $\leq 1$  MB.

### 3.6 Data Utility

#### **Within the Consortium:**

The data sets will be shared within the consortium as the working baseline to measure indicators, to produce comparative analysis between the 4 cities, to verify and validate the results at distinct locations and as a baseline for a comprehensive documentation of the role of visionary and integrated solutions to increase health and wellbeing.

#### **Beyond the Consortium:**

IN-HABIT data might be of special interest for the researchers of the sister projects to produce comparative analysis, to verify and validate the results at distinct locations, to write scientific publications and to deliver joint results.

Data will be suitable for use by other research groups working on the issues addressed by IN-HABIT such as inclusive health and wellbeing, gendered cities, inclusive urban planning, visionary, and integrated solutions, etc.



The data can be used by independent researchers to understand better the contents and conclusions of the scientific publications, which base their findings on the data. Furthermore, independent researchers can use the files to produce figures and publications, showing comparisons of their own results and the IN-HABIT results. Finally, the data sets may also be used by city science officers and urban planners.

## 4. FAIR DATA

### 4.1 Making data findable, including provisions for metadata

IN-HABIT, as part of the ORD Pilot, has selected the Zenodo repository as its data archive of choice, based on compliance of the repository structure, and facilities and management FAIR data principles.

The guidelines provided by Zenodo will be used by IN-HABIT to ensure the right format of data is uploaded to comply with FAIR principles. The protocol below outlines the management principles behind storing and making findable data collected through IN-HABIT. Beneficiaries will follow these processes for each dataset collected or generated through the IN-HABIT project:

- Store and make findable any IN-HABIT data that can be made openly accessible (see next section), in the Zenodo repository and provide the DOI assigned by Zenodo for persistent identification and citability of the dataset.
- Ensure that research outputs and datasets are cross-referencing each other (e.g., scientific publications and the data behind them).
- Outline the discoverability of the data (give metadata provision).
- The organisation, data collection and most convenient format will be under the responsibility of the relevant task leader.
- Each task leader will be responsible for depositing relevant data in Zenodo. Data will be made accessible within one month of publishing the data in peer reviewed scientific articles or similar, unless beneficiaries have outlined justifiable reasons for maintaining data confidentiality.
- Each beneficiary is responsible for their records and documentation in relation to data generated, which must be in line with the accepted standards in the respective field, overseen by Task leads. To avoid losses, beneficiaries must take measures to ensure that data is backed-up using reliable methods.

