European data space
for smart communities

Deliverable D4.1

Pilots onboarding and support plan

WP 4 – Pilots support

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Abbreviations

Abbreviation	Definition	Abbreviation	Definition
WP	Work package	EU	Europe
DS4SSCC	Data Space for Smart and Sustainable Cities and Communities (former name of the data space)	DS4SSCC-DEP	Data Space for Smart and Sustainable Cities and Communities - Deployment project
TEF	Testing Experimental Facilities	IT	Information Technology
API	Application Programming Interface	Q&A	Questions and answers
MPC	Mentor Program Coordinator	sync	synchronisation
MIM	Minimal Interoperability Mechanism	KPI	Key Performance Indicator

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Executive Summary

The present document aims at defining the strategy and action plan for the overall support to the pilots selected in the various rounds of the Call for Pilots for the deployment and validation of the European Data Space for Smart Communities blueprint. The support activities include the onboarding into the data space, the monitoring of all the pilot activities, the training about the related technical and business matters, and the periodic evaluation of performance and collection of feedback about the process and the blueprint.

The document introduces in Section 1 the overall approach and process to follow across the different tasks included in the WP4, and the innovation methodology that will be applied across the whole process. This section also summarises the various roles that have been defined to carry out all the referred activities as part of the support team.

The following sections detail the specific goals and plans for each of the supporting activities. Section 2 is focused on the onboarding process of the pilots into the data space, detailing the tools and mechanisms that will be used. Section 3 is describing the mentoring program and monitoring process, detailing the role of the mentor and the experts and how they will be governed and will operate in coordination. Therefore, Section 4 explains the purpose of the training program, the potential needs, the method and an overview of the pre-designed training packages for the pilots. Finally, Section 5 describes the meaning of the evaluation in the context of the pilots, how the evaluation process will be and the indicators which will be used to assess the performance and progress of the pilots.

Guiding the pilots through the endeavour of onboarding and operating a data space is the main mission of the support team in the European Data Space for Smart Communities. Since the pilots are awarded in any of the rounds of the open call, the support team (under the umbrella of the WP4) will be providing them with all the necessary elements to do their project in the best possible way. Thus, a mentor will be assigned already during the contract phase to accompany them from the very beginning. An onboarding workshop with all the winning pilots in each round is organised to welcome them to the data space and provide a smooth landing. After that, each mentor organises an individual meeting with her pilot to detail the working plan, agree on the monitoring program and profile the pilot at starting time. The mentor will be supported by the experts in different topics for the continuous support to the pilot. In every evaluation, the mentor will assess the status of the indicators to verify the evolution of the pilot, collecting as well the feedback about the blueprint valuable for its evolution.

This WP works in close collaboration with WP2, WP3 and WP5.

1   Introduction

The overall mission of Work Package 4 (WP4) Pilots Support is to design and coordinate an overarching pilot program for the selected smart communities from the calls for pilots and to provide operational support for them along its execution. To achieve this goal, WP4 is split into four tasks:

- Task 4.1 (T4.1): onboarding process of the selected pilots from the open calls including continuous technical and business support.
- Task 4.2 (T4.2): continuous mentoring and monitoring of the execution.
- Task 4.3 (T4.3): training program to acquire the required skills for executing the pilots.
- Task 4.4 (T4.4): periodic evaluation of the pilots to ensure the requirements are fulfilled.

This document provides a detailed strategy and concrete action plans for each of the four cornerstones of the pilot program (i.e., onboarding, mentoring and monitoring, training, evaluation). In addition, WP4 has a strong innovation management focus to help the selected pilots create viable and sustainable business models for their data spaces.

The document will refer indistinctly to DS4SSCC-DEP and European Data Space for Smart Communities to name the deployment project for the related data space.

1.1   Overall approach and process

The tasks included in WP4 are aligned with the planning of the call for pilots, and are interrelated, as can be seen in Table 1. The above-mentioned tasks will work in coherence and consistency with this plan and are interrelated with each other.

Table 1: Calls timeline (source: WP3)

Submission round	1st round	2nd round	3rd round
Submission Period	March 11th 9AM CET - May 10th 23.59 CET (2 months)	June – August 2024 (3 months)	October – November 2024 (2 months)
Evaluation Period	June – July 2024	September – October 2024	December 2024 – January 2025
Notification	August 2024	November 2024	February 2025
Number of Selected Pilots	*1-2*	*4-6*	*4-6*
Feedback to pilot teams and re-submission of re-scoped proposal	August – September 2024	November – December 2024	February – March 2025
Onboarding workshop	September 2024	December 2024	March 2025
Implementation Period	October 2024 – September 2025/January 2026 (16 months)	January 2025 – December 2025/April 2026 (16 months)	April 2025 – March – May 2026 (14 months)

Figure 1 summarises the sequence of the different actions that this WP will carry out with the selected pilots in the three phases of the open call. The process is only defined for the first batch (see

Batch 1 label), as the other two batches (Batch 2 and Batch 3 in the figure) will follow the same timeline with a later starting date. The colour codes indicate which action belongs to which task: T4.1 in orange; T4.2 in green; T4.3 in blue; and T4.4 in pink. The grey colour represents common actions for all the tasks, such as the elaboration of this deliverable.
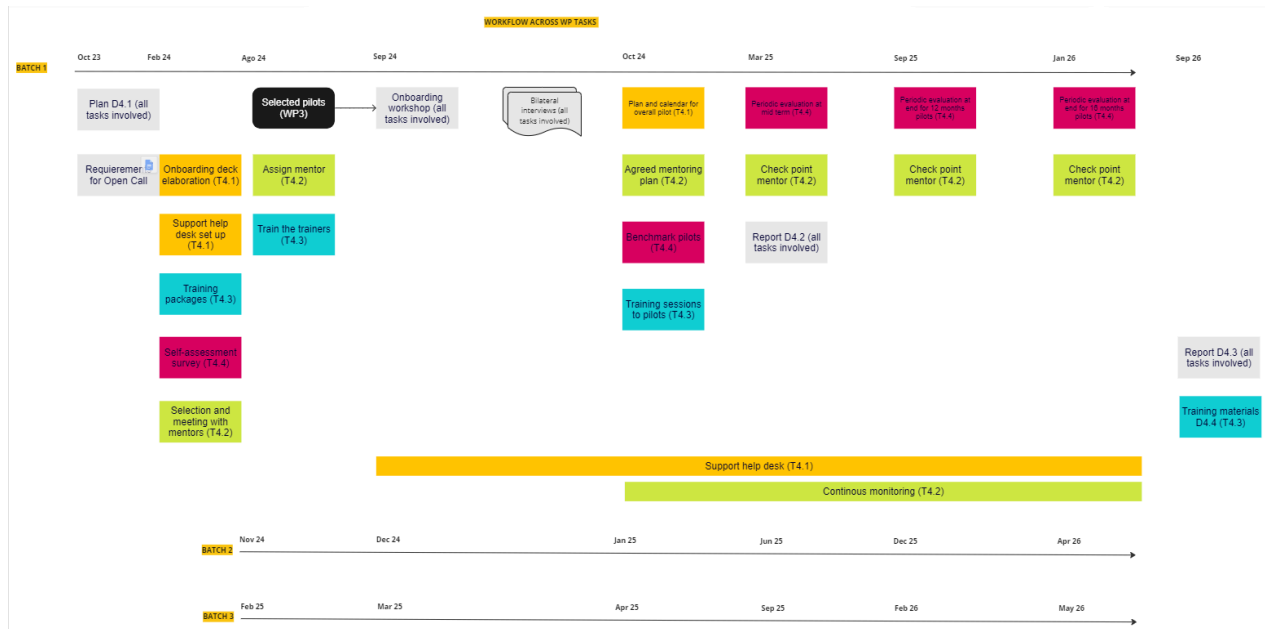

Figure 1: Summary of timeline and activities to carry out during the pilots support

In the period between the start of the project and the end of February 2024, the submission of this deliverable, the main action points this WP intends to carry out are the following:

- Elaborate the working plan for all the tasks for the whole duration of the project (D4.1). The working plan will be revised in the mid-term evaluation report of the project (D4.2) and updated , if needed.
- Collect all the requirements that this WP requires for the call for pilots text. This includes:
  a) description of what the pilots may expect in terms of support, training, monitoring and evaluation
  b) the required effort that needs to be committed by the pilots in their budget for addressing the activities in this WP (support, training, meetings, etc.)
- Establish the evaluation criteria to assess pilot performance during the execution.
- Prepare the onboarding deck with all essential information and material that the pilots will need when joining the data space.
- Set up a help desk tool that will be used by the pilots to request, track and get support from the project.
- Prepare the different training packages that can be required by the pilots according to their background knowledge.
- Prepare the self-assessment survey to collect at the beginning of the pilot the baseline values for the defined evaluation criteria to benchmark the pilots.
- Select the pool of mentors that will be assigned to the pilots and train them about their mission and responsibilities.

Following the WP3 Open Call selection process, and contract signature for each batch of the projects, this WP will organise an intake meeting with all the winners to welcome them and explain to them

the onboarding process. At this point in time, we will also assign the mentors to the pilots, and we will train the experts and the mentors, when required.

Then, a bilateral meeting with each pilot will be set up to obtain the essential information from them to define the training program, the monitoring plan and the evaluation baseline according to their profile. Based on this information, we will define together with each pilot, the overall support plan for the whole duration of the pilot and the mentoring plan. We will also produce the benchmark of the pilot in relation to the defined indicators for evaluation. This will allow us to compare the evolution of the pilots with regards to these indicators at mid and end of the project.

There will be a mid-term evaluation for each pilot, during which WP4 will assess the status of the pilot execution, applying the corrective measures, when needed. The collected feedback at mid-term will feed the call text (to be published in March) for the next stages. The same assessment will be carried out at the end of the pilot program for the final report.

The support helpdesk (T4.1) and the monitoring program (T4.2) will run continuously during the full duration of the pilot program. The evaluation (T4.4) will run at certain points of the process to collect the feedback and assessment from the pilots. All the tasks contribute to the report in M18 (D4.2) and the report in M36 (D4.3). T4.3 will collect all the training and other materials in a final deliverable in M36 (D4.4).

1.2 Innovation methodology

The Innovatrix framework

To create a foundation for sustainable data spaces after the project is completed, WP4 has a strong business modelling focus. We propose an innovative approach to managing innovation through a targeted, yet adaptable business modelling framework known as Innovatrix, developed by Imec. Innovatrix comprises eight criteria integral to each (digital) innovation:
- Customer Segment: Identifying the most significant user groups for the proposed innovation of the product or service.
- Needs: Addressing the critical problems faced by these customer segments.
- Current Practices: Understanding how customer segments currently interact with existing products or services.
- Value Proposition: Defining the added value of the proposed innovation over current practices.
- (Digital) Solution: Outlining the components required to deliver the value proposition, including capabilities, timeframe, technical development, costs, outsourcing, etc.
- Barriers: Identifying potential reasons the innovation might not be adopted or could fail.
- Value Capture: Determining the value the entrepreneur receives from a specific customer segment, including revenue models and pricing schemes.
- Key Partners: Establishing relationships with necessary partners to realise the innovation.

For each innovation criterion, relevant assumptions are documented. These assumptions serve as the foundation of an innovation project and are continuously validated or invalidated at key milestones throughout the process. Assumption validation can take various forms, such as workshops facilitated by a coordinator, interviews, or self-assessment. Project managers and entrepreneurs can leverage the digital Open Innovatrix Platform for the entire process.

Relation with the Data Cooperation Canvas

Innovatrix builds upon the Data Cooperation Canvas developed during the preparatory action of Data Space for Smart Communities (DS4SSCC). While both the Data Cooperation Canvas and Innovatrix share similar elements, the former focuses on describing and exploring data cooperations, whereas Innovatrix specifically concentrates on value creation and value capturing from a business modelling perspective. Therefore, following a comprehensive self-assessment of the 14 elements of the Data Cooperation Canvas, we will concentrate only on the most essential building blocks to construct our innovation management canvas and oversee the value creation process.

Innovation Management Approach in the DS4SSCC-DEP Project

The Innovatrix tool is proposed for use throughout the following steps as part of the onboarding and mentoring and monitoring plan of WP4, with touchpoints with pilots facilitated through periodic interviews, email communication, and videoconferencing support:
- Pilot owners will complete a digital version of the Data Cooperation Canvas as part of their onboarding process.
- Relevant aspects of the Data Cooperation Canvas, such as Key Partners, Resources, Business Case, and Added Value, will be assessed and translated into the Innovatrix assumption framework.
- Each pilot will have its use case on the Open Innovatrix Platform (opened and managed by Imec), accessible for consultation at any time.
- Innovatrix criteria will be discussed with each pilot owner using guiding questions, with a specific focus on validating or invalidating previous assumptions and determining the next steps.
- Follow-up interviews will be conducted as needed.

The results of the innovation management approach will be documented in the template progress minutes of the mentors (see more information in Section 3.4.1). The main goal is to create a viable business model for each pilot by the end of the piloting period.

1.3 Supporting roles

This section summarises the different roles within the support team that will intervene throughout the piloting program. Each of them is acting at different stages of the pilot and will be referred to in the rest of the sections in this document. The section 3.3 describes in detail the responsibilities for each role.

We identify 3 main roles: Mentors, Experts and Trainers. Within WP4, a list has been created in which project partners could decide which role they would take upon according to their expertise and availability. One person can take upon more than one role. All the partners will contribute to any of the roles, according to their allocated effort in WP4 primarily, but additionally from other WPs.

Figure 2 represents the three roles and the relationships among them. The following considerations apply:
- Every pilot has a unique mentor who acts as a main entry point of the pilot into the data space. Mentors are gatekeepers for any request or contact with the project.
- One mentor can be assigned to one or more pilots depending on the workload and availability.

- The pilots may request at any time, via support@ds4sscc.eu address, support from an expert. A ticketing system will be set up, thus all the requests will be registered, assigned and tracked through the tool. Each mentor will assign every support request from their pilot(s) to the different experts, depending on type of request and required knowledge.
- The mentor will try to balance the assignment of requests according to the available time of each expert and the overall workload.
- Each expert may attend to requests from several pilots. The requests can be about technical, business, finance or ethical aspects.
- The mentor will request the required training for the pilot according to their training needs, considering the workload and available time of the trainers.
- Every pilot is required to carry out all the proposed training packages, since they are considered essential for the good execution of the pilot.
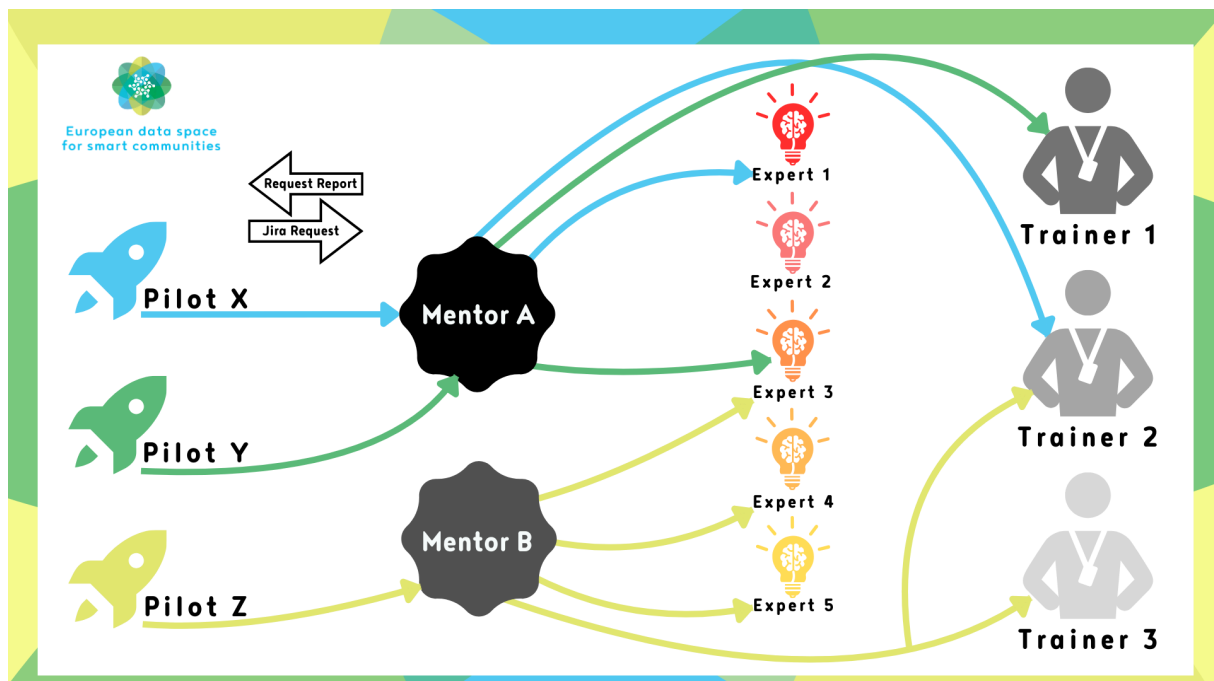

Figure 2: Supporting roles for the pilots

1.4 Links to other project activities

The work carried out in WP4 Pilots Support is highly relevant to other WPs, such as:
- WP2. The collected feedback from the pilots during the evaluation phase will serve as primary input for the update of the data space blueprint. The results of the pilots will be communicated to the Stakeholder Forum.
- WP3. The evaluation criteria (performance indicators) and estimation of effort/budget allocation for supporting activities are included in the requirements of the Open Call text. The mentor of the pilots is assigned already during the contract phase of the call for pilots.
- WP5. The supporting activities will also assist in understanding the impact of the data spaces as well as in sustaining the solutions by co-creating a sustainability plan. In fact, WP4 will act as the main interface to the pilots in order to gather data that will feed the impact assessment framework. The Do It Yourself communication toolkit will be distributed to the pilot owners within the onboarding package described later, to ensure the communication

and dissemination of the pilot progress and results are communicated following the project branding and guidelines.

2   Pilots onboarding

Between 9 and 14 pilots will be selected through the three waves of the Open Call launched by the project under the WP3. The pilots have to propose a cross-sectorial and cross-country use case of data sharing within the European Data Space for Smart Communities. These pilots will bring their own business case and technical infrastructure to the data space, and we need to provide them support in the onboarding process and in resolving any issue (technical, business, finance or ethical) during the full execution of the pilot.

In order to ensure a smooth onboarding of the pilots to the data space, we have defined a set of activities that will take place once the pilot is awarded and entered into the contract phase.

2.1   Onboarding process and tools

The onboarding process includes following steps:
1) Assign a **mentor** to the pilot during the contract phase of the Open Call to favour the landing into the project and guide the pilot through the first actions in the data space. All the details about the mentoring process are in section 3.
2) Organise an **onboarding workshop** with all the awarded pilots in each open call round.
3) Provide them an **onboarding package** with all the documents, instructions and resources available in the data space to carry out their pilot.
4) Set up an **individual workshop** per pilot to elaborate a profile about their status, characteristics and knowledge and establish a benchmarking to be used for further assessments.
5) Elaborate the **pilot plan** for each of the pilots with all the details and timeline of mentoring, monitoring, training and evaluation activities for the whole duration of the pilot.

2.1.1. Onboarding workshop

This workshop will be organised at the launch of the winning pilots in every open call round. All the pilots must attend this workshop at the beginning of the contract phase. Previously, a mentor should have been assigned to them so he/she can facilitate and ensure their participation in the workshop.

The purpose of this joint workshop is to introduce the awarded pilots into the data spaces by providing them the guidelines, instructions and materials to onboard their pilots into the overall ecosystem of the data space.

Table 2 shows the basic information about this kind of session.

Table 2: Onboarding workshop factsheet

Chair of the workshop	WP4 Pilots Support leader
Expected attendees	At least one representative from each awarded pilot of every open call round
Agenda	- Introduction to the European Data Space for Smart Communities (includes overview, context, blueprint) - Brief presentation of each pilot by its representative and assigned mentor (template to be provided) - Explanation of supporting activities and onboarding package

	● Q&A ● Setting up of individual workshops with each participant pilot
Duration	2 hours max
Format	Online

2.1.2. Onboarding package

The onboarding package includes materials with all the necessary documentation, references and resources for the execution of the pilots. It will be presented and explained during the onboarding workshop, thus it will be prepared in advance to the first workshop and refined at every open call round according to the provided feedback from the pilots.

Below is the list of potential materials to be included:
- Overall description of the European Data Space for Smart Communities.
- Inventory of the Data Spaces Blueprint and instructions about how to use it.
- Deliverables with the details about the different elements of the blueprint.
- List of training packages with the corresponding description (see Annex 2).
- The Pilot Profile template with a guide to fulfil it (see Annex 1).
- Indications about how to use the support tool (Jira) in case of any request.
- Access to the online self-assessment survey to be completed at the beginning, at mid-term and at the end for the evaluation of the pilot.
- Communication package with all the instructions to use the data space branding, social networks and other communications channels and spread the word about the data space and their pilot.

In most of the cases, this material will be provided by the WP4, but some elements will come from WP2 (blueprint) and WP5 (communication package).

2.1.3. Individual workshop

After the onboarding workshop, each pilot will set up an individual workshop with its mentor to work on a specific pilot plan and collect all relevant information. The meeting can be online or physical depending on the location of the pilots and the mentors, although online meeting is recommended.

Following working items need to be included in the agenda of the meeting:
- Fulfilment of the **Pilot Profile** (see in Annex 1). It is a cheat sheet which allows to profile the pilot according to all relevant dimensions for a data space. The Pilot Profile includes:
  - The **Data Cooperation Canvas** produced by the preparatory action of the data space allows partners and stakeholders of the pilot to clearly identify the needs for data sharing, define its purpose as well as lay out the different components (technical, governance, business models, implementation) that are required to ensure the success of the cooperation. The canvas is divided into three main parts providing:
    - The context of the cooperation ('Why')
    - The governance and business models underlining the cooperation ('Organisational')
    - The technical aspects of the cooperation ('Data & Technical')

- The **Impact** dimension which comprises the different stages of maturity of a data space (explore, validate, define, implement). This part of the profile will identify in which phase of maturity is the pilot at the beginning of the project and to what extent it evolves during the pilot execution. Each phase defines a concrete status for each dimension of the data space (i.e., governance, value creation and technical infrastructure). Each dimension in every stage will be assessed through a set of indicators.

- The **Building Blocks** part collects the standards and implementations that each pilot has adopted for each building block. The referred building blocks are the ones recommended by the Data Spaces Support Centre[1] (DSSC) in its blueprint v1.0. This information is of relevance to assess the degree of compliance and interoperability of the pilot with the Smart Communities data space and other related European data spaces.

● Completion of the **self-assessment survey for benchmarking**. Each pilot will be evaluated three times during the overall duration of the pilot (see section 5). The evaluation will be carried out through an online survey to be fulfilled by the pilot at the beginning, at mid-term and at the end of the pilot. The survey inquires about a set of indicators that have been defined to measure the performance and status of each pilot. During this first individual workshop, the mentor will guide the pilot through the survey to solve all possible doubts and support them in the fulfilment. The results of this first survey will serve as a baseline (benchmark) for establishing the comparison with the results at mid-term and at the end, and observe the evolution of the indicators.

● Design and completion of a **pilot plan**. Relying on the implementation plan proposed by each pilot in the open call proposal, the mentor will refine with the pilot the timeline of the checkpoints, evaluation milestones, training events and other support interventions that would be required.

2.1.4. Pilot plan

This is the plan that will be agreed upon with each pilot to carry out the monitoring and evaluation by the mentor with the support of experts and trainers. During the individual workshop set up by the mentor with the pilot, the mentor will define with the pilot the milestones for continuous monitoring and assessment of the performance indicators. The mentor will apply the monitoring process detailed in section 3.5.

This plan will take into account the implementation plan described by the pilot in the project proposal submitted to the open call. The proposal should include the required allocation of effort (and budget) for accomplishing the supporting activities like the onboarding and individual workshops, the essential training, the evaluation surveys and the support requests from experts. Table 3 indicates an estimation of the expected dedication for each of these activities from the pilot.

Table 3 – Expected effort allocation in pilots for supporting activities

Activity	Duration/frequency	Estimated effort (in days)
Joint onboarding workshop	2 hours	0,25
Bilateral interview for profiling/benchmarking	2 hours	0,25

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[1] www.dssc.eu

Training at onboarding	2 hours	0,5
Additional training	See table below.	The exact list of trainings will be prepared based on the onboarding interview
Request support from experts		1 day/month
Evaluation at mid term	2 hours	0,25
Evaluation at the end	2 hours	0,25
Check points with mentor	1 hour	1 hour/per week

Table 4. Estimated effort allocation in pilots for trainings

Training topic	Target group			
	Local authorities - demand side		Solution providers - supply side	
	Decision makers	IT experts	Business developers	IT experts
Technical	2	16	1	16
Business	1		5	
Governance and Legal	4	2	2	2
Leveraging TEF & other infrastructure	1	16		16
Total hours (including self-learning)	**8**	**34**	**8**	**34**

2.1.5. Support centre

All the pilots will have access to an online supporting tool which allows them to request at any time the support of any expert, the need of some training, the advice on any issue or the resolution of a doubt. The pilots will need to send their request to the email address support@ds4sscc.eu.

In order to facilitate either the collection of these requests and the monitoring of their progress, the project has decided to set up a ticketing system tool to organise and attend all the possible requests in the most efficient manner. The project has selected an open source tool, Jira from Atlassian, that will be provided by FIWARE in a licensed mode with no limit of users.

Both the support team and the pilots will create accounts in the Jira system to create requests that will be labelled and assigned to the right person. As explained in section 1.3, the project has collected a list of experts, mentors and trainers. The requests created by a pilot will be automatically assigned to its mentor, and the mentor will re-assign each request to the most suitable expert, depending on the topic.

Every request should be automatically replied in a maximum of 24 hours during working days (from Monday to Friday, excluding weekends). However, the resolution time of each request may vary depending on the complexity and availability of the required expert. Thus, after consulting with the assigned expert, the mentor must inform the pilot about the estimated time of resolution. In case of

public holidays or vacation periods, the mentor must ensure a replacement person who can attend the pilot in her/his absence. Thus, every pilot will be assigned with a main mentor and a deputy mentor who will act as the mentor when he/she will not be available. The experts, trainers and mentors have to provide their days off calendars to avoid any lack of support due to this reason.

In addition to the online support, the mentor can propose any focused meeting between the pilot and some expert to discuss specific issues; or request a training session from the training team.

The administrators of the tool will provide statistics about the use of the system, the number of requested issues and the percentage of resolution in due time.
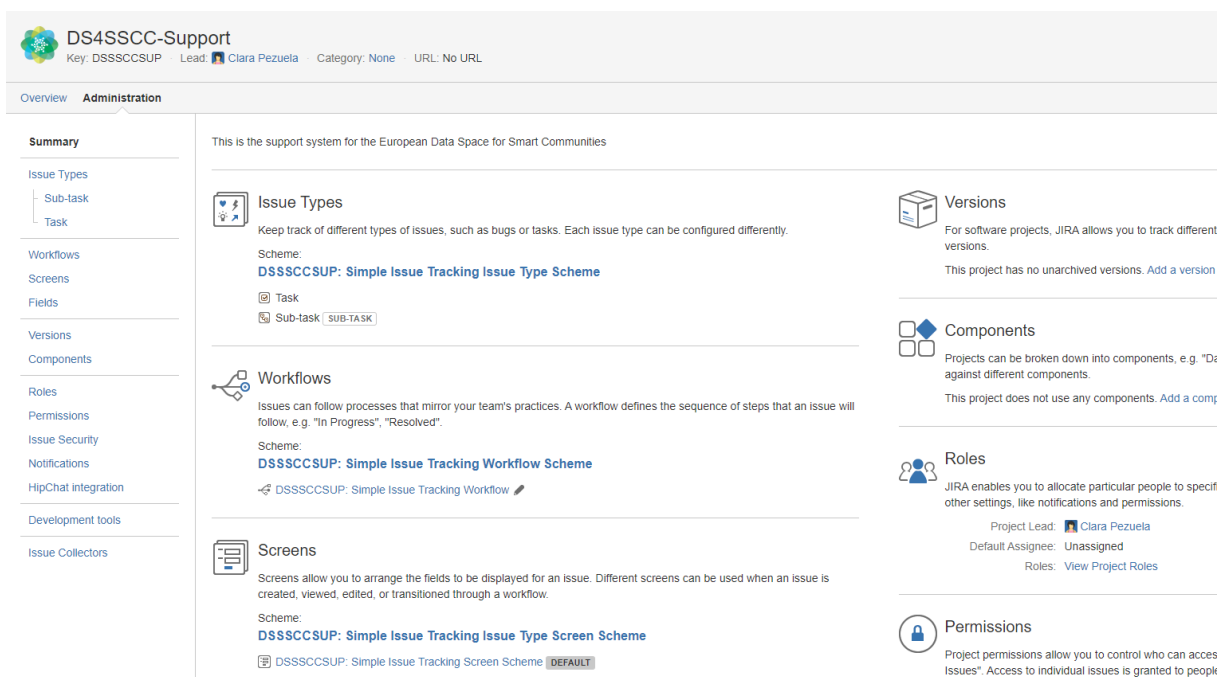

Figure 3: Jira space for pilots' requests support

3   Mentoring program and monitoring

3.1   The goal of mentoring

The awarded pilots of the Open Calls are followed by a mentor who monitors and guides mentees (the pilots) through the various stages of the data space blueprint deployment with the support of experts and trainers. While mentors act as a liaison between the pilots and DS4SSCC-DEP, meaning that they will link the pilots to relevant resources and knowledge; experts and trainers will offer technical and business support.

3.2   Timeline of mentoring and monitoring program

The mentoring and monitoring program accompanies the four stages of the data space pilot deployment stages (see Figure 4): explore, validate, define and implement.

Figure 4: Data Space deployment stages

Throughout these stages the pilots should achieve certain pre-defined Key Performance Indicators (KPIs) and milestones for the governance, data value creation, technical infrastructure, and innovation management approach of the data space. Those pilot performance indicators are described more in detail in section 5.3.

In order to facilitate a smooth transition from the pilot preparation for the call for pilots to the pilot execution, the mentor will be assigned during the contract phase of selected pilots to guide them through the onboarding phase. At the start of each pilot, the mentoring team will facilitate support and accompany the pilot holders in the technical process of onboarding their environments, infrastructures and solutions into the data space. During the overall pilot development, the support team will provide to the open call winners the required knowledge and support for the integration, testing and validation of their pilot into the data space; and business advice in focusing their market and finding business opportunities (e.g., through the innovation management approach). The mentor will also accompany the pilot at the three mandatory evaluations of performance and complete the self-assessment survey . Through the mentor, the DS4SSCC-DEP will gather feedback of improvements for the next call phase (WP3) and further versions of the blueprint (WP2).

3.3   Roles and responsibilities

Complementing the introduction of the supporting roles in section 1.3, this section dives deep into the roles and responsibilities in relation to the mentoring program.

3.3.1. Mentor: role and responsibilities

In our project setup, each pilot is overseen by a mentor who may handle multiple pilots concurrently. These mentors serve as the primary link between the project team, pilots, and the Mentor Programme Coordinator (MPC).

For each pilot, a tailored mentoring plan is developed and executed by the assigned mentor. They document learnings, to-do items, opportunities, and Key Performance Indicators in a standardised

internal database. Mentors can leverage a pool of experts for additional project support. Regular internal sync calls, scheduled for optimal participation, provide a platform for mentors and the MPC to align, discuss challenges, and share best practices across projects. The mentors should establish reports back to the MPC and WP4 leader with results and documentation by using a standard template (refer to Public Info repository).

This streamlined approach ensures effective mentorship, collaborative problem-solving, and continual improvement across all projects.

Table 5: Key responsibilities of Mentors

Guidance	Mentors offer guidance to the pilot project through the pool of experts, facilitate the access to the training program and trainers to learn about data space technologies, methodologies, and best practices.
Networking and Connections	Mentors help the pilots expand their professional networks and connect with other individuals in the data space field. They facilitate introductions to experts, peers, and potential collaborators, fostering valuable connections.
Problem-Solving and Conflict Resolution	Mentors act as sounding boards for the pilots, helping them to navigate and resolve challenges that arise during the pilot project implementation. They provide strategies for overcoming obstacles.
Monitoring	Mentors work with the pilots to establish clear and measurable goals for their pilot projects. They provide assistance in tracking progress (self-assessment survey and evaluation check points). Overview timeline with most important milestones in **Annex 2.**
Reporting	The mentors should report back to the MPC with the progress and results of their assigned data space pilots. They will use the Pilot Profile document which is integrated and used together with the pilot progress minute template as means of reporting (refer to Public Info repository)
Wellbeing	Mentors provide ongoing motivation and encouragement to mentees, helping them to maintain enthusiasm and perseverance throughout the project lifecycle. They recognize achievements and foster a positive learning experience.

3.3.2. Mentor program coordinator's (MPC) role and responsibilities

The Mentor Program Coordinator acts as a central figure in the mentorship program, managing recruitment of mentors, fostering collaboration, addressing mentor needs, and ensuring effective communication and coordination among consortium partners. Their role is instrumental in maximising the success of pilot projects and promoting a culture of shared learning and best practices within the consortium.

Table 4: Key responsibilities of the MPC

Mentor Recruitment and Coordination	Collaboratively recruits mentors from consortium partners in coordination with the WP4 leader. Ensures alignment between mentors and the overall goals of the mentorship program. Creates a platform for discussing challenges faced by pilot projects and sharing successful practices.
Needs Assessment:	Identifies and addresses the overarching needs of mentors, ensuring they are equipped to provide effective support to pilot projects.
Monitoring and Evaluation	Assists mentors in monitoring pilot projects throughout their duration. Assists mentors in evaluating the performance and results of the pilots at the conclusion of the projects.
Liaison across Consortium Partners and Work Packages	Acts as a communication bridge between the WP4 leader and consortium partners within WP4. Identifies links across different work packages, such as WP3 and WP5 with the WP4 leader.
Support in Network Events	Assists in organising network events to enhance connectivity and knowledge exchange within the consortium and the WP4 leader. Promotes a collaborative environment for mentors and pilot projects to network and share experiences.

3.3.3. Mentee (pilot): role and responsibility

A pilot is referred to as a mentee. This means that various individuals may form the mentee in a pilot project. The mentee is expected to deliver according to its application a cross-sectorial use case with the help of the data space blueprint. To help the deployment the mentees are expected to achieve certain KPIs and milestones with the support of their mentors.

Table 5: Key responsibilities of Mentees

Set goals	Identify the challenges, opportunities and the vision of the pilot within the data space
Document	Use the pilot profile and other templates provided by the mentor of easily readable and shareable documentation.
Data Space blueprint	Use and validate the data space blueprint for developing the use case submitted in the pilot and rely on the support of the mentor, experts and trainers.
Monitor KPIs	Report on the indicators detailed in section 5.3 when requested, trying to achieve the target value.

3.3.4. Expert: role and responsibility

The mentor team can also consult a sounding board group of experts. They rely on a pool of experts to provide necessary support to the pilots' mentors on various aspects like smart cities, data spaces, technology, business development, business modelling, data governance, technology, business, legal and deeper technical support for the integration, testing and validation of their pilot into the data space. The mentor is the entry point for the pilot, the hub person towards the project, but he/she will require the support of the experts (for technical and business requests) and the trainers (for the training program) to guide the pilots.

3.4 Governance and Mentors management

3.4.1. Tools to be used for Mentoring and Monitoring

Data Space Blueprint for Smart Cities and Communities
The preparatory action 'Data Space for Smart and Sustainable Cities and Communities' (DS4SSCC) provided to the 'European Data Space for Smart Communities' (DS4SSCC-DEP) with a data space blueprint. The blueprint provides guidance for data space governance, the building blocks of a data space together with technical specifications, and a reference architecture. These items are documented in reports and are available on the website https://inventory.ds4sscc.eu/ for the public.

Pilot Profile document
The pilot profile is an additional output of the preparatory action DS4SSCC which serves as an 'at a glance' overview of a data space. It has a dedicated part for documenting the governance and technical aspects of a data space. The DS4SSCC-DEP complemented the canvas to help mentors in the monitoring process. As such, it also provides a checklist of the building blocks of the data space and space for documenting the phases of deployment and. The Pilot Profile can be consulted in Annex 1 and available at Public Info repository.

Progress Minutes Template for Mentors
The mentors will use the **Pilot Profile** document as guidance and mindmap for their coaching sessions and is embedded in the **progress minute template for mentors** (refer to Public Info repository). focusing on the four stages of the data space pilot deployment and their reached pilot performance indicators, detected risks and training needs and a timing as means of reporting.

Annex 2 is provided to mentors as an overview of the upcoming activities which helps keep track of expected milestones and KPIs.

Nice to know document for mentors
Facultative examples of the application of 4 stages of innovation management process on the data space deployment (refer to Public Info repository).

This document can serve as a source of inspiration but mentors are free to use their own approach.

The Innovatrix
Innovatrix builds upon the Data Cooperation Canvas developed during the preparatory action (DS4SSCC). While both the Data Cooperation Canvas and Innovatrix share similar elements, the former focuses on describing and exploring data cooperations, whereas Innovatrix specifically concentrates on value creation and value capturing from a business modelling perspective.

3.4.2. Mentors team

All partners in WP4 will provide minimum 1 mentor. Each mentor will be representing a minimum 2 pilot projects of a total of 10-12 selected pilots out of probably 20-24 pilot applications in 3 waves.

The mentor team is composed of professionals with different areas of expertise and diverse coaching skills so that there are sufficient human resources in the DSS4SSCC-DEP project to cope with the support of the pilots on the level of mentoring and monitoring.

The team comprises a diverse mix of men and women with expertise in smart cities, data spaces, business development, business modelling, data governance, marketing and communication, procurement, financing strategy, business and sustainability, European digital landscape, communication, facilitation, financial planning, interoperability, MIMs…

The mentor team will be supported by a mentoring program coordinator and the WP4 leader.

3.4.3. Mentor program

The mentors of each pilot with the support of the expert group will mentor the selected pilots to achieve their objectives and at the same time also guide the pilots toward the wider strategic objectives of the DS4SSCC-DEP project.

The mentor is the entry point for the pilot, the hub person towards the project, but he/she will require the support of the experts (for technical and business requests) and the trainers (for the training program) to guide the pilots.

For each pilot individual mentoring will be created.

The Mentoring is aimed at guiding the pilots through their journey with a 12-16 months of customised service, articulated in several stages, to fit the needs.

There will be 3 waves of onboarding followed by a mentoring period of the pilots. Between each wave there will be a period of several months.

Across the stages of the plan there will be regular update meetings between the mentors and the pilots to keep track of progress.

The tools described above are proposed for use as part of the mentoring and monitoring plan of WP4, with touchpoints with pilots facilitated through periodic interviews, email communication, and videoconferencing support.

Following the activities which are to be conducted by pilot mentors with their allocated pilot on regular basis
- Regular Sync up with pilot contact – weekly or bi-weekly
- Review of milestones – at each milestone as specified in Annex 2
- Notes/summary of challenges and learnings for deliverable – pilot mentors will maintain a record of challenges faced and learnings for each pilot they are mentoring which in the end is aggregated into the deliverable(s) for this WP4 (minutes template)

- Regular internal sync – A sync between the pilot mentors and pool of experts on Monthly basis

When feasible, the internal sync activities will be carried out in the context of the periodic WP4 meetings to avoid replication of meetings. Only when needed, bilateral meetings will be set up.

As mentioned before, at the pilot starting, the WP4 will organise an onboarding workshop with all the winners at each open call wave. The main goal of this workshop will be to meet the pilots, explain to them the onboarding process and present them the training, monitoring and evaluation plans. After this collective workshop with all the winners, an individual meeting will be set up with each pilot to discuss specific plans and collect from them the required information and needs for profiling and benchmarking every pilot.

Once the pilots are selected by the process described under the WP3 Open Calls, the responsible coordinator will organise an intake meeting with all the winners to welcome them and explain to them the onboarding process. At this point of time, we will also assign the mentors to the pilots and we will train the experts and the mentors, when required.

The Kick off event at the beginning of the mentoring program will allocate the full pool of mentors; explain the resources available and the procedures to be followed within the pilot program.

3.5 Monitoring process

Monitoring the execution of the different pilot projects during the deployment phase of the DS4SSCC-DEP project is essential. As included in Annex 2, a dashboard/overview of the monitoring is important because it helps the team to evaluate the effectiveness of the pilot project before deploying it on a larger scale. By monitoring the progress, performance, quality and timeline checks of the project, the support team can identify any issues or opportunities for improvement and plan changes accordingly.

During the monitoring period of the pilot projects also the mentors will work with the pilots to establish clear and measurable goals for their pilot projects. They provide assistance in tracking the progress.

To keep an overview for the support team and both mentors, annex 2 gives a timeline with most important milestones starting from the announcement of the open call until the final deployment of the pilot project. The mentors get a perspective of the overall deadlines, important communications, official feedback, selection and evaluation moments and the timing of their mentor targets to be reached during the different deployment stages of their pilot projects.

In the **minute template for mentors** (refer to Public Info repository) also the most essential timing regarding the mentoring is listed. In this template with 3 topics, the mentor can also take note of the reached KPI's, the detected risks or training needed and can write down some extra remarks if necessary.

Some pilot projects will start from a more mature starting situation/position than other projects which allows the mentors also to proceed faster in some cases through the timing than others.

The pilot performance indicators will need constant monitoring (at least on a monthly basis) during this timeline and in the template minutes mentor will be facilitating this process to standardise the track keeping over the projects.

The colour codes in annex 2 table indicate which type of milestone our communication is stated. All official deliverables and reports in dark orange; all official announcements/communication moments in light orange, all support and mentoring in green; all supportive and additional information in blue.

All timing except the official announcement or deadlines are suggested time targets but are not fixed or obligatory. They only serve as guidance for the mentors/mentees and the coordinating team.

4   Training program

To ensure a successful deployment and execution of DS4SSCC-DEP pilots, a comprehensive series of training activities has been planned.

The training is closely intertwined with the mentoring program (T4.2), as mentors will actively guide and monitor the mentees (the pilots). During the preparation phase of the training program, specific training packages will be defined, and relevant training materials will be prepared by experts. Identifying these experts among the partners before the pilots commence their training is crucial.

Attendance in these training programs is mandatory to acquire the necessary skills for executing the pilots.

4.1   Training needs

Data spaces for smart communities are a novel concept that aims to enable data sharing and collaboration among different stakeholders in urban and rural areas. However, the level of awareness and understanding of this concept varies across different groups, such as municipalities, citizens, businesses, and researchers. Based on the DS4SSCC preparatory action and work with the Stakeholder Forum, we identified the main stakeholder groups that will be involved in pilots and estimated their knowledge levels related to data spaces for smart communities. Further, in the development of trainings, we will address challenges and opportunities for increasing the capacity and readiness of these groups to participate in data spaces.

The main groups of stakeholders that will be involved in pilot deployments are either from representatives of local authorities (cities, regions, villages, NGOs) or from those organisations providing solutions for them (mainly companies, but also associations and research organisations). They have specific training needs based on their roles, as well as their expertise and level of knowledge.

- **Local Authorities - Decision Makers:** These individuals hold key positions within local government bodies or agencies. They are responsible for making strategic decisions related to policies, regulations, and resource allocation. Their focus is on governance, public service delivery, and overall management of the territory.
  - **Overall Knowledge:** Decision makers within local authorities have a solid understanding of data governance related to policy-making and city management. However, their specific knowledge about data spaces may be limited.
  - **Gap:** While decision makers are well-versed in traditional data governance, they lack familiarity with the concept of Data Spaces for Smart Communities. These gaps become more pronounced when considering the European vision for data-driven innovation and collaboration. Here, alignment with the European data space framework becomes essential.
  - **Training Needs:** Decision makers require an introduction to data spaces, emphasising their role in enabling data-driven decision-making, along with contextualization for smart communities. Real-world examples and case studies can illustrate the impact of data spaces on local governance and service delivery, empowering them to actively contribute to the European data ecosystem and drive innovation and prosperity .
- **Authorities - IT Experts:** These professionals work within local government IT departments. They specialise in technology infrastructure, systems, and applications. Their responsibilities

include maintaining and enhancing IT services, cybersecurity, data management, and digital transformation.

- ○ **Overall Knowledge:** IT experts working for local authorities are well-versed in technology infrastructure, systems, and applications. However, their exposure to data spaces may be limited.
- ○ **Gap:** They may not have specific knowledge about implementing data spaces tailored for smart communities. This includes understanding interoperability, security and thrust and added value creation topics that are covered in the Blueprint for Data Spaces for Smart Communities.
- ○ **Training Needs:** These IT experts need specialised training that covers the technical aspects of data spaces, including integration, security, and scalability within the context of smart cities.

- ● **Solution Providers - Business Developers:** These individuals represent companies or organisations that offer solutions, products, or services for local governments. They focus on understanding client needs, identifying business opportunities, and creating value propositions. Their main goal is to establish partnerships and drive business growth.
  - ○ **Overall Knowledge:** Business developers from solution provider companies understand client needs, business opportunities, and value propositions. However, data spaces may be a novel concept for them.
  - ○ **Gap:** They might lack awareness of how data spaces can enhance their solutions for smart communities and what is the potential impact on their business models, market positioning and sustainability.
  - ○ **Training Needs:** These business developers require an introductory session on data spaces, focusing on their potential impact on business models, market positioning and sustainability.

- ● **Solution Providers - IT Experts:** These professionals work for solution provider companies. They specialise in technical aspects such as software development, system integration, and implementation. Their role is to design, develop, and deliver technology solutions to address specific challenges or requirements.
  - ○ **Overall Knowledge:** IT experts within solution provider organisations excel in technical domains such as software development and system integration. However, data spaces may not be part of their existing expertise.
  - ○ **Gap:** They may lack familiarity with the Blueprint for Data Spaces for Smart Communities, which is the core requirement for pilot delivery..
  - ○ **Training Needs:** These IT experts need targeted training that delves into the intricacies of data space architecture, interoperability, and data governance within the context of smart city projects. Specifically, they must gain in-depth understanding of the Blueprint for Data Spaces for Smart Communities.

In summary, while each group brings valuable expertise, tailored training programs will bridge the knowledge gaps and empower them to leverage data spaces effectively in the deployment of smart community solutions.

Based on our assessment, Table 6 shows the proposed topics of the training packages and the knowledge level of a training based on the stakeholder profile involved in the pilot.

Table 6: Training needs

Training topic	Target group

	Local authorities - demand side		Solution providers - supply side	
	Decision makers	**IT experts**	**Business developers**	**IT experts**
Technical	basic	advanced	basic	advanced
Business	basic		advanced	
Governance and Legal	advanced	basic	basic	basic
Leveraging TEF & other infrastructure	basic	advanced		advanced

4.2 Training methods

The following training methods will be used throughout the pilot program:
- **eLearning**: Educational content will be delivered on-line. Learners will access materials at their own pace, making it flexible and convenient.
- **Classroom training**: Traditional instructor-led sessions. Participants will engage in face-to-face learning, discussions, and activities. Classroom training will be delivered mostly on-line, in a webinar format. When convenient, those training sessions may also be delivered in a classroom setting
- **Case studies and best practices from pilots**: Examples and scenarios from DS4SSCC-DEP pilots will be analysed to showcase best practices and underlying principles. These trainings will be developed for Batch 2 and Batch 3 of the pilots.

Training methods that could be used for the roles outlined in Table 6 are:
- Local authorities - Decision makers: As this role requires advanced knowledge in governance, and legal aspects, a combination of classroom training and case studies could be beneficial. Classroom training can provide in-depth information and allow for real-time Q&A, while case studies can provide practical examples of how to apply this knowledge. For the basic knowledge in business, eLearning could be a good fit as it allows for self-paced learning.
- Local authorities - IT experts: This role requires advanced knowledge in technical topics. A general classroom introduction about the technical blueprint and a provision of information about TEF and other infrastructure through eLearning will be provided.
- Solution providers - business developers: This role requires advanced knowledge in business models and sustainability. Classroom training and case studies could be useful here as they allow for the understanding of theoretical knowledge in connection with real-life examples. Basic knowledge in governance and legal aspects could be gained through eLearning.
- Solution providers - IT experts: This role requires advanced knowledge in technical topics. Therefore, in addition to a general classroom training, provision of detailed information about TEF and other infrastructure will be provided through eLearning (technical documentation, tutorials). Basic knowledge in governance and legal aspects could also be gained through eLearning.

4.3 Training packages

Standard training packages with training materials will be prepared in order for the pilots to gain the required skills for executing the pilots. The packages will be prepared for technical, business and governance topics for different roles - decision makers, service/solution providers. The starting point

to prepare the packages are the building blocks that were defined by the Data Spaces Support Center (DSSC). The training packages will build further on the results of the DS4SSCC preparatory action such as a catalogue of building blocks specifications, a reference architecture, etc.

Training packages must address the needs of a very diverse group of learners who will work on the pilot execution. It is envisioned that the learners are already employed therefore have limited time for learning, meaning that an efficient combination of mentoring and training is essential.

A training package must be specific for a certain context and target group(s) as described in Training needs and Training methods sections.

Figure 5 illustrates the training packages that will be delivered for each pilot project.
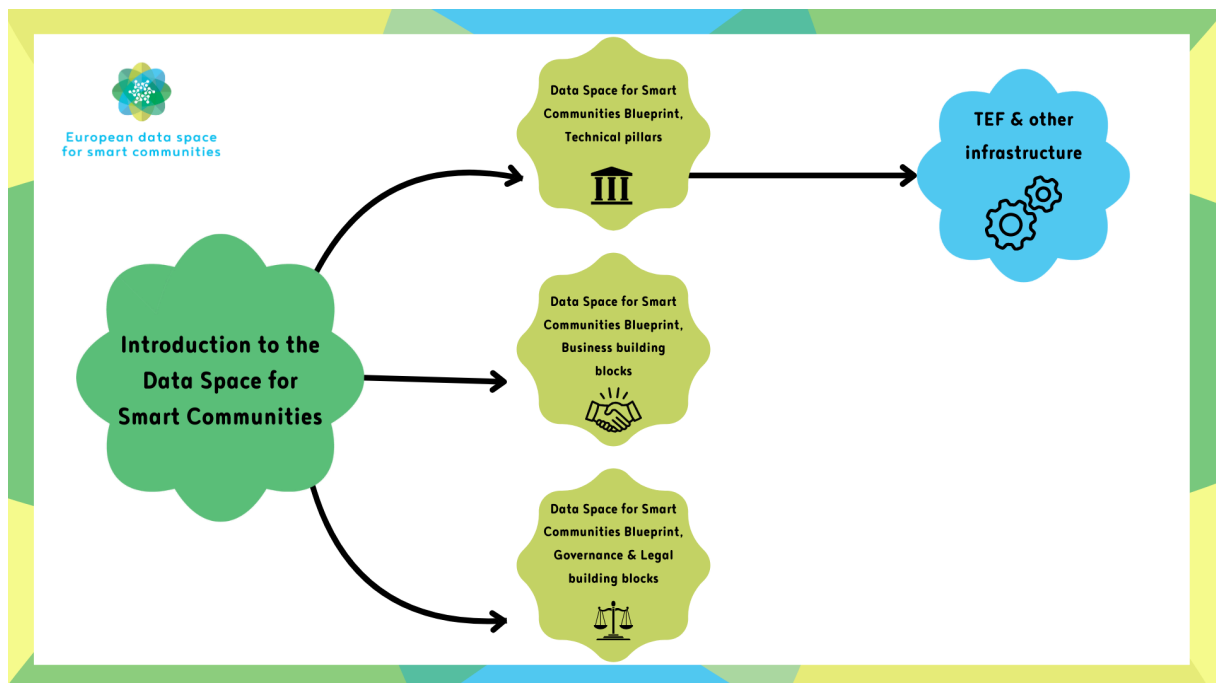

Figure 5:Training packages

Overview of the training packages:

- **Introduction to the Data Space for Smart Communities**: This foundational training provides an overview of data spaces and their significance in the context of smart communities. Participants will learn about the core concepts, benefits, and potential applications of data spaces.
    - ○ Target Audience: All stakeholders, including decision makers, IT experts, and solution providers.
    - ○ Key Topics: Understanding data space fundamentals, use cases, benefits and relevance to smart community development.
- **Data Space for Smart Communities Blueprint - Technical Pillars:** This training delves into the technical aspects of data spaces. Participants will explore the architecture, interoperability, security, scalability and data value considerations specific to smart community data spaces.
    - ○ Target Audience: IT experts, solution providers, and technical teams.

- ○ Key Topics: Data integration, interoperability, MIMs, APIs, data governance and data privacy.
- **Data Space for Smart Communities Blueprint - Business Building Blocks:** Focusing on business perspectives, this training covers how data spaces can create value for businesses operating in smart communities. Participants will learn about monetization strategies, ecosystem collaboration, and business models.
  - ○ Target Audience: Business developers, solution providers, and entrepreneurs.
  - ○ Key Topics: Business opportunities, revenue models, data monetization, and market positioning.
- **Data Space for Smart Communities Blueprint - Governance & Legal Building Blocks**: This training addresses the legal and governance aspects of data spaces. Participants will gain insights into regulatory frameworks, data ownership, consent management, and compliance.
  - ○ Target Audience: Decision makers, legal experts, and policymakers.
  - ○ Key Topics: Legal considerations, data sharing agreements, privacy regulations, and ethical guidelines.
- **TEF and other Infrastructure:** Focusing on technical infrastructure, this training explores the **Testing and Experimentation Facility (TEF)** and other infrastructure that will be made available to pilots. Participants will understand what are the services provided by TEFs and other initiatives.
  - ○ Target Audience: IT experts, technical architects, and infrastructure specialists.
  - ○ Key Topics: TEF principles, infrastructure setup, data storage, and network connectivity.

These training packages aim to equip participants with the necessary knowledge and skills to actively participate in the deployment of data spaces for smart communities.

4.4 Delivery of trainings

The training sessions for the DS4SSCC-DEP pilots will be organised to ensure flexibility and adaptability for the piloting organisations. The delivery methods will be tailored based on the specific roles of individuals, as outlined in the training method chapter. During the onboarding process, the proposed training activities' schedule for each pilot will be further refined.

The identification of existing training materials, design and delivery of new ones will be a collaborative and iterative effort involving key partners. WP4 partners will collectively contribute to shaping the training content. By leveraging their expertise, these partners will ensure that the materials align with the project's goals and address the unique requirements of smart community data spaces.

To enhance the effectiveness of the training, the Mentor Program Coordinator together with the mentors will assess the needs of the selected pilots. Understanding their specific requirements and skill gaps will allow us to plan the training content accordingly.

Upon successful completion of the training, participants in the pilots will receive certificates. These certificates will recognize their acquisition of relevant experience and skills necessary to achieve the pilot objectives.

This approach aims to foster collaboration, knowledge sharing, and skill development among all stakeholders involved in the DS4SSCC-DEP initiative.

4.5   Evolution of training material and learning experience

Gathering feedback from trainees is a cornerstone for a successful training program. It provides essential insights into both the quality of training materials and the effectiveness of delivery. In this chapter, we propose an optimal approach for distributing evaluation questionnaires.

The questionnaire aims to gather trainees' feedback on various aspects of the training program. Trainees are asked to rate elements such as the clarity of learning outcomes, their interest in the topic, the balance of workload, and the effectiveness of teaching methods. Additionally, the questionnaire explores overall satisfaction and alignment with expectations. By actively seeking trainees' input, the training program can continuously evolve and enhance the learning experience.

The timing of questionnaire distribution significantly impacts the quality of responses. For this reason, we will implement the following approach:

- End of Training: Distribute evaluation questionnaires towards the end of the training session (end of live classes or self-learning materials). By this point, trainees have engaged with the material, experienced the methods, and can provide thoughtful feedback.
- Informed Trainees: Prior to the training, we will inform participants that they will be asked to evaluate the training materials. Transparency encourages active participation.
- Classroom Integration: We will reserve a few minutes during the training session to complete the questionnaires. This ensures higher response rates and provides an opportunity for immediate discussion.

To leverage the value of the collected feedback, the following steps will be taken:

- Prompt Analysis: Review the responses promptly. Identify trends, common themes, and actionable insights.
- Material Refinement: Use feedback to update training materials. Correct errors, clarify concepts, and enhance relevance.
- Trainee Engagement: Share the aggregated results with trainees. Discuss improvements made based on their feedback. This reinforces the collaborative learning process.

5   Pilots and evaluation assessment

All the running pilots under the European Data Space for Smart Communities are required to be supported (as described in Section 2), monitored (as described in Section 3), trained (as described in Section 4) and evaluated with regards to certain indicators as it is described in this section.

5.1 Purpose of the evaluation

The evaluation to be conducted across the pilots has two objectives:
- **Assess the performance of the pilots** towards a set of indicators to show the evolution of their status from the beginning (benchmark) to the end. Through the three assessments of the proposed indicators (at starting, mid-term and at the end of the pilot), the mentor can verify the progress of the pilot, identity potential issues and drawbacks, define contingency measures with the pilot owners and escalate to the WP4 leader in case of stoppers' detection.
- **Obtain relevant feedback** about their validation of the blueprint to adapt it accordingly. This feedback is of great importance for the WP2 which is in charge of upgrading and adapting the current blueprint to the real application scenarios.

5.2 Evaluation process

The evaluation of the pilots will be carried out at mid-term and at the end of the pilot execution. In order to establish the reference values for benchmarking, the project has to evaluate the pilot at the beginning of the execution and gather the baseline values where each of them starts from.

Figure 6 shows the three milestones and actions to carry out in each of the steps for the evaluation process.
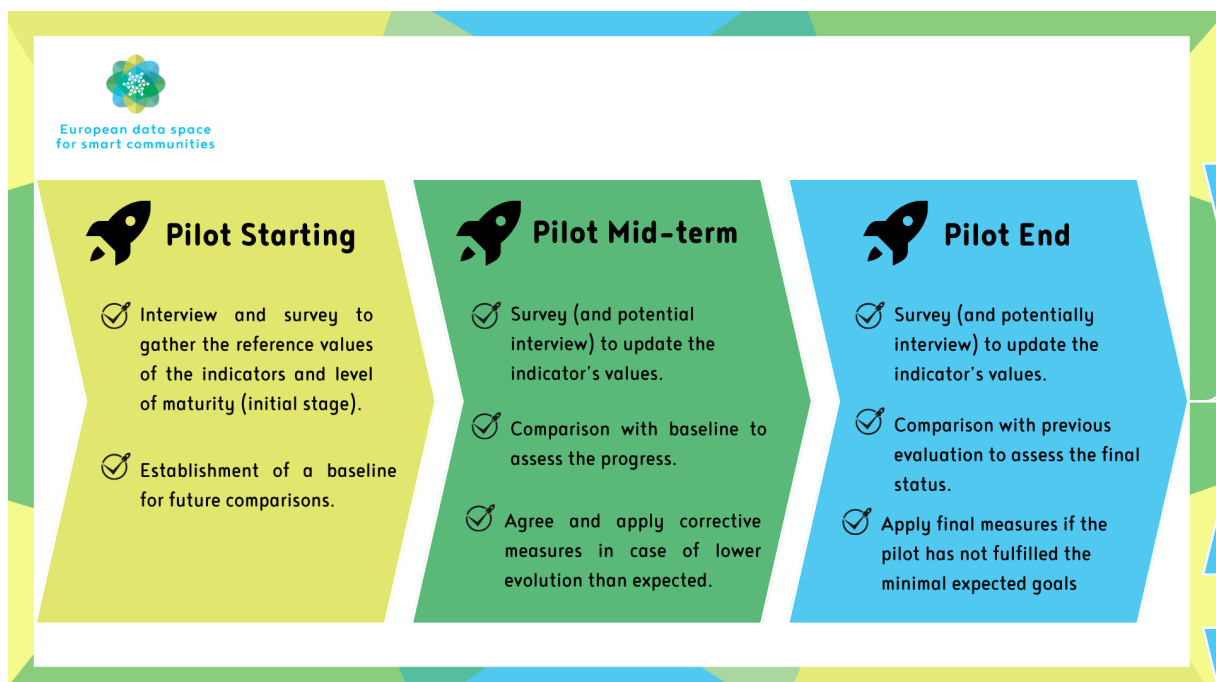

Figure 6: Evaluation process

5.3   Indicators (Key Performance Indicators)

The project has defined a set of key performance indicators to support the monitoring and assessment of the pilots. The indicators have been decided under the basis of fostering the evolution of the pilots and the target values have been set up to prevent the access barrier but to the minimal value required to validate the principles of the data space principle (e.g. to share data between two participants; at least two data providers are needed in each pilot; at least one service needs to be provided based on the shared data; at least one data user is needed in each pilot).

Table 8 lists the different categories of identified indicators, codified and with the related work packages and the minimal target value to overcome the evaluation assessment. These indicators will be provided to the applicants to the open call to allow them knowing what they will be measured about during the pilot's execution. The indicators are as most quantitative as possible, and a poor evaluation may affect the payment schema of the funding tranches.

Table 8: Performance indicators for pilots evaluation

Category	Code	Indicator	Related WPs	Target value (minimal)
Governance	IG1	number of data providers	WP4	2
Governance	IG2	number of data users	WP4	1
Governance	IG3	number of participants	WP4	3
Governance	IG3	number of contracts (new data provider)	WP4	1
Governance	IG4	participation in Stakeholder Forum meetings	WP2	all organised during the execution
Governance	IG5	number of engagement of eDIHs	WP2	1
Impact	II1	number of events	WP5	1
Impact	II2	number of diss actions (articles, posts, etc)	WP5	3
Impact	II3	higher score in Lordimas	WP5	increment of 10% in the score
Management	IM1	ethics readiness	WP5	High
Management	IM2	% deviation of budget spent	WP3	10%
Management	IM3	% ethical issues solved	WP5	100%
Support	IS1	number of support requests (Jira)	WP4	12
Support	IS2	number of training packages	WP4	4
Technical	IT1	number of datasets provided to other participants (shared)	WP2	2
Technical	IT2	number of reusable services	WP2	1
Technical	IT3	number of data sources	WP2	2
Technical	IT4	number of datasets reused from other participants (used)	WP2	2
Technical	IT5	% infrastructure reused from TEF	WP2	50%
Technical	IT6	number of AI services available	WP2	1

Technical	IT7	number of datasets shared outside of the domain	WP2	1
Technical	IT8	number of implemented MIMs	WP2	2
Technical	IT9	number of new developed applications	WP2	1
Technical	IT10	number of building blocks used	WP2	all essential
Technical	IT11	number of validated components from the blueprint	WP2	3
Technical	IT12	number of open standards used	WP2	1 per used BB

This initial list of 26 indicators could be extended with some additional as a result of the collected feedback from pilots about the monitoring and evaluation process. They have been categorised into Governance, Impact, Management, Support and Technical depending on the addressed aspect by each one. A code has been assigned to refer to them in a shorter manner. Every indicator is affecting different WPs, attending also to its category. The referred WPs will use the obtained values for their own analysis and assessment. The target value represents the minimal goal for each pilot to reach at the end of the execution. In most cases, the indicator has a quantitative target value in favour of objectivity and measurability.

The presented list of indicators are required for the assessment of the pilots' performance, but through the interaction of the mentor with the pilots, other additional indicators will be gathered from them. WP5 is working on a set of indicators to measure the impact of the data space as a whole, and the inputs from the pilots are vital for this assessment. Therefore, this list of indicators will be complemented by an additional one that will be processed by WP5.

5.4   Evaluation tools

The evaluation will be conducted by the mentor according to the pilot plan defined in agreement with the pilot. The three planned **evaluation's interviews** (starting, mid-term and final) will be set up by the mentor. During them, the mentor can gather the status and progress of the pilot informally through a friendly conversation. The mentor can make use of the template of the progress minutes (to be used in all meetings with the pilot) to register the progress.

Additionally, the pilot needs to fulfil a **self-assessment survey** with qualitative and quantitative questions about:
- the current values of the above referred indicators,
- the main issues encountered during the period,
- the main challenges for the next period,
- feedback about the different elements of the blueprint,
- valoration of the received support from the experts,
- valoration of the received mentoring by the mentor,
- open questions/opinions.

This survey will be provided online using the EU Survey tool and the pilots will have 2 weeks at most to fulfil it. The results will be analysed to come up with the overall status of the pilot which will confirm its evolution or not; and with the collected feedback about the blueprint which will be transferred to WP2 for the evolution of the blueprint.

Finally, the project team maintains a central dashboard (**Project KPIs framework**) with all indicators used in the project, either for the pilots performance, for the impact assessment and for reporting as included in the contract. Having this common framework for all KPIs, a consolidated view is provided to the project team and also favour the alignment towards the pilots, requesting them the required information through an unique channel and only once.

6   Conclusions and next steps

This document has presented the planned activities by the support team in the DS4SSCC-DEP project to facilitate the onboarding in the European Data Space for Smart Communities and execution of the pilots selected by the call for pilots. Therefore, it includes the onboarding process, the monitoring plan, the training activities and the evaluation framework to assess their performance and gather the feedback about the blueprint.

The support team will be formed by mentors who will be monitoring the pilots and acting as the entry point to the data space; experts in specific areas about data spaces and trainers for different learning packages. The support activities will follow the milestones defined by the call for pilots procedure. Since the pilots are awarded in any of the rounds of the open call, the support team (under the umbrella of the WP4) will be providing them with all the necessary elements to do their project in the best possible way. Thus, a mentor will be assigned already during the contract phase to accompany them from the very beginning. An onboarding workshop with all the winning pilots in each round is organised to welcome them to the data space and provide a smooth landing. After that, each mentor organises an individual meeting with her pilot to detail the working plan, agree on the monitoring program and profile the pilot at starting time. The mentor will be supported by the experts in different topics for the continuous support to the pilot. In every evaluation, the mentor will assess the status of the indicators to verify the evolution of the pilot, collecting as well the feedback about the blueprint valuable for its evolution.

The above described plans will be updated during the project according to the feedback provided by the pilots about the process and activities and based on the lessons learned from one round of pilots to the next one. The WP4 will deliver two reports (D4.2 at M18 and D4.3 at M36) about the carried out activities, the status of the pilots and the gained experience from each round. All the training material will be compiled in a unique deliverable (D4.4) at the end of the project for future reference. After the submission of the deliverable, the support team will start to prepare the onboarding package, the training packages and the self-assessment survey in order to be ready for the first round of pilots starting in September 2024.

Annex 1: Pilot profile

Pilot profile
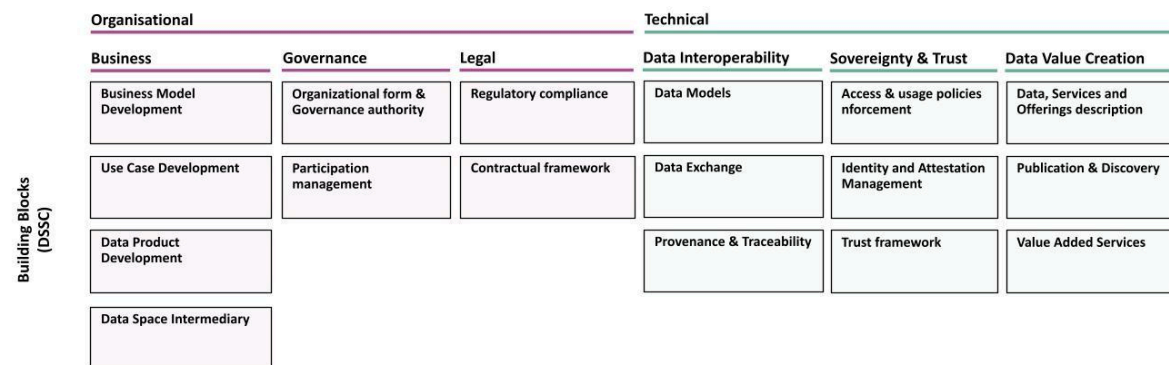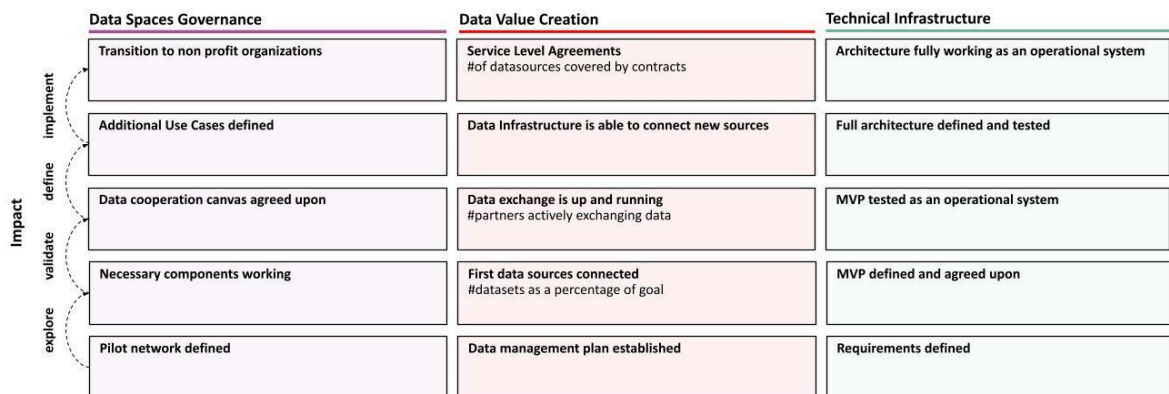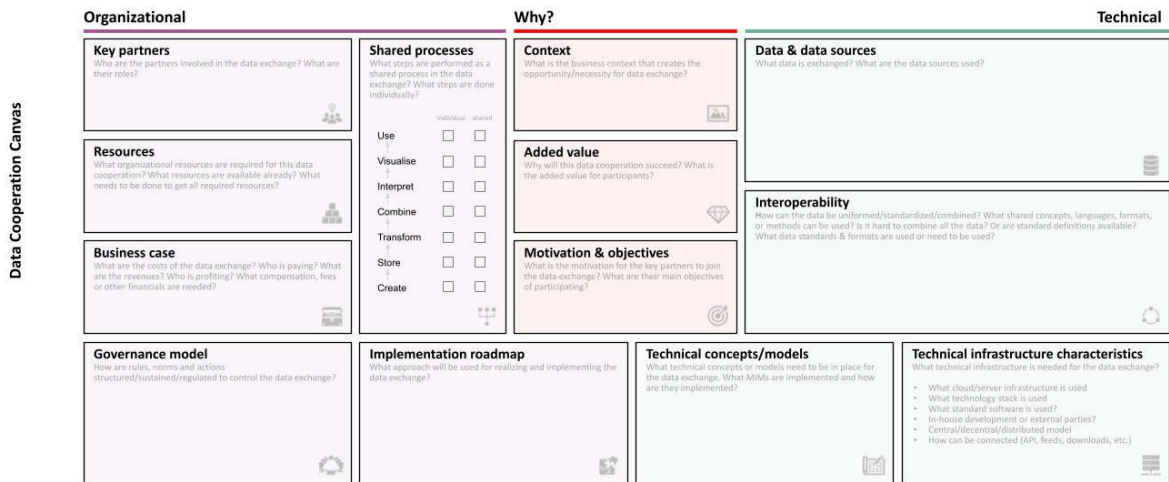
Annex 2: Milestones monitoring overview

Responsible	Item/Task/Target		Timing	Frequency	Remarks
WP3	**open call 1 announcement**		17/1/2024		
	Stakeholder forum open call 1		Feb-March 2024		
WP3	**Deliverable (D3.1)**		29/2/2024		
WP4	**WP4: D4.1**		29/2/2024		
WP3	**official open call launch/application period starts wave launch 1**		11/3/2024		
APPLICATION PERIOD LAUNCH 1: March- May 24					
WP3	Open Call 2 Announcement		May 2024		
WP3	**Stakeholder forum open call 2**		May-June 2024		
WP3/WP4	**Evaluation and selection period by expert jury launch 1**		June-July 2024		
WP3	**Official Open Call 2 Launch/ application period starts wave launch 2**		June 2024		
APPLICATION PERIOD LAUNCH 2: June-August 24					
WP3/WP4	notification of selected pilot projects launch 1		August 2024		
WP3	Feedback to pilot teams and re-submission of re-scoped proposal		August-Sept 2024		
WP3	**Open Call 3 Announcement**		September 2024		
WP3	**Stakeholder forum open call 3**		Sept-Oct 2024		
WP3/WP4	**Evaluation and selection period by expert jury launch 2**		Sept- Oct 2024		
APPLICATION PERIOD LAUNCH 3: October- November 2024					
WP4/WP3	onboarding workshop projects launch 1		September 2024	implementation period until sept 25	
WP4: FIWARE	support helpdesk starts launch 1 projects		September 2024		
MPM and mentors and pilots	**The Kick off event** launch at the beginning of the mentoring Program will allocate the full pool of mentors;		Sept 2024 start pilot deployment		
WP3	**Official Open Call 3 Launch/application period starts wave launch 3**		October 2024		
MPM and mentors	meeting startup mentoring guidelines and approach		October 2024		
IMPLEMENTATION PERIOD 1 (12-16M: October 24-September 25/Jan 26)					

mentors /experts	agreed mentoring plan T4.2		October 2024		
mentoring and monitoring starts Launch 1 pilots: October 24-September 25/January 26					
mentor and pilot	Launch 1 pilots **Explore**: identify the challenges or opportunities that the organisation aims to address through the creation of a data space, and to generate and mobilise ideas for potential solutions: use the data canvas model and innovatrix tool as guidance (mentoring target 1)		October 2024		
WP3	Notification of selected projects launch 2		November 2024		
WP3	Feedback to pilot teams and re-submission of re-scoped proposal of launch 2		Nov-Dec 2024		
WP4/WP3	On-boarding workshops launch 2 pilot projects		December 2024	implementation period December 24 until November 25	
IMPLEMENTATION PERIOD 2 (12-16M: January 25-Dec 25/April 26)					
WP4/FIWARE	support helpdesk starts launch 2 projects		December 2024		
mentor and pilot	Launch 1 pilot projects **Validate**: evaluate and select the most promising and feasible ideas for the data space, and to test them with customers and stakeholders (mentoring target 2)		December 2024		
MENTORING AND MONITORING STARTS-LAUNCH 2 pilots: December 24 until November 25/April26					
WP3	Evaluation and selection period by expert jury launch 3		Dec 24-Jan 25		
mentor and pilot	Launch 2 pilot projects **Explore**: identify the challenges or opportunities that the organisation aims to address through the creation of a data space, and to generate and mobilise ideas for potential solutions: use the data canvas model and innovatrix tool as guidance (mentoring target 1)		December 2024		

WP3/WP4	D3.3 Ranking and selection of Pilots		January 2025		
WP3	Notification of selected projects launch 3		February 2025		
WP3	Feedback to pilot teams launch 3 and re-submission of re-scoped proposal		Feb-March 2025		
mentor and pilot	Launch 2 pilot projects **Validate**: evaluate and select the most promising and feasible ideas for the data space, and to test them with customers and stakeholders (mentoring target 2)		Feb/March 2025		
mentor and pilot	Launch 1 pilot projects **Define**: Define and optimise the selected ideas for the data space, and to develop a detailed and comprehensive plan for the implementation(mentoring target 3)		Feb/March 2025		
WP3/WP4	On-boarding workshops launch 3 pilot projects		March 2025	implementation April25-March/May 26	
all WP4	**report D 4.2 (M18): Pilots interim report**		March 2025		
IMPLEMENTATION PERIOD 3 (12-14M: April 2025-March 26/May 2026)					
FIWARE/WP4	support helpdesk starts launch 3 projects		April 2025		
MENTORING AND MONITORING STARTS- Launch 3 pilots 12-14M: April 2025-March 26/May 26					
mentor and pilot	Launch 3 pilot projects **Explore**: identify the challenges or opportunities that the organisation aims to address through the creation of a data space, and to generate and mobilise ideas for potential solutions: use the data canvas model and innovatrix tool as guidance (mentoring target 1)		April 2025		
mentor and pilot	Launch 2 pilot projects **Define**: Define and optimise the selected ideas for the data space, and to develop a detailed and comprehensive plan for the implementation(mentoring target 3)		April/May 2025		

mentor and pilot	Launch 1 pilot projects **Implement**: execute and monitor the project plan, and launch and evaluate the data space (mentoring target 4)		April-Sept/Dec 2025		
mentor and pilot	Launch 3 pilot projects **Validate**: evaluate and select the most promising and feasible ideas for the data space, and to test them with customers and stakeholders (mentoring target 2)		May/June 2025		
mentor and pilot	Launch 2 pilot projects **Implement**: execute and monitor the project plan, and launch and evaluate the data space (mentoring target 4)		June/July 2025		
mentor and pilot	Launch 3 pilot projects **Define**: Define and optimise the selected ideas for the data space, and to develop a detailed and comprehensive plan for the implementation(mentoring target 3)		July/August 2025		
mentor and pilot	Launch 3 pilot projects **Implement**: execute and monitor the project plan, and launch and evaluate the data space (mentoring target 4)		Sept/Oct 2025		
all tasks	**REPORT D4.3 (M36)**		**Sept 2026**		
REPEATED ACTIONS					
mentor	Regular Sync up with pilot contact **Launch 1 pilot projects**		from Sept 2024 to sept 2025	bi-weekly	
mentor	Regular Sync up with pilot contact **Launch 2 pilots**		December 2024 until November 2025	bi-weekly	
mentor	Regular Sync up with pilot contact **Launch 3 pilots**		March 2025-Feb 2026	bi-weekly	
mentor	Regular internal sync – A sync between the pilot mentors and pool of experts		from Sept 2024 to Feb 2026?	Monthly	

mentor	Notes/summary of challenges and learnings for deliverable – pilot mentors will maintain a record of challenges faced and learnings for each pilot they are mentoring which in the end is aggregated into the deliverable(s) for this WP4		from Sept 2024 to feb 2026?		
MPC and mentors	pilot peer learning event: focus on creating links and finding synergies across the pilots		mid project deployment: M17/18 Feb/March 25		
MPC	Regular internal sync – A sync between the pilot mentors and MPC		during 3 launches	bi-weekly	
MPC	Regular internal sync – A sync between the responsibles training (CCIS) and MPC and WP4 leader		during 3 launches		
MPC	Regular internal sync – A sync between the responsibles helpdesk (FIWARE) and MPC and WP4 leader		during 3 launches		
MPC en mentors	closing event:final feedback collected				
mentor and pilot	co-creation exercise (data cooperation canvas) for engaging stakeholder in order to map -there needs -facilities, technical and data resources -help the pilots to understand their business case (mentoring target 5)		During implementation		

About the European Data Space for Smart Communities

The European Data Space for Smart Communities (DS4SSCC-DEP) initiative is a pivotal deployment following the preparatory action for a Data Space for Sustainable and Smart Cities and Communities (DS4SSCC). The preparatory action for a Data Space for Sustainable and Smart Cities and Communities (DS4SSCC) laid the foundation for DS4SSCC-DEP. Emphasising sustainability aspects and diversity in communities, DS4SSCC developed a multi-stakeholder data governance scheme, created a blueprint for the European DS4SSCC, delivered priority datasets, developed a roadmap towards a mature DS4SSCC, and implemented the data space on various governance levels.

DS4SSCC-DEP's vision revolves around creating a well-governed data space available for developers and infrastructure providers, aligning with the prospects outlined in Europe's Digital Decade objectives. Our vision is rooted in acknowledging data as a critical asset in contemporary society, akin to essential resources like water or food supplies. DS4SSCC-DEP aims to build a territorial, place-based data space for smart communities. This approach distinguishes itself from sectorial data spaces by encompassing diverse domains, underpinning governance across all levels of society. The key objectives of the project are:

- **Objective 1: Establishing a Federated and Innovative Data Space**. This phase focuses on creating a large-scale data space controlled by public data holders, ensuring alignment with the Smart Middleware Platform and broader data space ecosystems. It also aims to offer middleware service solutions facilitating data sharing and management while refining the blueprint based on gained experience.
- **Objective 2: Pilots and Refinement of the Data Space Blueprint**. Through 10-12 cross-sector data pilots in various EU communities, this objective aims to validate and refine the data space blueprint. Using common high-value data sets, it seeks to create added value by combining data from various domains, contributing to the sustainability plan, and minimising infrastructure investment.
- **Objective 3: Fostering Innovation and Ecosystem Alignment**. Engaging stakeholders, compliance with sector-specific legislation, establishing links with Horizon Europe missions, creating services available via trusted application catalogues, and enhancing ethical considerations and AI-enabled local solutions constitute the focus of this objective.

DS4SSCC-DEP, building upon established European networks, aims to significantly contribute to the sustainability goals of European citizens. It emphasises co-creation, standardisation, business models, strategies for data spaces, and envisions a federated platform.

Our consortium: