



True Demand-Driven Semiconductor Supply Chains for Europe

Project Acronym:

SC⁴EU

Grant agreement no: 101139949

Deliverable no. and title	D8.2 - Demonstrators Specification Report B	
Work package	WP8	Dissemination and International Communication
WPs involved	WP2, WP3, WP4, WP5, WP6	
Lead contractor	Infineon Technologies AG Thomas Gutt, mailto: thomas.gutt@infineon.com	
Deliverable responsible	Harokopio University of Athens Fenia Giannakopoulou, email: fgiannakopoulou@hua.gr	
Version number	V1.0	
Date	30.11.2025	
Status	Final	
Dissemination level	Public (PU)	

Copyright: SC⁴EU Project Consortium, 2025

Authors

Participant no.	Part. short name	Author name	Chapter(s)
1	HUA	Fenia Giannakopoulou	Chapters 1,3
2	IFAG	Isabella Lippert, Yannick Mester	Chapter 2.3.5
3	IFAG	Marta Bonik	Chapters 2.1, 2.2
4	Flostock	Robert Peels	Chapter 2.3.3
5	TIB	Felix Engel	Chapter 2.3.2
6	SAP	Dominik Erleback	Chapter 2.3.1
7	FTK	Lars Mönch	Chapter 2.3.4
8	Involvation	Alfons Willemsen	Chapter 2.3.6

Document History

Version	Date	Author name	Reason
v0.1	06.04.2024	Alfred Hoess	Initial Template
V0.2	01.10.2025	Fenia Giannakopoulou	Chapter 1 Contributions
V0.3	16.10.2025	Marta Bonik	Chapters 2.1, 2.2
V0.4	29.10.2025	Isabella Lippert, Yannick Mester	Chapter 2.3.5
V0.5	05.11.2025	Robert Peels	Chapter 2.3.3
V0.6	07.11.2025	Felix Engel	Chapter 2.3.2
V0.7	08.11.2025	Dominik Erleback	Chapter 2.3.1
V0.8	10.11.2025	Lars Mönch	Chapter 2.3.4
V0.9	23.11.2025	Alfons Willemsen	Chapter 2.3.6
v0.10	23.11.2025	Fenia Giannakopoulou	Chapter 3
v0.11	24.11.2025	Fenia Giannakopoulou & Eirini Liotou	Final Version

v0.12	25.11.2025	Alfred Hoess	Project internal review
V1.0	30.11.2025	Fenia Giannakopoulou	Project internal reviewer comments included. Final editing and deliverable submission.

Publishable Executive Summary

Deliverable **D8.2 - Demonstrators Specification Report B** presents the updated and extended set of demonstrators developed within the **SC⁴EU (True Demand-Driven Semiconductor Supply Chains for Europe)** project. **SC⁴EU** aims to strengthen Europe's semiconductor ecosystem by reducing the bullwhip effect, enabling more accurate demand forecasting, and promoting secure, privacy-preserving data sharing across the supply chain.

Building upon the foundations laid in **Deliverable D8.1**, this updated report provides refined specifications, progress updates, and enhanced functionalities for the initial demonstrators. In addition, **D8.2 introduces a series of new demonstrators (Chapter 2.3)** that expand the project's technical and methodological toolkit.

The report provides detailed descriptions of each demonstrator, including architecture, objectives, functionality, and progress achieved to date.

Overall, **D8.2** consolidates the demonstrator ecosystem, ensuring coherence across work packages and preparing the ground for final validation activities. The progress presented underscores **SC⁴EU's** contribution to building secure, resilient, and transparent semiconductor supply chains for Europe.

Table of Contents

1. Introduction	8
1.1 SC4EU Overview	8
1.2 Objectives of this Report.....	9
2. Updated Demonstrator Specifications and Development Status	10
2.1 OntoQuest Vocabulary Game - Enhancing Ontology Development through Gamification	10
2.2 True Demand Knowledge Graph	11
2.3 Introduction of Additional Demonstrators	12
2.3.1 SSI System	12
2.3.2 Vocabulary Development Support Tool (VDST) in Semiconductor Supply Chains.....	13
2.3.3 System Dynamics Model	14
2.3.4 Optimization-based Demand Forecasting Framework.....	15
2.3.5 True Demand MPC Survey	16
2.3.6 Semiconductor Game	17
3. Conclusions	20
4. Appendix A - Abbreviations.....	21

List of Tables

Table 1: Abbreviations.....	21
-----------------------------	----

Abstract

This deliverable provides the updated specifications and development status of the demonstrators that constitute the technological and methodological foundation of the SC⁴EU project. It refines and extends the demonstrators initially introduced in Deliverable D8.1 and integrates **additional demonstrators** developed since the previous reporting period.

The document presents enhanced versions of existing demonstrators—including the OntoQuest Vocabulary Game and the True Demand Knowledge Graph—and introduces new components such as the Self-Sovereign Identity System, the Vocabulary Development Support Tool (VDST), the System Dynamics Model, the Optimization-based Demand Forecasting Framework, the True Demand MPC Survey Platform, and the Semiconductor Game. Each demonstrator contributes to SC⁴EU's overarching goals: improving forecast accuracy, enabling secure and privacy-preserving data sharing, strengthening semantic interoperability, and supporting ecosystem-wide collaboration. The report concludes with next steps for final integration, validation, and deployment across relevant work packages.

Structure of the deliverable report

The structure of **Deliverable D8.2** is organized as follows: The **Introduction** provides an overview of the **SC⁴EU** project's objectives and explains the role of demonstrators in supporting the True Demand Framework, as well as how this deliverable builds upon the previously submitted D8.1. **Chapter 1** summarizes the overall objectives, ambition, and expected impact of **SC⁴EU**, including key components such as AI-based demand breakdown, ontology-driven data structuring, and privacy-preserving survey mechanisms. It also clarifies the purpose of D8.2 and explains how it extends the demonstrator specifications introduced in D8.1 by updating their progress and incorporating newly developed demonstrators. **Chapter 2** presents all demonstrators in detail, both updated and newly added. **Chapter 3** summarizes the progress achieved to date and outlines the planned activities for final integration, testing, and validation in the upcoming phases of the project.

1. Introduction

1.1 SC⁴EU Overview

SC⁴EU, a collaborative Innovation Action, aims at strengthening European digital sovereignty by mitigating the chip shortage through the reduction of the bullwhip effect in the semiconductor industry and supply chains containing semiconductors. This will be reached via a “truer” demand signal gained from an anonymous MPC (Multi-Party Computation) survey on coarse granularity which will be broken down via Artificial Intelligence (AI) methods to fine granularities following the semantic web-based digital reference structure.

The ambition of the **SC⁴EU** consortium is to overcome these obstacles and to obtain high-quality, reliable data for semiconductor demand forecasting. In the solution proposed by **SC⁴EU**, data should be gathered via an anonymous survey based on Multi-Party Computation technology. Anonymity and security of data flow will encourage business partners to share their true demand data. Then, the gathered data will be mapped onto ontologies (semantic representations of the semiconductor industry) and processed with AI tools for demand breakdown of fine granularity.

Key Objectives:

The overall goal of the **SC⁴EU** project is to develop a solution for better demand forecasting in semiconductor supply chains. This objective will be achieved by establishing a true demand platform - a service available to companies included in semiconductor supply chains. On its way to the platform realization **SC⁴EU** consortium will specifically target the following objectives:

- Establish an improved version of the Digital Reference ecosystem and ensure its maintenance
- Provide secure access to the true demand forecasting services and integrate them with cloud services and other data spaces
- Integration of collaborative ontology processing tools into the **SC⁴EU** Ontology Curation Portal and availability of Continuous Integration pipelines
- Provision of an integrated and collaborative ontology editing and visualisation tooling
- Provision and establishment of an integrated SSO solution for all SC3 Portal-connected tools
- Development of a consistent, modular, and semantic description of semiconductor supply chains that can be used to generate meaningful demand forecasts for the supply chain
- Design and test of demand forecasting methods that especially allow for disaggregate of demand information
- Development of the Survey Use Case

The overarching goals of the **SC⁴EU** project are:

- Mitigation of the chip shortage
- Reduction of the bullwhip effect in the semiconductor industry
- True-demand-based forecast
- Resilient and sustainable semiconductor supply chains
- Promotion of data sharing.

By addressing these key areas, **SC⁴EU** will result in a better bullwhip reduced demand forecast on all levels of the semiconductor demand and of demands for supply chains containing

semiconductors.

1.2 Objectives of this Report

The objective of this report is to provide an updated and consolidated specification of all demonstrators developed within the SC⁴EU project, reflecting the progress achieved since the release of Deliverable **D8.1 - Demonstrators Specification Report A**. While **D8.1** introduced the initial demonstrator concepts and early prototypes, Deliverable **D8.2** expands upon that foundation in two key ways.

First, it provides updated specifications and progress updates for the demonstrators already presented in **D8.1**, reflecting refinements in design, architecture, and functionality based on ongoing development activities and feedback from technical work packages.

Second, **D8.2** introduces additional demonstrators that were not included in the previous report. These newly developed demonstrators—presented in Chapter 2.3—extend the project’s technical capability in areas such as identity management, consensus-based terminology development, system dynamics modelling, advanced forecasting, secure multi-party computation surveys, and gamification strategies. Their inclusion provides a more complete representation of the demonstrator ecosystem supporting the SC⁴EU True Demand Framework.

Overall, this report documents the full set of demonstrators available at this stage of the project, ensuring consistency across work packages and preparing the ground for final validation, integration, and dissemination activities.

2. Updated Demonstrator Specifications and Development Status

2.1 OntoQuest Vocabulary Game - Enhancing Ontology Development through Gamification

Demonstrator	Presentation, Live Demonstration
Duration	10-15 minutes
Goal	<p>The goal of this demonstrator is to showcase OntoQuest, a vocabulary game designed to support the development of ontologies, particularly the Digital Reference model. Industrial vocabularies are characterized by high terminological specialization and complexity, which can lead to inconsistencies and communication difficulties. In corporate contexts, the same terms may be used differently across departments, or similar concepts may be referred to by different names. Structured knowledge representations, such as taxonomies, semantic networks, and ontologies, can facilitate vocabulary development and organization, increasing the efficiency of knowledge management. In complex areas like semiconductor supply chains, efficient knowledge management is crucial for transparent information flow, accurate decision-making, which can contribute to overall supply chain resilience.</p> <p>Semantic modelling requires close collaboration between ontology engineers and knowledge domain experts. This collaborative process can result in high-quality semantic descriptions when efficiently managed. Therefore, it is essential to encourage experts to work together on providing ontology and vocabulary feedback.</p> <p>In the context of the SC⁴EU project, semantic models play a vital role in the overall data flow, supporting anonymous survey data processing, data integration from open sources, and data visualization. The quality of the applied models directly impacts the project outcomes. The underlying top-level ontology for SC⁴EU is the Digital Reference model, a holistic ontology for semiconductor supply chains and supply chains containing semiconductors.</p> <p>To facilitate collaborative ontology development, we propose OntoQuest, a game that engages a broad community to work together on improving the Digital Reference model. OntoQuest offers short game rounds, allowing players to interact with the model in various ways, such as verifying existing definitions, adding missing definitions, and providing abbreviations or name variants. Participants collect points and badges as incentives for providing feedback. In the future, it will also be possible to provide feedback on the ontology structure.</p> <p>This game supports SC⁴EU's gamification efforts to make improvements to the semiconductor supply chain more interactive (WP7 and related tasks) and complements SC⁴EU vocabulary development efforts in WP3. While the WP3 vocabulary development service captures and defines new terms to extend semantic descriptions, OntoQuest enables continuous evaluation in a constantly changing business environment.</p>
Specification	In this demonstration, the current version of the game is being presented, which is structured according to the Digital Reference model's thematic areas, or "lobes." Users can choose which lobe to provide feedback on and decide the

duration of the game round (number of definitions). For each displayed term, users can provide feedback on the definition, accept it, change it, or propose a new version. All inputs are saved in a database and undergo human verification before being incorporated into the semantic model.

During the demonstration, a short overview of the concept is presented, followed by a live demonstration of a short game round. All attendees also have the opportunity to play the game online.

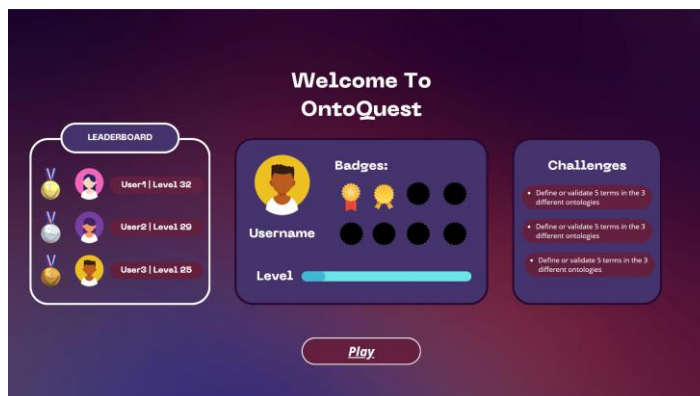


Figure 1: OntoQuest User Interface



Figure 2: OntoQuest: possible interaction with vocabulary terms

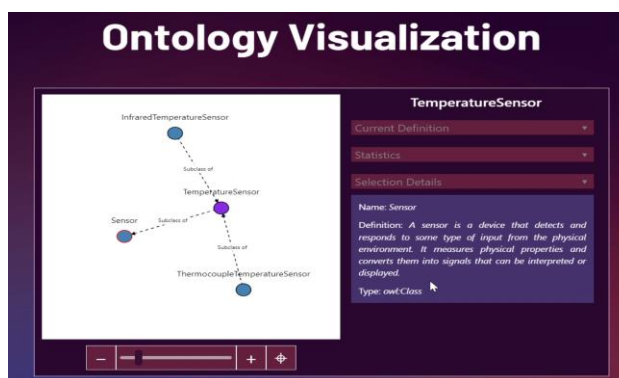


Figure 3: OntoQuest: Ontology-driven architecture

2.2 True Demand Knowledge Graph

Demonstrator	Video
Duration	5-10 minutes
Goal	The objective of this demonstration is to showcase the concept behind the True Demand Knowledge Graph, one of the modules within the designed True

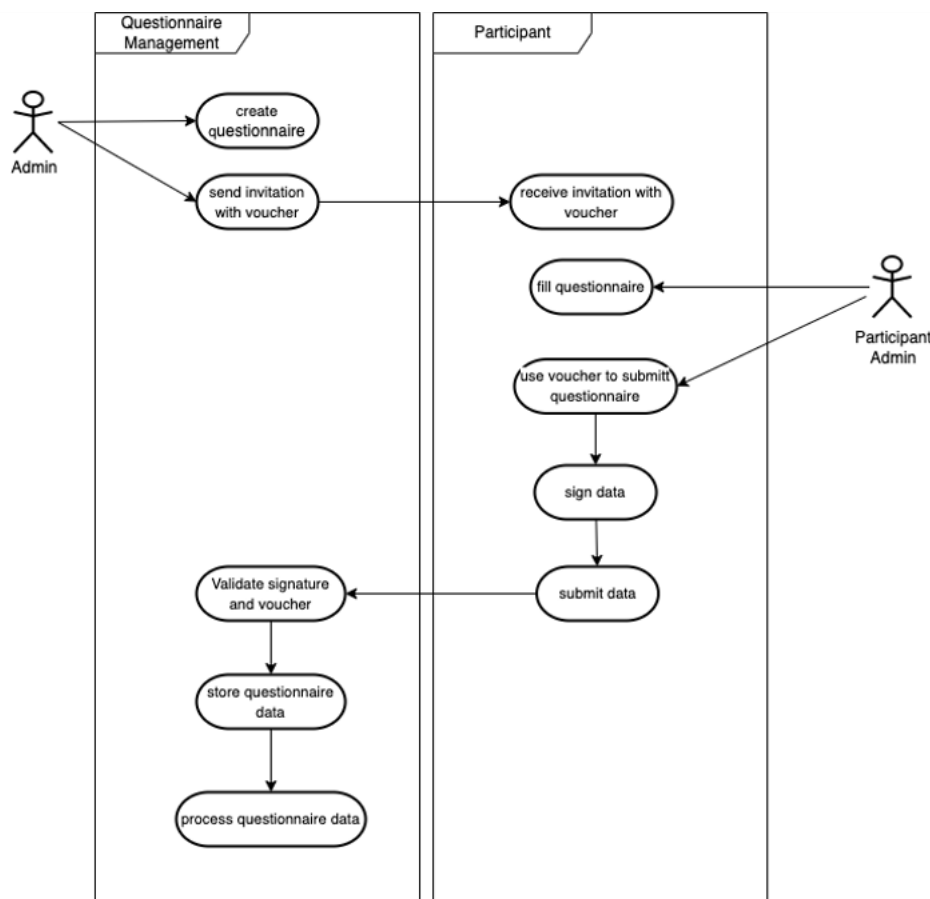
	<p>Demand Framework, which serves as the primary outcome of the SC⁴EU project. The True Demand Knowledge Graph is a semantic data repository, implemented as a graph database, capable of aggregating data collected across various project components. This knowledge graph is established upon semantic models, specifically survey ontologies developed based on the Digital Reference model structure. Data collected through the SC⁴EU anonymous survey is mapped onto this developed model, enabling the representation of complex relationships and dependencies within the data.</p> <p>Furthermore, the True Demand Knowledge Graph supports the breakdown of demand data from a coarse to a highly granular level by providing a sub-model capable of distributing quantities across technology nodes and respective market sectors. By leveraging semantic technologies, used also in other linked data repositories, this knowledge graph can help provide a more comprehensive view of the semiconductor demand landscape. It achieves this by seamlessly integrating and providing access to external RDF data on relevant factors, such as trade information, geographical, political, and climate factors.</p> <p>Thus, the True Demand Knowledge Graph serves as a powerful semantic data repository within the True Demand Framework, enabling the aggregation and analysis of complex data relationships. By integrating external data sources and applying semantic technologies, it offers a more comprehensive view of the semiconductor demand landscape, supporting informed decision-making and strategic planning within the industry.</p>
Specification	<p>In this demonstration, we present a short video showcasing the concept of the True Demand Knowledge Graph. We illustrate the data flow from the demand questionnaire to a comprehensive analysis of multiple data sources, highlighting the potential of semantic data linking approach. This architecture is currently under development and will be further refined, expanded, and presented in greater detail during the subsequent phases of the project.</p>

2.3 Introduction of Additional Demonstrators

2.3.1 SSI System

Demonstrator	Presentation, Live Demonstration
Duration	10-15 Minutes
Goal	<p>The goal of this demonstrator is to show and explain the concept of self-sovereign identity and the innovation of issuing anonymous vouchers to submit survey without disclosing its author.</p> <p>SC⁴EU aims to create seamless data sharing across the semiconductor ecosystem. As a member of this consortium, each participant needs to have a secure and trusted identity to participate in the dataspace. This solution addresses this by ensuring that all members are properly identified before they can access or share data.</p> <p>We will explain how this technology helps to overcome the trust barrier amongst semiconductor manufacturers and suppliers, and promotes the willingness to share data</p>
Specification	The demonstration will follow this sequence

1. Invitations are sent to selected participants, including a voucher
2. The voucher is an SSI VC issued for selected participants (guarantee that only the selected participant can submit the questionnaire once)
3. Participants fill out the questionnaires
4. Questionnaires can only be submitted if the participant provides the voucher VC wrapped into a VP signed by the participant



2.3.2 Vocabulary Development Support Tool (VDST) in Semiconductor Supply Chains

Demonstrator	Presentation, Live demonstration
Duration	10-15 minutes
Goal	<p>This demonstrator will introduce and showcase the motivation for- and the usage of a tool that supports consensus building, to agree on term specifications.</p> <p>The demonstrator showcases a collaborative terminology management process designed to support consistent communication among diverse stakeholders within the SC⁴EU project. Its objective is to ensure that all partners share a common understanding of key terms used in both internal and external exchanges.</p> <p>Users can propose new terms through the portal, each consisting of at least a</p>

	<p>Label (e.g., “Demand”) and a Definition (e.g., “Demand represents the quantity of products requested by customers”), with the option to add further descriptive details. Once submitted, terms enter a Draft status and become open for discussion. The platform enables partners to comment on and refine term definitions collaboratively, such as suggesting revisions or proposing alternative wording. Throughout this discussion phase, the term remains in Draft, ensuring transparency and traceability of changes. When a term reaches sufficient maturity, its status can be advanced through a structured Consensus Process. The possible status outcomes are Accepted or Not Accepted. To finalize a status change, the system requires participation from a defined proportion of stakeholders and approval by a two-thirds majority, ensuring decisions are both inclusive and representative.</p>
Specification	<p>The demo will present a workflow, starting by collaborative discussion and refinement about given terms, to a consensus of its acceptance in the group. We will present how to discuss and refine a term and to start a consensus via our frontend application. The demonstration will showcase the consensus process, illustrating how participants vote, how thresholds are calculated, and how a term’s status changes from “Draft” to either “Accepted” or “Not Accepted.”</p>

2.3.3 System Dynamics Model

Demonstrator	Presentation, live demonstration
Duration	10 minutes
Goal	<p>The goal of this demonstrator is to showcase the System Dynamics based Global Semiconductor Supply Chain Model to simulate how end-market demand signals propagate across the multi-tier semiconductor supply chain. Semiconductor supply chains are characterized by exceptionally long lead times, strong market cyclicalities, and tightly coupled interdependencies between upstream equipment manufacturers (e.g., ASML), integrated device manufacturers (e.g., Infineon, NXP), and foundries (e.g., TSMC). These structural properties make them highly vulnerable to demand shocks, geopolitical disruptions, and inventory-driven amplification effects such as the bullwhip effect.</p> <p>To address these challenges, we developed a comprehensive System Dynamics model built from expert interviews and industry feedback collected throughout the project (the final version will incorporate results from the finalized survey from WP5). The model captures key structural elements of the semiconductor ecosystem: fabrication node evolution, end-market segmentation, inventory policies, production lead times, and capacity constraints, thus allowing for a dynamic representation of how shocks propagate through the supply network.</p> <p>This demonstrator introduces a user-friendly dashboard that enables stakeholders to interact with the model directly. From a single interface, users can configure macroeconomic scenarios (e.g., different GDP trajectories), geopolitical disruptions, or structural supply chain parameters (e.g., lead times), and immediately observe their impact on performance indicators such as true demand per echelon, inventory levels, and upstream capacity requirements.</p> <p>By integrating industry knowledge with system-level simulation capabilities,</p>

	<p>the demonstrator illustrates how demand amplification, shortage gaming, and supply chain structure shape the evolution of semiconductor markets. It thereby supports SC⁴EU's overarching mission to improve demand visibility, understand systemic vulnerabilities, and provide analytical tools that strengthen European supply chain resilience.</p>
Specification	<p>In this demonstration, we present the current version of the Global Semiconductor Supply Chain System Dynamics Model, accompanied by a newly developed interactive dashboard. We first shortly (re)introduce the modelling approach, explaining the rationale for using System Dynamics to simulate multi-tier global supply chains and highlighting specific structural characteristics of the semiconductor industry.</p> <p>The core of the demonstration focuses on the dashboard interface, which enables users to configure a variety of scenario parameters directly from a single screen. These include macroeconomic drivers (e.g., end-market GDP trajectories), geopolitical or disruption scenarios, and internal supply chain policy parameters such as inventory policies. As users adjust these settings, the dashboard provides real-time visual feedback on key performance indicators, including true demand at each echelon, inventory accumulation, bullwhip amplification patterns, and upstream capacity requirements.</p> <p>The current version of the dashboard and simulation model will continue to be refined and expanded during subsequent phases of the project, incorporating additional survey data, feedback from industry par, and extended scenario modelling.</p>

2.3.4 Optimization-based Demand Forecasting Framework

Demonstrator	Presentation, Live Demonstration
Duration	10 min
Goal	<p>The goal of this demonstrator consists in showing the demand forecasting framework designed and coded within WP 4. The proposed framework is based on non-linear optimization to determine appropriate parameter values for weighting forecasts obtained from different forecasting sources. Such forecast sources can be statistical methods such as exponential smoothing or machine learning models. Moreover, several leading indicator values can be taken into account in the forecasting process by computing appropriate weights. The framework allows for computing h-step ahead forecasts by applying the framework in an iterative manner. The optimization is carried out by a genetic algorithm (GA) where the constraint fulfilment is ensured by adding penalty terms.</p> <p>We will present the architecture of the prototype and show its application by performing forecasting experiments with it. The effect of various parameter settings on forecasting quality will be also highlighted. Moreover, we will also show the dashboard for visualization of input and output values for the proposed forecast scheme.</p>
Specification	<p>The following components are included into the prototype:</p> <ol style="list-style-type: none"> 1. Component for Forecast Approaches (statistical methods, ML,...) 2. Component with Disaggregation Methods (naïve approaches based on proportions, ML,...)

	<p>3. Data Handling Component (read/write data, maintain of real-world datasets, i.e. split of the data for training, validation,..., data preparation, generation of synthetic data, for instance, based on the martingale model of forecast evolution)</p> <p>4. Workflow Component (control of activities, orchestration, error handling)</p> <p>5. Component for Data Visualization (this is basically a dashboard)</p> <p>6. Component for General Purpose Approaches (GA or other non-linear optimization solver)</p> <p>A scalable modern infrastructure is established since forecasting algorithms are IO intensive and especially ML algorithms require a large amount of CPU and GPU power. It is also ensured that multiple algorithms can carry out computations in parallel. A cloud-based infrastructure is used for the demonstrator. The prototype has the following properties:</p> <ul style="list-style-type: none"> ▫ programming language: Python 3.14 ▫ runtime: Docker stable hosted on a Linux virtual machine ▫ infrastructure: AWS cloud delivered as EC2 service with an instance size of: 8GB RAM and 4 Cores of ~3.5GHz.
--	---

2.3.5 True Demand MPC Survey

Demonstrator	Presentation, Live Demonstration
Duration	10 min
Goal	<p>The goal of this demonstrator is to showcase the MPC Survey True Demand Platform, a privacy-preserving survey system designed to enable secure data collection and aggregation for semiconductor supply chain demand forecasting. In the semiconductor industry, accurate demand forecasting is critical for supply chain resilience, yet traditional survey methods face significant challenges: participants are reluctant to share sensitive business data due to competitive concerns, centralized data collection creates privacy risks, and conventional aggregation methods can expose individual company information even in anonymized reports.</p> <p>Multi-Party Computation (MPC) technology addresses these challenges by enabling multiple parties to jointly compute aggregate statistics (e.g., averages, standard deviations, totals) without revealing individual input data to any party, including the survey operator. This cryptographic approach ensures that sensitive demand data remains encrypted throughout the entire process, with only aggregate results becoming visible.</p> <p>In the context of the SC⁴EU project, the MPC Survey Platform plays a vital role in collecting authentic demand signals from semiconductor supply chain participants while maintaining strict data privacy. The platform supports multiple survey types targeting different market segments: SEMI surveys for equipment and materials suppliers, TIER-1 surveys for automotive component manufacturers, and OEM surveys for original equipment manufacturers. Each survey type is specifically designed to capture relevant demand patterns,</p>

	<p>inventory trends, and market expectations for its respective industry segments.</p> <p>This demonstrator supports SC⁴EU's privacy-preserving data collection efforts (WP5 & WP2 and related tasks) and complements the project's supply chain transparency initiatives. While traditional survey methods require participants to trust a central authority with sensitive data, the MPC Survey Platform enables trustless collaboration where mathematical proofs guarantee data privacy.</p>
<p>Specification</p>	<p>In this demonstration, the current version of the MPC Survey Platform is presented, featuring a comprehensive multi-survey architecture with six distinct survey types (SEMI/TIER-1/OEM Monthly and Yearly surveys). Users can access survey-specific interfaces tailored to their industry segment, with dynamic template downloads and real-time validation systems.</p> <p>The platform demonstrates the complete MPC workflow: participants upload survey data via Excel templates, the system performs cryptographic aggregation, and results are computed without any party (including the operator) seeing individual inputs. The demonstration showcases key features, including Self-Sovereign Identity (SSI) integration via SAP DIV for participant authentication, automated Excel template generation for different survey types, real-time data validation with visual feedback, and secure multi-party computation with mathematical privacy guarantees.</p> <p>The system supports various data types, including numerical demand forecasts, categorical inventory trends, and regional distribution patterns. All computations are performed using secret sharing protocols that ensure individual data points remain encrypted even during processing.</p> <p>During the demonstration, a short overview of MPC principles is presented, followed by a live demonstration of the complete survey workflow - from participant authentication and data entry to encrypted computation and aggregate result generation. Attendees will observe how sensitive demand data can be collected and processed while maintaining mathematical guarantees of individual data privacy, showcasing the potential for trustless collaboration in competitive business environments.</p>

2.3.6 Semiconductor Game

<p>Demonstrator</p>	<p>Presentation, live demonstration</p>
<p>Duration</p>	<p>10-15 min</p>
<p>Goal</p>	<p>The goal of this demonstrator is to showcase the first MVP of the developed game. The objective of the game is to convince potential survey participants to participate in the survey. The game is flexible and versatile, which will be illustrated. The game is one of the elements of the overall "toolkit". Depending on the tier (semi, tier 1, OEM), the relevant and most appropriate "toolkit" element will be selected. The game can be used in multiple versions for different target audiences. Critical in the gameplay is the main objective: why would it make sense to have "true demand" information available. The elements of the developed survey (WP 5) are included in the game.</p>
<p>Specification</p>	<p>In this demonstration, we present the current (MVP) version of the game.</p>

The current version includes a multitier situation with semi, tier 1, and OEM.

Semiconductor Game

Select Your Role

SEMI

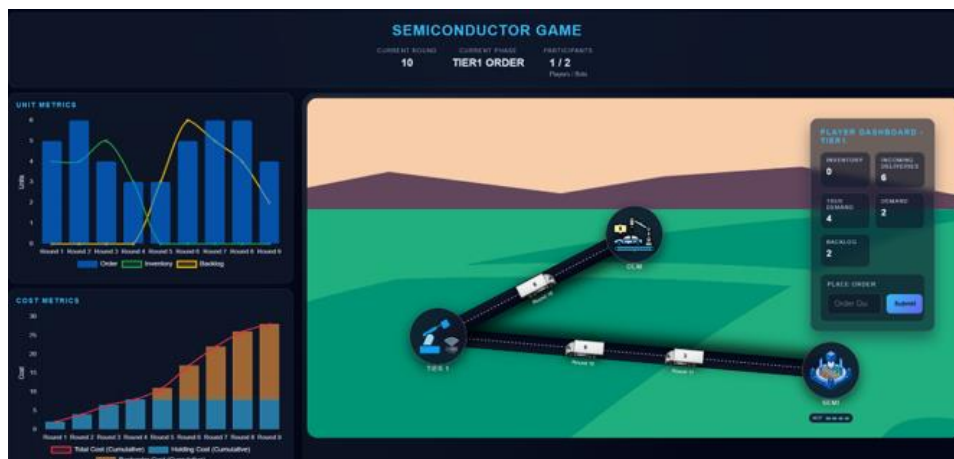
Tier1

OEM

Join as Host

We will explain and demonstrate:

- The instructions on how to play the game
- How to play the game; option with bots
- Playing the game:
 - Without true demand information
 - With true demand information
- Results: scorecards and interpretation of results
- Back-office: options and variables of the game (host) and consequences for the game
- Gameplay of the game
- Different scenarios of the game





3. Conclusions

This deliverable provides an updated and consolidated description of the demonstrators developed within the SC⁴EU project. It outlines the progress made since D8.1 and introduces the additional demonstrators created during this reporting period. Together, these descriptions offer a clear overview of the tools and components that form the current demonstrator landscape and reflect the ongoing maturation of the project's technical developments. This consolidated view supports a shared understanding among partners and ensures coherence across the evolving SC⁴EU framework.

4. Appendix A - Abbreviations

Abbreviation	Meaning
SC ⁴ EU	True Demand-Driven Semiconductor Supply Chains for Europe
VDST	Vocabulary Development Support Tool

Table 1: Abbreviations