IOTWeek

Dublin — June 20-23, 2022

Techno-Economic Impact Analysis of Digital Platforms

OPEN DEI Ecosystem Projects

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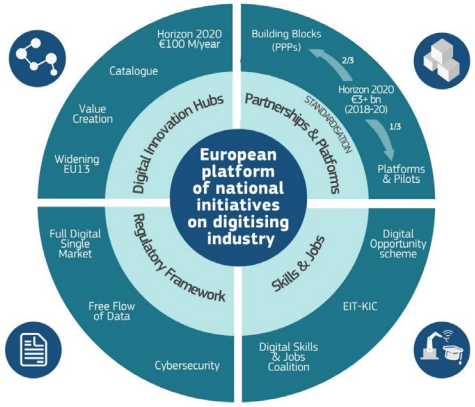
GLOBAL VISION:
IoT TODAY AND BEYOND

IOTForum

OPEN DEI's Ambition: Goal and Objectives

Coordinate & Support EC's efforts in DT for Manufacturing, Energy, Agri-Food and Health & Care Sectors.
Support the Adoption of Digital Platforms and the development of LSP

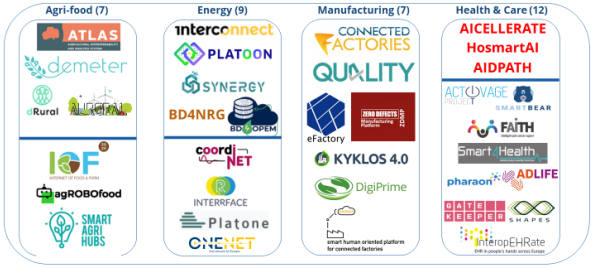


Coordinate & Support **TECHNOLOGY-DRIVEN DT**:

- Common RAs
- OS Reference Implementations
- Methods and tools for Data Spaces
- Domain-specific Open Standards

Coordinate & Support **BUSINESS-DRIVEN DT**:

- Digital Maturity assessments
- Digital Skills
- Emerging Digital Technologies Uptake
- Business KPIs and Benchmarking
- **Business Models**



OPENDEI

The OPEN DEI ecosystem: 38+ ICT-DT 07-13 Digital Platforms and Pilots

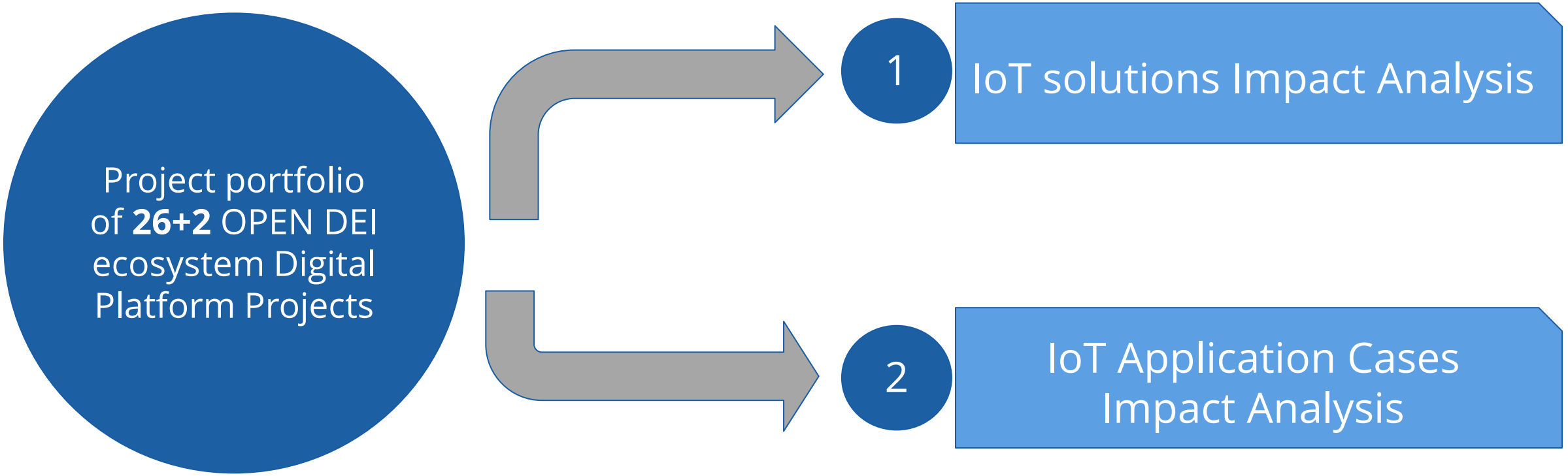
A new task for OPEN DEI on behalf of the EC

OPEN DEI and EU-IoT to collaboratively perform a technological and economic impact analysis for the ICT-56 and DT-07-13 Project Ecosystem

ICT-56
Next-Generation Internet of Things

ICT-DT-07/13
Digital Innovation Hubs and Platforms

Scope of the Analysis



1. IoT Solutions Impact Analysis: a) Content

IoT Solutions Analysis in terms of:

- **Degree of Innovation** of developed solutions
- **Degree of Maturity** of the developed solutions
- **Potential/Actual Contribution** to Standardisation and Open-Source
- **Potential economic impact** of the developed solutions and potential **market share**

1. IoT Solutions Impact Analysis: b) Scope and Methodology

Identification of:

- **2 solutions per each of the 4 domains** (Manufacturing, Energy, Health, Agri-food)
- **In-depth interviews/Meetings/Surveys** with Solution Owners about:
  - USPs
  - Value proposition
  - SWOT
  - Market competition/relative positioning
  - Business model and ROI plan
- **Additional methodologies:**
  - BM CANVAS
  - Evolutionary Plan Business Plan elaboration

2. IoT Application Cases Impact Analysis: a) Content

IoT Applications Analysis in terms of:

- **Application description**: technologies, standards, open-source frameworks
- **User involvement**, empowerment and user journeys/experience
- **Impact assessment** in terms of Product-Process Platform and People-Partnership-Performance
- **Identification of key success stories** to cover all application sectors

2. IoT Application Cases Impact Analysis: b) Scope and Methodology

Identification of:

- **2 cases/success stories per each of the 4 domains** (Manufacturing, Energy, Health, Agri-food) where IoT technologies are playing a fundamental role

Methodologies involved:

- **Common template elaboration for synoptical description**
- **6Ps Methodology framework for Impact Assessment**
- **Socio-economic indicators**
- **Replicability / Scalability Plan**

2. IoT Application Cases Impact Analysis: c) The 6Ps Method

PRODUCTS

Digital Smart Products and Services

PROCESS

Digital Factories and Production Processes

PLATFORM

Digital Manufacturing Platforms

PEOPLE

Digital Skills and Professions

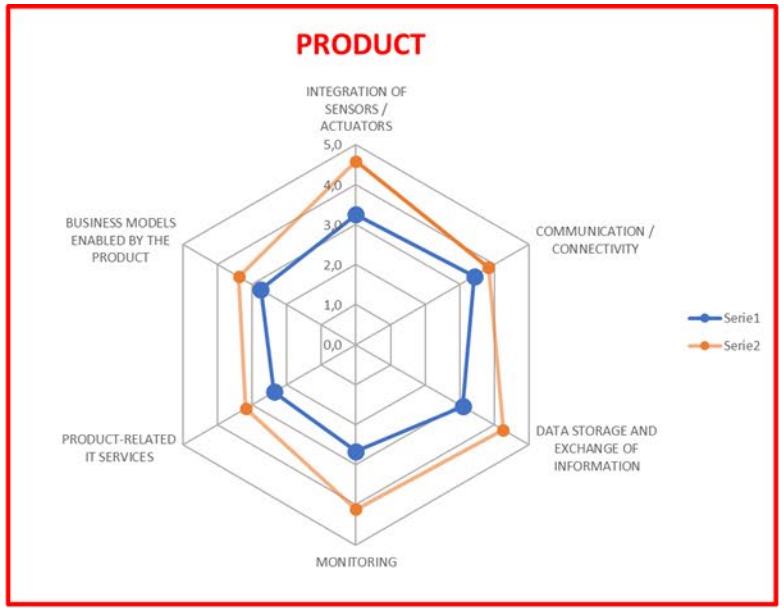
PARTNERSHIP

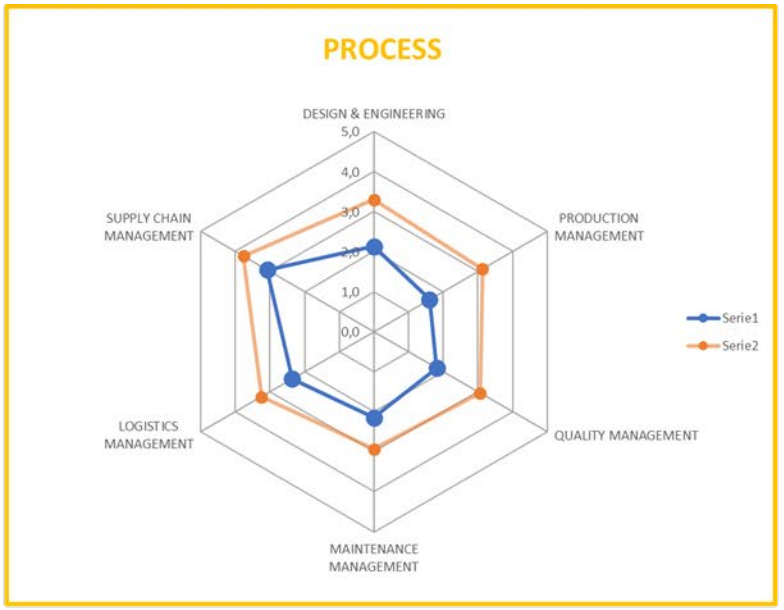
Digital Ecosystems and Innovation Hubs

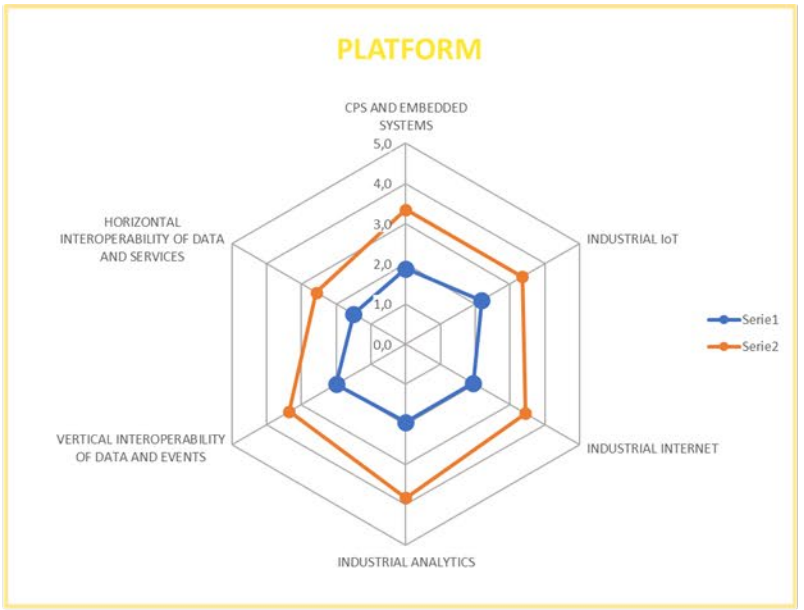
PERFORMANCE

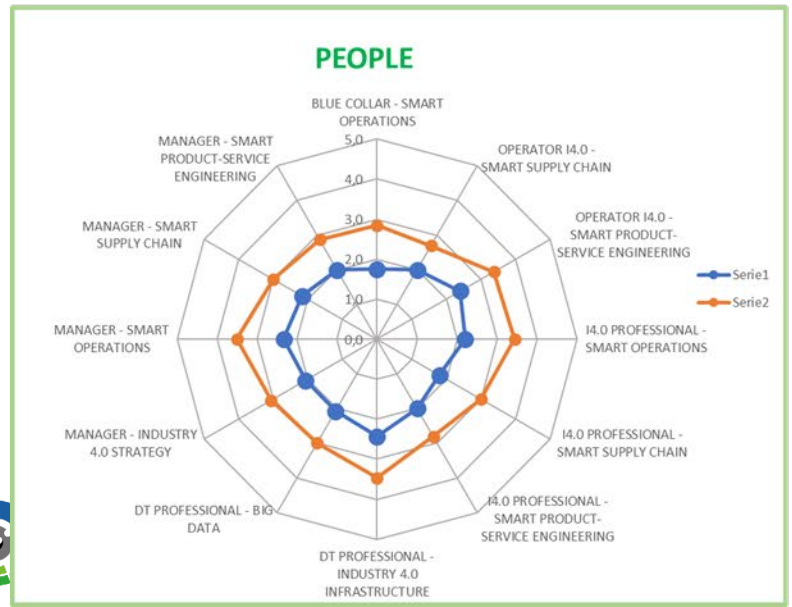
Digital Business Models

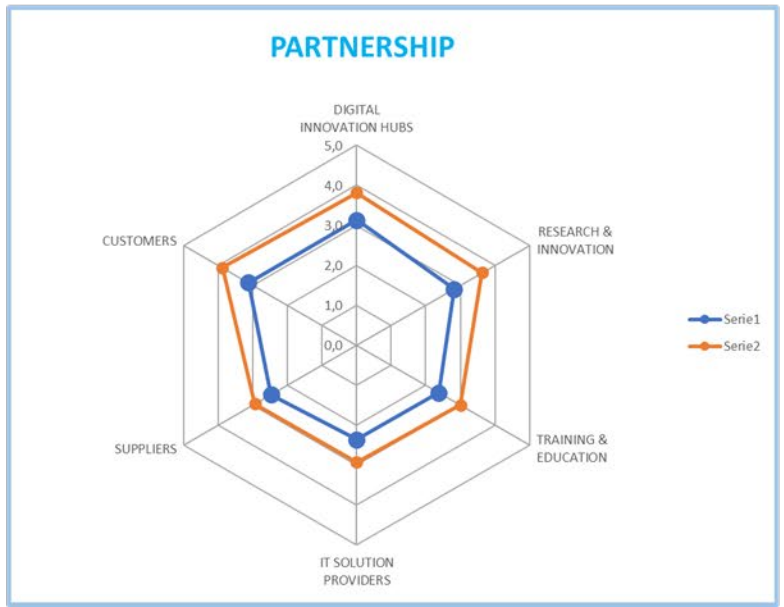
2. IoT Application Cases Impact Analysis: d) 6Ps Results & KPI

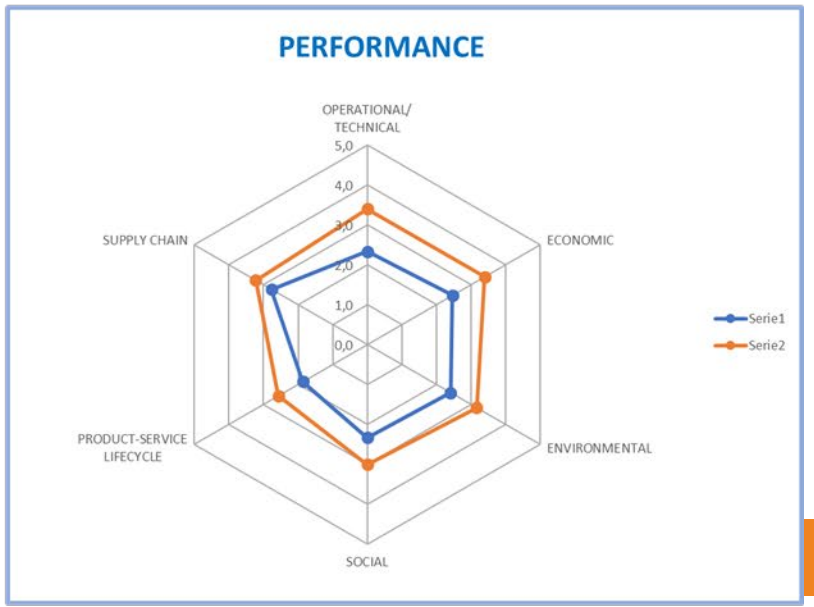












2. IoT Application Cases Impact Analysis: e) Replicability

Enabling REPLICABILITY and SCALABILITY– SOME HIGHLIGHTS FROM LSPs

MODULARITY
Referred to **modular IoT architecture** that can be customized for a diverse range of applications or, in general, to a **design principle** that subdivides a system into smaller parts called modules, which can be independently created, modified, replaced, or exchanged with other modules or between different systems

INTEROPERABILITY AND STANDARDS COMPLIANCE
- **Standardized device communication API**
  Provides application developers with uniform and transparent access to physical devices and wearables. (e.g. SCRAL, LinkSmart)
- **Standardized Data Modeling**
  Allows IoT syntactic and semantic interoperability (e.g. OGC SensorThings API)
- **IoT Platforms interoperability**
  Allows the integration with other IoT platforms (e.g. oneM2M Standards)

OPENNESS
Openness can be guaranteed adopting **open standards**, integrating **public APIs**, releasing **open source code**

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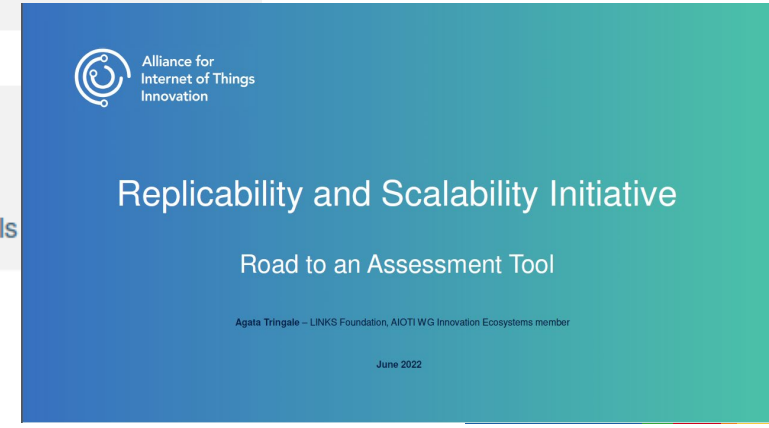
REGULATIONS COMPLIANCE
- **Technical regulations**
- **GDPR, but also national and regional regulations (often a barrier for the replicability of solutions)**
- **Ethics**

ACCEPTANCE OF SOLUTIONS
- Precise **identification of the target end users** and their needs
- **User experience** and **usability aspects**
- **Specific contents** for specific end users
- Make **benefits clear**

ATTRACTIVENESS OF SOLUTIONS
- Revenue models
- Business models
- «easy to replicate» in different sectors/verticals



Outputs

Public Report
(printed and online)

- Executive Summary
- Forward
- Intro
- Overview of Techno and Economic Impact Analysis
- Success Stories
- Recommendations
- Annex with project descriptions

Confidential Report
(for EC only)

- Techno-Economic impact analysis per project and domain
- Overall assessment
- Set of recommendations

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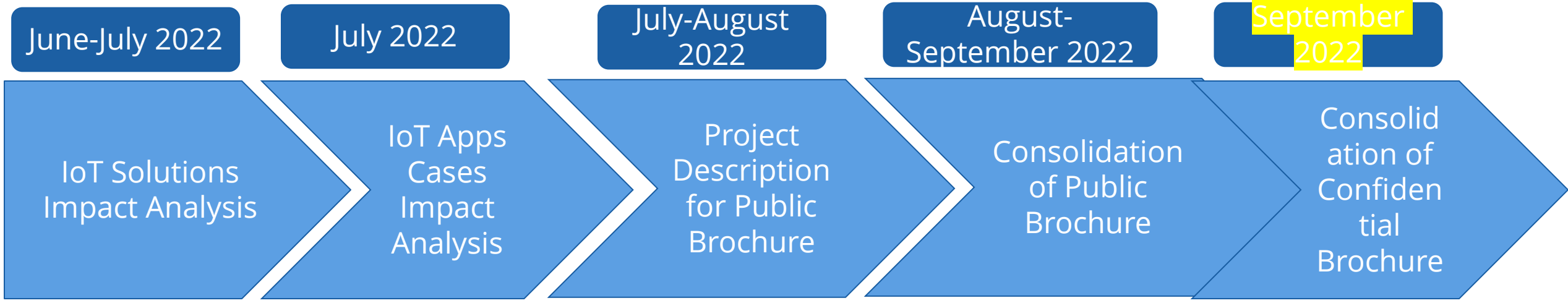
Timeframe


June-July 2022
IoT Solutions Impact Analysis
July 2022
IoT Apps Cases Impact Analysis
July-August 2022
Project Description for Public Brochure
August-September 2022
Consolidation of Public Brochure
September 2022
Consolidation of Confidential Brochure

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Thank you!

Find more:

https://www.opendei.eu/

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