TRUSTS
Trusted Secure Data Sharing Space

D7.9
'Innovation Impact Assurance'
(M18 Activity Report)

Authors:
Bert Utermark (G1), Andreas Huber (G1), Hosea Ofe (TUD), Gerrit Rosam (LUH), Michael Fribus (LUH), Alina Brockob (LUH)

June 2021

TRUSTS Trusted Secure Data Sharing Space

D7.6 'Innovation Impact Assurance' (M18 activity report)

Document Summary Information

Grant Agreement No.	871481	Acronym	TRUSTS
Full Title	TRUSTS Trusted Secure Data Sharing Space		
Start Date	01/01/2020	Duration	36 months
Project URL	https://trusts-data.eu/		
Deliverable	D7.9 'Innovation Impact Assurance' (M18 Activity Report)		
Work Package	WP7 'Business Exploitation and Innovation Impact Assurance'		
Contractual due date	30-06-2021	Actual submission date	11-08-2021
Nature	Report	Dissemination Level	Public
Lead Beneficiary	G1		
Responsible Author	Bert Utermark (IDSA)		
Contributions from	Bert Utermark (G1), Andreas Huber (G1), Hosea Ofe (TUD), Gerrit Rosam (LUH), Michael Fribus (LUH), Alina Brockob (LUH)		

Revision history (including peer reviewing & quality control)

Version	Issue Date	% Complete	Changes	Contributor(s)
V0.1	01.04.2020	10 %	Initial deliverable structure	Bert Utermark, Andreas Huber (G1), Hosea Ofe (TuD)
V0.2	11.09.2020	15 %	Adaption of the initial deliverable structure	Bert Utermark (G1)
V0.3	18.12.2021	30 %	Added section on Approach	Bert Utermark (G1)
V0.35	26.02.2021	50 %	Added section on Critical Areas	Bert Utermark (G1)
V0.4	30.04.2021	60 %	Added section on PM Quality Management	Gerrit Rosam, Michael Fribus, Alina Brockob (LUH)
V0.45	28.05.2021	75%	Added sections on delivered activities, and Critical Assessment and Outlook	Bert Utermark (G1), Gerrit Rosam, Michael Fribus, Alina Brockob (LUH)
V0.5	18.06.2021	80 %	Quality review and general additions	Hosea Ofe (TuD)
V0.6	19.07.2021	90 %	Implementation of the first quality review comments	Bert Utermark (G1)
V0.8	26.07.2021	95 %	Submitted for internal review	Gerrit Rosam, Michael Fribus, Alina Brockob (LUH)
V0.9	30.07.2021	98 %	Implementation of feedback from reviewers, and finalized all sections	Bert Utermark (G1)
V1.0	11.08.2021	100 %	Final version for submission	

Disclaimer

The content of the publication herein is the sole responsibility of the publishers and it does not necessarily represent the views expressed by the European Commission or its services. While the information contained in the documents is believed to be accurate, the authors(s) or any other participant in the TRUSTS consortium make no warranty of any kind with regard to this material including, but not limited to the implied warranties of merchantability and fitness for a particular purpose.

Neither the TRUSTS Consortium nor any of its members, their officers, employees or agents shall be responsible or liable in negligence or otherwise however in respect of any inaccuracy or omission herein.

Without derogating from the generality of the foregoing neither the TRUSTS Consortium nor any of its members, their officers, employees or agents shall be liable for any direct or indirect or consequential loss or damage caused by or arising from any information advice or inaccuracy or omission herein.

Copyright message

Table of Contents

List of Figures

List of Tables

Glossary of terms and abbreviations

Abbreviation / Term	Description
AI	Artificial Intelligence
AML	Anti-Money Laundering
API	Application Programming Interfaces
B2B	Business-to-Business
DIO	Data Intelligence Offensive
DMA	Data Market Austria
EC	European Commission
EOSC	European Open Science Cloud
EU	European Union
EU27	27 European Union Countries
FhG	Fraunhofer Gesellschaft
FFG	Forschungfsörderungs Gesellschaft (National Funding Agency Austria)
GA	Grant Agreement

GAIA-X	Pan-European initiative aiming to develop common requirements for a European data infrastructure
IDS	International Data Space
IDSA	International Data Spaces Association
IIA	Innovation Impact Assurance
IPR	Intellectual Property Rights
IT	Information Technology
ParIS	Participant Information System
PM	Project Management
PoC	Proof of Concept
QM	Quality Management
SME	Small and Medium-sized Enterprises
TRUSTS	Trusted Secure Data Sharing Space
UC	Use Case
USP	Unique Selling Proposition
T(s)	Task(s), also Work Tasks. Sub-unit of Work Packages
WP(s)	Work Package(s)

Referenced Sources

Jim Highsmith. "Agile Project Management: Creating Innovative Products". Pearson Education/Addison-Wesley. March 2004. ISBN 0-321-21977-5

Kent Beck; James Grenning; Robert C. Martin; Mike Beedle; Jim Highsmith; Steve Mellor; Arie van Bennekum; Andrew Hunt; Ken Schwaber; Alistair Cockburn; Ron Jeffries; Jeff Sutherland; Ward Cunningham; Jon Kern; Dave Thomas; Martin Fowler; Brian Marick (2001). "Manifesto for Agile Software Development". Agile Alliance. Retrieved 14 June 2010.

Executive Summary

Aspiration of this EU funded programme is to bridge from research to market, that is to move beyond (research & development) output to outcomes and defined impacts. Thus, research findings, concepts and prototypes shall be usable for the next level of development and adoption by pertinent (industry) players in the wider business ecosystem. To enable this, task T7.6 works with all work packages and tasks to both ascertain from the outset and throughout the project that the aspired Outcomes and Impacts are kept in mind and guide Output creation.

Our experience from the Data Market Austria shows that this dramatically improves research transferability and hence business viability, whilst it also reduces efforts for conceptualization or technology development. Thus, continuous interactions with all work packages and tasks through regular check-ins, coordinated with project management (work package WP1) are of paramount importance. In doing so, we also complement and enrich work package WP1 by enabling a firmer content-involved challenger role of project management as compared to a more coordinated role.

Agreed deliverable of task T7.6 is continuous interactions with all work packages and tasks, acting as a cross-function to the program to ascertain and optimize innovation impact. The first version of the "Innovation Impact Assurance" report at hand summarizes these activities and will be followed up on by a final version by end of 2022.

We view Innovation Impact Assurance as the continuous process of optimizing project delivery and outputs towards aspired project outcomes and innovation impacts. IIA was delivered collaboratively between project quality management and targeted activities & interventions, as per the related methodology and approach (Chapter 2).

Whereas all parts of the TRUSTS project were addressed (Chapter 4.1), based on an analysis of projects mandates and call topics and other expected substantial impact (Chapter 3.1), prioritized areas for dedicated IIA support were identified (3.2) and corresponding, dedicated support activities and interventions were delivered (Chapter 4.2).

The IIA focus during the first half of the TRUSTS project was on the supporting the overarching mandates (objectives) of TRUSTS and corresponding roles to be fulfilled by TRUST as a platform, effecting:

1. Support for European datamarket requirements elicitation and business-technology alignment
2. Evangelism for datamarket federation to align all consortium partner to this a core objective of TRUSTS
3. Facilitation of development of concepts supporting business sustainability, through strengthening of the linkage and synergies between tasks T2.1 (European data market study), T7.1 (Sustainable Business Models, and T7.5 (Commercialization), as well as dialogue with market participants and multiplicators to ease ecosystem design

Facing adverse starting conditions, the project achieved good progress towards fulfilling the project mandate. Task T7.6 in conjunction with project quality management has been providing a meaningful contribution to this pursuit. Heading into the 2nd half of the project, particular IIA activities will be continued. A particular, priority will be given to co-establishing and / or attracting of a future commercial and technical operator of the TRUSTS platform, and attraction of early platform adopters (pilots) including federation partners.

1 Introduction

This section maps the pertinent project outputs as per the Grand Agreements to the chapters of the report at hand. Subsequently, an overview of the deliverable and the report structure is provided.

1.1 Mapping of Project Outputs

Table 1: Adherence to TRUSTS GA Deliverable & Tasks Descriptions

TRUSTS Task		Respective Chapter(s)	Justification
T7.6	Aspiration of this EU funded programme is to bridge from research to market, that is to move beyond (research) output to outcomes and defined impacts. Thus, research findings, concepts and prototypes shall be usable for the next level of development and adoption by pertinent (industry) players in the wider business ecosystem.		
	To enable this, task T7.6 shall work with all work packages and tasks to both ascertain from the outset and throughout the project that the aspired Outcomes and Impacts are kept in mind and guide Output creation. Our experience from the Data Market Austria shows that this dramatically improves research transferability and hence business viability, whilst it also reduces efforts for conceptualization or technology development.	*Chapters 2* *Chapter 3*	*Methodology* *Focus areas for interactions/ agile interventions*
	Thus, continuous interactions with all work packages and tasks through regular check-ins, coordinated with project management (work package WP1) are of paramount importance. In doing so, we also complement and enrich work package WP1 by enabling a firmer content-involved challenger role of project management as compared to a more coordinated role.	*Chapter 4* *Chapter 2*	*Delivery during M1-M18* *Methodology*
TRUSTS Deliverable			
D7.9: Innovation Impact Assurance Interim Report (M18) and final report (M36) *T7.6* is tasked with continuous interactions with all work packages and tasks, acting as a cross-function to the program to ascertain and optimize innovation impact. The first version of the "Innovation Impact Assurance" report at hand summarizes these activities and will be followed up on by a final version by end of 2022.			

1.2 Deliverable Overview and Report Structure

The objectives of WP7, which envelops task T7.6 Innovation Impact Assurance, are to develop a feasible business model to sustain the results of the project, mobilize an ecosystem, and conduct concrete actions for commercializing the data market platform. Thus, the WP will conduct market research on what business models for data markets exist around the world. The focus will be on business models combining scientific and non-scientific founders since TRUSTS has the same mixed private and public owned structure. The main deliverables during the project will be on the ecosystem and its needs regarding the innovation aspects and intellectual property and data management. The WP will establish pre-conditions for successful business models and best practises.

The mandate of the specific project task T7.6 Innovation Impact Assurance is to deliver continuous interactions with all work packages and tasks, acting as a cross-function to the program to ascertain and optimize innovation impact.

This report summarizes the ongoing action related to "Innovation Impact Assurance" in the TRUSTS project as per task T7.6. Other than the bulk of project-related reports in the TRUSTS projects, this paper by its nature is focused on reporting of activities supporting, rather than outlining R&D findings, novel concepts, and project outputs.

Innovation Impact Assurance is meant as an instrument linking the project's activities and focussing them on aspired innovation to be delivered within TRUSTS.

The report is divided into four main sections:

1. In (Chapter 2), the overall methodology and approach to Innovation Impact Assurance are described.
2. In (Chapter 3), the prioritized areas for Innovation Impact Assurance are described.
3. In (Chapter 4), delivered Innovation Impact Assurance activities are reported.
4. Lastly, (Chapter 4) provides a critical assessment of efforts to date and transforms this into an outlook of areas of Innovation Impact Assurance actions in the 2nd half of the project.

First, the section on Methodology and Approach (Chapter 2) elaborates on the concept of involved & agile project management effecting a contextually evolving string of targeted interventions as complement to traditional, structured project management quality management, both supporting Innovation Impact Assurance.

Continuing, the section on Innovation Impact Assurance critical to for the project's success (Chapter 3), elaborates on the aspired innovation impact, and related, prioritized areas for targeted in-project IIA activities and interventions. This includes assessment of each area.

Next, Chapter reports on the delivered Innovation Impact Assurance activities. Once more, the synergistic duality between continuous activities arising from traditional project management quality management and agile interventions is upheld, whereby activities pertaining to the latter are grouped into Project-wide activities and Work-package specific activities, that ultimately deliver bilateral ideation, co-ordination, and project-wide alignment.

The report concludes with (Chapter 5), providing a brief critical review summarizing results of IIA activities. Focus areas and recommendations for the 2nd half of the project are pointed out.

2 Methodology and approach

2.1 Overview

A multitude of concepts, frameworks, methodologies, and tools exist in project management, pertaining to quality management and innovation impact assurance. Within the TRUSTS project, we understand the specific manifestation of project management to arise along a continuum between two prototypical approaches: administrative Project Management and agile Project Management.

Within this field of tension, we view Innovation Impact Assurance as the continuous process of optimizing project delivery and outputs towards aspired project outcomes and innovation impacts.

Administrative (also: waterfall or sequential-plan-based) project management utilizes an extensive, well established and understood body of knowledge, effecting clarity in its mechanics. It is particularly suited for:

- Small projects, due to lower time-bound probability of change during the project duration
- Repeatable projects, due to available experience from prior manifestations, and clarity around a known end goal
- Physical projects, due to utilization of a comprehensive architecture as input-function to the project

However, it faces challenges when applied to:

- Medium-to-large sized projects, due to elevated time-bound probability of changes over the course of implementation
- Research & innovation projects, due to uncertainty of findings along the projects necessitating changes to the project path and / or the project output, and trade-offs vis-à-vis aspired project outcomes and impacts
- Digital projects, due to increased probability to changes to the underlying architecture and targeted functionality vis-à-vis insights from continuous market testing

Agile Project Management[1], on the other hand, attempts to address project management utilizing elements of the agile software development methodology. New challenges in product development require adaptive, not anticipatory, project management. Basic agile values are proclaimed in the Agile Manifesto[2]:

1. Individuals and interactions over processes and tools
2. Working software over comprehensive documentation
3. Customer collaboration over contract negotiation
4. Responding to change over following a plan

---

[1] Jim Highsmith. "Agile Project Management: Creating Innovative Products". Pearson Education/Addison-Wesley. March 2004. ISBN 0-321-21977-5

[2] Kent Beck; James Grenning; Robert C. Martin; Mike Beedle; Jim Highsmith; Steve Mellor; Arie van Bennekum; Andrew Hunt; Ken Schwaber; Alistair Cockburn; Ron Jeffries; Jeff Sutherland; Ward Cunningham; Jon Kern; Dave Thomas; Martin Fowler; Brian Marick (2001). "Manifesto for Agile Software Development". Agile Alliance. Retrieved 14 June 2010.

Agile project management is particularly suited for:

- Medium-to-large sized projects, due to the time-bound elevated probability of changes to the project scope
- Research & innovation projects, due to uncertainty regards path and achievable optimal output end-goal vis-à-vis defined project outcome and impact
- Digital projects, due to require adaptions to the underlying architecture and targeted functionality during project delivery

However, it faces methodological challenges arising from:

- Requirements for immediate or near-term changes, due constraints to applicability and infusion of change requests during sprints
- Limited employee involvement, due to elevated interaction requirements with the principal, such as a product owner, who is an inherent part of the project team
- Higher overhead, due to highly frequent (in software development, typically: daily) meetings and recurring, longer planning sessions

The governance framework and structure for Horizon2020 poses specific challenges to innovation impact assurance as part of wider project management in Innovation Action projects. The elongated duration between program design, sign-off, publication, proposal stage, project selection, and project delivery effects a high probability of changes in the state of R&D and the market environment facing any project. Key assumptions may see loss of validity by the time of onset and during delivery of projects. And whereas there is a clearly defined process for change requests, its applicability is for exceptional cases, and day-to-day involvement of the principal for ad-hoc guidance is not foreseen. This is a necessary trade-off to the behemoth task of managing such a vast program and the ability to assert control for project delivery along pre-set milestones, utilizing target objectives, outputs and impacts. Thus, projects can benefit from following an overall waterfall model corresponding to the project governance structure, whilst complementing it with agile or similar approach elements, e.g. in work packages dealing with software development, to obtain the necessary flexibility vs. a changing environment.

Within TRUSTS, task T7.6 was conceptualized and implemented to complement the overall administrative project management provided through work package WP1 of the project, thus enabling the required ambidexterity. It combines the project's quality management approach with targeted, continuous interventions necessitated over the course of the project.

2.2 PM Quality Management Approach

In order to ensure a high innovation impact, the role of project management is of high importance, as it provides the basis to ensure that all objectives are met and high-quality results are delivered timely and in scope of the budget. Furthermore, it is part of project management to set up the overall framework in which the consortium operates in. This includes, among many other tasks, to set up bodies, procedures and tools that ensure proper oversight and good collaboration between work packages (WPs), the partners of the consortium as well as other stakeholders. To translate research findings, concepts and prototypes developed within TRUSTS into usable and adoptable products and services, it is of high importance to have certain structures and processes in place.

The Project Management Work Package serves this objective and ensures that project results are delivered timely, successfully, and impactful in compliance with EC regulations and the H2020 framework. The hands-on and continuous monitoring of the execution and completion of the project's tasks, activities, milestones, and deliverables safeguards the qualitative and timely development according to the Description of Action (DoA) and the project's work-plan. It furthermore ensures the successful, smooth, and efficient collaboration among the Consortium partners. Many of the activities of the project management work package focus on providing guidance and direction on how to achieve tasks and the overall goals of the TRUSTS project, ensuring, and encouraging continuous and proactive communication with and between the consortium partners, establishing transparency at all levels, setting up proper report structures, conducting quality assurance as well as risk analysis and risk mitigation. In order to achieve all this, certain roles have been assigned and appropriate mechanisms have been set up that benefit the innovation impact assurance in several ways as outlined in table 2.

Table 2: Project Management Contributions to Innovation Impact Assurance

Project Management Roles, Formats of Exchange, Processes & Bodies	
Roles	
Role	**Contribution to Innovation Impact**
Scientific Lead	Making sure that scientific contributions inform the project in terms of e.g. exploring the status quo of data markets and data sharing technology, assessment of functional requirements, analysis of challenges and current trends and good research practices are in place.
Technical Lead	Ensuring the implementation of the technical vision especially in terms of architectural design and architectural alignment between work packages.
Security Lead	Ensuring the security and trustworthiness of the platform .
Legal & Ethical Lead	Ensuring that partners are well informed on European laws, regulations and ethical requirements that are relevant for the implementation of the TRUSTS platform, such as GDPR lawful basis and regulations.
Communication & Community Lead	Raising awareness about TRUSTS through dedicated dissemination strategies and building a community which engages with TRUSTS and provides valuable feedback & guidance.
Business Exploitation Lead	Ensuring the proper development of a feasible business model to sustain the results of the project, mobilise an ecosystem and conduct concrete actions for commercialisation.
Innovation Lead	Ensuring that technical characteristics of the platform meet market needs.

Formats of Exchange	
Format of Exchange	**Contribution to Innovation Impact**
Executive Board Telco organised by WP1 (Project Management WP)	Monthly call that provides oversight and an update of each WP. It gives participants the opportunity to learn about the progress, status quo and challenges of each WP.
Plenary	Deep Dive into the project in which partners discuss the progress and proactively work on solutions for current challenges, taking place ~ every 6 months.
WP-level telcos	Organised by WP Leads at weekly, bi-weekly and monthly rate, focusing on WP specific challanges.
Domain-specific telcos	Organised by domain leads to coordinate all activities within a domain, where these span across WPs, e.g. regular joint telcos arranged by the Technical Lead for the technical community (WPs 3, 4, 5) under coordination of task T2.4
Task forces	Organised as temporary overlays, e.g. for the creation of platform demonstrators and mock-ups
Project Bodies	
Project Body	**Contribution to Innovation Impact**
Stakeholder Advisory Board (SAB)	Brings in external and independent expertise both in terms of technical and business needs, contributing to the results of the project, to its outreach and uptake
Project Management Board (PMB)	Allows to discuss high level challenges, risks and opportunities and propose strategies, decisions and changes whenever necessary to address these.

Many of these roles, formats, and bodies, as outlined in table 2, benefit the project in multiple different ways. This table mainly highlights the contributions on the innovation impact assurance and are described in more detail in the following chapters.

2.2.1 Roles within TRUSTS

The Lead roles of the project are responsible to guide the vision of the project within their respective domain. As outlined in table 2 these roles include:

- Scientific Lead
- Technical Lead
- Security Lead
- Legal & Ethical Lead
- Communication & Community Lead
- Business Exploitation Lead
- Innovation Lead

The Scientific, Security and Technical Lead are responsible for the scientific, security and technical vision and guidance for the project. They monitor the progress in these areas especially regarding the integration of the innovative technology as well as the services and functions of the platform. The **Scientific Lead** ensures that research activities remain in focus and cover the ICT 13-2018-2019 call's specific challenges and objectives and good research practises are in place and executed accordingly. In terms of the Innovation Impact the scientific domain informs the project on recent trends, challenges, and opportunities in the data market. The output includes scientific publications on the one hand and deliverables on the other. Some of the research outputs can be accessed on the TRUSTS website and include papers on reasons for the failure of data markets, the robustness of meta market factorization against strict privacy constraints and challenges of (de-) anonymisation in data sharing. In terms of deliverables the outcomes of WP2 are especially noteworthy as they provide special insights on I.A. EU and worldwide data market trends, industry specific requirements, market functionality and architecture design and specification. ***These outcomes are particularly valuable to provide direction for the project in terms of the development of an innovative platform that genuinely provides a unique contribution to the data market domain and society.***

The **Technical Lead** then uses the insights of WP2 and other WPs to translate it into an applicable and usable platform. Tasks include the architecture design, coordination of architectural alignment between work packages 3, 4 and 5 as well as project management and oversight to execute WP3. In this respect the **Security Lead** is responsible to ensure that data protection principles, GDPR compliance and other security and privacy concerns are taken into consideration and are properly implemented. This in turn is partly informed by the Legal & **Ethical Lead** whose main job is to develop a robust legal and ethical framework for the TRUSTS Platform to ensure sustainability and compliance with relevant laws, regulations and ethical principles. To this end the work carried out in WP6 focuses on providing guidance on the implementation of relevant legal rules and ethical principles. ***The USP of the TRUSTS Platform is that it provides a secure and trustworthy data sharing space that fulfills the technical requirements based on market needs***. ***In this respect the roles of Technical, Security and Ethical Lead are of key importance.***

The **Communication & Community Lead** is responsible to raise awareness about TRUSTS and build a community which engages with TRUSTS. This includes joint work with WP1, the coordinator and the Business & Exploitation Lead for example in promoting TRUSTS in key events or setting up the Stakeholder Advisory Board. This is important in order to get external feedback and expertise on the work done as well as to generate interest for

potential users for the platform. The **Business & Exploitation Lead** analyses the market and develops a sustainable business model and plan (incl. products & service portfolio, clear SLAs, pricing and billing etc.) for the TRUSTS Platform in order to pave the way to the successful commercialisation of the TRUSTS Platform. In conjunction with the Communication & Community Lead he builds a community of stakeholders (SMEs, start-ups, large enterprises, academics, public administration) around the Data-Services Ecosystem which is sustainable beyond the funding period of the project. The **Innovation Lead** brings the technology and business side together and ensures that the development of both market and technical problems will be accomplished in alignment with each other to meet the needs of the market and end-users. *The Communication & Community Lead, the Business & Exploitation Lead as well as the Innovation Lead thereby oversee and ensure that technology and business considerations are incorporated in alignment from the start of the development until the actual commercialisation of the TRUSTS platform. This furthermore contributes to the commercial viability and market adoption of the platform.*

These roles have been identified by the coordinator at proposal writing stage as they provide special value and ensure that high quality results are achieved within their respective domain. To develop a truly unique and innovative platform which meets market needs, incorporates state of the art technology and complies with laws, regulations, ethical and security requirements each of these roles are important. Having one person be responsible for the success of the domain specific objectives ensures accountability, transparent workflows and improves the overall quality of the results.

2.2.2 Formats of Exchange

Aside from bilateral and multilateral telcos there are special formats of exchange offered by the Project Management that allow for alignment on a broader and consortium wide level. One of these formats is the **monthly Executive Board Telco**. The aim of this meeting is to get an update on the progress of each WP and oversee the progress. On a project management level it is an opportunity to identify challenges, provide guidance and direction when challenges occur and to monitor the progress. In practice it also serves as a tool of alignment between each partner allowing each WPL to be informed on what happens in the other WPs. Therefore requirements, action items and objectives that span across multiple WPs, sometimes in a way that could not be foreseen, are communicated. This allows WPLs and Task Leads to consider the work of other WPs and Tasks in their own work. The **plenary** is a second consortium wide Format which takes place every 6 months for two full days. Aside from presenting the progress on a WP level, the format focuses on more practice-oriented work on current challenges and allows other partners to weigh in and provide their input on other WPs. This consortium wide alignment benefits the quality of the overall work within the project as every WP has to consider how the work within other WPs affects their own work and progress. Furthermore, the coordinator actively encourages WP specific telcos to focus on WP specific challenges. This includes also technical telcos as technology is a core outcome of the project. *As Innovation Impact is an explicit area of focus within WP7 and requires constant alignment between all partners involved, these formats are an important tool for assuring innovation impact.*

2.2.3 Project Bodies

There are multiple project bodies that benefit the overall work of the consortium. In regard to the innovation impact assurance two bodies, namely the PMB and SAB can be highlighted. The **PMB** is the ultimate decision-making body of the Consortium. One Delegate is appointed per Partner who votes at any meeting. The PMB

takes decisions on changes in regard to the budget, Annex I of the Grant Agreement or on changes in the composition of the Consortium such as entry of a new party or withdrawal of an existing one. Other functions of the PMB are outlined in D1.1 (Project Management Plan). The PMB therefore allows to discuss high level challenges, risks and opportunities and propose strategies, decisions, and changes whenever necessary to address these. The PC acts as chair of the PMB and the PMB is advised by the **SAB**. The SAB consists of high level academic and industry experts who will contribute to the results of the project, to its outreach and uptake. The WP Leads with co-leads as deputies secure proper representation of all WPs at all project meetings. Therefore the SAB brings in external and independent expertise both in terms of technical and business needs, contributing to the results of the project, to its outreach and uptake. Both bodies contribute to the risk analysis and mitigation of the project, help to identify opportunities and steer the project in the right direction, with the PMB being the responsible body to undertake high-level decisions. ***While the PMB contributes to the innovation impact by ensuring the overall project success through strategic decisions, the SAB provides external expertise which benefits the innovation impact on a strategic level as well, especially in terms of technical and commercial feasibility.***

2.3   Agile Interventions for Innovation Impact Assurance

Aspiration of this EU funded programme is to bridge from research to market, that is to move beyond (research & development) output to outcomes and defined impacts. Thus, research findings, concepts and prototypes shall be usable for the next level of development and adoption by pertinent (industry) players in the wider business ecosystem.

Our experience from the Data Market Austria shows that this dramatically improves research transferability and hence business viability, whilst it also reduces efforts for conceptualization or technology development. Thus, continuous interactions with all work packages and tasks through regular check-ins, coordinated with project management (work package WP1) are of paramount importance. In doing so, we also complement and enrich work package WP1 by enabling a firmer content-involved challenger role of project management as compared to a more coordinated role.

To enable Innovation Impact Assurance, task T7.6, acting as a cross-function to the program, works with all work packages and tasks to both ascertain from the outset and throughout the project that the aspired outcomes and impacts are kept in mind, and guide optimized Output creation. Innovation Impact Assurance ensures that the development of both market and technical problems will be accomplished during the project, while enabling the successful implementation of appropriate novel concepts, so that innovative products, services and processes will arise from the project's output ensuring thus its sustainable update beyond its duration.

Based on the identification of the most critical areas for innovation impact as described in Chapter 3, and arising from continuous assessment of the evolving project situation, targeted, agile interventions were pursued, as described in Chapter 4.2.

3   IIA Topics critical to Project Success (M1-18)

The main objectives of this section is to describe the topics identified as critical to Innovation Impact Assurance. Identified topics were used to guide identification and delivery of required quality assurance and targeted interventions during months 1-18 of the project.

3.1   Aspired Project Innovation Impact

The aspired project innovation impact can be attributed to two layers:

I.   Overarching mandates (objectives) of TRUSTS and corresponding roles
       to be fulfilled by TRUST as a platform
II.   Call topics and other expected substantial impacts

Overarching objectives of TRUSTS, as per delivery until the end of the project, and corresponding project outputs can be summarized as:

Mandate 1 (M1):   Setting up a fully operational European Data Marketplace, with a focus on
                                data security, data sovereignty, and enabled data service interoperability.
Mandate 2 (O2):   Creation of a platform federation that allows the integration
                                and adoption of current and future platforms.
Mandate 3 (O3):   Developing the go-to-market approach to make it sustainable
                                beyond the project finalization.

… then can be used to further derive the techno-commercial roles to be fulfilled by TRUSTS as a platform:

Figure 1 The Roles of the TRUSTS project in the EU data economy
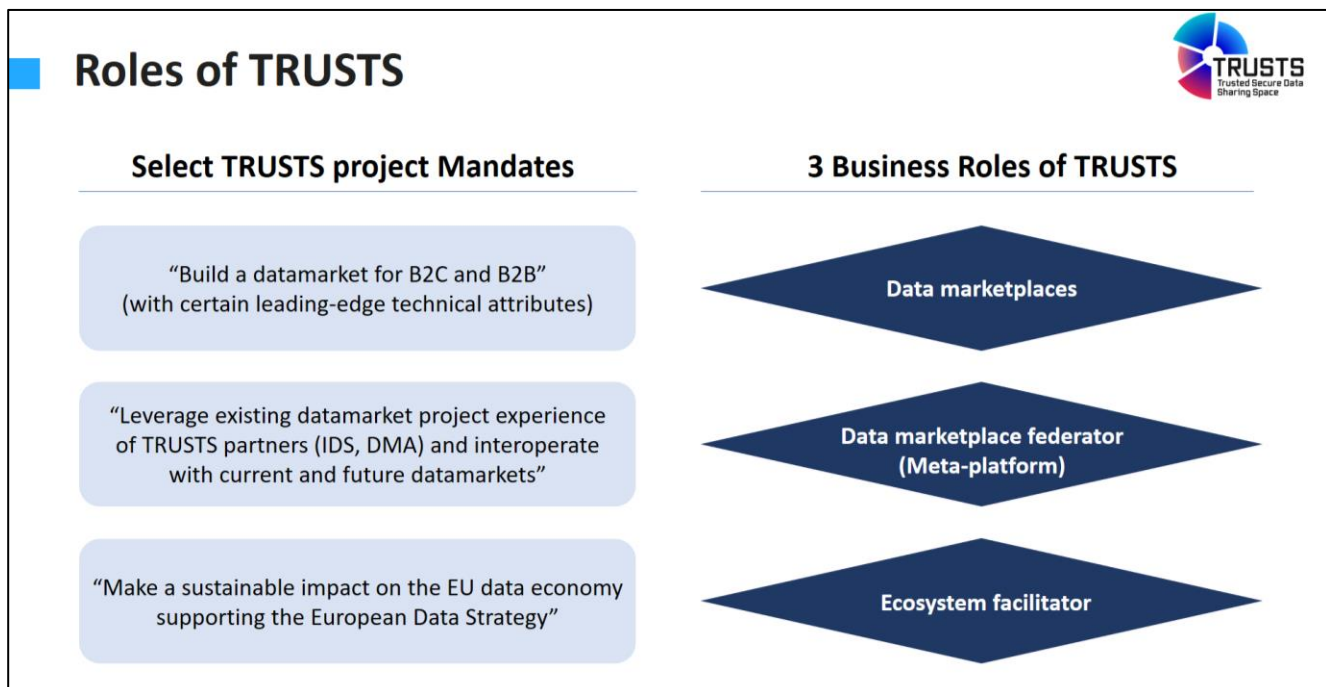
Call topics and other expected substantial impacts of the TRUSTS project encompass:

Table 3: Call topics and other expected substantial impact

Call Topic Expected Impact 1
"Personal data protection is improved, and compliance with the General Data Protection Regulation (and other relevant legislation) is made easier for economic operators."
What the project delivers (GA)
● TRUSTS delivers scalable technology to enable calculation without sharing personal data. ● Concrete and actionable set of legal/ethical guidelines for all actors involved at different levels of the digital value chain
Path to achieve the Impact (WP3, WP4, WP6)
• Multi-party computation technology, data protection by design and by default principle is followed, anonymisation / de-anonymisation tools and smart contracts are developed.
Call Topic Expected Impact 2
"Citizens' trust is improved as privacy-aware transparency and control features are increasingly streamlined across data platforms and Big Data applications."
What the project delivers (GA)
● Legal and ethical guidance ensuring that citizens' information, control and consent are respected ● Technologies that enable companies to guarantee new levels of privacy to their end-users
Path to achieve the Impact (WP3, WP4, WP6, WP7)
● Close dialogue between technical and legal and ethical partners will ensure a complementary approach, where both further the goals of the other. ● Transparency in business models reduce the perception of 'hidden objectives' ● Enablement of standardized 'smart contracts'
Call Topic Expected Impact 3
"Better value-creation from personal and proprietary/industrial data."
What the project delivers (GA)
● Measurable increase in income of use-case partners NOVA (Operator data) and PB (Bank data)
Path to achieve the Impact (WP5, WP7, WP8)
● Concrete and well-defined use-cases ensure that technology innovations in WP3 and WP4, are effectively adopted in WP5.

- Business model innovation extrapolated from the use-cases in WP7, together with communication activities in WP8 ensure that impact is extended beyond TRUSTS

Call Topic Expected Impact 4

"20% annual increase in the number of data provider organisations in the personal and industrial data platforms. 30% annual increase in the number of data user/buyer organisations using industrial data platforms. 50% annual increase in number of users (data subjects) in the personal data platforms."

What the project delivers (GA)

- A federated technology platform that brings together two large national data markets and creates the technical prerequisites for including future data markets
- Dockerized versions of the technology components developed in the project, deployable on TRUSTS, as well as on DMA and in IDS
- New business models

Path to achieve the Impact (WP5, WP7, WP8)

- Leveraging existing platforms, TRUSTS will be able to break the typical problems of multi-sided business models, where insufficient offer dissuades customers and lack of customers reduces the offer. Concretely, each of the three use-cases has provided measurable KPIs to quantify these percentual changes.

Other Substantial Expected Impact (i)

"Appropriate consideration and attention towards an ethically sound approach to big data processing, and effective involvement of the relevant actors and stakeholders."

What the project delivers (GA)

- Clear delineation of the right not to be subject to automated decision-making, specific guidelines towards trustworthy AI and big data analytics

Path to achieve the Impact (WP6)

- Intra-disciplinary literature study and close collaboration between legal, ethical and technical partners

Other Substantial Expected Impact (ii)

Improving the confidence of citizens towards Big Data technologies and data markets. Creating a trust environment for data transactions. Protecting fundamental rights of citizens."

Relationships between project results & expected impact

- Communication and engagement of the end-users, including summaries for citizens

Path to achieve the Impact (WP4, WP6, WP8)

- Study the key elements that influence user-perception of big-data technologies, and jointly address these key elements in a coherent communication strategy
- Raise awareness about trust for data transactions in the EU, stimulate data sharing through the reglementary developments.

Other Substantial Expected Impact (iii)

"Improved confidence and satisfaction of data subjects by the end of 2020."

What the project delivers (GA)

- By the end of 2020 TRUSTs will be in M12 and first prototypes of technology components and non-technology tools would already have been made available to the use-case partners.

Path to achieve the Impact (WP4, WP6, WP8)

- Surveys will measure the perception and satisfaction of end-users with the practices of telecom operators and banks.

Other Substantial Expected Impact (iv)

"Substantial improvements towards creating a secure environment for data access, process and analysis, demonstrated in the use situations that arise in the data experimentation /integration projects."

What the project delivers (GA)

- Ready-to-use software libraries providing access to privacy preserving tools.

Path to achieve the Impact (WP4, WP5, WP6)

- Secure protocols developed during the project will be implemented for easy integration by use-case partners and demonstrated in the three use-cases described in this proposal
- Analysis is being provided of cybersecurity related legal issues such as security of data processing, data breaches, data incidents and cyber-attacks handling.

Other Substantial Expected Impact (v)

"Protection by design"

What the project delivers (GA)

- Infrastructure setup and privacy preserving components are tightly integrated

Path to achieve the Impact (WP3, WP4)

- All protocols will be designed with privacy/confidentiality of data as the primary goal.

3.2 Prioritized areas for dedicated Innovation Impact Assurance support (M1-M18)

Task T7.6 is set up to provide Innovation Impact Assurance (IIA) across the project, whilst focusing its limited resources on the areas of highest impact.

A review of the <u>call topics expected impact and expected other substantial expected impacts</u>, reveals that these items are either time-distant impacts which will manifest themselves in interaction with the evolving European data economy, whereby they cannot be attributed discretely to the project itself (expected call topics impact) or are tactically linked to planned project delivery in specific work packages and tasks (other substantial expected impact).

At the same time, it must be considered that the original proposal and project plan was based on a ultimately not materialized core assumption: at the start of the TRUSTS project, the consortium would be able to build on and collaborate with two fully functional, by then established datamarkets with a proven business model (Data Market Austria, IDSA). This would have provided an immediate boost and enable streamlined delivery towards all three identified project mandates (objectives):

1. European datamarket geared towards data security, data sovereignty, and enabled data service interoperability: utilizing readily available, mature infrastructure asset of the DMA and the standards-based open architecture of IDSA

2. Federation and integration with other platforms: working with the DMA operator and IDSA to prototype and test datamarket federation, possibly even effecting willing amendments to their respective datamarket components

3. Business sustainability and ecosystem facilitation: building on proven business models, enabling cross-fertilization of a budding TRUSTS ecosystems – creation of an ecosystem on its own is a vast, long term, resource intensive task – through enabled interoperability, thereby allowing to focus on ability to scale commercialize add-on value propositions / capabilities related to data security and data sovereignty

However, upon start of the project, the DMA was not operational and re-usability of its artefact components proved to be limited. Equally, concrete implementations of the IDSA connector standard were not readily available for re-use.

Therefore, whilst providing general support for <u>call topics expected impact and other substantial expected impact</u>, dedicated IIA support activities and targeted interventions during months M1-M18 had to be focused on the <u>overarching objectives of TRUSTS and corresponding roles to be fulfilled by TRUST as a platform, effecting</u>:

1. Support for European datamarket requirements elicitation and business-technology alignment

2. Evangelism for datamarket federation to align all consortium partner to this a core objective of TRUSTS

3. Facilitation of development of concepts supporting business sustainability, through strengthening of the linkage and synergies between tasks T2.1 (European data market study), T7.1 (Sustainable Business Models, and T7.5 (Commercialization), as well as dialogue with market participants and multiplicators to ease ecosystem design

4 Delivered Innovation Impact Assurance Activities

4.1 Delivered PM Quality Management

The overall project delivers specific results in the form of deliverables as well as in technical, scientific, and conceptual achievements. In order to ensure innovation impact, measures must be taken and processes must be implemented to ensure the quality of the results.

4.1.1 Quality Approach

In terms of D1.5 (Technical & Quality Assurance & Risk Assessment Plan), the overall quality approach as well as quality methods have been outlined. The activities undertaken include:

- Definition of responsibilities in terms of quality assurance
- Implementation of effective measures for quality assurance control
- Defining quality assurance and control measures
- Setting up a quality implementation strategy including
  - Definition of actions & decisions
  - Definition of change control procedures
  - Definition and setup of the collaboration infrastructure
  - Definition of template and template structure as well as the setup of templates
    - Templates for the EC: deliverables, periodic reports, explanation of the use of resources and financial statements
    - PowerPoint presentations for internal and external use, e.g., for project meetings, reviews, presentations during workshops, exhibitions, conferences etc.
    - Web-based documents for internal use: e.g. agendas, minutes, other contributions etc.

Some of the outlined activities undertaken in terms of quality assurance, such as the definition of responsibilities, as outlined in Chapter 2.3.1 (Roles within TRUSTS), contribute directly to the innovation impact assurance. Others such as setting up template and template structures or the setting up a collaboration infrastructure contribute the innovation impact assurance more indirectly but are nonetheless a helpful vehicle to ensure a high quality of results, meet objectives and drive success.

4.1.2 Quality Methods

Similar to the quality approach, D1.5 has specified different quality methods. The activities undertaken in this area include:

- Set up of project plan and milestones, outlining interdependencies between WPs
- Setting up of deliverable overview, specification of reviewers for each deliverable and review process (see figure 2 with clearly outlined responsibilities and quality indicators
- Clearly defined quality indicators to track the quality within WPs
- Define responsibility and minimal requirements for dissemination activities

● Setup of Benchmarking Platform as per the international standards for software development and products

Similarly, some activities undertaken while establishing quality methods benefit the innovation impact assurance directly while others contribute to it indirectly. The established review process for example, as showcased in figure 3 ensures for smooth collaboration and the timely delivery of results. As this is a technical project there is a high interaction and relation between WPs. If one deliverable cannot be delivered timely this affects the work of other partners and deliverables as well, therefore the strict compliance with the outlined review process is of high importance, enables partners to plan ahead and improves the quality of collaboration.

Figure 2: Internal QA and review process
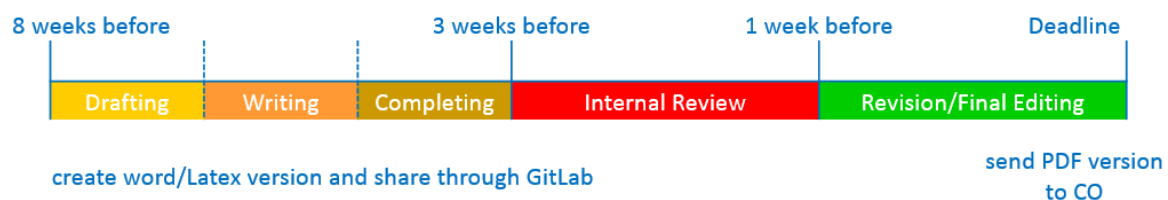
Other activities such as the specification of the benchmarking platform directly contribute to the innovation impact as well. As a core technical result, the benchmarking platform is central for the achievement of the project goals (e.g., development of benchmarks, challenges). As this refers to the international standards for software development and products it includes quality indicators such as Functional Suitability, Performance Efficiency, Compatibility, Usability, Reliability, Security, Maintainability, Portability and thereby directly contributes to the innovation impact from a technical side.

4.1.3   Other Activities

Other activities undertaken include:

● Regular Executive Board Telcos
● Organisation of multiple plenaries
● Regular Project Management Board Meetings
● Setting up of Stakeholder Advisory Board
● Tracking and monitoring progress on a day-to-day basis as per the quality indicators defined

As outlined in Chapter 2.3.2 (Formats of Exchange) and 2.3.3 (Project Bodies), these activities mainly help in the alignment between WPs and tasks, decision making, overall project strategy, acquiring of outside expertise and overseeing the overall progress and quality of results.

4.2   Delivered targeted IIA Activities and Interventions

4.2.1   Activities supporting requirements elicitation, business-technology alignment and federation

- Participation and contribution to the kick-off in month M1, highlighting experiences and lessons learned from the Data Market Austria (DMA) project, particular to project governance and in-project alignment, and hurdles during project delivery
- Participation in, and contribution to the online project plenary in M6, alerting and aligning all consortia partners on the mandate of federation (platform interoperability and technical implementation of TRUSTS as a federator for other data markets), and providing a forum for discussion around a draft taxonomy
- Participation in, and contribution to the online project plenary in M13, discussing business model considerations and arising requirements for the platform vis-à-vis business model considerations. Additionally, a guest contribution on a concrete infrastructure solution for data sharing spaces in the wider IDSA / FhG / GAIA-X environment got organized
- Participation in, and contribution to the online project plenary in M18, alerting and aligning all consortia partners on risks and mitigation options for (1) late establishing of a commercial Platform Operator, (2) limited commercial scalability of differentiating capabilities, (3) marginal / slow uptake of associated data services, as well as infrastructure and integration services, and (4) lack of true federation ('market of markets'), enabling commercial transactions with data markets

Figure 3: TRUSTS Plenary Working Session delivered as part of task T7.6
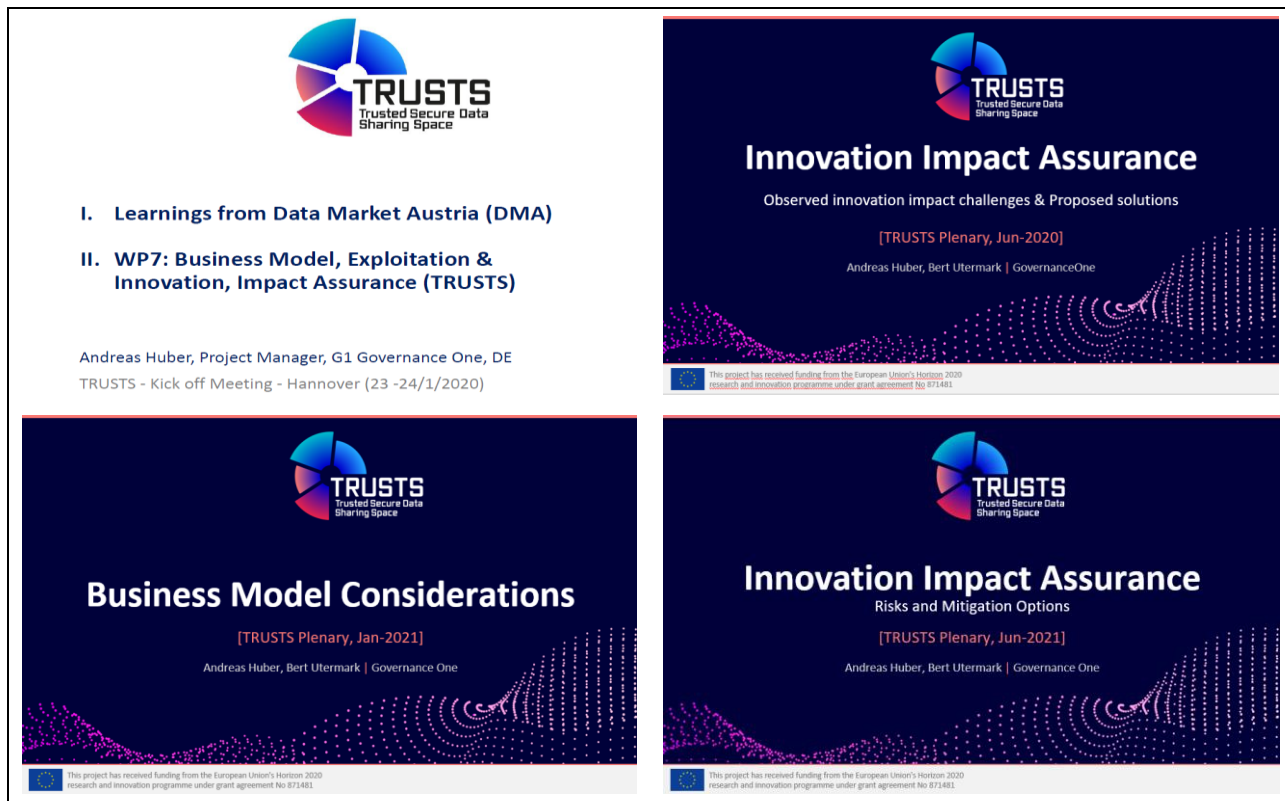
- Organization of an All-Hands "Positioning of TRUSTS" workshop in month M10, creating deeper awareness for and alignment on the three roles of the TRUSTS platform (see figure 1). This included the discussion of prerequisites and characteristics pertaining to these roles, inherent challenges and complications principal options and corresponding implications

- Co-organization of a project-wide "Business Technology Alignment" workshop in month M16, acting as platform for alignment

Figure 4: TRUSTS Internal Alignment Working Session delivered as part of task T7.6

Additionally, Business Lead and Task Lead of T7.6 contributed:

- Close coordination with the Technical Lead and regular participation in the weekly calls of task T2.4 "Architecture design and technical specifications", thereby tapping into the planning of the technical implementation in work package WP3

- Regular coordination and alignment with the project's Innovation Lead, who also acts as work package leader for WP2 and as conduit to the project use cases pursued in work package WP5

- Support for two project-wide workshops related to the development of the unified, business-centric data market and data market federation taxonomy by task T7.1 during Q2_2021, using these as a platform to align on requirements the three main project objectives and derived techno-commercial roles of the TRUSTS platform

- Participation and contribution to monthly consortia calls, in a role as challenger focussing the discussion on prerequisites of achieving innovation impact, as per the mandate of task T7.6

- Participation and contribution to Management Board meetings, as per the project governance structure, as venue for discussing options, trade-offs and project decision making

4.2.2 Activities supporting business sustainability and ecosystem design

- Close coordination with, and direct support of task leader for T2.1 "EU and worldwide data market" in task planning and tactics ideation, thereby increasing project-relevance of market research and strengthening the linkage to task T7.1. This also effected a front-loading of task T2.1, in support of the interdependency flow between task T2.1 "EU and worldwide data market" -> task T7.1 "Sustainable

business models" -> task T7.5 "Commercialization initiatives and action plan" vis-à-vis the same formal deadline for the first related reports in month 18

- Regular interaction with prior DMA consortia partners, and stakeholders of the Austrian data landscape, through DIO, soliciting inbound-leads of data-driven SMBs through co-delivery of DIO workshops, e.g. Spoton Statistics ([www.spoton-stats.com)](www.spoton-stats.com) and nexyo ([www.nexyo.ag)](www.nexyo.ag)

- Soliciting inbound-leads Delivery of TRUSTS knowledge dissemination and communication activities (webinars, podcasts and newsletter contributions) through work package WP8, soliciting inbound leads with data solution providers, e.g. CATCH.market (www.catch.direct) and Decentriq (www.decentriq.com), and with data initiatives, e.g. Data Occitanie (www.occitaniedata.fr)

- Support for, and close coordination with the task leader of task T3.3 "Interoperability Solutions" to jointly advocate datamarket federation and interoperability beyond mere demonstration of principal technical feasibility. This included conceptualization of survey of datamarket operators aimed at providing inputs to data market research for tasks T2.1, commercial aspects for tasks T7.1 and T7.5, and sentiment and technical prerequisites for federation and interoperability for task T3.3. Following a low response rate, a revised approach was pursued, soliciting direct stakeholder interactions through tasks 7.2 and work package WP8, and a data market registry was created in task T3.3

- Close coordination with task T7.2 and work package WP8, aligning on and creating synergies between stakeholder engagement, community building and project communication.

Additionally, online project plenary sessions listed under Chapter 4.2.1 also addressed aspects of business sustainability.

5   Critical Review and Outlook

5.1   Review of progress through M18

Project delivery is a collaborative effort between all project partners within TRUSTS. Task T7.6 in conjunction with project quality management has been providing a meaningful contribution through its continuous interactions seeking to challenge and align all partners towards achievements of project objectives, techno-commercial roles to be fulfilled by the TRUSTS platform and delivery towards call topic and other significant expected impact.

In light of the adverse starting conditions, the project achieved good progress towards fulfilling the three overarching mandates (objectives) of TRUSTS and corresponding roles to be fulfilled by TRUST as a platform.

Notably, the Technical Lead adopted an agile delivery approach, and provided elevated responsiveness to business-technology alignment requirements. Jointly with the Task Lead for task T3.3, interoperability solutions were interpreted and pursued with the required focus on enabling federation – at present, federation with a open data-rich open data cloud system (EOSC) is explored. We also raised awareness and initiated project-wide dialogue related to resolving of IPR issues as pre-requisites for attracting any future platform operator, may this be directly (established infrastructure operator) or indirectly (new venture supported by an investor).

That said, a number of hurdles will still need to be overcome in the remainder of the project. Particularly the absence of a proven business model to build on, effected by the Data Market Austria not being operational, as well as the lack of readily available access to counterparties of an existing datamarket, to refine and validate business model and commercialization plans, is to be noted. Also, whereas internal dialogue about establishing of a platform operator to carry project outputs beyond the project got initiated, ultimate success of this pursuit is by no means certain, yet. Going forward, we shall thus focus IIA efforts on these aspects.

Achieved project progress towards call topics and other expected substantial impact is listed in table 4, below.

Table 4: Achieved progress towards call topics and other expected substantial impact

Call Topic Expected Impact 1
"Personal data protection is improved, and compliance with the General Data Protection Regulation (and other relevant legislation) is made easier for economic operators."
Project Progress
- Mechanism for Data Stewardship and IP Protection as precursor for adherence to privacy preservation have been drafted (task T7.3 / deliverable D7.4). This also includes reporting mechanisms for observed misconduct   - Privacy preservation, and compliance with GDPR as well as other pertinent regulations and standards as a centrepiece of the value proposition utilized in ongoing definition of the business model and commercialization plan (tasks T7.1 and T7.5)

- Stakeholder engagements strategy & plan (task T7.2 / deliverable D7.3) supporting propagation of privacy preservation in interactions with stakeholders at large, and with concurrent data initiatives as well as associations and organizations that act as multiplicators
- Analysis has been provided of EU legislation applicable to data sharing in B2B context such as the regulation of unfair commercial practices between businesses, mainly at national level, taking Germany, France and Belgium as an example. Based on the European Commission 'Guidance on sharing private sector data in the European data economy' of 2018, KUL provided consortium partners a non-exhaustive list of considerations which may help in the preparation and/or negotiation of data usage agreements.
- DELL EMC is developing a "Smart Contract Executor" component along with support from task 3.2 partners. The component will provide a library of smart contracts to service core operations of the TRUSTS platform as well as a ledger and blockchain in the back-end. The component is currently operational in an early stage but is not yet integrated with other components.

Call Topic Expected Impact 2

"Citizens' trust is improved as privacy-aware transparency and control features are increasingly streamlined across data platforms and Big Data applications."

Project Progress

- Exploratory research on the nature of data assets in the context of economically sustainable data trading as well as research of patterns and implications of platform orientation and platform orientation, on the example of data exchange and trading platforms in the automotive sector (task T7.1)
- Positioning of TRUSTS in the unified business-model centric taxonomy of data markets and data market federators as an ecosystem facilitator, strengthening multi-sided platform effects through increased solution-specific availability, co-creation, interaction and combination of data assets (task T7.1)
- Definition of stakeholder engagement mechanisms for fostering supply- and demand-sided use cases to move from "data as a product" to "data-as-problem-solution" (task T7.2)
- Exploration of mechanisms for IPR protection and data stewardship as prerequisites for value-creation from data in a trusted environment (task T7.3)
- Trainings and workshops (D8.6), publications and reports (see Output on the TRUSTS website), materials and design (D8.2), exploitation strategy/plan, dissemination and communication strategy/plan (D8.1), external and independent Stakeholder Advisory Board (SAB).

Call Topic Expected Impact 3

"Better value-creation from personal and proprietary/industrial data."

Project Progress

- Concrete and well-defined use-cases ensure that technology innovations in WP3 and WP4, are effectively adopted in WP5.
- Business model innovation extrapolated from the use-cases in WP7, together with communication activities in WP8 ensure that impact is extended beyond TRUSTS

Call Topic Expected Impact 4

"20% annual increase in the number of data provider organisations in the personal and industrial data platforms. 30% annual increase in the number of data user/buyer organisations using industrial data platforms. 50% annual increase in number of users (data subjects) in the personal data platforms."

Project Progress

This aspired impact can be understood as a longer-term, directional co-contribution to the European data economy, in particular through the novel concept of data exchange / data market federation, overcoming the fragmentation and lacking interoperability in the European data landscape. As impact manifests itself along the axis of project activity - project output - outcome impact, the overall project contributes to this longer-term vision.

- Research in data markets and data market federation, which yielded a business-model centric, unified taxonomy which will form the basis of identifying and selecting viable business model options during M19-M36
- Promotion of progress via Podcasts, Webinars, Papers and Blog Posts.

Other Substantial Expected Impact (i)

"Appropriate consideration and attention towards an ethically sound approach to big data processing, and effective involvement of the relevant actors and stakeholders."

Project Progress

- Project partner KUL conducted a desktop research on all the legal frameworks relevant for data transactions that will be guiding the partners throughout the project. D6.1 on ethics requirements was submitted. Furthermore, KUL addressed 10 ethics requirements within WP9.

Other Substantial Expected Impact (ii)

Improving the confidence of citizens towards Big Data technologies and data markets. Creating a trust environment for data transactions. Protecting fundamental rights of citizens."

Project Progress

- Multi-channel communications approach: Website, Social Media (Twitter, LinkedIn, Researchgate, Youtube), press releases (CORDIS, APA via RSA), Newsletter, Webinars, Podcasts.
- set communication activities focusing on citizens' trust towards data markets e.g. highlighting legal aspects, privacy preservation etc.
- Knowledge Base and interactive learning tool, Social Microlearning
- Analysis has been done in relation to data transactions related frameworks, including financial frameworks, B2B relationships, data sharing agreements, privacy enhancing techniques. The work on the Chapter on trustworthy data sharing has been carried out in cooperation with the TRUSTS partners.
- DELL EMC contributed an article to the TRUSTS newsletter on the topic of privacy preservation in the area of smart contracts - proliferating knowledge that such technologies can be implemented in a privacy-sensitive manner.

Other Substantial Expected Impact (iii)

"Improved confidence and satisfaction of data subjects by the end of 2020."
Project Progress
● WP8 disseminated survey via Newsletter, Website and Social Media. ● Analysis to make sure that the TRUSTS consortium respects GDPR, ePrivacy Directive and other relevant frameworks such as DSA, DMA and Data Governance Act.

Other Substantial Expected Impact (iv)
"Substantial improvements towards creating a secure environment for data access, process and analysis, demonstrated in the use situations that arise in the data experimentation /integration projects."
Project Progress
● Reports have been published and are being developed for informing the partners on security related legal frameworks such as Paris Call for Trust, NIS Directive and the updated NIS 2 Directive.

Other Substantial Expected Impact (v)
"Protection by design"
Project Progress
● The design of the "Smart Contract Executor" component was aware that public blockchain technology does little to preserve privacy and thus a focus on a consortium blockchain (public/private hybrid) approach was taken.

5.2 Outlook

The current Innovation Impact Assurance activities will be continued under task T7.6, bringing together project quality management and targeted IIA actions and interventions, as per elements of an agile methodology.

In the 2nd half of the project, we shall focus on collaboratively with all project consortium members and external stakeholders developing answers to the following critical questions:

1. How can TRUSTS mitigate a potential shortfall / resource crunch effected by the changed environment related to the Data Market Austria?

   - Support of task T3.3 to find external partners for conjoint development and testing in the field of data market federation
   - Collaboration with DIO in lieu of accessible DMA data market users and stakeholders for identification and addressing of real-life challenges and emerging requirements

2. How can TRUSTS optimize the exploitation of R&D outputs around the defined three project use cases with respect to data trading as opposed to mere data exchange & transformation?

   - Close collaboration with the Business Lead, Innovation Lead and the project use case partners to identify pathways for scaling and commercializing project use-case related capabilities and value propositions

3. How will the project address enable onwards-usability and monetization of created IP vis-à-vis future requirements for development, maintenance and operations, respecting a balance interests of project partners and that of a platform operator?

   - IIA support of efforts arising from tasks T7.3 (IPR and Data Stewardship) and T7.5 (Commercialization) related to IPR management

4. How can the project co-establish and / or attract a future commercial and technical operator of the TRUSTS platform? **(PRIORITY 1)**

   - Joint efforts with Business Lead, Innovation Lead, and work package WP7 (Business Exploitation) to establish a mechanism for platform operations beyond the end of the project

5. How can TRUSTS meaningfully and at scale attract early adopters, particularly data buyers and sellers, as well as data markets for federation, whilst the platform is under development and no operating company is in place? **(PRIORITY 2)**

   - IIA support for tasks T3.3 (Interoperability and Federation), T7.2 (Stakeholder Engagement), T7.5 (Commercialization), in collaboration with work package WP8 (Communication and Knowledge Dissemination)

6. How does TRUSTS contribute and link to artefacts and participants within the evolving European data economy, leverage and collaborate with concurrent national and pan-European initiatives and projects, and ascertain a meaningful and sustainable contribution in support of the European Data Strategy?

   - Collaboration between Technical Lead, Innovation Lead, and Business Lead
   - IIA support for implementation of task T7.2 (stakeholder engagement) and T7.5 (commercialization)