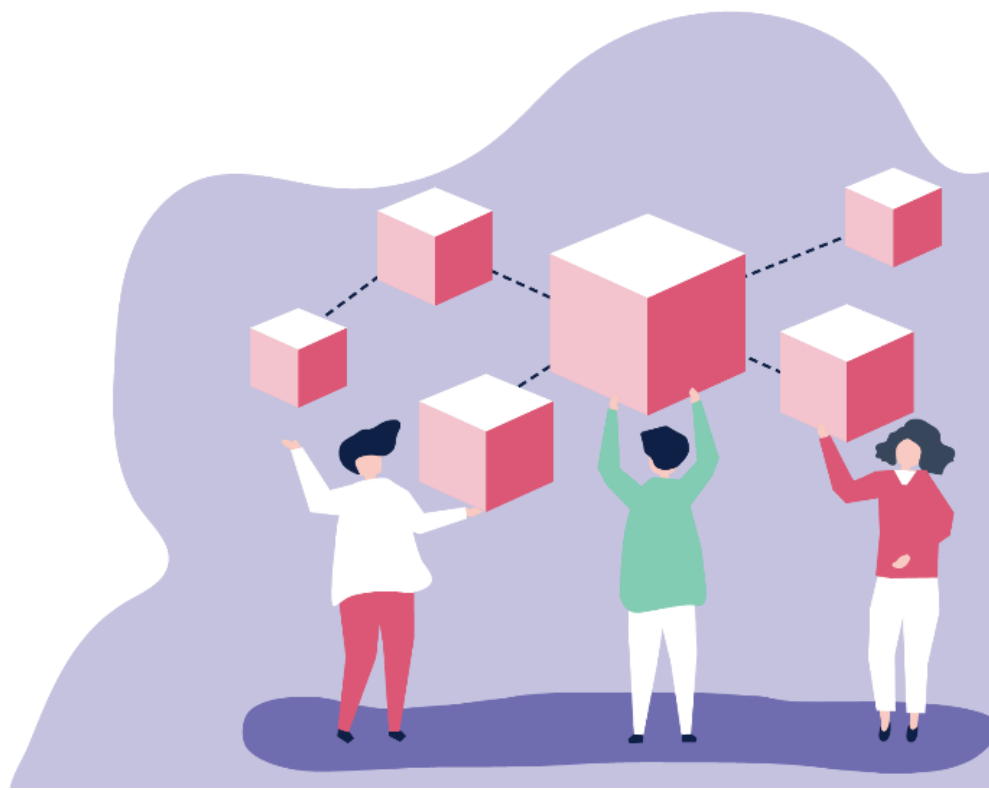




GATE KEEPER

D2.1 Initial Ecosystem Management Plan

Deliverable No.	D2.1	Due Date	31/12/2020
Description	Document the definition of the open calls and their scope, the requirements for the platform sustainability and management details.		
Type	Report	Dissemination Level	PU
Work Package No.	WP2	Work Package Title	Eco-system value co-creation, Open Calls and scaling up twinning
Version	1.0	Status	Final



Authors

Name and surname	Partner name	e-mail
Marta Pérez Alba	Medtronic	Marta.perezalba@medtronic.com
Sergio Guillen	MYS	sguillen@mysphera.com
Carina Dantas	ECHA	carina@echalliance.com
Karolina Mackiewicz	ECHA	karolina@echalliance.com
Valentina Tageo	ECHA	valentina@echalliance.com

History

Date	Version	Change
30/04/2020	0.1	Include ecosystem table reference and methodology
15/12/2020	0.2	Include in business perspective
30/01/2021	0.3	Include layers methodology
30/02/2021	0.4	Review sections and annex
11/03/2021	1.0	Ready for peer review

Key data

Keywords	Ecosystem, business model, management plan, key players,
Lead Editor	Marta Perez (MDT)
Internal Reviewer(s)	Jose Usero (Funka), Jon Farrell (RSCN)

Abstract

This document provides an initial management and enlargement plan of the ecosystem built around the GATEKEEPER project. The scale and aims to this project require a running and sustainability plan that can ensure its positive impact and adaptability in the relevant domains. The initial mapping of the GATEKEEPER ecosystem is presented, followed by an analysis of its business perspective. This is done by researching and identifying the key findings and best practices in the area of creation and growth of business ecosystems in the health and care, with a special focus on the engagement of relevant stakeholders by using Open Calls The **ecosystem creation** process is laid out to discuss the value creation

strategy and business model definition. **The ecosystem management and enlargement plan** are based on three key strategies: the value sharing and value promise (assets to be created in GATEKEEPER), recruitment of new partners via two open calls, knowledge sharing and awareness. This document also introduce and presents an open call process that will be followed when recruiting third parties.

Statement of originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Table of contents

TABLE OF CONTENTS.....	5
LIST OF TABLES	7
LIST OF FIGURES	8
INTRODUCTION	9
1.1 THE ECOSYSTEM APPROACH IN GATEKEEPER.....	9
1.2 STAKEHOLDERS MAPPING IN GATEKEEPER	9
1.2.1 <i>Impact Entities.....</i>	10
1.2.2 <i>Demand entities.....</i>	12
1.2.3 <i>Supply entities.....</i>	12
2. ANALYSING THE HEALTH PLATFORMS LANDSCAPE THROUGH A BUSINESS PERSPECTIVE	22
2.1 PLATFORM LANDSCAPE.....	22
2.1.1 <i>Healthcare and digital ecosystems are converging</i>	23
2.1.2 <i>Medical technology companies are shifting from selling products to providing services23</i>	
2.1.3 <i>Hallmarks of a successful platform.....</i>	24
2.1.4 <i>The value of platforms for the medical technology ecosystem.....</i>	25
2.2 CREATION AND MANAGEMENT OF THE GK ECOSYSTEM	27
2.2.1 <i>Key definition of an ecosystem.....</i>	27
2.2.2 <i>Business Ecosystem Creation</i>	29
3. GATEKEEPER ECOSYSTEM MANAGEMENT.....	31
3.1 GATEKEEPER ECOSYSTEM CREATION PROCESS	31
3.1.1 <i>Value proposition</i>	32
3.1.2 <i>Ecosystem enlargement.....</i>	35
3.1.3 <i>GATEKEEPER Ecosystem enlargement</i>	35
4. TOOLS AND METHODS FOR ECOSYSTEM ENLARGEMENT.....	37
4.1 OPEN CALLS.....	37
4.1.1 <i>Recommendations for good management</i>	38
4.1.2 <i>Contribution of the Open Calls to the GATEKEEPER Ecosystem creation process</i>	42
4.1.3 <i>Expected outcomes.....</i>	43
4.1.4 <i>Gatekeeper Open call procedures</i>	44
4.1.5 <i>Budget distribution.....</i>	52
4.1.6 <i>Timeline</i>	52
4.2 COMMUNITY OF INTEREST.....	54
4.2.1 <i>The purpose of the community of interest.....</i>	54
4.2.2 <i>Relations with others task in the project</i>	55
4.2.3 <i>Management of the community of interest.....</i>	56
4.2.4 <i>Status of the Community of Interest at M15.....</i>	58
5. CONCLUSIONS AND FUTURE WORK.....	60

6. REFERENCE	61
APPENDIX A . COI SUBSCRIPTION	62
- GUIDANCE ON FINANCIAL SUPPORT TO THIRD PARTIES	63
APPENDIX B GUIDANCE ON FINANCIAL SUPPORT TO THIRD PARTIES	64
APPENDIX C GOOD PRACTICES FOR ORGANIZING OPEN CALLS	65
APPENDIX D EVALUATION FORM	69
APPENDIX E CONFIDENTIALITY AND CONFLICT OF INTEREST DECLARATION	71

List of tables

TABLE 1. TABLE CATEGORIES ENTITIES.....	10
TABLE 2. TABLE IMPACT GROUP, ENTITY TYPES AND DEFINITION OF THE MAIN ROLES IN ECOSYSTEM	13
TABLE 3. TABLE SUPPLY GROUP, ENTITY TYPES AND DEFINITION OF THE MAIN ROLES IN ECOSYSTEM	15
TABLE 4. TABLE IMPACT GROUP, ENTITY TYPES AND DEFINITION OF THE MAIN ROLES IN ECOSYSTEM	18
TABLE 5. TABLE ON NEEDS OF RELEVANT STAKEHOLDERS.....	25
TABLE 6. GATEKEEPER OPEN CALL PROCEDURE.....	44

List of figures

FIGURE 1. INITIAL GK ECOSYSTEM MAPPING	20
FIGURE 2. CREATION PROCESS OF THE GATEKEEPER ECOSYSTEM. ADAPTED FROM (IANSITI AND LEVIEN 2004A)	32
FIGURE 3 VALUE PROPOSITION CANVAS (OLSTERVERVALDER ET ALL. 2014), STRATEGYZER.COM	33
FIGURE 4 GATEKEEPER ENLARGEMENT PLAN	36
FIGURE 6. OPEN CALL 1 TIMELINE	53
FIGURE 7. OPEN CALL 2 TIMELINE	53
FIGURE 8. INTEREST IN JOINING COMMUNITY OF INTEREST	58
FIGURE 9. EXPECTATIONS IN JOINING COMMUNITY OF INTEREST	59

INTRODUCTION

1.1 The ecosystem approach in GATEKEEPER

GATEKEEPER aims, as one of its central objectives, to provide an ecosystem co-creation framework, resulting from Responsible and Social Innovation principles, that engages and generates trust from Citizens, Healthcare Professionals, Industry, extended through open calls to SMEs, Start-ups, and new regions in an open innovation fashion.

Work Package 2 targets the creation of a viable innovation ecosystem, that focuses on the perspective of citizens as (potential) users of GATEKEEPER solutions, while including different stakeholders' perspectives that cut across the four project spaces: health, consumer, business, and ecosystem transaction spaces.

The successful implementation, scaling-up and impact of GATEKEEPER fundamentally depend on the creation of a viable and committed dynamic stakeholder ecosystem, that aligns trust and value to generate a sustainable business context. Trust is a pre-condition for reliable data sharing, knowledge creation and value generation / propagation across the "Value Journey". This approach focuses on values that are considered important in the everyday lives and practices of all relevant stakeholders involved, in this case involved in the project's innovations, such as healthcare providers, technology developers, policymakers, older citizens, informal caregivers etc.

This framework acknowledges that ethical issues, such as trust or privacy, are dynamic and change alongside with technological development, thus not only it is important to understand how trust is currently framed in relation to healthcare, but also map future scenarios of trust in relation to the GATEKEEPER solutions.

Based on this approach, GATEKEEPER (i) builds a baseline scenario to map stakeholders' initial position towards trust, (ii) initiates a prospective process to map future trust and value frameworks/scenarios in relation to the new technology, and (iii) involves relevant stakeholders in eco-system co-creation to elaborate and articulate these positions as development moves forward.

The deliverable 2.1 - Initial Ecosystem Management presents an initial overview of relevant stakeholders in the GATEKEEPER ecosystem, added by an explanation on the specific forms of engaging with these stakeholders.

1.2 Stakeholders mapping in GATEKEEPER

When developing a platform strategy, one needs to address, mobilize and support an entire Ecosystem. To make it easier for platform designers to confront the complexity of designing for ecosystems, we've created a simple framework to frame the entities involved in a platform strategy. We differentiate entities into three groups (impact, demand and supply entities), of which the table below reports a synthetic view:

Table 1. Table Categories entities

GROUPS	DESCRIPTION	DETAIL
IMPACT entities	Impact related entities, A) Owners/Shapers of platforms, and B) EXTERNAL STAKEHOLDERS - these are not involved in the continuous interactions happening in the ecosystem.	Large entities, mostly interested in the evolution and control, interacting and impacted by the whole system dynamics, not by the punctual interactions.
	<ul style="list-style-type: none"> Platform Owners/Shapers [PO] Platform External Stakeholders [ES] 	
DEMAND entities	Entities that are interested in "consuming" the value produced in the ecosystem.	Patients and citizens Informal caregivers
	<ul style="list-style-type: none"> Peer Consumers [PC] 	Professionals, mainly in the health and care sectors These stakeholders are involved in continuous interactions.
SUPPLY entities	Entities that are interested in "producing" the value consumed in the ecosystem.	GK platform developers, GK consultants, Research & Innovation and Standards Developing Organisations (SDO), who are interested in producing assets for the GK platform and the marketplace – usually individuals or small-medium organizations that behave as a single, identifiable entity with a specific interest and identifiable objectives that the Platform's Value Proposition should meet. These entities are involved in continuous interactions.
	<ul style="list-style-type: none"> Partners [PA] Peer Producers [PP] 	

1.2.1 Impact Entities

PLATFORM OWNERS (or SHAPERS) [PO]

is the entity who owns the vision behind the realization of the market and ensure that the platform strategy exists, evolves and thrives. It can be a team, an organization or sometimes is a set of teams throughout different organizations in a form of committee or a consortium.

This category refers to the "owners" of the Platform. Owners are those ultimately responsible to ensure that the platform strategy exists and evolve. Normally we are talking about the firms - being them Start-ups or Scale-ups or corporate firms - that own the platform, but nothing prevents this to be a non-profit organization, a foundation or even, a cooperative structure that is open to the participants.

In the latter, peers or partners could also be somehow owners of the platform: as an example, in the Bitcoin Blockchain ecosystem, peers collaboratively own the infrastructure that makes the platform.

Sometimes, and increasingly, we see the potential to separate owners from shapers. One player can design a strategy with the objective to craft a sustainable business model that is not necessarily related to owning the infrastructure of the strategy. This potential separation is reflected by several trends in the evolution of platforms, their governance, and the increasing type of players that can develop or influence the future of platform strategies.

EXAMPLES	<p>Airbnb (as a firm), Apple (re the Apple app store ecosystem), Google (re the Android ecosystem for example), Tripadvisor, WordPress: they're all owners.</p> <p>In the Bitcoin ecosystem, Bitcoin developers can be considered the shapers (as compared to the actual owners of the infrastructure and value that are the Bitcoin miners and Hodlers).</p>
-----------------	---

GK case	<p>The owner of the platform is the GATEKEEPER Project. The project must decide who will continue executing this role after the end of the project.</p>
----------------	---

<p>EXTERNAL STAKEHOLDERS (ESI)</p> <p>External Stakeholders are entities that have a specific interest in platform success or failure, in controlling platform externalities and outcomes, in regulating it or in exercising rights in the platform governance.</p>	
--	--

This category normally includes, for example, all the actors dealing with the regulation and control of platform strategy on a local basis. It can also include the representatives of the plurality of peers and partners involved in the value creation, or any pre-existing institutions that can help the platform thrive. Additionally, this can include entities that can help distribute the strategy and help it grow. Normally, we're talking about entities that are hit by the positive or negative externalities of the platform.

EXAMPLE	<p>A municipality affected by the gentrification effect of short time rentals that wants to regulate AirBnb. In this case, the external stakeholder applies boundaries restrictions to the business of the platform, but it does not participate in the platform business.</p>
----------------	--

GK case	The typical case in our sector is the Health Care Regional authority, who defines a lot of mandatory rules. For example: technology assessment, purchasing regulations, etc.
----------------	--

1.2.2 Demand entities

PEER CONSUMERS [PC]
Peer Consumers (PC) who we may also call users, are entities interested in consuming, utilizing, accessing the value that is created through and on the platform.

They are individuals but can also be small/medium business and single representatives or teams in bigger organizations. Eventually, in some cases, they may evolve into peer producers when they realize that beyond fulfilling a need, they can seek evolutionary opportunities to produce.

EXAMPLE	Travelers in AirBnb (PC), Bloggers in Wordpress (PC), Angels in AngelList (PC), Homeowners in Houzz (PC)
----------------	--

GK case	All entities and individuals that will use (consume) services, both technological services (applications, cloud services, devices, etc.) and health care services produced in the project.
----------------	--

1.2.3 Supply entities

PEER PRODUCERS [PP]
Peer Producers (PP) who we may also call producers, prosumers, and providers, are entities interested in providing value on the supply side of the ecosystem/marketplace, usually seeking for opportunities to improve their business and honing their capabilities towards a better performance.

Typically, these players produce value that is usually consumed by demand entities. Often the same peer may behave as both consumer and producer in different phases of its relationship with the brand-platform. Like in the case of GK, a hospital supply health care services to patients (consumers) and at the same time "consume" technological services supplied by technology suppliers.

EXAMPLE	Hosts in Airbnb (PP), an Uber X driver (PP) that provide the transportation service, a developer that publish her app on the Apple marketplace (PP).
----------------	--

GK case	Technological companies, technological centres and universities than supply technological assets in the project. Hospitals and other health care organisations that provide health care services
----------------	--

PARTNERS [PA]

Partners (PA) are entities that seek to create additional professional value and to collaborate with platform owners on a stronger level of relationship.

Typically, partners are professional value creators that tend to specialize in a niche or advanced/premium product/service and become better and better within time. Partners sometimes also facilitate, cater and enhance the value production by acting as brokers, facilitators, connectors.

In particularly polarized platforms, where you substantially have two sides (supply and demand) the partner could be an evolution of the peer producer into a more professionalized role. This evolution is typically well received from the platform since partners drive more value than peer producers and are able to pull many other players towards a better overall platform experience

EXAMPLE	Airbnb Superhosts (PA), WordPress theme developers (PA), Companies developing applications on Apple or Android marketplaces (PA), Salesforce Forge developers (PA), AngelList syndication SuperAngels (PA), WordPress Cloud service providers (PA), ...
----------------	---

GK case	The partners of GK project that assume this strategic roll of pushing the building and enlarging the ecosystem.
----------------	---

Using the concepts just explained, we are approaching the first draft of the ecosystem.

We have mapped the entities presented in GK project and then, understand what roles they might play,

Table 2. Table impact group, entity types and definition of the main roles in Ecosystem

ENTITY GROUP	ENTITY CATEGORY	ENTITY TYPE	ORGANISATION	MAIN ROLE IN ECOSYSTEM	ENTITY NAME (*)
IMPACT	PLATFORM OWNER		GATEKEEPER PROJECT	Core organisation integrated by committed partners. Take leadership and ownership	
	PLATFORM EXTERNALS	Health & Care Agency: Public and usually	-Governmental	Delivery of health and care services, potential users of	

		governmental organization that has the legal mandate to organize, finance and deliver health care to all population in a geographical region or country		the services within the GK platform	
		Private Payor: Any insurance company, health maintenance organization, preferred provider organization or similar entity that is obligated to make payments for goods or services provided to a patient but shall not include a Government Reimbursement Programme.	-Insurance company	Funders or payors of health and care services, potentially relevant for the GK business model and future exploitation	
		User associations: group of affiliates from the contributory and subsidised system of the Social Security system in Health, who have the right to use health services, according to their affiliation system, which will ensure the quality of the service and the defense of the user.	-NGOs, -Foundations,	Representatives of user's voices and rights and, in some regions or countries, care providers to users and/or to informal caregivers.	
		Enabler Organisation: Helps ecosystem stakeholders to strengthen the capacity to innovate and to	-EIT Health -EIP on AHA - AAL - Digital Innovations Hubs	Overarching organisations or networks, associating different stakeholders and/or	

		match demand and supply	-Non-profit associations -Clusters	organisations and providing them support, very relevant for the future sustainability of GK	
		Policy makers: international, national, regional and local decision-making authorities	-European Commission - Regional and national ministries - City councils - EIP on AHA reference sites	Stakeholders that develop policies, laws, regulations and guidelines that may enable or hinder the future adoption, use and upscale of the GK platform.	

Table 3.Table supply group, entity types and definition of the main roles in Ecosystem

ENTITY GROUP	ENTITY CATEGORY	ENTITY TYPE	ORGANISATION	MAIN ROLE IN ECOSYSTEM	ENTITY NAME
SUPPLY	PARTNER (organisation that are engaged in the ecosystem)	Gatekeeper platform developers: Organisations intimately familiar with specific operating systems and hardware components, to create and optimise the functions of the Gatekeeper platform.	-Tech SME -University -Research Centre	Organisations that can provide maintenances and technology evolution of GK platform and training assets	
		Gatekeeper Consultant: Organisations that provide expert advice in a specific area such as business, healthcare, law, regulatory compliance...	-Consultant SME -Solution enabler business	Organisation that can design local ecosystems, impact assessment, re-engineering, pilot phase planning and evaluation	
		Research & Innovation: organisations that provide activities aiming to establish new knowledge	-Tech SME -University -Research Centre	Provides continuous innovation in the Ecosystem	

		and/or to explore the feasibility of a new or improved technology, product, process, service or solution.			
		Standards Developing Organisation (SDO): is an organisation whose primary activities are developing, coordinating, promulgating, revising, amending, reissuing, interpreting, or otherwise producing technical standards that are intended to address the needs of a group of affected adopters.	-SME -Industry -Technology Centre	Organisations that are active contributors in SDO working groups	
	PEER PRODUCER (organisation that provide services or product, tech nature)	Platform service providers: organisations that allows development teams to build, test, deploy, manage, update, and scale applications faster and more cost-effectively.	-IoT Healthcare -SME/Midcap -Industry	Companies able to design, install, deploy and operate full Gatekeeper ecosystem	
		AI, Big Data Application/solution supplier: Organisations that develops software based on the specific needs of a group of end-users.	-Start up -Tech SME -University -Technology Centre	Application designers, innovation	
		Medical devices: Medical device companies	-SME -Industry	Market devices Prototyping	

		develop medical and surgical instruments to diagnose, treat or prevent various medical conditions.	-Technology Centre	Smart devices (AI enabled)	
		Consumer devices (non-medical devices): Organisations that provide "smart" or internet-connected devices to individuals or in their homes.	-SME -Industry -Technology Centre	Market devices Prototyping Smart devices (AI enabled)	
		Local deployer & support: Organisations that provide local support and deploy services.	-Maintenance SME -System integrator	Home installations First line customer support Maintenance	
		Professional Caregiver: People who provide care to those who need supervision or assistance in illness or disability. They may provide the care in the home, in a hospital, or in an institution. Although caregivers include trained medical, nursing, and other health personnel, the concept also refers to members of the clergy, teachers, social workers, fellow patients.	-Social care -Nurse	Professionals providing care and human interface with a person in need of assistance	
		Health care Service Provider: A health professional organisation may provide health	-Hospital -Nursing home -Day care centre	Organisations providing services at local/regional scope. They provide essential services that	

		care treatment and advice based on formal training and experience. The state laws define the scope of practice for medicine, nursing, and a number of allied health professions.		promote health, prevent diseases and deliver health care services to individuals, families and communities based on the primary health care approach	
		Social care service provider: organization which its central role is the provision of care and support elderly with needs emerging from independent living, social connection, wellbeing, illness or disability.	-Private companies -Nurse Homes -Municipality -NGOs	Organisations delivering social care services directly to senior people and their caregivers	
		Integrated care service provider: Organisations that aim to facilitate the appropriate delivery of health care services.	-Hospital -Nursing home - Intermediary care services	Health and social care integration	
		On-line health information and support provider: Organisations that provide information through the network.	-Wellbeing portals and Apps	Provides guidelines, advice	

Table 4. Table impact group, entity types and definition of the main roles in Ecosystem

ENTITY GROUP	ENTITY CATEGORY	ENTITY TYPE	ORGANISATION	MAIN ROLE IN ECOSYSTEM	ENTITY NAME
DEMAND	PEER CONSUMER	Patient: a person receiving or registered to	Individuals	Person consuming health services	

		receive medical treatment.		from health service providers	
		Citizen: someone who lives in a particular town and is entitled to enjoy all the legal rights and privileges granted by a state to the people in a constituency. They are obliged to obey its laws and to fulfil their duties as a citizen.	Individual	Person generating personal data and consuming services from on-line providers	
		Informal Caregiver: Also called family caregivers, are people who give care to family or friends usually without payment.	Individuals, family...	Person(s) affectively connected to assisted person	
		Professional caregiver. Same definition as in Peer Producer. In this case the Professional caregiver performs as consumer of technological services.	-Medical staff -Physical therapists...	Professional using technology to provide service to Assisted person	
		Health care service Provider: Same definition as in Peer Producer. In this case the Health Care service provider performs as consumer of technological services.:	-Hospital -Primary care centres	Organisations consuming technology services and data to produce and deliver AHA services	
		Social care service provider: Same definition as in Peer Producer. In this	-Nurse Homes -Municipality	Organisations consuming technology services and data to produce and	

		case the Social Care service provider performs as consumer of technological services.		deliver health and AHA services	
--	--	---	--	---------------------------------	--

(*) **NOTE:** this column will be completed in the following months, capturing the information compiled by each partner

By departing from the above-referred information, the following figure was created:



Figure 1. Initial GK ecosystem mapping

The GK ecosystem is broader than the partner within the consortium. A first layer of additional stakeholders directly involved in the project are other entities that are participating in pilot sites. But there is also a wider ecosystem, including stakeholders in the different regions involved in the pilot sites, and those to be involved in future twinning projects and other initiatives.

A second layer is composed of entities that are not directly connected now but who can benefit from the GK solutions and results and can thus be also identified as stakeholders in the project. An example are future proposers within the GK Open Calls.

The stakeholder mapping in the project has been implemented iteratively following three main steps:

As a first step, during the Milton Keynes meeting, the team worked and presented the initial Gatekeeper ecosystem, considering the different categories of organisations.

As a second step and during the second year of the project, to map the Gatekeeper ecosystem, the partners need to identify their own context (layer 1) and network (layer 2 and 3), using, for the layer 1 the empty table attached in the Annex A and as a reference the

example provided in this document. For the layers 2 and 3, the task 2.1 will provide appropriate templates for such purpose.

As a third step, all information provided by the different partners will be merged and considered to create the final Gatekeeper ecosystem.

2. Analysing the health platforms landscape through a business perspective

As portrayed, the GK ecosystem is broad and multi-layered. Besides the mapping, this report aims to provide background knowledge and further definitions on the business perspective of the ecosystem, to complement T2.3, that has collected user needs and T2.4, that maps and explores the underlying values through the co-creation workshops.

In the following sections we provide context information on the platform landscape, followed by the analysis of the business ecosystem and lead to the following section with the definition of the GK business ecosystem and value proposal.

2.1 Platform landscape

Digitally-enabled business models have radically changed the world around us over the past decade. As many of the services that companies offer have transferred from bricks-and-mortar branches to online channels, new businesses have been created bringing new-found levels of convenience and choice for consumers. But not all companies have thrived in this period of extraordinary disruption: the business models of companies that were not adequately prepared have been compromised, in some cases irreparably.

In the healthcare sector, however, these shifts have not yet caused a major impact. Incumbents, whether medical technology, pharmaceutical, firms, payers, health providers, or other players, have generally been reluctant to build similar kinds of disruptive digital service models for their industry. As a result, many customer experiences have changed little in 20 years. There is lack of cost transparency, difficulty in comparing providers, and a disconnection between prevention, diagnosis, treatment, and aftercare services.

But a combination of socio-economic and policy changes, technological advances, and structural shifts are set to change the present described situation. Healthcare is now primed for its own period of upheaval and disruption. An aging society is expected to double healthcare costs from an aggregate US\$8.4 trillion in 2015 to US\$18.3 trillion in 2030. Chronic disease could result in US\$47 trillion in lost productivity over the same period. What's more, consumers accustomed to comparing products, services, and prices online have come to expect similar conveniences in other areas of their lives, including healthcare. These developments call for new approaches in how healthcare is organized, offered, and paid for.

Strengthening prevention and implementing value - or outcome-based reimbursement models are solutions to this challenge. In the latter, services and payments are bundled together for specific conditions across the whole patient journey, from diagnosis and pre-treatment to treatment and post-treatment care. In these models, the systematic measurement of outcomes is used to improve quality and reduce cost. But acquiring the necessary levels of coordination and measurement is not straightforward. It calls for sophisticated digital platforms that bring all players in the healthcare system together under one umbrella.

2.1.1 Healthcare and digital ecosystems are converging

The healthcare ecosystem is increasingly joining forces with digital services companies to improve patient outcomes. Digital companies like Google (Verily, Deep Mind) and Microsoft are expanding their healthcare footprints. GlaxoSmithKline and Verily are forming Galvani Bioelectronics to develop solutions for chronic disease¹. Sanofi and Verily have joined forces at OnDuo to tackle diabetes, while Roche acquired MySugr to become the leading open platform in diabetes management. Philips is partnering with Salesforce to extend their HealthSuite digital platform. Startups like Flatiron Health which raised funding from Google Ventures are partnering with established players like Roche to bring personalized medicine in oncology to market². Boston Scientific is developing a data-driven digital health solution for chronic cardiovascular care³. And GE (Health Cloud) and Siemens Healthineers (teamplay) are investing heavily in digital platform capabilities. Taken together, these developments highlight how disruption is pushing the industry to converge and join forces to deliver better patient outcomes

2.1.2 Medical technology companies are shifting from selling products to providing services

Medical technology companies are on a journey to the new, transforming from products-based businesses through 'integrated services' and beyond to 'living services'. This journey is taking place in three waves:

1) Transform the core

Standalone devices are augmented by data exchange and network capabilities that enable product enhancements to leverage the data they generate. That might be something as simple as a mobile application that accesses a medical device to enable new value-added functionality for patients.

2) Grow the core

Network capabilities are enhanced to allow continuous deep data access (through a cloud service, for instance) enabling connected solutions to combine products with integrated services and redefine customer experience. This enables medical technology companies to change their commercial models from a product to a (product-as-a-) service by facilitating, for example, pay-per-use reimbursements for their devices.

3) Grow the new

Companies create highly sophisticated 'living services' that are able to constantly learn and evolve. By wrapping themselves around everyday activities, these services can intuitively learn individual habits, likes and dislikes, and adapt themselves to changing needs.

¹ <http://www.galvani.bio/>

² http://www.roche.com/de/investors/ar16d_partnership_biotech_amy-abernethy.html

³ <http://news.bostonscientific.com/2016-01-28-Boston-Scientific-and-Accenture-Develop-Data-Driven-Digital-Health-Solution-to-Help-Improve-Patient-Outcomes-and-Reduce-Cost-of-Treating-Chronic-Cardiovascular-Conditions>

In the medical technology industry, this could potentially transform areas like proactive clinical decision-making and patient support, treatment adaptations, proactive caregiver consultations, and much else besides. But it requires access to vast amounts of patient data for the application of advanced analytics or artificial intelligence (AI) to gain insights and derive data-based predictions. It also likely requires close cooperation or partnerships between different stakeholders in the healthcare ecosystem, facilitated by digital platforms

2.1.3 Hallmarks of a successful platform

"A platform is a business based on enabling value-creating interactions between external producers and consumers. The platform provides an open, participative infrastructure for these interactions and sets governance conditions for them. The platform's overarching purpose: to consummate matches among users and facilitate the exchange of goods, services, or social currency, thereby enabling value creation for all participants."

In 2013, as many as 14 of the top 30 global brands by market capitalization were platform-enabled companies.¹ And the numbers have grown since then. In consumer goods and services, platforms are already a reality, and market success is not only determined by the product, but also by the platform strategy. These platforms can be merciless in the way they devour incumbents. Take Blackberry. At the beginning of the smartphone era, their mobile phones were extremely popular and comparable with those of other vendors. But their lack of a competitive software platform led to a decrease in their relative market share from 10 percent in 2007 to less than 1 percent in 2016.

So, what does this mean for medical technology companies as they look to develop their own platforms? First and foremost, they must think about the user needs of their stakeholders. Consumers love the convenience and near limitless opportunities provided by platforms like the Apple App Store, the Android Play Store, and the Amazon Prime. They have equally high expectations when listening to music, watching videos, or buying products through platforms. Stakeholders in the medical technology ecosystem are no different. They are used to connected, convenient, high-value, and seamless platform experiences as part of their daily lives. And they will expect the very same from any medical technology platform solution.

As medical technology companies invest in platforms, they must be careful not to force their development into one dedicated product, neglecting to articulate the value of shared benefits and the need for underlying organizational changes. Platforms rely on collaboration within an ecosystem, and no company can create sufficient value on its own to make a platform a success. Thus, the pivotal question for a medical technology company is this: how can we not only create value for ourselves, but also enable others to create or co-create value for a larger audience?

Successful platforms that achieve this ambition share four important characteristics:

1. Connectivity/plug and play/openness.

Effective platforms help enable seamless interactions between the producers/providers of products and services and the consumers of those products and services by ensuring easy connection and access to platform technologies. They provide open and solid API management to developers and users to manage the complexity of interactions and enable them to participate, contribute, and grow the platform. Organizations must be able to easily connect to

and collaborate on the platform, either to create and offer new products and services or to co-create in building new value on top of existing products and services. This is key to reaching a critical mass of consumers.

2. Data utilization

The exchange of data is at the heart of platform matchmaking. Successful platforms capture and consolidate meaningful data about participants and use it to facilitate connections between additional producers, providers, payers, and consumers, while ensuring clarity about data ownership and user rights.

3. Convenience

Successful platforms address the 'hyperlife' of their consumers by dominating their markets with the fastest, most convenient, most seamless, and easiest user experiences at all times and in all places. No brand, however successful, is immune from the threat of a more convenient competitor. Take the recent history of the music business. After Napster broke the monopoly of physical sound mediums like vinyl and CDs, iTunes came to dominate the market. But it subsequently lost ground to more convenient competitor streaming services like Spotify

4. Gravity/attraction

Achieving a critical mass of both producers (those supplying value) and consumers (those consuming value) on a platform is key. eBay, for example, needed both sellers and buyers to thrive. Leading companies therefore pay a great deal of attention to designing forms of 'social gravity' on their platforms, using incentives, reputation systems, and pricing models to increase interactions between different types of users.

2.1.4 The value of platforms for the medical technology ecosystem

It goes without saying that platforms in the medical technology sector would be operating in a highly regulated and tremendously complex ecosystem, comprised of very different stakeholders. An effective platform must therefore understand who the various players are, as well as their different ambitions, characteristics, and needs. The following table explores some of the most prominent

Table 5. Table on needs of relevant stakeholders

STAKEHOLDER	AMBITIONS	CHARACTERISTICS	ADDITIONAL BUSINESS NEEDS	STRATEGIC APPROACH FOR STAKEHOLDER GROUP
Medical devices	Sell products and services for better healthcare outcomes and revenues	<ul style="list-style-type: none"> • Large/non-agile • Insights into diagnostics and treatment • Investment capability 	Utilization of insights for product development	Provide the platform ('from product to service')
Platform services provider	<ul style="list-style-type: none"> • Sell services 	<ul style="list-style-type: none"> • 'Breathe' digital 	Bridge from general data to medical	Connect to medical data and help them

	<ul style="list-style-type: none"> • Gain access to healthcare/patient data • Attract medical consumers 	<ul style="list-style-type: none"> • Tremendous insights into consumer characteristics • Own large digital capabilities 		'understand' medicine
Professional caregivers	<ul style="list-style-type: none"> • Improve treatment quality outcomes • Increase diagnostic and treatment speed and efficiency 	<ul style="list-style-type: none"> • No time • Less digital knowledge • Satellite entity (not part of a connected health environment) 	Connectivity of relevant data (diagnostics, labs)	Be part of a connected healthcare environment that adds value to their businesses
Healthcare service provider	<ul style="list-style-type: none"> • Improve clinical efficiency and revenue • Operation excellence 	<ul style="list-style-type: none"> • Less willing to change • Use of fragmented clinical systems • Financial Limitations 	<ul style="list-style-type: none"> • Low effort for implementation and maintenance • Increase capacity • A 'one-stop-shop' 	Offer a simple but comprehensive interface to existing clinical systems
Payers	<ul style="list-style-type: none"> • Decrease healthcare costs • Improve long-term outcomes 	<ul style="list-style-type: none"> • Highly regulated data security • Slow to change • Short-term view 	<ul style="list-style-type: none"> • Transparency on a treatment outcome • Data security 	Offer a secure way of entering, outputting and matching of data
Patients	<ul style="list-style-type: none"> • Improve treatment outcomes • Increased convenience 	<ul style="list-style-type: none"> • Need for information and involvement • Need for interaction and automated guidance 	<ul style="list-style-type: none"> • Easy to use • Informative • Increase quality • Increase speed 	Offer convenient and easy-to-use information about their own healthcare
Health and care agency	Decreased healthcare costs	Maximum of regulatory limitations	Insights into epidemiology of diseases and treatments	Offer quick and easy overview of epidemiology insights

Looking at this highly complex ecosystem, one thing becomes clear above all: that a winning medical technology platform strategy must focus on specific value propositions for each of the different groups of stakeholders in an integrated manner

If a company does not understand the full spectrum of stakeholders and their specific needs, it will never be able to build the trusted relationships needed to create a powerful, thriving medical technology platform

Success rests on attracting a broader range of participants than just physicians, labs, or pharma companies, important as those relationships are. Medical technology players should also seek out partnerships in areas like consumer products or consumer care. For example, companies like Nike, Adidas, or Fitbit could be connected to a medical technology platform to leverage real-world data and match it against laboratory sequencing algorithms. But in developing these partnerships, companies must never forget one of the fundamental principles of every healthcare-related activity: to ensure data and platform security and quality control are maintained at the highest possible level.

Healthcare has lagged behind other sectors, particularly retail, in the use of digital platforms. But as patients increasingly expect platform-enabled transparency and convenience in their healthcare, and as the industry moves increasingly towards models of outcome-based treatment, that is now set to change.

2.2 Creation and management of the GK ecosystem

This deliverable focuses in setting the strategy for the building of the Gatekeeper Ecosystem within the project and set the basis for the growth and evolution of the ecosystem ahead of the end of the project. In the next sub-sections, we make a revision and extend the analysis of business ecosystems dynamics and management that will serve as the bases for the mentioned strategy and its implementation plan definitions.

2.2.1 Key definition of an ecosystem

2.2.1.1 Business ecosystem

Business networking has existed for hundreds of years. It started as a loosely connected network of many organisations, many as small as one person. In the second half of the 20th century, business challenges, as well as business network pervasiveness, have evolved due to the development of social, economic, political, and technological systems, according to lansiti and Levien (2004a).

The concept of the business ecosystem was introduced by James F. Moore (1993) with the description: "An economic community supported by a foundation of interacting organizations and individuals--the organisms of the business world. This economic community produces goods and services of value to customers, who are themselves members of the ecosystem. The organisation members also include suppliers, lead producers, competitors, and other stakeholders. Over time, they coevolve their capabilities and roles, and tend to align themselves with the directions set by one or more central companies. Those companies holding leadership roles may change over time, but the function of ecosystem leader is valued by the community because it enables members to move toward shared visions to align their investments and to find mutually supportive roles."

2.2.1.2 Success in creating and sustaining Business ecosystems

Success in creating and sustaining business ecosystems is reflecting a viable, growing and healthy business ecosystem (Karhiniemi 2009). In the creation phase, favourable selections in value proposal, in core strategic decisions, and in ecosystem promise are chosen. As for sustaining the business ecosystem, it essentially embodies an active business ecosystem management where the business ecosystem is continuously monitored as well as its healthiness is actively improved. Furthermore, the ecosystem is shaped towards promising insights with strategies and related decisions. The ecosystem healthiness is measured with productivity, robustness and niche creation introduced by lansiti and Levien (2004a).

2.2.1.3 Operating leverage

Iansiti and Levien (2004a) introduce a concept of operating leverage in a business ecosystem, which systematises value creation with a series of assets to be easily across the business network (operating leverage sharing). **Operating leverage** consists of:

- High-value, sharable assets (e.g. process tools, libraries)
- Leveraging direct customer connection (e.g. effectiveness in value chain)
- Creating and managing physical and information hubs (e.g. shareable resources)
- Supporting uniform information standards, for instance, APIs, and purchase histories
- Creating, packaging and sharing state-of-the-art tools for innovation building blocks (e.g. optimised design tools)
- Establishing and maintaining performance standards (e.g. monitoring performance within the ecosystem)
- Building or acquiring financial assets for operating leverage (e.g. injecting venture capital money)
- Reducing uncertainty by centralising and coordinating communication (e.g. simplifying communication),
- Reducing complexity by providing powerful platforms (e.g. software platform).

We recognise from this list, many of the assets that GATEKEEPER is meant to create and that will be the building blocks of our ecosystem creation and management strategy.

2.2.1.4 Network externalities and switching costs

Switching costs are about the stickiness or cost in making alternative choices for the future. The previous selections in history, whether they are technology, methods or brands bound us and systems to the existing assets. Switching costs are ubiquitously present in the information economy, although the forms can vary much. It can be an investment to another system replacing the previous system, time and cost used to make the systems working and compatible, learning a new system, overcoming mindset and behaviour of the previous working paradigms, contractual commitments, partnership loyalties and specialisation and getting the performance and quality to a comparable level.

Usually, switching costs are undervalued; the direct investments, estimated working time etc. are calculated, but the indirect multiplicative effects as well as psychological, emotional, and social costs are trivialised (Gourville, 2003). When network externalities exist, collective switching costs apply, thus the combined switching costs of all members.

When the switching costs are substantial, users and companies face lock-in; they are tied to a certain product or a system. This can be a source of enormous problems and headaches, or substantial profits depending on the management of switching costs. In order to win the markets with switching costs, the need to be strategically managed, neither to be avoided nor (over) embraced. Additionally, it is necessary to consider the full life-cycle of a lock-in to understand and predict actions of ecosystem members in each cycle phase.

Thus, in GATEKEEPER we will consider the barriers, strategies, selections, and areas where switching costs might be significant or a risk for the change.

2.2.2 Business Ecosystem Creation

Generally speaking, there are two foundational components in a business ecosystem creation. Firstly, it is a necessity to create value within the ecosystem in order to attract and retain members in addition to providing growth potential for the ecosystem. If these foundational criteria are not met, the ecosystem will wither. Secondly, there needs to be a way to share the value within the ecosystem. (Iansiti and Levien, 2004a, p.91).

Value creation for the ecosystem is essentially innovation within the ecosystem and customers outside the ecosystem. In order to have such a big value proposal that it is possible to create a new business ecosystem, the innovation needs to be disruptive or radical innovation.

Additionally, as Iansiti and Levien (2004a) point out, there needs to be a way to share the value as well. Thus, to understand the value sharing, an appropriate ecosystem structure needs to be crafted according to the discussion in next subsection. Furthermore, in order to distribute value in the ecosystem, it is a requirement to understand how the innovation is diffused and how network externalities are present.

2.2.2.1 Creating New Business Ecosystems

In the increasingly interconnected business networks, a new business ecosystem can fundamentally be created two ways. In the first case, a strong asset or vision already exists (or is researched), which is leveraged by proposing a value creation and value sharing methods for the ecosystem. Once vision and opportunity have been identified, the business ecosystem structure and strategy can be made, which requires an understanding of the possible species and roles. Then, the plans are applied to a totally new market or industry to get the ecosystem into operation.

The second way is through analysing the existing business ecosystem, where a new business ecosystem, member interaction, and networking are to be created. Consequently, the existing ecosystem is analysed, ecosystem evolution and opportunity are elaborated. A vision, that is to say, a prediction about the future from the perspective of an ecosystem is determined. The vision needs to ensure growth opportunities and give ground on healthy operations for the business ecosystem as a whole. On the basis of the vision, a strategic intent, that is, where the business ecosystem and company want to be in the future, as well as mission and strategy, are to be built.

To sum up, the first case creates a totally new operating leverage proposal (likely to a new industry or market as well), creating new value for the business ecosystem, attracting new members and drawing existing members from other ecosystems. In the second case, the business ecosystem process is based on a new or recreated operating leverage proposal that is going to be adapted to an existing business environment where the value is both created as well as drawn from the activities.

In the case of GATEKEEPER, the most likely situation (after a deep analysis to confirm or deny) would be a combination of the two ways. As it was previously described in Deliverable 9.1-Section 4.1 (Pérez, Ail et al. 2020), new ecosystem shall be created by GATEKEEPER upon two Business Ecosystems: The healthcare Ecosystem and the technology Ecosystem. This process would perfectly fit into the first way of ecosystem creation. Moreover, most of actions in GATEKEEPER project are oriented to the creation of the leverage proposal, i.e. new technology developments, standards, and empiric evidence creation. On the other hand, the GATEKEEPER ecosystem shall be implanted within existing healthcare Business ecosystems represented in GATEKEEPER by the pilot

sites. This process of "transformation" is step-by-step followed according with the 5 stages innovation pathway. In conclusion, the project's strategy for ecosystem creation have to consider both approaches in a coordinated way.

Regardless of the approach followed, a very concrete way of establishing a new business ecosystem is to start with a set of strategic options suggested by Gawer and Cusumano (2008), from a business and technology perspective. The business actions to be considered are: an essential problem for many industry players, creating and preserving complementors' incentives to contribute and innovate, protecting main sources of revenue and profit and maintaining high switching costs to competing platforms. Accordingly, the technology actions to be considered are: solving an essential "system" problem, facilitating external companies' provision of add-ons, keeping intellectual property closed on the innards of your technology, maintaining strong interdependencies between platform and complements

2.2.2.2 Value creation and value sharing

There are various ways to create economic value, which can be shared within the business ecosystem, customers and other members. There is a vast bibliography, tools and guidelines on value creation that we recommend consulting for the design of the Healthcare and technology Ecosystem. Iansiti and Levien (2004a) state the **value creation** as "operating leverage" in ecosystems, which are a series of assets that can be scaled and shared by a broad network of business partners. Operating leverage, essentially broadly defined as innovation, can be obtained by the development of physical, intellectual, and financial assets.

Another important classical reference is Christensen et al. (2004) who introduced a disruptive innovation theory, used as fundamental theory in every business school in the world.

Value sharing is the second foundational components in a business ecosystem creation. The keystones in an ecosystem usually couple value creation with value sharing, but value sharing is not simply a matter of deciding whether to share value or not, or how much value should be shared, it is a significant operating challenge. It is a question of sharing value through a massive network of business partners and the cost of sharing value with each individual business partner must be very low and preferably decrease with the size of the network. In order to enable value sharing in the ecosystem there must be ways to share problems throughout the network, sustain value creation and balance value creation and sharing. The value sharing ways and methods vary depending on the ecosystem, however, as keystones focus on improving the overall health of the ecosystem (performance, robustness, niche creation), the efficient value sharing ways generally consist of robust platforms, easy-to-use APIs, intellectual property licensing, shared operations, enabling software tools, and the like. (Iansiti and Levien, 2004a).

3. Gatekeeper ecosystem management

This section describes the initial plan for the building of the new Gatekeeper Ecosystem and the enlargement strategy to achieve a critical mass enough to sustain its further evolution and growth after the end of the project.

The three pillars for this process of creation and market take-up are:

1. **Gatekeeper ecosystem.** GATEKEEPER consortium is the seed of the Gatekeeper Ecosystem. This elementary structure has many of the components (i.e. keystones, and other species) from which the ecosystem is going to be constructed. The seed ecosystem members are jointly working around a common work plan and have achieved a high-level alignment towards global objectives. Now the process will be focused in the consolidation through long-term partnerships and alignments towards growing and expansion objectives; maturing the Value Proposition and Operating Leverage; and enlarging the network with new members to reach the critical mass. This process is described in the section 3.1
2. **Transforming pilots** (i.e. current Healthcare-business ecosystems) into nodes of the Gatekeeper Ecosystem network. This is perhaps one of the most challenging actions in the ecosystem building plan due to the complexity, heterogeneity and local political and regulatory frameworks of each pilot. However, they would be the real foci of expansion throughout Europe that worth the efforts of such transformation. We analyse this process in the section 3.1
3. **Generating awareness** of the value of the Operating Leverage continuously created and renewed by that Gatekeeper Ecosystems as the enabler for the healthcare market take up and the reach of millions of European citizens. Due to the limited budget of communication in GATEKEEPER, this would lead to re-dimension our communication strategy to align these efforts with the ecosystem enlargement through awareness creation.

3.1 Gatekeeper Ecosystem creation process

Section 2.6.3 describes briefly the theoretical approaches for creation of ecosystems: a) by design of a new ecosystem, and b) by transformation of existing ecosystems. Both processes are not mutually exclusive. Moreover, in the case of GATEKEEPER we have to execute both processes in parallel, since they sustain really the first two pillars of our strategy. The next figure is the schematic description of the creation process adapted from the referenced methodology (Iansiti and Levien 2004a).

The whole process is split into five phases. For every phase we define high level actions that shall be performed according with a very specific program, and which are aligned with activities and resources defined in the DoA. Although the schema may represent a cascading process model, iterations will take place as consequences of evolution and maturation of the process, and interactions between both columns.

GATEKEEPER has taken the strategic decision to create the GATEKEEPER Ecosystem in Europe, being it a contractual commitment of the project, it is important to design and agree how to proceed for its full realization, which is the topic of next sub-sections. The next four phases will shape the actual realization of that commitment, representing the mayor challenge of gatekeeper towards the impact on sustainability achievement.

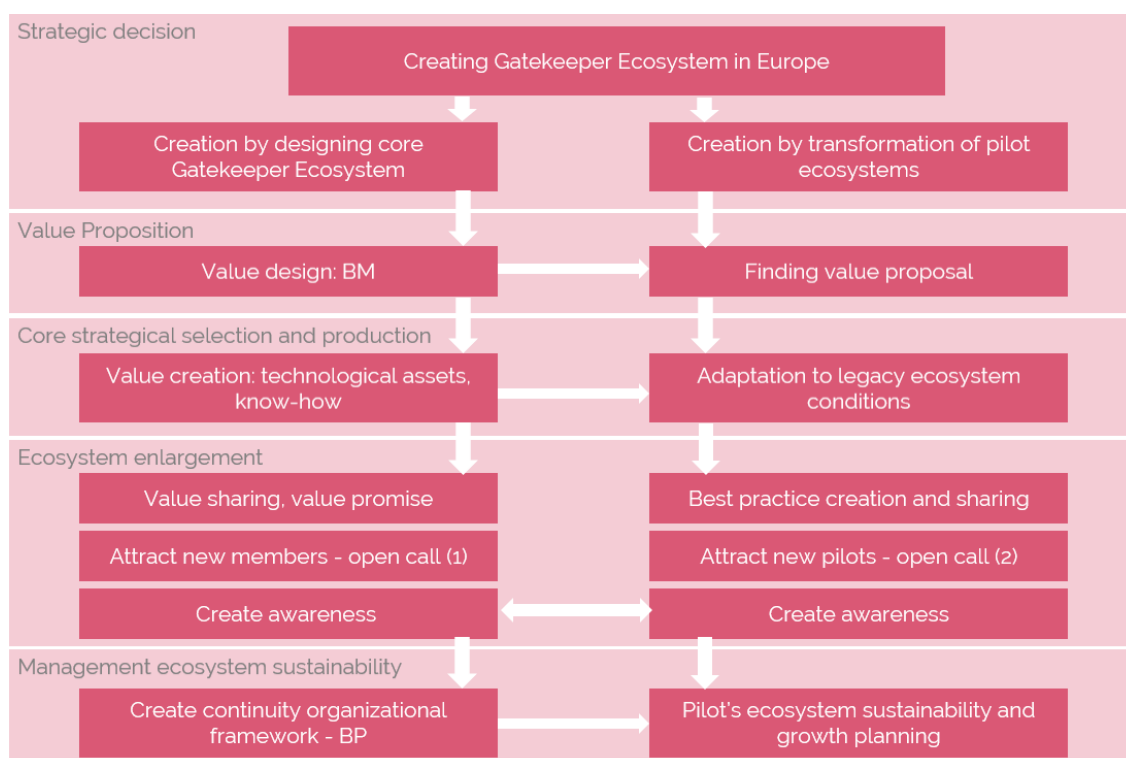


Figure 2. Creation process of the GATEKEEPER Ecosystem. Adapted from (Iansiti and Levien 2004a)

3.1.1 Value proposition

A value proposition is a promise of value to be delivered, communicated, and acknowledged. It is also a belief from the customer about how value will be delivered, experienced and acquired. A value proposition can apply to an entire organization, or parts thereof, or customer accounts, or products or services (Kaplan and Norton 2004). In the case of the GATEKEEPER Ecosystem creation process, it means what is the value that the ecosystem can provide to its members, i.e. the companies, organisations and institutions engaged at the different stages of the Ecosystem creation and enlargement.

With this collection, we present the simplified value proposition for the GATEKEEPER Ecosystem's members with a) representing the supply side (mainly the private companies) and b) representing the demand side (mainly the healthcare providers). We assume that they are users of the GATEKEEPER platform but the ecosystem will not be excluding those which are not the users at the moment of joining.

Here we follow the logic of the value proposition canvas by Olstervalder et al. (2014)

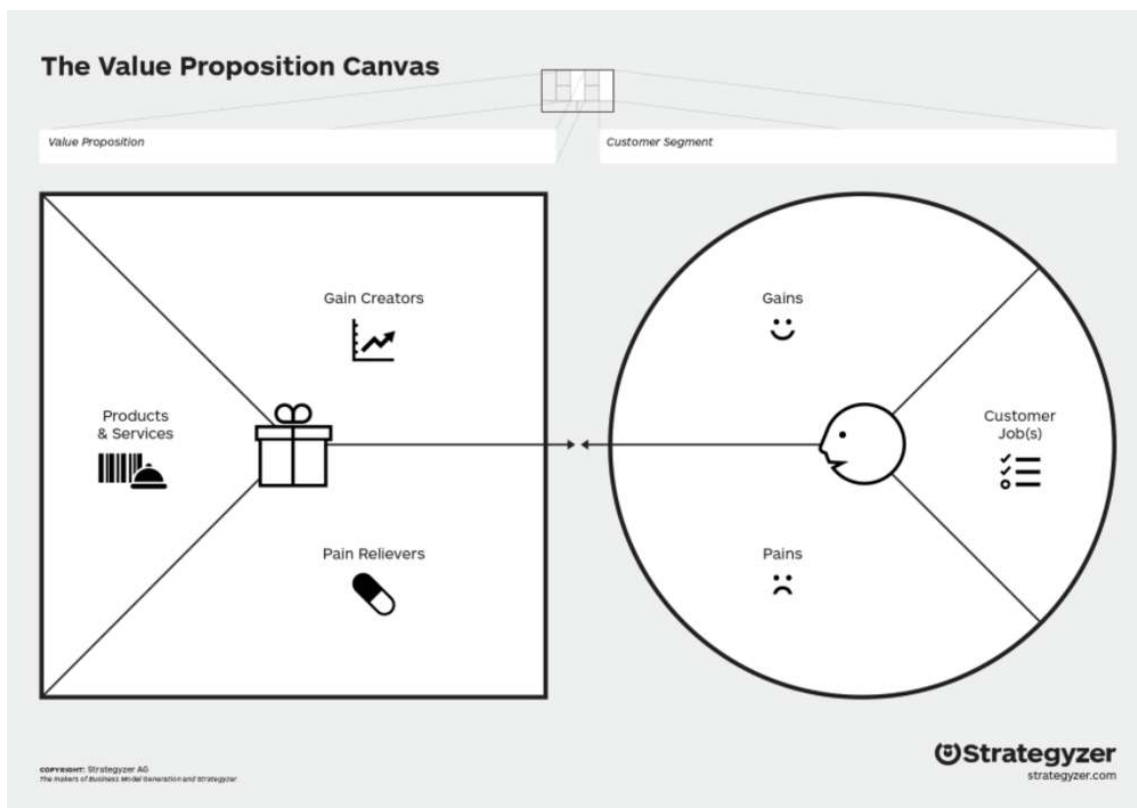


Figure 3 Value proposition canvas (Olstervalder et al. 2014), strategyzer.com

1. Potential members of the GATEKEEPER ecosystem:
 - a. **Supply side:** Companies that delivers the solutions in the area of Smart Living Environments, including but limited to the users of the GATEKEEPER platform
 - b. **Demand side:** Healthcare providers, insurers, regions, national and local authorities, including but not limited to the users of the GATEKEEPER platform
2. Job-to-be-done (What are the jobs the potential members of the GATEKEEPER ecosystem are trying to get done in work or life? What basic needs do they have?
 - a. Provide the high-quality products and services that improve health, create value and bring the revenue, fight the competitors and win the trust of the healthcare providers
 - b. Provide the best quality care at the lowest cost, integrate the used tools and solutions
3. Pains (What is annoying or troubling the potential members of the GATEKEEPER ecosystem? What is preventing them from getting the job don and hindering their activities?)
 - a. High competition on the market, not fully developed digital solutions, lack of compatibility and standards, lack of understanding of the procedures of procurement of the public organisations
 - b. Fragmented solutions, scarce financial and human resources that can be spent on deployment and integration of the solutions, lack of compatibility and universal standards

- c. Fragmented market, with different healthcare systems, funding schemes, procurement systems, organizational background, cultural aspects and languages.
4. Gains (What would make the potential members of the GATEKEEPER ecosystem happy? What outcomes do they expect and what would exceed their expectations?)
 - a. New customers for the core products, new partners for the developments of the new products, new channels of communication and reaching out to the customers, development of new use cases, cross-selling, scaling, internationalisation
 - b. Better provision of the high-quality integrated services at lower price, understanding of the available offer, participation in the designing of the solutions, expanding the network of collaborators and partners
5. Pain relievers (How can you help the potential members of the GATEKEEPER ecosystem relieve their pains?)
 - a. By bringing all the actors together to cooperate in the conditions of healthy competition, providing the forum to share the knowledge, learnings and resources, and create the partnerships
 - b. By linking the demand and supply side, creating the forum to discuss the challenges, needs and expectations of the public and private organisations and how to best leverage the GATEKEEPER platform to support the objectives of the partners
6. Gain creators (What can we offer to the potential members of the GATEKEEPER ecosystem to help them fulfil the gains?)
 - a. Operational Healthcare-technology Ecosystem that connects the stakeholders from different sectors and levels (national, regional, national, European) around the GATEKEEPER focus theme of Smart Living Environments
 - b. Networking, exchange of expertise, co-creation, joined procurement
7. Products and services (What are the products and services we can offer to the potential members of the GATEKEEPER Ecosystem so they can get their job done?)
 - a. GATEKEEPER platform, events, matchmaking, information resources, support in joint proposals for the EU projects
 - b. GATEKEEPER platform, events, matchmaking, information resources, support in joint proposals for the EU projects

To sum up, the GATEKEEPER Ecosystem will offer the following value to its members:

- Reaching out to new customers for the core services and products,
- Reaching out to the collaborators for the developments of the new services and products and joined application for the development funding,
- Building the competitive advantage of the companies by aligning and integrating their solution to create a viable and valuable package of services and products for the use of healthcare providers,
- Learning about the procurement procedures to follow,
- Expanding the network,

- Matching the demand with supply side,
- Higher participation of the healthcare providers in the development of the services, and products that increases their functionality and applicability.

3.1.2 Ecosystem enlargement

GATEKEEPER elected to concentrate its strategy in values as the main driver, which are much broader than usual needs and requirements and are dynamic. For example, being safe nearby other people was a very low-rated value one year ago, when compared with the current feeling, due to the COVID19 pandemic.

The core strategy of the project is thus grounded on what stakeholders find important, what is at stake and guides their actions. These values are deeply rooted in organizational cultures, habits and procedures but they can evolve as new elements are brought forward.

GATEKEEPER uses a dynamic approach – valuation (from static to dynamic understanding of values) – to consider the initial values rated as essential in the first approach to the different users and stakeholders, but also accompanies their evolvement, change and refinement as innovation is brought to these actors and their valuation adapts to the new realities.

The key pillars of the valuation framework are thus value multiplicity, dynamism and valuation implications and these are fully dependent, to be effective, of an integrated ecosystem of actors – people and organisations – that relate to each other. Within this context, the business perspective of the GATEKEEPER ecosystem acknowledges these relationships and further attempts to map the main types of stakeholders in three main categories: IMPACT, SUPPLY and DEMAND, as already explained in the chapter 1.2

3.1.3 GATEKEEPER Ecosystem enlargement

The GATEKEEPER ecosystem will be a living, dynamic structure that will evolve, develop and grow, during the project implementation and afterwards. The growth will be gradual and follow the process visualised in the Figure 4. However, we take into account the fact that as a living system, some of the developments and engagement of certain group of stakeholders might be a result of a different developments at the different stage.

The enlargement plan is built as a four-step process. At the beginning, the GATEKEEPER project partners are engaged. This means 42 partners from 13 countries representing research institutions & academy, healthcare providers, networks and enabler organisations and large and small companies. This is a natural first step in the ecosystem building and maturing process. The consortium constitutes the core of the ecosystem and its first layer.

The second step will be to engage the project partners affiliated entities. This will extend the ecosystem beyond the consortium and bring the new partners for exchange, networking, matchmaking and work together. Those will be mainly platform developers, consultants, research & innovations organisations and SDO members.

The third step will be engagement of the local, regional, national networks of partners. This includes but is not limited to platform service providers, medical devices regulators, professional caregivers, local deployer & support organisations, online health information

and support providers, big data and AI applications suppliers, producers of consumer devices, healthcare service providers, and integrated care service providers.

At this stage the ecosystem is expected to be fully mature and ready to attract and engage the external stakeholders, which constitutes the step 4. Also then, patients, citizens, informal caregivers, health and care professionals, health and care service providers, social care providers, enabler organisations, health & care agencies, private payers and user associations participate in the ecosystem. This way the ecosystem lives beyond the project timeline.

This all will be done with the methods and tools described in details in the Part 4 of this deliverable, namely Open Calls, Community of Practice, Communication and Events.

ECOSYSTEM

ENLARGEMENT PLAN

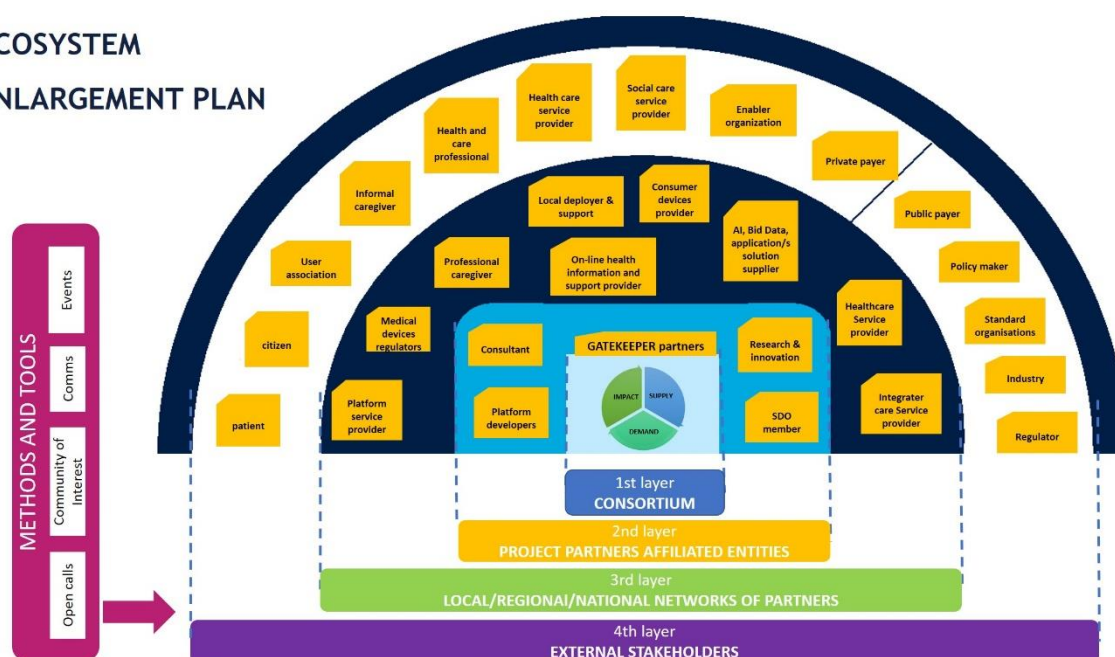


Figure 4 GATEKEEPER enlargement plan

4. Tools and methods for ecosystem enlargement

According to EU commission, when running the open calls to recruit third parties, it is up to the project consortium to comply with the rules and standards set out in the work programme and with applicable rules on ethics. The Commission has no specific duty to oversee the individual procedures for selecting proposals for funding. Nevertheless, aiming to assist the beneficiaries in the definition of those rules, the Commission provides some good practices and templates. However, the consortium remains responsible for defining the rules and principles that they will apply for selecting third parties European Commission (2016).

While considering the Commission's guidelines, this section also identifies and discusses best practices from past and existing EU projects, which may be useful to run gatekeeper open calls for recruiting third parties to extend and exploit the GATEKEEPER ecosystem.

In this chapter is where the methodology applied to run an open call is going to be detailed as there is no other deliverable in WP2 (specifically in T2.5) where the methodology can be well explained. This methodology, as already explained, is developed based on the experience in previous and other EU projects

The ecosystem enlargement plan will essentially make use of four main engagement methods, that will be leveraged to reach all the identified categories of stakeholders, also expecting to have them involved in the project in diverse levels and ways:

- Open calls
- Community of Interest
- Communication and dissemination
- Events

The first two methods will be respectively addressed in chapters 4.1 and 4.2, as they will be the main enablers of the engagement methodology and are also the ones deserving a longer explanation of their terms and implementation procedures.

In what refers to communication and events, the main aspect to be highlighted is that a strong connection will be established between WP2 and WP9 to ensure that targeted communication is prepared to each category of stakeholders, in the different steps of implementations. The events shall be used either to showcase early and consolidated results, as also to engage relevant stakeholder representatives in the refinement of the GK platform and also in sustainability and exploitation opportunities for the future.

4.1 Open calls

The GATEKEEPER project will use the Open Calls as one of the key tools to impact and attract new stakeholders around the GATEKEEPER-technology ecosystem, and to consolidate the stakeholders' relationships and roles inside the ecosystem.

One of the main expected impact of the gatekeeper project is to ignite the market growth and future sustainability of the Healthcare-technical Ecosystem. According to this, the GATEKEEPER project is planning to organize two different open calls as a powerful tool for attracting:

- innovative SMEs, IoT technologies providers, entrepreneurs and investors to build, deploy, test and replicate new artificial intelligent and big data solutions.
- external pilot projects, regions, public authorities and service providers to adopt and implement GATEKEEPER's evidence-based best practices throughout Europe.

4.1.1 Recommendations for good management

4.1.1.1 Dissemination

The main goal of an open call is to create impact and start to create a community behind the project. In order to disseminate to the widest possible communities, several activities to achieve this goal are detailed below.

So as to promote the open call, the project consortium has implemented the following actions:

Open calls details should be announced not only in the website of the project but also in social network and in different specialized journals and platforms. Furthermore, the open call could be announced through the participation in external events.

On the other hand, newsletters are another available medium of dissemination for people that have requested to receive information about a project news and updates. It is important that during the open call period newsletter inform of:

GATEKEEPER news and activities

- Open call Information
- Upcoming events and webinars
- Website articles about the project
- Other activities by partners or hubs of interest to the network

Moreover, **webinars** are a technologic tool that significantly support and maximizes the dissemination of the announcement of an open call. Holding a Webinar gives the opportunity to present the project and its open call extensively while simultaneously allows the interaction with the potential applicants. This provides a better understanding of the project and what the project is looking for by means of the open call. Moreover, a webinar offers an excellent opportunity to interact with the applicants allowing to clear up any concerns someone may have about the call. The webinar can be recorded and placed in the call materials section of the open call to be visualized by anyone interested. The presentation can also be included in this section.

Proposed webinars for open call can include:

- The gatekeeper fundamentals and how to apply Project
- Technical overview
- The application process and how to use the open call platform.

Another good practice is to provide **telcos** on request with project partners for applicants who want to know specific details of the project.

4.1.1.2 Support actions

The information about the open call should provide answers to the basic questions “What” (objectives of the open call), “When” (important dates), “Who” (possible participants), “Why” (remarking the importance of the open call for both the GATEKEEPER Project and the participants), “How” (all the necessary information for the applicants). With this aim, the support options described hereunder will be provided.

Information about the call

The main website of the open call must include a section with general information of the call. This section will be the first that applicants read and should summarize those most important points of the call in a concise way. The following information must be provided:

- Dates of publication
- Deadline
- Date of notification of selected applicants
- Start and end dates of the selected projects
- Language in which the proposal should be submitted
- Call identifier
- Email contact address
- Total amount of funding for the call
- Funding per project

Related documents

The following information should be provided in different files available at the website:

- Open Call Announcement
- Template for the Proposal
- Guide for Applicants
- Guide for submit the application
- Terms and Conditions
- Eligibility Criteria
- Technical Details

Media files

In addition, the following media files can be included in the website:

- Webinar recording
- Webinar presentation

FAQ

It is highly recommended to create a FAQ section on the open call website to answer frequent doubts regarding the open calls. Some common questions for this section are the following:

- About the participation in the open call:
 - What is GATEKEEPER looking for?

- Who are the eligible applicants for the Open Call?
 - Can participants to the first Open call apply to the second Open call?
 - Can we participate in consortium with another company?
 - Can we present two or more proposals?
 - Where can I find more information about GATEKEEPER Project?
- About the evaluation:
 - Can you tell me more about the evaluation criteria?
 - Who will evaluate my submission?
 - When I get the notification of results?
- About the funding
 - When will I get funded?
 - How many projects does the project expect to fund?
 - What has to be reported for a reimbursement of costs?
- About the participation if the proposal is selected:
 - My proposal has been selected for funding, now what?
 - When will selected proposals start?
 - What support will be given to the selected Third Parties during the participation?

Help desk

For questions not found in the FAQ section, it is important to provide a helpdesk contact for support both, procedural doubts as well as technical matters of the proposal. FAQ section should be updated continuously with the doubts that come via helpdesk.

There will be different events in which the open call will be presented, and support will be provided in preparing the applications. Follow the web site and also de social networks accounts of the project to get information about the open call.

Proposal submission

For almost all the project listed in previous section, the applicant needs to be in relation with a project partner to set-up the proposal. During the call opening, a support team from the project partner is available to give technical, business or application feedback on the experiment feasibility and alignment with the scope of the project open call. Proposal must be submitted on-line either on existing platform or on the project portal with a dedicated area.

In many cases, applications are not intuitive, and it is therefore important to provide applicants with a manual to use the Proposal Submission Platform. This guide may consist of a document showing all the steps necessary to register the proposal or in a video showing step by step the proposal submission process.

On the other hand, it is important to create a section in the application that provides contact information to the help desk support system. In this way, if a user encounters any malfunction, he can report it quickly and effectively.

Funding

Different types of financing options have been used in existing projects:

- Subvention to the project partners for the technological development of the SME demonstrator (30-100k€/ demonstrator). No subvention and no cost for the SME. In some case in-kind contribution by the SME or co-financing by National body. This is the Gateone-project model.
- Mixed model: Funding of the project partner for technical and non-technical (business) support to the experiment and cascade funding to the Innovative companies / public body. 60k€ max for the cascade funding. In some case with in-kind contribution by the company. (EUROCPS, FED4SAE and SMARTEES)
- Subvention to the applicant only, no funding for the project partner for the SME experiment, partner is funded through the project. €60k max for large experiment, 10k€ max for smaller experiments.

Financing options must be designed depending upon the project requirements, and goals and ambitions to be achieved via the open calls.

Evaluation board

Different methodologies have been used for the evaluation process.

Most of them use a mixed evaluation with an external board of experts and an internal board composed of project partners. A project "open call board" is always defined to run and follow the full process of the open call, one partner (often the coordinator) is leading this Board. The internal evaluation board is responsible for the eligibility criteria evaluation of the proposal (including ethical criteria), organizing a concertation meeting when existing and editing the ranking of the proposal, keeping all the document of the evaluation.

External experts are proposed by all the consortium partners or by the Open call board, with different competencies and profiles: research/ industry, innovation (business / investors). FED4SAE, EUROCPS and ACTIVAGE created a pool of experts that were activated depending the proposal number / topics. ORGANICITY added public expert from the cities involved in the experiment for the feasibility evaluation.

External evaluators are paid by the consortium: 500 - 800 €/day with an average of 20-30 proposal per day, often reading all the proposals. Evaluation is made remotely by the external partners. 2 to 3 experts are involved in the external evaluation board

4.1.1.3 EU guide and supporting documentation

Horizon 2020 – work programme 2018-2020⁴ include the guiding principle for Open calls in general annex section 19⁵, annex *K. Actions involving financial support to third parties*. This annex encompasses a set of elements that detail the objectives and the results to be

⁴ European Commission Decision C(2017)7124 of 27 October 2017 - http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html#h2020-work-programmes-2018-20

⁵ https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-k-fs3p_en.pdf

obtained. These concepts are furtherly explored in the *Guidance note on financial support* to third parties under H20206, that provides:

Legal basis and general principles

- An overview about different types of third parties, including Third parties receiving financial support and how they are reference in H2020 model grant agreement⁷
- Their responsibilities
- A set of good practices and template for organizing open calls

The calls should be carried out in the light of the same basic principles which govern Commission calls: Excellence; Transparency; Fairness and impartiality; Confidentiality; Efficiency and speed. The project must prepare a call announcement at least 30 days prior to its foreseen date of publication to your Project Officer and a dedicated section of the website for the full details of the open calls, in line with the specific requirements of the work programme and respect the recommendations of the mentioned document.

The call must remain open for the submission of proposals for a period of at least three months, any change must be reported to applicants, that have to receive fair and equal treatment. Information or facilities which you supply to any proposer must be equally available to all.

The selection of the proposal is responsibility of the project and in general, beneficiaries are responsible for the proper use of the funding by the third-party recipients (hereafter recipients) and must ensure that they comply with certain obligations under the grant agreement with the Commission.

4.1.2 Contribution of the Open Calls to the GATEKEEPER Ecosystem creation process

The first GATEKEEPER Open Call will be an attraction polo for involving developers in the artificial intelligence and bid data environment to:

- Implement innovative solutions.
- Implement artificial intelligent and bid data technology to complement the current one available in the GATEKEEPER project.
- Evaluate and benchmarking their tools and mechanisms using GATEKEEPER technology, test beds, and data sets.
- Evaluate the adequacy of GATEKEEPER to their domains.

⁶https://www.ffg.at/sites/default/files/downloads/page/h2020guidancenote_financialsupport2thirdparties.pdf

⁷ H2020 Programme Multi-Beneficiary General Model Grant Agreement (H2020 General MGA — Multi) Version 5.0 18 October 2017: ec.europa.eu/research/participants/data/ref/h2020/mga/gga/h2020-mga-gga-multi_en.pdf

The second GATEKEEPER Open Call will be an attraction polo for new stakeholders to develop extended and new use cases based on the GATEKEEPER platform, including an evaluation and validation of the functionalities offered through GATEKEEPER. Both calls will be also opened to other deployment sites that want to share experiences through bilateral exchange

4.1.3 Expected outcomes

4.1.3.1 Open call 1

The expected outcomes for the first open call can be classified in 3 main aspects:

1. Involve new IoT-related suppliers in the healthcare – technology ecosystem, assuring they receive a clear benefit of this involvement for short and long-term (sustainability).
2. Extend the current available services developed in the different pilots through the implementation of complement technology/solutions.
3. Consolidate the current relationship between the current stakeholders (supply and demand sites) involved in the consortium with new ones.

We have defined a set of KPIs to measure the achieved outcomes during the project:

1. Number of new stakeholders attracted by the open call in terms of:
 - Institutions interested to know more about the open call
 - Institutions submitted a proposal.
2. Number of new services/functionalities/improvements implemented or may be implemented in the current services thanks to the new technology.
3. Number of partners agreements, alliances, contract, and so on created with the different partners during the project and expected ones once the project finishes.

4.1.3.2 Open call 2

The expected outcomes for the second open call can be classified in 3 main aspects:

1. Involve third parties to replicate and extend to new DSs the current available use cases and AHA services based on IoT, assuring they receive a clear benefit of this involvement for short and long-term (sustainability).
2. Consolidate the current relationship between the current stakeholders (supply and demand sites) involved in the consortium with new ones.

We will define a set of KPIs to measure the achieved outcomes during the project:

1. Number of new deployments sited attracted by the open call in terms of:
 - Institutions interested to know more about the open call.
 - Institutions submitted a proposal
2. Number of new stakeholders involved in the new deployment site and use cases.
3. Number of partners agreements, alliances, commitments, and so on, created with the different partners during the project, and the expected ones once the project finishes.

4.1.3.3 Eligibility requirements

The current gatekeeper partners are excluded from Open Call application. However, they will be able to join new Use Cases or pilot which could be implemented during the project duration.

First Open call

The call is open to individual European SME, start-ups, entrepreneurs, universities and research centres that can contribute to the GATEKEEPER objectives.

Open Call candidates must comply with the following eligibility criteria:

- Register to the gatekeeper Open Call portal and submit the proposal before January 29th, 2021.
- institutions based in the EU or associated countries with a business partner who is committed to invest and exploit the developed technologies.
- Be directly responsible for the preparation, management and execution of the proposed plan.

Second Open call

The call is open to regions, public or private authorities, external pilot projects and service providers that can adopt and extend the coverage of the gatekeeper uses cases geographically within the EU or in associated countries.

Open Call candidates must comply with the following eligibility criteria:

- Register to the gatekeeper Open Call portal and submit the proposal before June 30th 2021
- Be directly responsible for the preparation, management and execution of the proposed plan.
- Submit an endorsement of the proposal by one or more existing use cases. Furthermore, some portion of the call budget will be available for current gatekeeper partners to support new use cases and/or pilots

4.1.4 Gatekeeper Open call procedures

Using the knowledge from existing projects and guide provided by the Commission, we now build a systematic process of running the GATEKEEPER open calls. As shown in Figure 5, the whole process is divided into four major categories. Each category contains tasks to be performed for ensuring successful execution of the open calls

Table 6. GATEKEEPER Open call procedure

	PHASE 1	PHASE 2	PHASE 3
PREPARATION	Call documentation	Call announcement	
BOARD DESIGN	Reviewer's selection	Proposal evaluation	Conflict resolution
RESULT	Result's announcement	Contract negotiation	
TECHNICAL SUPPORT	Training/ Workshops	Progress tracking	Technical support

4.1.4.1 Documentation

It is needed to prepare a set of documents that contain general Open Call information. The first document that should be prepared is the "Open Call Summary" which must consist of two parts. The first part should contain general information of GATEKEEPER such as the context of the project, the GATEKEEPER vision, the GATEKEEPER objectives, project structure and use cases. The second part will consist of the Details of the GATEKEEPER Open Call. Also, the eligibility requirements as well as the evaluation criteria must be detailed in separated documents. All these documents will be included in the Open Call Announcement

Moreover, it will be necessary to prepare and share a set of specific documents with the people interested on participating in the Open Call. For that, it must be taken into account that there are to different profiles of people that will participate mainly, applicants and reviewers.

On the one hand, applicants should be provided with information about the Open Call. This document will be the "GATEKEEPER Open Call Guide for Applicants". The document should contain an overview of GATEKEEPER project along with detailed information of the application process. That is to say, in-depth information on the steps to be followed by applicants during the open call phases as well as all details of the evaluation process. Moreover, it must be provided to the applicants the "GATEKEEPER Collaboration Proposal Template". In this document, applicants should include their proposal, detailing the overall concept of their project and explaining the main ideas and models involved. Once the Open Call evaluation is finalised, representatives of the selected proposals will be invited to sign a Collaboration Agreement.

On the other hand, the reviewers will be individuals external to the GATEKEEPER project. Therefore, a document containing project information should be provided to them. Additionally, once reviewers were selected, a contract of collaboration will be provided to them. Each evaluator will record his/her individual opinion on each proposal using an evaluation form. They will then communicate in order to reach consensus on the quality of each proposal. The result of that agreement (comments and scores) will be reflected on the evaluation platform.

4.1.4.2 Call announcement

The details of the Open Call will be announced in the website of the project so as in social networks and in different specialized journals and platforms. The main goal of the Open Call will be to create impact and start to create a community behind gatekeeper.

The Open Call announcement should contain information about the following points:

- Call information
- Important Dates
- Call Materials

Call information

The first information that should be included in the Open Call announcement is general information of the gatekeeper project. The information that must be provided in this first section is the following:

- Project acronym

- Project Grant Agreement Number.
- Project Full Name
- Call identifier
- Call Title
- Submission Deadline
- Expected Duration of participation
- Total Budget
- Maximum amount of financial support for each proposal
- Type of Activities
- Type of Applicants
- Language of Proposals
- Contact information
- Proposal Submission Platform

Important dates

In this section, the key dates of the Open Call must be provided, namely:

- Publication of Open Call
- Deadline for Pre-proposal Feasibility Check
- Deadline for Proposal Submission
- Notification of Results
- Selected Third Parties joining the Project

Call materials

Here it must be included all the needed materials to assist applicants in preparing their submissions.

- Open Call Summary
- GATEKEEPER Open Call Guide for Applicants
- Collaboration Proposal Template
- Collaboration Agreement
- Eligibility Requirements
- Evaluation Criteria
- Collaboration Agreement

4.1.4.3 Reviewer's selection

The proposals will be evaluated by independent experts, who will be briefed by the consortium about the selection criteria. Selection criteria will include the next sections:

- Background and expertise in the healthcare & technology domain.
- Availability during both Open Calls.
- Seniority of the candidates.

Each application will be assessed by external experts. The experts will be individuals with experience in the fields of innovation linked to this Open Call and also with the highest level of knowledge. The selected experts will sign a declaration of confidentiality concerning the evaluation process and the content of the proposals they evaluate. They will also declare their absence of any conflict of interest for the assigned tasks.

By signing a contract of collaboration, reviewers confirm that they have no conflict of interest with respect to the proposals assigned to be evaluated under Open Call. Should the Expert become aware of a conflict of interest at any stage of the process, they should immediately inform of it.

4.1.4.4 Evaluation

The evaluation shall take place at a maximum of two weeks from the close of the call.

Every proposal will be checked to ensure that it meets requirements before it is sent for evaluation to the GATEKEEPER Experiment Evaluation Committee (EEC).

Each proposal will be evaluated by 2 evaluator/s. Each evaluator will record his/her individual opinion on each proposal using the attached evaluation form, describing his/her degree of expertise on the proposal field.

The OPEN CALL team will then organize a concertation remote meeting with the experts, in order to reach consensus on the quality of each proposal. The result of that agreement will be reflected on the Evaluation Summary Report (ESR). A final ranking of all the proposals will be sent to the OPEN CALL team.

The proposals will be evaluated by independent experts, who will be briefed by the consortium OPEN CALL Team about the selection criteria.

Selection criteria for the first call will include the next four aspects:

EXCELLENCE: Soundness of concept, quality of objectives and innovative elements present in the proposal. Max=5. Threshold =3

- How well does the proposed solution address the challenge as detailed in the open call text?
- Are the proposed objectives clear and pertinent?
- Is the concept sound and shows a clear plan for development of a working solution?

IMPLEMENTATION: quality and efficiency of the implementation and the management. Feasibility of the workplan, quality and effectiveness of the technical methodology, including the workplan, contribution to collaboration with Gatekeeper to achieve objectives of the project, appropriateness of the allocation and justification of the resources to be committed (staff, equipment...) Max=5 Threshold =3

- How effectively will be the Application Experiment be managed? Is the proposed work plan coherent and effective? Are deliverables, milestones and deadlines defined and adapted to the goals of the proposals?
- Is the allocation of tasks and dedicated resources (e.g. human capital, equipment, man hours, etc.) appropriate and necessary to necessary to perform the scope of the proposal and achieve its objectives?
- Are the costs clearly defined and aligned with the required efforts?

- Does the third party possess the technical skills and abilities necessary to perform the scope of the proposal?

IMPACT AND SUSTAINABILITY: Potential impact through the development, dissemination and use of project results, in which way the proposal contributes to further maturity, integration and interoperability of gatekeeper AI solutions, and explain if you consider any further support after your participation in Gatekeeper project. Max=5 Threshold =3

- Does the proposal enhance innovation capacity and the integration of new knowledge?
- Assessment of resources required to demonstrate you have taken into account all key elements for the success of your project to reach exploitation.
- Strategic fit for the company explaining why this project is important for your company.

Each category will be scored on a scale from 0 to 5, with excellence and implementation having double weight, and impact and sustainability having single weight; thus, the overall maximum score is 25. For a proposal to be considered for being selected for funding, the score has to pass a threshold of 3 out of 5 in each individual category (for the double-weighted impact, this means a score of at least 6 out of 10). The total sum of the individual scores must reach the minimum threshold of 20 points

The individual scores have the following interpretation:

0 - Fail: The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information.

1 - Poor: The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses.

2 - Fair: While the proposal broadly addresses the criterion, there are significant weaknesses.

3 - Good: The proposal addresses the criterion well, although improvements would be necessary.

4 - Very good: The proposal addresses the criterion very well, although certain improvements are still possible.

5 - Excellent: Proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

4.1.4.5 Conflict resolution

The main risk is to have large discrepancy between experts' evaluation. To minimize this risk a concertation meeting has been planned in the process. The OPEN CALL Team will be there for mediation. Having an odd number (3) evaluator / proposal will allow to make a vote if no consensus is founded

4.1.4.6 Project selection

The highest ranked eligible proposals, passing the thresholds, will be selected for funding, until the available budget for the call is reached. There might be objective reasons for objecting to a specific third party, for example commercial competition. In

this case the choice may pass to the next-ranked proposal. If no proposal passed the thresholds, no selection will be made, and we will re-open the call at a later date.

If for some any reason a selected proposal is not launched after one month, the next first refused proposal (if passed the threshold) will then be contacted

4.1.4.7 Result's announcement

The results of the Open Call should be disseminated by two different means. Applicants must be notified by email about the funding or rejection information of the process resolution together with any feedback deemed necessary. Furthermore, the result of the Open Call must be available publicly on the gatekeeper website.

The OPEN CALL Team will publish a public summary report of the evaluation results on GATEKEEPER project website within 30 days of the end of evaluation. This report will comprise an account of the call, its evaluation and its results, including dates of call, how it was published, dates of evaluation, number of proposals received, number of proposals funded, as well as a list of all selected proposers and their funding amounts

The full evaluation process will be kept in GATEKEEPER internal records in case of contestations by proposers, audits, or checks by the commission. These records comprise:

- A listing of proposals received, identifying the proposing organisations involved (name and address).
- All received proposals
- All communications with applicants before call closure and during evaluation
- The names and affiliations of the experts involved in the evaluation;
- For each proposal a copy of the filled forms used in the evaluation;
- A record of all incidents which occurred during the evaluation (e.g. how conflict of interest was handled if they were detected during the evaluation process) and any deviation from standard procedure (e.g. if a proposer selected was not the highest scoring one, you must document the objective reasons why the highest scoring one was passed over)

4.1.4.8 Contract negotiation

The representor of the project in the contract negotiation is the project coordinator (PC), Mr. German Gutierrez. Following the selection of the proposals that should join the project, the third parties that will be chosen, will negotiate a standard contract compliant with the Grant Agreement and the Consortium Agreement with the designated beneficiary of gatekeeper, university of Warkwick, that will act in accordance with PSB and the project coordinator. Successful negotiations let the beneficiaries become a third party of Fraunhofer. This means no legal and financial validation is necessary for these organizations by EU, and that that beneficiaries are liable towards the EC for the 3rd parties

to which they provide financial support, so this needs a careful contract between the beneficiary and 3rd party⁸

For each experiment selected through the open call process, an implementation plan will be developed by respective third parties and a designated GATEKEEPER partner or this experiment will be assigned. The implementation plans include milestones, deliverables, and work-split among partners. The implementation plans are evaluated by the Executive Board; upon approval of the plans, a contract is agreed between the responsible GATEKEEPER beneficiary and the third parties involved, and finally the experiments are kicked-off. Specific attention needs to be used on the definition of back ground and foreground knowledge licensing. The commission usually requires that background and foreground needed to exploit a participant's own results be licensed on fair and reasonable conditions (FRC). The condition applied to open call winner should reflect the ones of former GATEKEEPER beneficiaries. The grant beneficiary must ensure that recipients of the financial support allow the Commission, the European Anti-fraud Office and the Court of Auditors to exercise their powers of control, on documents, information, even stored on electronic media, or on the final recipient's premises⁹.

Standard contract: The standard contract will notably regulate (i) the conditions of transfer and usage of the cascade funding, (ii) the IPR rules, and (iii) the other collaboration mechanisms; it will also likely take into consideration the following principles, which will be refined in the final agreed text of such standard document:

1. Payment arrangements and other provisions for the benefit of the European Commission:
 - The third party will have to return all necessary justifications (deliverables, reports and financial documents) in order to allow the gatekeeper beneficiary to pay the third party. Third parties will only be paid if sufficient justifications have been received;
 - The beneficiaries will ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) have the right to carry out checks, reviews, audits and investigations on the third parties;
 - The beneficiaries must also ensure that the Commission has the right to make an evaluation of the impact of the action measured against the objective of the work program;
 - The third parties do not have the right to make direct profit with the cascade funding.
2. IPR agreements:
 - The standard contract will have to protect the intellectual property of third parties and beneficiaries involved;

⁸ FAQs on H2020 calls on Customised and Low-power Computing (ICT 4) and ICT in Factories of the Future (FoF 8 and FoF 9) - 2. Rules for support to 3rd parties in H2020 (http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=7912)

⁹ Revised HORIZON 2020 – WORK PROGRAMME 2016-2017: http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016_2017/annexes/h2020-wp1617-annex-k-fs3p_en.pdf

- The standard contract will also protect the background of both beneficiaries and third parties;
 - Provisions regarding access rights will be set forth in accordance with the provisions of the consortium agreement;
 - Results from experiments are owned by the beneficiaries or third parties that generate them. Specifically, the product resulting from an experiment is owned by the third parties;
 - Detailed IPR terms and conditions will be stated in the Consortium Agreement.
3. Other collaboration mechanisms related to experiment execution:
- An implementation plan, including an accurate task description, a planning and a list of quantified objectives, will be defined with the third parties at the beginning of each experiment;
 - This implementation plan will then be used to monitor the progress of each experiment.

Example of a cooperation agreement used in the EU-project is ACTIVAGE

4.1.4.9 Training workshops

The GATEKEEPER philosophy and activities need to be understandable by newly joined third parties, and therefore it is important that all WPs produces internal dissemination material keeping in mind that it could be useful also to GATEKEEPER inexpert.

In addition to dissemination material that provides an overview of GATEKEEPER activities, third party shall have access to project partner confidential information

They shall also be provided with a guide to navigate through project tools and document repository and to recognize the responsible of each aspect of the project, in order to facilitate the communication.

Therefore, third parties need:

- Overviews of the project, of pilots and of GATEKEEPER platform.
- A list of communication channels to reach the correct recipient for each possible in-depth analysis, including a specific email address for technical questions.
- An extended version of the FAQ, with the Q&A regarding confidential subjects.
- Specific training:
 - Trainings could be organized in form of physical meeting or webinar, with priority on this latest more efficient tool.
 - Subject of trainings could be part of negotiation. Third parties must participate at least to training on GATEKEEPER platform and GATEKEEPER project tools

4.1.4.10 Process tracking

As a part of the contract, newly joined third parties receive obligation to track progress to the related beneficiaries and take part in demonstrations. In addition to periodic progress report they will be instructed on gatekeeper progress tracking tool currently in use by all beneficiaries. The reference beneficiary of each new partner is in charge to tutor and

control the progress. Any breach in the execution of the activity under contract will be processed within GATEKEEPER consortium, and the relative costs will be considerable ineligible

4.1.4.11 Technical support

A Mentor must be set up to help new partners with technical queries. Once the contracts have been signed and the third parties start their work, the contact point for technical questions related to GATEKEEPER platform will be sent.

4.1.5 Budget distribution

GATEKEEPER allocates 1.500.000 € for cascade funding for the financial support of the new stakeholders that will be selected through open calls. This amount will be divided in both open call in this way:

- 1) 600.000€ will be assigned for supporting the first open call. The maximum budget assigned to the beneficiaries of the Open Call will be 60.000 €. The maximum number of beneficiaries will be 10 proposals.
- 2) 600.000 € will be allocated for the second open call. There will be 3 winners. The maximum budget assigned to the beneficiaries of the Open Call will be 200.000 €.

Open Call Review Boards Honorariums: experts will be compensated for their effort and time with a flat rate of 200 € per proposal.

The amount of financial support will be calculated on the basis of estimated costs. Each proposal will include an implementation plan including milestone and deliverables, and a cost estimation justifying the costs and resources in relation to the implementation plan. Checking the consistency between these costs and the expected work of the experiment will be part of the evaluation of experiments.

The estimated costs of the third party should be reasonable, and comply with the principle of sound financial management, in particular regarding economy and efficiency. The allowed overhead rate is 25% flat rate. The third party cannot request any funding for activities that are already funded by other grants (the principle of no double funding). The industrial third parties will be funded 70% of their respective cost. Non-profit research institutes and public authorities can receive funding of up to 100% of their cost.

Third parties can receive pre-financing of 20% of their respective total funding amount. Further payments will be made upon successful completion of milestone and/or deliverables as evaluated and approved in the mid-term and final reviews.

4.1.6 Timeline

4.1.6.1 Open call 1

The first open call will be developed according to the timeline showed in the figure 6.

Once the Open Call is finished, GATEKEEPER includes a continuous tracking of the deployment and evaluation of the experiments until the end of the project.



Figure 5. OPEN CALL 1 Timeline

4.1.6.2 Open call 2

The second open call will be developed according to the timeline showed in the figure 7

Once the Open Call is finished, GATEKEEPER includes a continuous tracking of the deployment and evaluation of the experiments until the end of the project.



Figure 6. Open call 2 Timeline

4.2 Community of interest

This chapter aims at describing the "Gatekeeper Community of Interest" that has been created within the European project Gatekeeper. The role of the community of interest, the way it is managed, how it is developed, and its current status will be presented here.

The network created with the community of interest is strongly connected to all activities of the project, as it will be used as the main mean of dissemination for the consortium's findings, documents or events. The network will ensure that relevant stakeholders are identified (through the on-going growth of the network) and consulted (through general or targeted dissemination).

This chapter will first describe the grounds and role of the community of interest. We will then precise how it is managed and structured, before we present its current status (number of members, evolution, main topics of interest, etc.). Some perspectives on the future steps and how the consortiums will use the community will also be shared

4.2.1 The purpose of the community of interest

The GATEKEEPER "Community of Interest" is a network of key stakeholders interested in following the developments of the project and as such, supposedly interested in topics at the crossroads of healthcare, artificial intelligent and big data. The successful delivery and take-up of the project productions will depend on the capacity of project partners to engage with a representative range of stakeholders to be involved in our Gatekeeper ecosystem. This holds particularly true for the design and adoption of Gatekeeper platform, main output of the project, that will be the subject of a dedicated exploitation scheme targeting specific categories of stakeholders.

In that context, the Community of Interest will play a crucial role, by allowing for the consortium both to communicate on the project results and to obtain stakeholders' inputs.

Members of the Community of Interest will have the possibility to contribute to the project and bring external expertise.

The Community of Interest has been initiated by communicating about GATEKEEPER among all the partners networks last September 2020. It keeps growing, as more and more stakeholders hear about the project, e.g. during conferences and events attended by the partners, social media or open calls. During the remaining months of the project, the consortium will keep exchanging with the Community of Interest about the work carried out, the deliverables published, the events we organise, etc. It is expected to reach 100 members by September 2021, targeting 100 stakeholders per year.

The Gatekeeper community of interest brings together and structures a network of stakeholders across Europe that work or are interested in the healthcare and technology offering portfolio.

Those persons, together with the organisations they represent, have very different profiles and come from the public, not-for-profit, and for-profit private sectors. They might be as well potential beneficiaries, potential early-adopters of the Gatekeeper platform, services, users, etc. Those stakeholders would like to keep informed and maybe participate in the project and the work carried out by the consortium.

The Community of interest enables the consortium to have a direct access to the dissemination targets of the project. Updates about the work carried out, documents published, participation to or organisations of events by partners, etc. are shared with the Community of interest¹⁰.

This, in addition to the GK Twitter account¹¹ and website¹² ensures a good level of transparency of the activities carried out by the consortium and allows for the promotion of the project outputs. The communication is not restricted to information about the platform only, but to all activities and news relating to healthcare and value-based healthcare domain.

The variety of this set of stakeholders gives the possibility to have an integral and transversal approach of how to tackle the question of where and how the gatekeeper ecosystem wants to grow. By subscribing to the Community of interest, stakeholders get the opportunity to contribute to the Gatekeeper project, through e.g. stakeholder events where consortium members will be present, or the recruitment of pilot testing sites, as an example

4.2.2 Relations with others task in the project

This community has been created at the very beginning of the project and keeps expanding, especially thanks to the contacts established by the project partners from the beginning of the project. The networks were initially based on known persons or organizations, and kept growing by meeting people during conferences, presentations, other collaborations on related topics, etc.

People might hear about the Community of Interest during communication campaigns. All GATEKEEPER partners have advertised about the Community of Interest within their networks through direct emails, newsletters, articles on their webpages and/or social media accounts. Each time partners present the project during a conference or other event, they advertise about it as well

The development, implementation, monitoring and exploitation of the stakeholder's Community of Interest is closely intertwined with the activities conducted in other Work Packages (WP) of the project, AS WP2, WP7, WP3, WP9.

The community of interest will help the WP9, as the community of interest can be the early adopters of the GATEKEEPER platform. The community can bring the interest of those new stakeholders in being part of the project and their expectations. The community is also linked with the WP7 as the project is offering the opportunity to join the pilot's events of being the final users of the technology offered in the pilots. As the community of interest is open to all stakeholder identified in the GATEKEEPER ecosystem, included technical developers, they are also linked with the WP3, WP4, WP5.

¹⁰ <https://www.gatekeeper-project.eu/community-of-interest>

¹¹ https://twitter.com/GATEKEEPER_EU

¹² <https://www.gatekeeper-project.eu/>

4.2.3 Management of the community of interest

Registration to the Community of interest is possible via the website of the GATEKEEPER project¹³. The registration form can be found in the ANNEX C of the present document.

Value and Focus

When registering to the Community of Interest, subscribers are asked to inform which specific topics they are interested in. The Community of interest has a clear purpose and informed understanding of its aims and working plan, working closely with a core team to ensure that all necessary information is included. The focus of the Col directs to 5 key areas:

- Active and healthy ageing
- Technology for Health
- Smart living environment
- Internet of things
- Big data in Public health, telemedicine and healthcare
- Other

Strategy

The Col started its work by creating an open space landed on the Gatekeeper website - <https://www.gatekeeper-project.eu/community-of-interest> - with the aim to gather the interest of the project main stakeholders, grouped under the following areas:

- Impact
- Supply partner
- Supply peer producer
- Demand

Subscribers are also asked to mention their expectations:

- Be informed about the project and achievements
- Be invited to workshops or events organised by our partners
- Receive opportunities to contribute to the project
- Participate in surveys and research activities
- Other

These fields globally aim at assessing what the subscribers can bring to GATEKEEPER and what they can potentially exploit from the project findings. The consortium can map the different fields of expertise gathered within the Community of Interest and understand which sectors seem particularly interested. Also, the consortium can design better its

¹³ <https://www.gatekeeper-project.eu/community-of-interest>

communication campaigns, by targeting specific subscribers depending on the information to be disseminated.

Besides the interests and expectations of the subscribers, the following information is gathered and stored for each member of the Community of Interest:

- Email address
- First name
- Last name
- Organisation

This information is not shared with anyone outside the consortium. In addition, it is possible to unsubscribe at any time by clicking on a link in the footer of emails issued by the project. By introducing their email, they consent to receive regular communications about the GATEKEEPER project. The provided data will be used in accordance with the GDPR.

The following step will be to launch a webinar with the interested stakeholders to define/co-create the terminology, goals, enablers and constraints, and understand the main topics to be discussed, so that stakeholders find it relevant to participate.

This initial scope to be discussed shall permit useful results to be delivered within 9 to 12 months, through a common model and schema across domains.

This session will be done through the use of an interactive tool (e.g. Mural) to collect the participants ideas and, based on them, the core team of the Gatekeeper Col will launch 2-3 dedicated short-term activities for 2021.

Two additional items shall be discussed in the first webinar:

- Cross-organizational and cultural challenges, as well as any competing agendas need to be addressed directly, seeking common ground and win-win solutions.
- Invitation of additional key stakeholders proposed by the Col stakeholders. Identify organizations willing to contribute early in the process and those with a vested interest in the outcomes allows to surface hindering issues early, so they can be dealt with appropriately as the work progresses.

Guidelines for the Community of interest

The Community must establish its own operating procedures, and these will be established and discussed in the first webinar, including.

- A set of criteria and an exit strategy for dismantling the Col or to cease participation of members, using the CI objectives and role.
- Limit attendance to one or two representatives per organization/program, to avoid biasing the discussion.
- Limit teleconferences to preparing for meetings and establish rules for email exchange or use of collaborative spaces (e.g. Slack).
- Have important tasks and announcements distributed by a Col leader to gather attention and increase the level of cooperation.

- Have fewer but longer meetings. This improves the chance of retaining the same players and helps eliminate the problem of restarting and retracing steps and agreements made at previous meetings for the benefit of new players.
- Take real-time minutes to ensure agreement on issues, results, and action items. This provides a tangible track record that helps prevent disagreements later.

4.2.4 Status of the Community of Interest at M15

4.2.4.1 Members

The Community of Interest gathers 37 members as of Marc 30th 2020.

There is an interesting diversity in terms of type of organisation registered to the Community of interest, like solution supplier, Enable association. Supporting Agency. Integrated care service provider, Health care service Provider.

4.2.4.2 Interest and expectations

Within the online Community of interest registration form, members can select their main interests among 5 options as well as select their main expectations among 5 options as well. The main interest of Col members relates to Technology for Health (see Figure 8).

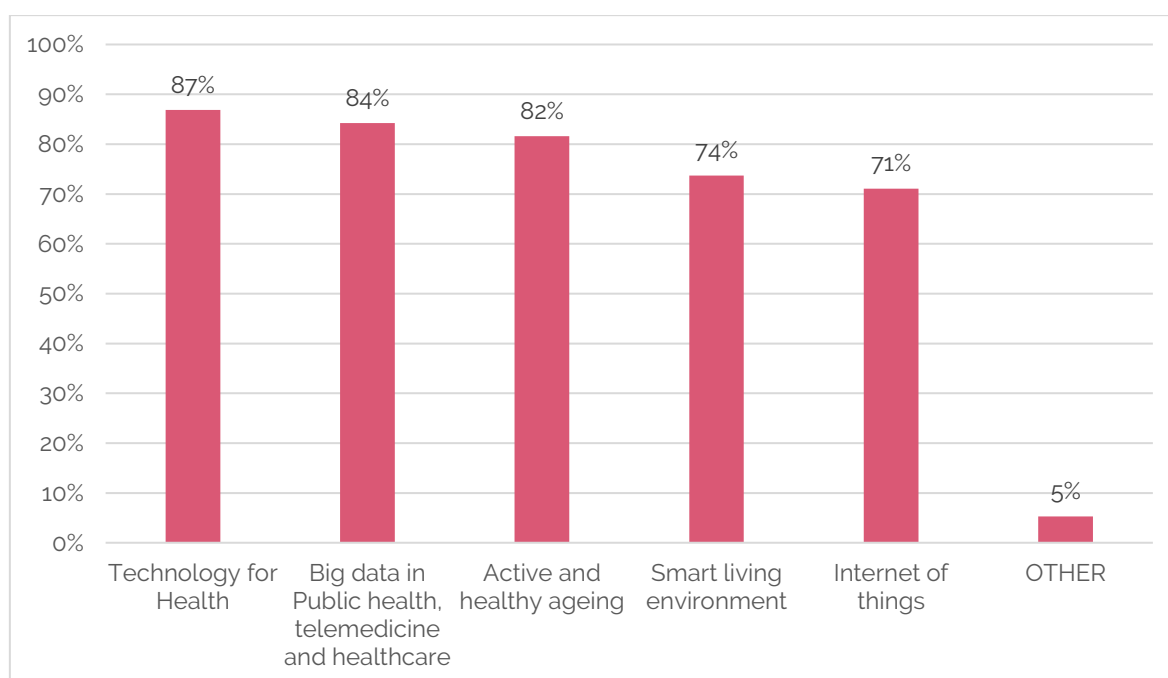


Figure 7. Interest in joining Community of Interest

In terms of expectations (see Figure 9), a large majority of members is interested in being informed about the project and achievements

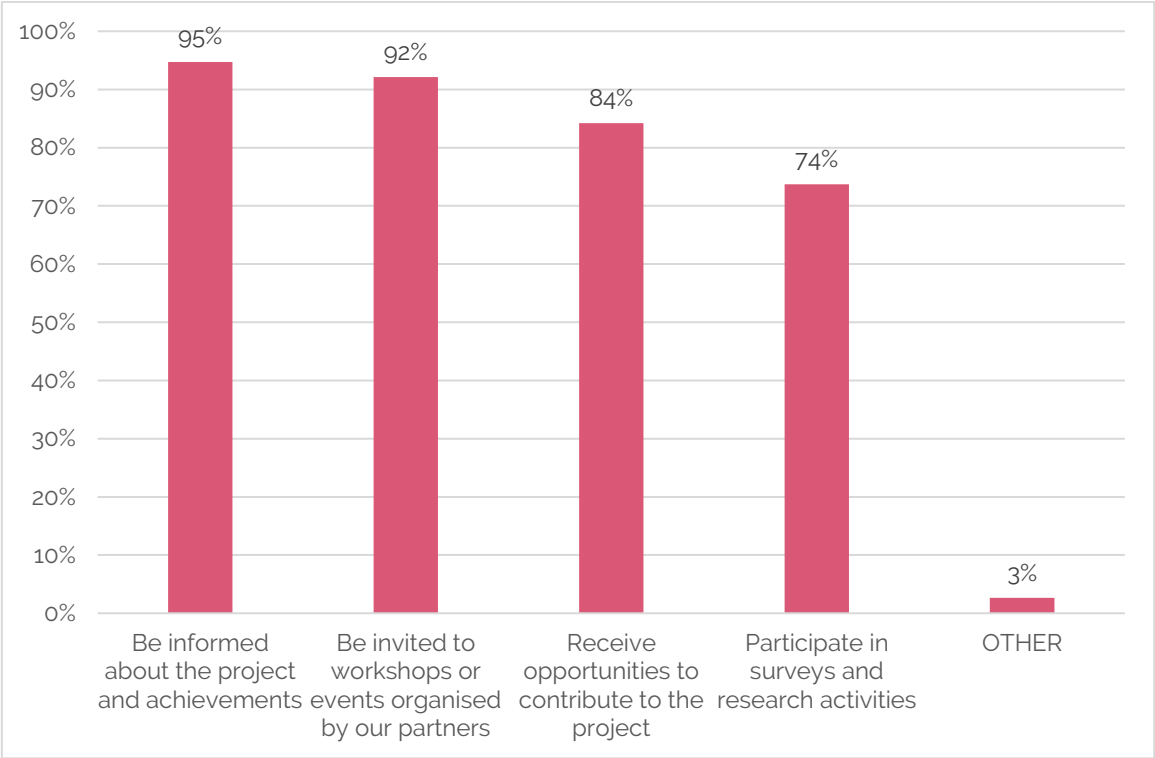


Figure 8. Expectations in joining Community of Interest

5. Conclusions and future work

Ecosystem design, creation and management is long lasting endeavour that largely exceeds the time and resources limits of the project.

Considering GATEKEEPER project as the seed of the gatekeeper ecosystem, the aim is to set the basis for its construction and achieve a critical mass of engaged (committed) key members and other stakeholders that continues the process beyond the project lifecycle.

Enlarging the ecosystem is not only an isolated activity of WP2, but it's directly connected with Task 9.1 (dissemination and communication), T9.2 (impact attainment), 9.3 (exploitation) , which are coordinated within the Business Cluster.

The GATEKEEPER ecosystem is a new ecosystem which is interwoven by combining the Artificial intelligence and healthcare ecosystems, thus, it requires a detailed and systematic plan for its creation, management, enlargement, and sustainability phases. This deliverable presented the initial plan about the first three phases. The sustainability planning will be carried out closer to the end of the GATEKEEPER project.

This document first discusses the ecosystem approach used to create the initial GK ecosystem. It then discusses how the stakeholders mapping was approached. It then analyses the health platforms landscape through a business perspective. Then it discusses the gatekeeper ecosystem and later on presents the tools and methods to enlarge the ecosystem, describing the best practices and recommendations for running successful open calls in order to enlarge the ecosystem

Finally, the document lists all the necessary and important details about the two Open Calls to be executed by the GATEKEEPER project in order to extend the ecosystem by adding new partners.

The creation, management, and enlargement of an ecosystem is a complicated process and long-term endeavour. This deliverable provides a solid base for the upcoming tasks (Open calls and enlargement of the Ecosystem) specifically in WP2 and its deliverables.

6. Reference

- Elton, Jeff et al, Healthcare Disrupted, Wiley, 2016
- Porter, M.E. et al, How to Pay for Health Care, HBR, Jul/Aug 2016
- Sangeet Paul Choudary, Marshall W. Van Alstyne et al, Platform Revolution, p. 26
- Statista Global smartphone OS market share held by RIM (BlackBerry) from 2007 to 2016
- Massachusetts Institute of Technology 2015

Appendix A . Col subscription

Subscribe to our Gatekeeper Community of Interest

Email address*

First name*

Last name*

Organization*

* Compulsory fields

IMPACT

SUPPLY PARTNER

SUPPLY PEER PRODUCER

DEMAND

MY INTEREST

- ☐ Active and healthy ageing
- ☐ Technology for Health
- ☐ Smart living environment
- ☐ Internet of things
- ☐ Big data in Public health, telemedicine and healthcare
- ☐ Other

MY EXPECTATIONS

- ☐ Be informed about the project and achievements
- ☐ Be invited to workshops or events organised by our partners
- ☐ Receive opportunities to contribute to the project
- ☐ Participate in surveys and research activities
- ☐ Other

SEND

* By introducing your email, you consent to receive regular communications about the GATEKEEPER project. The provided data will be used in accordance with the [GDPR](#)

- Guidance on Financial Support to Third Parties

Appendix B Guidance on Financial Support to Third Parties

	Parties	Third Parties				Third parties receiving financial support (Art 15)
		Linked third parties (Art 14)		Third parties providing in-kind contribution	Third parties providing in-kind contribution	
	Beneficiaries	Affiliated entities/entities with legal link	Subcontractors (Art 13)	against payment (Art 11)	free of charge (Art 12)	
Nature	Signatory of the grant agreement. It performs the action tasks.	Subsidiary of the beneficiary implementing part of the action. Structurally linked with the beneficiary.	Economic operator providing a service, supply or work to the beneficiary necessary for the action. Bound by a contract with the beneficiary specifically concluded for the service, supply or work necessary for the action.	Legal entity providing in-kind contributions by putting non-financial resources (e.g. seconded staff, equipment, infrastructure, etc.) at the beneficiaries' disposal against a payment.	Legal entity providing in-kind contributions by putting non-financial resources (e.g. seconded staff, equipment, infrastructure, etc.) at the beneficiaries' disposal free of charge.	Final recipients of EU funds. Target population of the activity implemented by the beneficiary, and consisting in re-distributing EU funds.
Selection	By the EC according to evaluation criteria published in the call for proposals.	Proposed by the beneficiary. Verification by the EC of affiliation + eligibility and non-exclusion according to the evaluation criteria published in the call for proposals	By the beneficiary according to the best value for money or lowest price principle and absence of conflict of interest (Art 35.).	Proposed by the beneficiary and included in Annex 1 (third parties and their contributions) and approved by the EC.	Proposed by the beneficiary and included in Annex 1 (third parties and their contributions) and approved by the EC.	By the beneficiary only if foreseen by the WP and according to conditions set out in the grant agreement (Annex 1)
Financial operations / restrictions	No	No	May cover only a limited part of the action.	May be used if necessary to implement the action.	May be used if necessary to implement the action. Receipts to be declared if contribution	May not receive more than EUR 60.000, unless it is necessary to achieve the objectives of the action and explicitly foreseen in the work programme.

					specific for the project	
Identified in the grant agreement	Yes, as parties (and LE validated ex ante).	Yes, as linked third parties.	No (only tasks that are subcontracted).	Yes, third parties and their contribution must be in Annex 1 (EC can still approve if not in Annex 1 (Art 55.))	Yes, third parties and their contribution must be in Annex 1 (EC can still approve if not in Annex 1 (Art 55.))	No (only categories of persons that may receive it).
Bound by the grant agreement	Yes	No	No	No	No	No, but beneficiaries must ensure that their obligations under Art 35 (Conflict of interest), 36 (Confidentiality), 38 (Visibility of EU funding) and 46 (Liability for damages) also apply to the third parties receiving financial support, by contractual arrangements (Art 15.1.2.)
Operational responsibility	Yes (joint and several in case of multi-beneficiary grant).	No but EC may require joint and several liability with beneficiaries	No	No	No	No, but obligations must be extended by contract (Art 15.1.2.)
Financial responsibility	Yes	No	No	No	No	No, but obligations must be extended by contract (Art 15.1.2.)
Eligible costs	Costs incurred by the beneficiary and compliant with the cost eligibility conditions set out in the grant agreement.	Costs incurred by the linked third party and compliant with the cost eligibility conditions set out in the grant agreement (same as beneficiary).	Price paid by the beneficiary.	Actual costs for paying the in-kind contribution up to the costs actually incurred by the third party and compliant with cost eligibility conditions set out in the grant agreement.	Costs incurred by the third parties for the contribution (seconded persons, equipment, etc.) and compliant with cost eligibility conditions set out in the grant agreement.	Financial support paid by the beneficiary.
Right of access and audit by the EC, OLAF and Court of Auditors	Yes	Yes, to be ensured by the beneficiary.	Yes, to be ensured by the beneficiary	Yes, to be ensured by the beneficiary	Yes, to be ensured by the beneficiary	Yes, to be ensured by the beneficiary

Appendix C Good Practices for organizing Open calls

1. INTRODUCTION

Your call should be carried out in the light of the same basic principles which govern Commission calls:

- i. **Excellence.** The proposal(s) selected for funding must demonstrate a high quality in the context of the topics and criteria set out in the call;
- ii. **Transparency.** Funding decisions must be based on clearly described rules and procedures, and all applicants should receive adequate feedback on the outcome of the evaluation of their proposals;
- iii. **Fairness and impartiality.** All proposals submitted to a call are treated equally. They are evaluated impartially on their merits, irrespective of their origin or the identity of the applicants¹;
- iv. **Confidentiality.** All proposals and related data, knowledge and documents are treated in confidence;
- v. **Efficiency and speed.** Evaluation of proposals and award of the financial support should be as rapid as possible, commensurate with maintaining the quality of the evaluation, and respecting the legal framework.

2. PREPARATION ACTIVITIES

The Call Announcement

You should prepare a brief announcement about the call (you may use the model included in Annex 1 of this document) which will be published on the Horizon 2020 Participants Portal, and on the project website. It contains a link to the section on the project website where the full call details are published. In order to ensure timely publication on the Participant Portal, please provide the call announcement at least 30 days prior to its foreseen date of publication to your Project Officer.

The Full Call Details

You should prepare a dedicated section of your project's website, which will give proposers the Full Call Details. This must be in line with the specific requirements of the work programme and contain:

- A clear and exhaustive list of the types of activities that qualify for receiving financial support.
- Any restrictions on participation in any part of the call (e.g. only certain types of organisation are required, only organisations based in certain countries etc.). Please note that the calls must have a clear European dimension which can be achieved either through cross border experiments or through expanding local experiments to European scale.

¹ In the frame of any restrictions provided for in the call

- The criteria determining the award of the financial support.
- The criteria for determining the exact amount of financial support and the form that the financial support may take (e.g. a lump sum – either pre-defined or based on estimations of the grant recipient - or the reimbursement of actual costs incurred by the recipients when implementing the supported activities).
- The specific arrangements that the beneficiaries may impose on the third parties (e.g. specific reporting and feedback obligations from the third party towards the beneficiary in respect to the implementation of the supported activities; specific arrangements for providing the financial support; specific rights for the beneficiaries to access and use the results of the supported activities).
- The information needed to submit a proposal
 - The template to be used for the proposals
 - The coordinates (email address and telephone number) of a help facility which you must maintain for proposers during the call
 - The email address to which proposals should be submitted and the call identifier which will be used on these emails
 - The deadline for proposal submission, clearly specifying the local time involved (normally this is local time at the website where the proposals are received).

3. PUBLICATION OF THE CALL

Following the requirement of the General Annex K of the Work Programme, you will publish the Full Call Details, at least, on the project's own website.

Your Project Officer will arrange to publish the Call Announcement and (a reference to) the Full Call Details on the dedicated web page of the Horizon 2020 Participants Portal.

The call must remain open for the submission of proposals for a period of at least three months. If call deadlines are changed, this must immediately be communicated to the Project Officer for updating the Call Announcement on the Horizon 2020 Participant's Portal. The Full Call Details must be updated on the project's own website and all registered applicants must be informed of the change.

Please make sure that all proposers receive fair and equal treatment. Information or facilities which you supply to any proposer must be equally available to all.

4. PROPOSAL RECEPTION

Proposals should be submitted through an electronic exchange system which allows the identification of the time of submission. On receipt of each proposal you should send an Acknowledgment of receipt to the proposer (see example in Annex 2).

You may not accept late submissions; late submitters should receive by return email a "call closed" message from you.

You should evaluate the proposals as submitted: after the call closure no additions or changes to received proposals should be taken into account.

5. PROPOSAL EVALUATION AND SELECTION

Evaluation criteria and procedure

You will evaluate proposals received in the light of the criteria laid down in the Full Call Details. You may use the attached form (see Annex 3).

You remain responsible for the evaluation towards the proposers, even though you may count on the assistance of experts¹.

If you engage experts for evaluating the proposals, please ensure that they are independent from the organisations involved in the consortium and from any proposer.

The selected experts should sign a declaration of confidentiality concerning the contents of the proposals they read and they should also confirm the absence of any conflict of interest (see an example of such declaration in Annex 4).

The outcome of the evaluation will be a ranked list of all proposals, based on the scores obtained by each proposal.

Proposal selection

Whilst normally the highest ranked proposals will be selected for funding, there might be objective reasons for objecting to a specific third party, for example commercial competition. In this case the choice may pass to the next-ranked proposal.

You may conclude that even the highest scoring proposal is of inadequate quality, in which case you will make no selection. This conclusion is obligatory if all the proposals fall below the threshold scores applied at the evaluation.

In the event of no selection being made, you may re-open the call at a later date. Alternatively, you may conclude that no successful outcome can be expected and abandon the plan to hold an open call. This decision would have to be justified and be the subject of a grant agreement amendment.

6. REPORTING, DOCUMENTATION AND FEEDBACK

Reporting

Shortly after the evaluation you should publish a **public summary report** of the evaluation results on your project website within 30 days of the end of evaluation taking into account your feedback process to the proposers (i.e. the proposers should have received your individual feedback before the public summary report is published). This report should comprise an account of the call, its evaluation and its results, including dates of call, how it was published, dates of evaluation, number of proposals received, number of proposals funded, as well as a list of all selected proposers and

¹ The selection of these experts should follow the conditions foreseen in Article 10 of the Model Grant Agreement.

their funding amounts (you may use the model included in Annex 5).

Documentation

Additionally to the summary report you have to keep your internal records on the evaluation as audit trail in case of e.g. contestations by proposers, audits, or checks by the commission. These records comprise as a minimum:

- A listing of proposals received, identifying the proposing organisations involved (name and address).
- All received proposals
- All communications with applicants before call closure and during evaluation
- The names and affiliations of the experts involved in the evaluation;
- For each proposal a copy of the filled forms used in the evaluation;
- A record of all incidents which occurred during the evaluation (e.g. how conflict of interest were handled if they were detected during the evaluation process) and any deviation from standard procedure (e.g if a proposer selected was not the highest scoring one, you must document the objective reasons why the highest scoring one was passed over)

Feedback to proposers

After the evaluation of the proposals, you will get into contact with the successful proposer(s).

You should communicate to the other proposers that their proposal was not successful in the call, and should enclose to each a summary of the evaluation result of their proposal addressing the respective award criteria.

Appendix D Evaluation Form

Individual evaluation/Consensus (delete as appropriate)

Proposal No. :	Acronym :
1. Award criterion 1	Score: (Threshold 3/5; Weight) ¹
2. Award criterion 2	Score: (Threshold 3/5; Weight 1)
3. Award criterion 3	Score: (Threshold 3/5; Weight 1)
Remarks	Overall score: (Threshold 10/15)

¹ Thresholds and weights are standard values which can be adapted to the needs of the specific evaluation, if necessary

0 The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information; 1 Poor The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses; 2 Fair While the proposal broadly addresses the criterion, there are significant weaknesses; 3 Good The proposal addresses the criterion well, although improvements would be necessary; 4 Very good The proposal addresses the criterion very well, although certain improvements are still possible; 5 Excellent The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

Appendix E Confidentiality and conflict of interest declaration

I the undersigned declare that, in participating as an independent expert in the evaluation of proposals received in the open call of project XXX

I undertake to treat as confidential all information contained in the proposals which I am asked to evaluate, both during the evaluation and afterwards.

I will not reveal to any third party the identity or any details of the views of my fellow evaluator(s), neither during the evaluation nor afterwards

I do not, to the best of my knowledge, have any interest in any of the proposals submitted in this call, I have not been involved in their preparation and I do not benefit either directly or indirectly from the eventual selection. Should I discover a conflict of interest during the evaluation, I undertake to declare this and to withdraw from the evaluation.

Name	
Signature	
Date	