

Co-funded by the Horizon 2020 Framework Programme of the European Union



Deliverable D40: IPR management - outline of the code of conduct related to the management of intellectual property rights (IPR) in order to ensure an open atmosphere within the consortium as well as to foster efficient and fast exploitation of project results.

Abstract: This deliverable report presents strategies, plans, and procedures, regarding the development and management of intellectual assets/knowledge and their correct identification, handling, legal protection and leveraging in the context of REACH. A well-established IP strategy and management plan is crucial for bringing a consensus among all the parties involved regarding their existing or prospective intellectual assets, as well as for translating the intellectual assets efficiently and fast into tangible profit, both for the consortium parties, as well as for the whole healthcare system, and making an overall contribution to the REACH competitive advantage. The REACH IP strategy will follow the same organizational pattern as the technical development activities, the so called "touchpoints and engine strategy", through which the whole consortium is divided into seven main groups, responsible for the development of a clearly defined IP asset group. The development of an IP strategy and the management of IP is interpreted as an iterative process that is interdependent with the outcomes of other tasks and deliverables; therefore, the strategies, plans and procedures presented in this report will be reviewed, adapted and updated as per the outlined IP management plan phases.

Lead Partner:	Tu/e
Participants:	TUM, TU/e
Document Identifier:	REACH D40
Version (Date):	1.0 (30.01.2017)
Due Date:	31 Jan 2017
Linked WPs/Tasks:	WP9/ T9.6
Туре:	Public
Authors:	T. Linner (TUM), M.M. Bekker (Tu/e), A. Groth (TUM), Y. Lu
	(Tu/e), G. Solcanu (TUM), E. Steinhardt (TUM), C.A.L, Valk
	(Tu/e)

Date	Activity	Status
01.08.2016	Deliverable strategy and structure draft	completed
01.10.2016	Deliverable strategy and structure ready	completed
15.12.2016	Input of participants/partners ready	completed
20.12.2016	Input integrated and formalized	completed
16.01.2016	Draft of report ready	completed
27.01.2017	Review completed	completed
30.01.2017	Submission to EU	completed

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 690425. The content of this report does not reflect the official opinion of the European Union. Responsibility for the information and views expressed in the report lies entirely with the authors.

Tasks of the involved partners with respect to the deliverable (and respective tasks) presented in this report:

Partner	Short task description	
TUM	Structure/ strategy development; development of sections 1, 2, 3, 4,	
	and 5; input integration and finalization	
TU/e	Structure/ strategy development; deliverable review	
Philips	Inputs regarding relevant provisions of an handling of issues related to	
	IP protection, confidentiality, and publications	
Sturrm	Strategic advice	



Table of Contents

Table of Contents	.4
Key expressions	.6
List of tables	.8
List of figures	.9
1 Introduction: IP situation and challenges in REACH 1 1.1 Structure and content of this report 1 1.2 General IP situation and challenges in REACH 1 1.3 Overview over relevant EU guidelines and recommendations 1 2 The roles of IP strategy and management in REACH 1 2.1 Definitions 1 2.1.1 IP strategy/policy 1 2.1.2 IP management 1 2.1.3 IP research 1 2.1.4 IP environment 1	10 10 13 15 15 15 15 16 16
 2.2 Types of IP applicable in REACH	17 18 20
3.1 General guidennes 3.2 Mutual interests 3.3 Provisions set out in the Grant Agreement 3.4 Provisions set out in the Consortium Agreement	20 20
4 REACH IP Management 2 4.1 General recommendations 2 4.2 Checklist for IP protection in the context of REACH 2 4.3 Publications 2 4.3.1 Motivation 2 4.3.2 Approval Process 2 4.4 Knowledge and data 2 4.4.1 Motivation 2 4.4.2 Immediate actions 2 4.5 IP research 2 4.6 Data Property: Personal, health-related data and IPR 2 4.6.1 Personal data property rights 2 4.6.2 Legal issues, guidelines and standards impacting data gathering, processing, and sharir 28 28 4.6.3 Utilisation of existing data property 2 4.6.4 Licensing of data for reuse 2 4.6.5 Data sharing and patents 2 4.6.6 Conclusion: Data Property in REACH 2 5 REACH IP Management Roadmap 3	23 24 25 25 25 25 25 26 26 26 26 26 27 27 27 27 27 27 27 27
 5.1 Basic IP situation/strategy of REACH partners now and in the future	31 32

REACH

6	Concl	usion	
7	Refer	ences	
Ap	ppendix.		
-	7.1 A	ppendix A: Provisions set out in the Grant Agreement	37
	7.1.1	Art. 24 Agreement on background	
	7.1.2	Art. 25 Access rights to background:	
	7.1.3	Art. 26 Ownership of results:	
	7.1.4	Art. 27 Protection of results:	
	7.1.5	Art. 28 Exploitation of results:	
	7.1.6	Art. 29 Dissemination of results - open access - visibility of EU funding:	
	7.1.7	Art. 30 Transfer and licensing of results	
	7.1.8	Art. 31 Access rights to results:	
	7.2 A	ppendix B: Provisions set out in the Consortium Agreement	
	7.2.1	Art. 5 Liability towards each other: Fehler! Textmarke nic	
	7.2.2	Art. 6 Governance structure: Fehler! Textmarke nic	
	7.2.3	Art. 8 Ownership of Results: Fehler! Textmarke nic	ht definiert.
	7.2.4	Art. 9 Access Rights: Fehler! Textmarke nic	ht definiert.
	7.2.5	Art. 10 Non-disclosure of information: Fehler! Textmarke nic	
	7.2.6	Art. 11 Miscellaneous: Fehler! Textmarke nic	ht definiert.

Key expressions

Abbreviations for partners:

AH: ArjoHuntleigh
AM: Alreh Medical
CU: University of Kopenhagen
DTU: Technical University of Denmark
EPFL: École Polytechnique Fédérale of Lausanne, Switzerland
HUG: Hôpitaux Universitaires Genève
SC: SmartCardia
SK: Schön Klinik
TU/e: Eindhoven University of Technology
TUM: Technical University of Munich
ZZ: ZuidZorg

- Background intellectual property: intellectual property generated prior to the current project.
- Business Model: "a business model describes how an organization creates, delivers, and captures value" (Osterwalder and Pigneur, 2010).
- Copyright: Copyright is a legal right that creators have over their original works of literature, arts, cinematography, dramatic art, music, sound recording, Broadcasts, TV and radio and many others against unauthorized reproductions and public disseminations (WIPO). Copyright arises automatically on creation of the work, provided it is original and typically till 70 years after the author's death (Cornish, Lewelyn, & Aplin, 2013).
- **Engine concept:** a REACH Engine concept refers to a cloud-based digital platform/back end that supports health and behavioural data analysis, creates different user profiles and provides personalised motivation and real time feedback to both the user and their caregivers.
- Foreground intellectual property: intellectual property generated during the current project.
- Intellectual property (IP): is intangible property that is the result of creativity and innovation and which can be owned in a similar way to physical property (University of Oxford).
- **Intellectual property rights (IPRs):** are the legal protections assigned to the author of IP, and include trademarks, copyright, patents, industrial design rights, and in some jurisdictions trade secrets.
- **IP environment:** The overall REACH IP strategy, as well as the REACH IP management are highly influenced, as well as determined by several factors, the so-called "IP environment". The given factors comprise the existing national and international legal framework, the provisions set out in the Horizon 2020 Grant Agreement, the provisions set out in the Consortium Agreement, as well as the dissemination and communication commitments.
- IP management: IP management shall (1) raise a general awareness regarding IP identification, protection and handling, (2) identify and prevent risks (litigation, infringement, other 3rd party threats, etc.), (3) ensure the alignment of the technical

development processes to the IP strategy/policy, (4) identify the best relevant IP legal protection possibilities, and (5) facilitate the adherence of all the parties and processes to the IP management plan (**Schröder, 2009**).

- **IP policy:** in the context of REACH, IP policy refers to the process of creating and facilitating a consensus between the consortium partners, as well as to allow them act in an orchestrated manner.
- **IP research:** Before application for intellectual property rights (IPR) to protect an idea/product/service, an intellectual property research has to be conducted in order to ensure that the idea/product/service is novel and patentable (patentability search), and does not infringe any existing or pending property rights (infringement search).
- **IP strategy:** IP strategy is part of the overall corporate strategy and is thus interdependent with other strategies such as the business strategy (**Eckardt, 2012**).
- Patent: a patent is an exclusive right granted to a patent owner of a novel and innovative product or process to prevent or stop others from commercially exploiting the patented invention. In exchange, the patented product or process must be disclosed to the public (WIPO). A patent can last for a maximum of 20 years from application (Cornish, Lewelyn, & Aplin, 2013).

Postground intellectual property: intellectual property generated after the current project.

- **Registered Design:** a registered design is the exclusive right to the design registration owner allowing the owner to exclude others from commercially exploiting the overall appearance of a particular design (**Cornish, Lewelyn, & Aplin, 2013**). A protectable design may be two-dimensional, for example pattern, lines or color, or threedimensional, for example shapes, but must have an individual character (**WIPO**).
- **Sideground intellectual property:** intellectual property generated during the current project, but not in project related activities.
- T: Task defined in the project proposal.
- **Touchpoint/Touchpoint cluster:** touchpoint refers to each form of interaction that a customers has with a product and/or service. It includes any physical, communication, human and sensory interactions with and within an organization (**Brigman, 2013**). In this report, a touchpoint cluster refers to those touchpoint concepts that share common purposes, such as touchpoint concepts for mobility services, or similar technology platform such as touchpoint concepts based on wearable technologies.
- **Trademark:** a trademark is a recognizable sign, design or expression, which distinguishes products or services of one enterprise from those of other enterprises. A trademark could consist of words, pictures, letters, numbers, colors, sounds etc. (**WIPO**).
- **Utility model:** in some countries, inventions may also be protected by utility models, which are also known as "petty patents" or "utility innovations." The conditions for the registration of utility models are usually less stringent, the procedure for registration is faster and acquisition and maintenance fees are generally lower than those applicable to patents (source: **WIPO**)
- **WP:** work package defined in the project proposal.

List of tables

Table 1-1: Breakdown of expected foreground categories REACH (adopted from t	he DoA)
	12
Table 2-1: Types of IP applicable in REACH	16
Table 4-1: Checklist for IP protection in the context of REACH	24
Table 5-1: Basic IP situation/strategy of REACH partners now and in the future	
Table 5-2: IP management roadmap	

List of figures

Figure 1-1: REACH's IP/Knowledge management and protection strategy	11
Figure 2-1: Relation of IP strategy and management in REACH to other work packages	and
tasks	18
Figure 2-2: From the "touchpoints and engine concept", seven strategic IP fields are deri	ived,
which will guide IP management, IP search and IP protection	19
Figure 4-1: The process of approval of a paper for publishing	25
Figure 4-2: REACH partners' roles in the context of the gathering and usage of data prop	
(adopted from T10.1/ Deliverable D43)	28

I Introduction: IP situation and challenges in REACH

Due to the complex nature of a project like REACH, a number of innovation management issues will arise and therefore, shall be addressed. In that context, an IP management plan is essential for optimally making use of earlier generated IP/knowledge and/or existing IP/knowledge, to smart feed forward between research and innovation WP's, policy and practice, as well as for translating the intellectual assets into tangible profit, both for the consortium parties, as well as for the whole healthcare system, and making an overall contribution to the competitive advantage of any generated idea/product/service.

1.1 Structure and content of this report

The current report introduces the relevant terms, practices and guidelines regarding intellectual properties (IP), their correct and timely identification, handling, and legal protection, as well as means of translating intellectual property rights (IPR) into tangible value.

Chapter 1 underlines the general IP situation and challenges in REACH (Section 1.2), as well as the relevant documents that served as guidelines when formulating the given report, including the overall IP strategy in the context of REACH (Section 1.3). Chapter 2 introduces the relevant terminology concerning IP (Section 2.1), the existing possibilities of legally protecting an IP, which are relevant to REACH intellectual assets (Section 2.2), the relation of the REACH IP strategy to other work packages and tasks (Section 2.3), as well as the initial REACH IP strategy (Section 2.4). Chapter 3 presents a set of guidelines to be considered when formulating the REACH IP strategy/policy. Chapter 4 introduces the most critical issues to be addressed when designing an IP Management plan, such as the designing and approval of publications in accordance with existing or pending IPRs (Section **4.3**), assuring the security of background, foreground, sideground and postground data and knowledge (Section 4.4), conducting an IP research (Section 4.5), as well as the property rights in the context of personal data (Section 4.6). Chapter 5 presents an initial IP management roadmap, which sub-divides REACH into four IP strategy and management generation phases, which are in tune with the workflow and work plan of the project. Chapter 6 summarizes the most relevant issues addressed in the given report.

1.2 General IP situation and challenges in REACH

Of particular importance in the context of REACH are the following IP and knowledge management challenges:

- 1. Management of partners' existing knowledge (background knowledge): Due to the size and diversity of REACH consortium (18 partners; integration cross the value chain), the knowledge brought into the consortium has to be tracked and managed fastidiously in order to ensure an open atmosphere in the project.
- 2. Management and patenting of foreground technology: REACH has 4 technology oriented sub-areas (sensing; analytics; intervention; PI²Us) and from each of it, it is expected that a patent or a patent cluster shall emerge.

- **3. IP Management in the context of platform based business model/HSDP**: The knowledge management strategy has to consider the platform approach of REACH. Extensive patenting would hinder the open innovation created on the basis of the platform. Patenting in combination with standardisation must allow that stakeholders and 3rd parties can add via interfaces physical products and services or PSSs to the system, and offer them through Philip's HSDP.
- 4. Open Innovation: REACH partners will try to license the more radical ideas emerging from the project that are too far from the core competency of major partners as Philips or ArjoHuntleigh to the SMEs or to REACH related Spin-offs or Start-ups in order to make them exploitable.

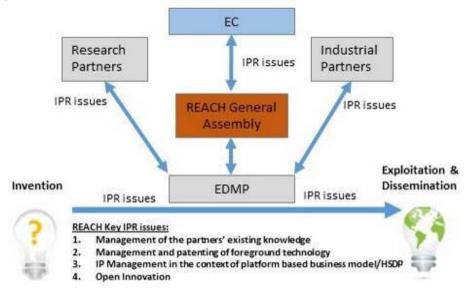


Figure 1-1: REACH's IP/Knowledge management and protection strategy

The IP management during the project needs to facilitate a structured process, as well as to identify, assess and protect the foreground generated in REACH (**Table 1-1**). At the centre of the IP management process is the General Assembly (GA), which is in charge of formulating the overall IP strategy and ensuring compliance with Commission guidelines. Once the IP strategy has been formulated and agreed upon by all the partner representatives present in the Grant Agreement (GA), the implementation of the IP strategy will be facilitated jointly by the Exploitation and Dissemination Management Panel (EDMP), the Coordinator, and the participants of **T8.2** (Design, Technology and IP Analysis) and **T9.6** (IP Management).

The mentioned entities will facilitate that the necessary IPR, license and royalty agreements are in place with all consortium partners to ensure subsequent exploitation of REACH foreground. Each partner is solely responsible for identifying foreground that they generate in the project. Partners, in consultation with the above mentioned facilitating entities, are also responsible for carrying out a structured assessment process, including a thorough patent search, to determine whether or not foreground is best exploited via patent protection or through other means.

The most significant results anticipated at this stage are listed in **Table 1-1** below – and according to the listed technology areas, technology mapping and IP research will be conducted throughout the project. Finally, if necessary, formalised license agreements with

third parties may be implemented, where this is deemed necessary to maximise the exploitation of foreground.

Result Nº	Foreground Technology Areas	WP	Protection approach	IPR holder	Foreground exploitation plan
1	Sub-system 1: Sensing and Monitoring: Wearable electronic sensor design, ultra-low power operation methods, emotion sensing engine; novel ambient sensing process, modular ambient sensors	2	Patents	SC, TUM	Exploit via wearables market, building technology market, eHealth market
2	Sub-system 2: Analysis and Planning: process of producing user behaviour clusters using data analytics methods applied to time-series data	3	Patents, copyrights	EPFL, FIAIS	Start-up launch targeting Big Data analytics market
3	Sub-system 3: Intervention: Physical intervention training modules, motivation methods, innovative services	4	Patents, secret knowledge	Kettler, Alreh, BZN, Philips	Allow for collaborative PSSs development via Philip's HASDP; exploit individual devices through rehabilitation market
4	Sub-system 4: Smart furniture/Pl ² Us: Smart Furniture, Pl ² Us, installation process, connectors/interfaces	5	Industrial designs, Patents	Arjo, TUM	Address Renovation/Building and Home Care/Care Home Market, Municipalities Insurances
5	Sub-systems 5: Personalisation & user acceptance, motivational strategies, security/data privacy	7	Copy rights, know- hows	TU/e, DTU, Kop., SK, Zuid., HUG, Lyngby	Service to R&D/Usability studies testing
6	Sub-systems 6: Innovative services- oriented business strategies for future market integration	8	Copy rights, know-how, secret knowledge	Sturrm, TU/e, SK, Zuid., HUG, Lyngby	Consult Municipalities, Insurances, Care Organizations

Table 1-1: Breakdown of expected foreground categories REACH (adopted from the DoA)

The concrete foreground and IPs to emerge from the project are likely to be diverse, including patents but also, where applicable, as designs (both registered and unregistered), copyright and (secret) know-how. The Consortium will seek patent protection when applicable. Compliance with EU and international rules and regulations on IPR is key in that context. The allocation of IPR among partners is based on the guiding principle in Horizon 2020 Participation Rules, as well as the provisions set up by the Grant Agreement, whereby partners retain ownership of the foreground generated by themselves.

For jointly generated foreground, the approach in REACH will be an up-front (i.e. in development groups before major development activities start) discussion and division of IP ownership among partners according to core business areas and deliverables in the project, coupled with the default joint ownership for foreground where the respective efforts of partners cannot be ascertained directly. The consortium partners defined and agreed amongst them on the Background for the project, and the REACH consortium works with actively listed background as laid down in the Consortium Agreement (CA).

The CA contains provision facilitating the implementation of REACH IP strategy, a description of each partner's role in the project, their expected contribution, as well as provisions facilitating the transfer of project results to market. Moreover, the CA sets out the rules of confidentiality that apply to all consortium members, and includes a breakdown of background brought into the project by consortium members, defining access rights and license agreements for its use in the project. All partners signed the obligatory CA in line with the official Commission's guidelines.

1.3 Overview over relevant EU guidelines and recommendations

The following EU and external guidelines and recommendations were considered when designing the IP strategy and management plan:

- 1. <u>The European IPR Helpdesk. Your guide to IP in Horizon 2020.</u> (European Comission): defines a set of steps to be followed when designing an IPR management plan during the three phases of a project "getting you project started, implementing your project and concluding your project".
- Strategisches IP Management Risiken adressieren und Chancen nutzen im unternehmerischen Kontext, Ulrich Schröder, Lübeck, 2009: presents a definition of IP management, as well as introduces the role and tasks of an IP manager.

Moreover, the European IPR helpdesk suggests the following documents to be consulted when designing the IP strategy and management plan:

- 1. <u>The General Model Grant Agreement</u>: <u>http://ec.europa.eu/research/participants/data/ref/h2020/mga/gga/h2020-mga-gga-multi_en.pdf</u>
- 2. <u>Rules for Participation and Dissemination in Horizon 2020</u>: <u>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:391:0001:0018:EN:PDF</u>
- 3. <u>Fact sheet on "How to manage IP in FP7 during the proposal stage"</u>: <u>http://www.iprhelpdesk.eu/IP Management in Horizon 2020 at the proposal stage</u>
- 4. Fact sheet on "IP joint ownership": http://www.iprhelpdesk.eu/IP_joint_ownership
- 5. <u>Fact sheet on "Exploitation channels for public research results"</u>: <u>http://www.iprhelpdesk.eu/Exploitation_channels_for_public_research_results</u>
- 6. <u>EC fact sheet on Open Access in Horizon 2020</u>: <u>https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/FactSheet_Open_Access.pdf</u>
- <u>EC guidelines on Open Access to Scientific Publications and Research Data in</u> <u>Horizon 2020</u>: <u>http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/ h2020-hi-oapilot-guide_en.pdf</u>

- Spichtinger, D., <u>"Open access in the European Research Area: FP7 and Horizon 2020</u>", European IPR Helpdesk Bulletin, N°11, October December 2013: <u>http://www.iprhelpdesk.eu/bulletin_issue_11</u>
- Schallnau, J., <u>"Efficient Resolution of Disputes in Research & Development</u> <u>Collaborations and Related Commercial Agreements</u>", European IPR Helpdesk Bulletin N°4, January - March 2012: <u>http://www.iprhelpdesk.eu/bulletin_issue_4</u>

2 The roles of IP strategy and management in REACH

The current chapter introduces relevant terms regarding intellectual assets, and their legal protection, associated with REACH. **Section 2.1** presents the understanding of an IP strategy/policy in a corporate environment as well as in the context of REACH (**Section 2.1.1**), the role and tasks of the IP management in leveraging the value of an intellectual asset (**Section 2.1.2**), the advantages on an IP research (**Section 2.1.3**), as well as the IP environment in the context of REACH (**Section 2.1.4**). **Section 2.2** introduces possibilities of legally protecting the intellectual assets, as well as features of REACH that may apply to given IPRs. **Section 2.3** presents the relation of the REACH IP strategy and management to other work packages and tasks. Finally, **section 2.4**, introduces the "touchpoints and engine concept", which shall shape and structure the REACH IP strategy.

2.1 Definitions

2.1.1 *IP* strategy/policy

A well-established IP strategy will make an important contribution to the competitive advantage of an idea/product/company, through translating an intellectual asset into market value (Eckardt, 2012), as well as bring a consensus among all the involved parties. The IP strategy is part of the overall corporate strategy, which is that of generating a sustainable profit. The IP strategy may make an important contribution to generating profit through preventing competitors realizing higher prices (bv from adopting protected assets/technologies), increasing market share and/or accessing new markets (by legally protecting features which are important to the customers), and maintaining lower production costs (through favourable royalty balance of payments) (Eckardt, 2012). "IP strategy development is a continuous process whereby the strategist observes what is happening in the external environment (competitor activity, existing protected IPs, customer needs, legal framework etc.) and the internal environment (monitoring performance and adherence to the IP strategy), orients herself to the most critical facts and circumstances (and presents it in a correct way to those who need it), decides on a course of action (aligned to the overall corporate strategy), and acts upon that decision (Eckardt, 2012)". In the context of REACH, the IP policy aims at creating and facilitating a consensus between the consortium partners, as well as to allow them act in an orchestrated manner. The REACH IP strategy aims at improving the exploitation of the projects results and leveraging their value, and generating sustainable long-term gains for the involved partners, as well as the health care system, and making an overall contribution to the competitive advantage of generated idea/product/service.

2.1.2 IP management

A complex, interdisciplinary project like REACH will make use, as well as generate a high amount of intellectual assets, of high economic relevance. In order to correctly and timely identify existing or potential intellectual assets, as well as their value and benefits and means to legally protect them and avoid the risks (litigation, infringement, other 3rd party threats, etc.), while being exploited and leveraged by the consortium partners, as well as by external parties, an IP management plan or a set of procedures have to be established, as well as continuously updated through the life of an IP, until expiry. In accordance with the overall REACH IP strategy and for the sake of its successful implementation, a common framework shall be established and thoroughly followed in order to enable the consortium members (engineers, lawyers, business executives etc.), as well as other involved parties, to manage

intellectual assets in a coordinated, informed manner, for facilitating timely and efficient decision taking regarding intellectual assets. In other words, in the context of REACH, an IP management plan shall control the involvement of the right people, at the right time, for correctly identifying, protecting and handling the right intellectual asset, in order to obtain the highest value from the generated knowledge. The IP manager shall (1) raise a general awareness regarding IP identification, protection and handling, (2) identify and prevent risks (litigation, infringement, other 3rd party threats, etc.), (3) ensure the alignment of the creative/developing process to the IP strategy/policy, (4) identify the best relevant IP legal protection possibilities, and (5) ensure the adherence of all the parties and processes to the IP management plan (**Schröder, 2009**).

2.1.3 IP research

Before application for intellectual property rights (IPR) to protect an idea/product/service, an intellectual property research has to be conducted in order to ensure that the idea/product/service is novel and patentable (patentability search), and does not infringe any existing or pending property rights (infringement search). Also, the IP research may be conducted when determining whether an idea/product/service's process of development could be limited or entirely prevented by existing or pending IPRs. Lastly, the IP research may be performed in order to identify opportunity areas, market trends, competitive advantages, as well as potential candidates for recruiting, as a part of the overall creative/developing process (state of the art search). A set of guidelines for conducting an IP research is presented in **Section 4.5**.

2.1.4 IP environment

The overall REACH IP strategy, as well as the REACH IP management are highly influenced, as well as determined by several factors, the so-called "IP environment". The given factors comprise the existing national and international legal framework, the provisions set out in the Horizon 2020 Grant Agreement (see **Section 3.3**), the provisions set out in the Consortium Agreement (see **Section 3.4**), as well as the dissemination and communication commitments (see **D42-a: Dissemination Plan**).

2.2 Types of IP applicable in REACH

The following table introduces the existing IP legal protection possibilities, the explanation of their peculiarities, as well as features of REACH that may apply to the given IPRs.

IPP types	Explanation	Examples in REACH
Patent	• A Patent is an exclusive rights granted to a	Sensors
	patent owner of a novel and innovative product	Actors
	or process to prevent or stop others from	Medical models
	commercially exploiting the patented invention.	 New and sophisticated data evaluation
	In exchange, the patented product or process	process
	must be disclosed to the public (WIPO).	• Hardware
	• A patent can last for a maximum of 20 years	 Interfacing products
	from application (Cornish, Lewelyn, & Aplin,	Computer programs or software
	2013)	
Utility Models	• A Utility model is an intellectual property right,	Less complex interventions
	which is very similar to the patent, but usually	 Products with short development cycle
	has a shorter commercial cycle time, is	 Products with limited product life cycle

Table 2-1: Types of IP applicable in REACH

	cheaper and has less stringent requirements (WIPO).	
Registered Design	 A registered design is the exclusive right to the design registration owner allowing the owner to exclude others from commercially exploiting the overall appearance of a particular design (Cornish, Lewelyn, & Aplin, 2013). A protectable design may be two-dimensional, for example pattern, lines or color, or three-dimensional, for example shapes, but must have an individual character (WIPO). 	 Designs for special furniture Designs for work panels Designs for Mobility devices
Trademark:	• A trademark is a recognizable sign, design or expression, which identifies products or services of one enterprise from those of other enterprises. A trademark could consist of words, pictures, letters, numbers, colors, sounds etc. (WIPO).	 Products of Industrial partners REACH Logo
Copyright	 Copyright is a legal right that creator have over their original works of literature, arts, cinematography, dramatic art, music, sound recording, Broadcasts, TV and radio and many others against unauthorized reproductions and public disseminations (WIPO). Copyright arises automatically on creation of the work, provided it is original and typically till 70 years after the author's death (Cornish, Lewelyn, & Aplin, 2013). 	 Publications Photographs/graphs/drawings/computer icons Videos Internet Media Layout of a published work Computer programs/Software (as source code or object code) Database

2.3 Relation of IP strategy and management to other work packages/tasks

The REACH IP strategy and management shall be based on, as well as be mutually dependent upon several other areas of the project, therefore other work packages and tasks. The updates in the other areas will automatically generate updates within the IP strategy and management and vice versa. The relevant aspects are presented in **Figure 2-1** and concern topics such as business and social environment (**WP8**, **T9.7**, **T9.8**) and technical development (**T1.2**, **T1.4**, **WP2 - WP5**).

Specifically, in **T8.1**, the REACH vision and business models for the four REACH participating countries were created. In **T8.2** (design, technology, and IP analysis), these results and the REACH "touchpoint and engine concept" shall be combined and taken further aiming at a co-adaption of technical developments, business strategy, and IP strategy. These results will be further used to inform and update the REACH IP strategy and IP management process, outlined in this deliverable report (being linked to **T9.6**).

REACH 2020

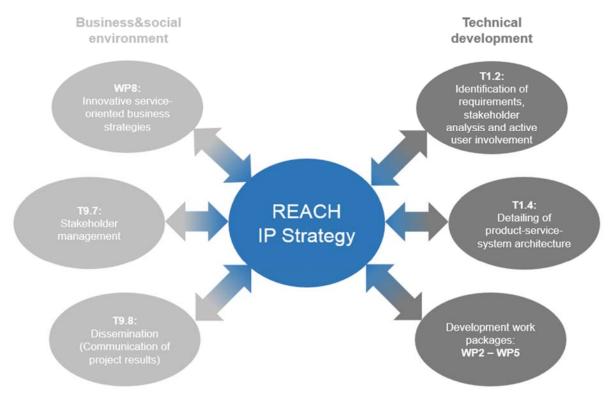


Figure 2-1: Relation of IP strategy and management in REACH to other work packages and tasks

2.4 Initial REACH IP strategy

Following **T1.3**: Development of initial value proposition and product-service-system concept with stakeholders, an initial set of needs and requirements of the relevant stakeholders was identified, as well as possible solutions and ideas, which lead to definition of a so-called "touchpoints and engine concept", which will further shape and organize the development of the REACH product-service-system architecture. The "touchpoints and engine concept" structures the envisioned REACH product-service-system architecture, as well as further R&D activities, into seven research areas or clusters, as following: five clusters of "touchpoints", which represent any tangible connection between users (seniors, informal/formal caregivers, physicians etc.) and the REACH system; one "engine" cluster, which represents a set of specifications that allows touchpoints and other products/services to connect/interact with the engine (see **Figure 2-2**). Each research area or cluster is associated with a separate development team made of consortium members, with a team leader. Please refer to Deliverable **D3**, **Section 7.3**, for a detailed overview of the research clusters.

The given structuring method will be applied to the REACH IP strategy and management as well, whereas each development team will address the intellectual properties employed or generated within their research cluster. This procedure will optimize and accelerate the management of IPs. As outlined in **Figure 2-2**, from the touchpoints and engine strategy seven strategic IP fields are derived which will guide IP management, IP search, and IP protection.

This subdivisions will, on one hand, simplify the project internal management and separation of IP. For example, through this, IP conflicts between the two large companies and medical equipment providers Philips and ArjoHuntleigh can be avoided, since Philips mainly operates in clusters "4", "7", and "6", whereas ArjoHuntleigh sets a strong focus on cluster "2". Moreover, conflicts between SC and Philips (both developers and manufacturers of wearable sensors) can thus be avoided, since SC will mainly operate within cluster "5". Furthermore, the separation creates smaller development teams, which will make the upfront discussion/negotiation of IP separation and joint ownership (see also **Section 4.1**) in each development group more efficient.

On the other hand, the sub-division simplifies IP research and protection towards IP outside the consortium, since it identifies seven clearly defined and foreseeable technology and IP fields. Finally yet importantly, the separation in these seven fields allows a parallelization and thus speeding up of the IP management process.

Thus, overall, the sub-division states a key element in ensuring an open atmosphere within the REACH consortium and fostering efficient and fast exploitation of the project results.

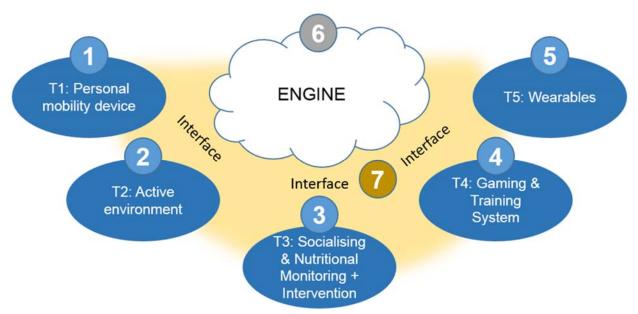


Figure 2-2: From the "touchpoints and engine concept", seven strategic IP fields are derived, which will guide IP management, IP search and IP protection

During **T1.4** Detailing of product-service-system architecture, a further detailing of the REACH overall system architecture shall be achieved, which will lead to a new stage for IP management as well (see **Section 5.2**). During **T1.4** the initial ideas generated during **T1.3** shall be translated into concrete functions/products/services, which shall be further prioritized and the corresponding IP identified and further legally protected, given that no IP infringement is detected.

3 REACH IP Strategy/policy guidelines

The current chapter lists a set of guidelines to be considered when formulating the REACH IP strategy/policy, such as general guidelines (**Section 3.1**), identification of the mutual interests of different parties (**Section 3.2**), as well as provisions set out in the Grant Agreement (**Section 3.3**), and the Consortium Agreement (**Section 3.4**).

3.1 General guidelines

Intellectual property rights are an important instrument to secure innovation in Europe. In order to ensure the protection of IPs in the context of REACH, the guidance below shall be thoroughly followed.

- IPs shall be secured by adequate instruments whenever the commercial interest of a partner is explicitly declared.
- IPs and explicitly patent applications shall be in accordance with European and national regulations for funding programs.
- All partners independently whether from Industry, Universities, Research Institutes or Public Organisations shall cover the IP rights of their own employees adequately.
- Ownership and exploitation rights of IPs belonging to more than one partner shall be covered by a mutual agreed and fixed contractual basis.
- Publications shall be free of declared background and foreground IPs of partners unless permitted by written agreement.
- Open Innovation Platforms may be a desirable instrument for certain aspects in the projects, but must be thoroughly checked and agreed upon by all partners.

3.2 Mutual interests

Sharing IPRs strengthens partnerships. All parties shall undertake the best efforts to respect and support other partners and public interests, as presented below.

- Public (EU) interests are to create innovation, i.e. knowledge, technologies and products available to the (European) society without inadequate restrictions.
- Health Care Organisations interests are to get access to the best products on reasonable conditions, i.e. to avoid monopoly situations.
- Industrial partners' interests are to protect and exploit their IPs to turn innovation into business.
- Research Institutes interests are to strengthen their reputation in science in educations by publishing results.

3.3 Provisions set out in the Grant Agreement

The REACH Grant Agreement (GA) sets out the provisions regarding rights and obligation of the members related to the background and resulting IP. The following articles are relevant to the matter, as well as set out the consequences of non-compliance to the stated provisions. The whole text of the provisions shall be found in **Appendix 7.1**.

• Art. 24 Agreement on background: (Appendix 7.1.1)

- <u>Art. 25 Access rights to background:</u> (**Appendix 7.1.2**) the article sets out provisions concerning access rights for other beneficiaries, for implementing their own tasks under the action (Art. 25.2), access rights for other beneficiaries, for exploiting their own results (Art. 25.3), as well as access rights for affiliated entities (Art. 25.4) and third parties (Art. 25.5).
- <u>Art. 26 Ownership of results:</u> (**Appendix 7.1.3**) the article sets out provision regarding the ownership by beneficiary that generates the results (Art. 26.1), joint ownership (Art. 26.2), rights of third parties (Art. 26.3), as well as rights of the EU, to protect results (Art. 26.4).
- <u>Art. 27 Protection of results:</u> (**Appendix 7.1.4**) the article sets out provision regarding the obligation to protect the results (Art. 27.1), the EU ownership (Art. 27.2), as well as information on EU funding (Art. 27.3).
- <u>Art. 28 Exploitation of results:</u> (**Appendix 7.1.5**) the article sets out provisions concerning obligation to exploit the results (Art. 28.1), and results that could contribute to European or international standards (Art. 28.2).
- <u>Art. 29 Dissemination of results open access visibility of EU funding:</u> (Appendix 7.1.6) the article sets out provision regarding obligation to disseminate results (Art. 29.1), open access to scientific publications (Art. 29.2), open access to research data (Art. 29.3), obligation and right to use the EU emblem (Art. 29.4), and disclaimer excluding Commission responsibility (Art, 29.5).
- <u>Art. 30 Transfer and licensing of results:</u> (**Appendix 7.1.7**) the article sets out provisions concerning the transfer of ownership (Art. 30.1), granting licenses (Art. 30.2), and Commission's rights to object to transfers or licensing (Art. 30.3).
- <u>Art. 31 Access rights to results:</u> (**Appendix 7.1.8**) the article sets out provision regarding exercising of access rights (Art. 31.1), access rights for other beneficiaries, for implementing their own tasks under the action (Art. 31.2), access rights for other beneficiaries, for exploiting their own results (Art. 31.3), access rights of affiliated entities (Art. 31.4), access rights for the EU institutions (Art. 31.5), and access rights for third parties (Art. 31.6).

3.4 Provisions set out in the Consortium Agreement

The REACH Consortium Agreement (CA) sets out the provisions regarding IPRs, dissemination, access rights and non-disclosure of information in the context of REACH. The following articles are relevant to the matter.

- <u>Art. 5.2 Limitations of liability:</u> (**Appendix** Fehler! Verweisquelle konnte nicht gefunden werden.)
- <u>Art. 6.2.4 Veto rights:</u> (**Appendix** Fehler! Verweisquelle konnte nicht gefunden werden.)

- <u>Art. 8 Ownership of Results:</u> (**Appendix** Fehler! Verweisquelle konnte nicht gefunden werden.) Art. 8.1 Joint ownership, Art. 8.2 Transfer of Results, Art. 8.3.1 Dissemination of own Results, Art. 8.3.2 Dissemination of another Party's unpublished Results or Background.
- <u>Art. 9 Access Rights</u>: (Appendix Fehler! Verweisquelle konnte nicht gefunden werden.) Art. 9.3 Access Rights for implementation, Art. 9.4 Access Rights for exploitation, Art. 9.5 Access Rights for affiliated entities, Art. 9.6 Additional Access Rights, Art. 9.7 Access Rights for Parties entering or leaving the consortium, Art. 9.8 Have Made Rights, Art. 9.9 Specific provisions for Access Rights to Software.
- <u>Art. 10 Non-disclosure of information</u>: (**Appendix** Fehler! Verweisquelle konnte nicht gefunden werden.)
- <u>Art. 11.8 Settlement of disputes:</u> (**Appendix** Fehler! Verweisquelle konnte nicht gefunden werden.)

REACH 2020

4 REACH IP Management

The current chapter introduces the most critical issues to be addressed when designing an IP Management plan. Section 4.1 presents the general recommendations to be considered when setting out an IP management plan. The following sections address such matters as the designing and approval of publications in accordance with existing or pending IPRs (Section 4.3), assuring the security of background, foreground, sideground and postground data and knowledge (Section 4.4), conducting an IP research (Section 4.5), as well as property rights in the context of personal data (Section 4.6).

4.1 General recommendations

- In order to avoid lengthy discussions and/or preventing progress due to lack of information during project and experts' meetings, an adequate strategy to handle ideas and inventions shall be established. In order to facilitate the given process, the guidance below shall be followed:
 - 1. Prior to a meeting, each party shall review and update their own background and/or sideground knowledge/data/technology list.
 - 2. All the participants shall agree upfront to share new ideas on an equal basis by partners (important for brainstorming sessions or other creativity methods, e.g. TRIZ), or
 - 3. All the participants shall claim the explicit ownership and contribution at the meeting and document it in the minutes.
 - 4. An Ownership Agreement shall be established in a reasonable timeframe.
 - 5. Industrial partners shall take the lead whenever reasonable.
 - 6. For strategic ideas and technologies it is recommended to aim for a comprehensive IPR protection. Experts' workshops and/or application of adequate methods shall be considered.

Remark: It shall be remembered that "mp3"-like inventions are very rare, but timing may be crucial to success.

- Applying for and maintaining legal IPR protection may be too expensive for some of the partners. Therefore, the guidance below shall be considered:
 - 1. An agreement for selling or licensing the own contribution to a REACH partner shall be found.
 - 2. A simple way to determine the value of an idea or invention (e.g. a fixed rate) shall be found.
 - 3. The IP policy shall be reviewed from time to time.
 - 4. A less costly way, such as a utility model, design or trademark may be opted for.

Remark: Initial costs for legal IPR protection are relatively low, but are increasing progressively in time.

- IPs may be generated and produced in all Work Packages and Use Cases.
- One shall not look for <u>Patents</u> only.

- REACH may be protected as a <u>Trademark</u> (all products and publications shall use the trademark sign).
- Many <u>Designs</u> will be created; they may be protected easily.
- <u>Utility models</u> may be adequate because of the short time-to-market scope.
- <u>Patents</u> shall protect the core inventions.
- <u>Publications</u> shall primarily create attention and interest of customers.
- <u>Research</u> on IPRs regarding the competing processes and products is imperative.

4.2 Checklist for IP protection in the context of REACH

The following checklist was designed to assist the working teams in selecting the most adequate possibility to protect their intellectual property, through listing the pros and cons of whether to keep it secret, disclose it, or acquire legal rights.

	Keep it secret	Disclose it	Secure legal rights (IPR)
Pro	 Legal Restrictions: Personal Health Data & History Personal Feedback Data Core Business Technology/ Recipes 	 Use Open Source Development Gain Freedom to operate Foster Research and Development Partnerships Inexpensive No business impact 	 Right to prohibit others from using your IP Get License fees or trade Protects own product Create intangible Values
Con	 Effort for Security Partners Requests Customer Requests May be reengineered May be claimed by someone else 	 Competition save money, time and may protect add-ons to own disadvantage 	 Time and Manpower Enforced Disclosure Effort to detect somebody infringing your patent Progressively Expensive
Examples	• Patient Data Bank	 <u>Press Releases</u> on <u>Overall</u> <u>Project Targets</u> and Basic Structure <u>Milestones</u> achieved <u>Basic Research</u> Results (medical sources for health problems) Results and data needed for <u>standardisation</u> (hardware and data interfaces) <u>Open Source Platforms</u> Problem descriptions, where <u>ideas</u> and/or data needed to resolve difficult problems Ideas where <u>feedback</u> of potential stakeholders/customers required <u>Brainpower</u> needed outside the project partners knowledge scope needed <u>Cost</u> and/or <u>Time</u> Frame in danger for overall success 	 <u>Patents</u> or <u>Utility Models</u> for inventive steps with potential commercial exploitation (sensors, actors, medical models, new and sophisticated data evaluation process) <u>Designs</u> for mobility and immobility (special furniture, work panels,) <u>Trade Marks</u> for REACH, REACH System, Subsystems, and Components (industrial partner products) <u>Copyright</u> for Publications, Photography, Videos, Internet Media)

Table 4-1: Checklist for IP protection in the context of REACH

4.3 Publications

4.3.1 Motivation

Publications will generate state of the art technology, which is free to use for everybody, unless there is a prior legal protection of IPRs. Therefore, publications shall be:

- Free of confidential information belonging to a partner and/or the project, unless approved and/or intended by the owner.
- Free of declared background and foreground IPRs of partners.
- Approved by the publishing party to be free of IPRs in process, and declare the pending IPRs.
- Attracting attention and convincing stakeholders.
- In accordance with the funding regulations.

4.3.2 Approval Process

Before publishing a paper, in order to facilitate the communication among all he partners, and ensure the lawfulness of given publication, the following process shall be followed (**Figure 4-1**).

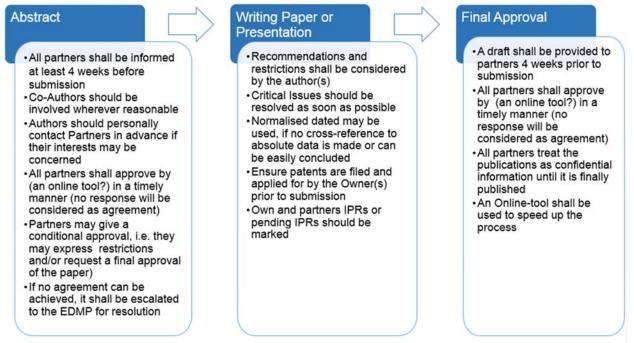


Figure 4-1: The process of approval of a paper for publishing

4.4 Knowledge and data

4.4.1 Motivation

Security of background, foreground, sideground and postground knowledge and data shall be ensured, as of the most valuable asset. Therefore, the guidance below shall be followed:

- It is desirable that all partners provide data for development and validation of instruments and technologies to be developed in the project.
- The rights on the data provided shall remain the property of the providing partner.

- Partners providing data shall be granted non-exclusive rights, non-transferable rights on technologies and in particular algorithms to exploit the shared data.
- The provided data segments, as well as the data pool, have to be kept secure and secret by all parties having access to them.
- IPRs on algorithms to exploit the data shall not include the data.

Remark: Any rights to get access to these data during the project shall be handled through enforced personal and be in compliance with terms and referenced regularly by an independent organisation.

4.4.2 Immediate actions

- Establish an online ballot procedure (or paper form) for publications?
- Establish an online platform (dropbox, portal?) for background technology?
- Apply for a Trademark?

4.5 IP research

When conducting an IP research, the following steps shall be followed:

- 1. The international patent classification (IPC) shall be followed. The online resources such as (European Patent Office) may be used.
- 2. Relevant competitors shall be identified and their patents searched.
- 3. The sub parts comprising a novel component shall be checked for any patent.
- 4. Patent attorneys, national and European patent offices may be employed for patent search, but the service involves additional fees.
- 5. Utility models, industrial designs and trademarks shall be searched as well.

4.6 Data Property: Personal, health-related data and IPR

IP management is considered an important aspect in the context of data management (**Cornell University**) and systems or business models that rely on the gathering and processing of personal data and information. One of the key aspects of REACH is the generation, use/processing, and exploitation of personal, health related data (increasingly also referred to as "data property") in the context of prevention and rehabilitation. As outlined in **T1.3/ Deliverable 3** the 5 major "touchpoints" will, as one of their key functions, serve as data gathering devices. In that context, in **T8.1/Deliverable D3**, it was shown that, in the REACH business model as well, health related data plays a key role: it is the key in an information driven and future value based health care industry.

In the context of **T10.1** (Deliverable **D43**), therefore as part of a privacy and data management plan, a variety of legal (including IP) provisions regarding the generation, usage, sharing, and exploitation of data property were analysed, which are re-called and summarized in the following:

4.6.1 Personal data property rights

1. When data are gathered, altered (e.g. pseudonymized or anonymized), and processed, the question arises to whom the data belongs. In particular, the altering and processing of data involves expertise and/or creativity of the data gatherers and processors. Therefore, particularly once informed consent is obtained from the data

subject and, additionally, proper anonymization is applied, the data become intellectual property of the entity (or group of entities) that generates/processes this data e.g. through their data gathering methods, sensors, and algorithms.

- 2. Thus, for processed data, a joint ownership with respect to all involved parties (data subject, data collecting entities, data controlling entities, data processing entities, etc.) according to the provisions for "IP protection/exploitation" and "Joint Ownership" set out in the REACH Consortium Agreement may be applicable and considered. Alternatively, and depending on the case and circumstances, the data subject himself and/or an objective 3rd party may be assigned ownership and/or control over the data, with the aim of user/patient/data subject "empowerment" (which may in return strengthen the acceptance and trust in REACH). Alternatively, the data subject may own his own data, while the aggregated and anonymous data and analysis results may be considered the property of the entities involved in analysis. Since the concept of personal data property is relatively new, common international standards need yet to be developed.
- 3. The REACH Consortium will further detail a data IP approach with regard to data property as part of various activities and tasks, such as development of the data management plan, the REACH business model and value proposition approaches (WPs 1 and 6), and the detailing of the REACH IP management strategy. The data IP approach shall finally allow the definition of a set of requirements for the REACH data altering and integration approach and REACH's system architecture.
- 4. In a first step prior to data collection, the data collecting partners will jointly agree on the data ownership (as also with regard to other IP that may jointly be developed for example within a touchpoint group). In a second step, the data owning partners will then set out the terms and conditions for use and sharing within the Consortium, before these data are included in the REACH data integration framework/platform. TUM will be considered as the overall data controller that handles request and grants access (see Figure 4-2).

2020⊿

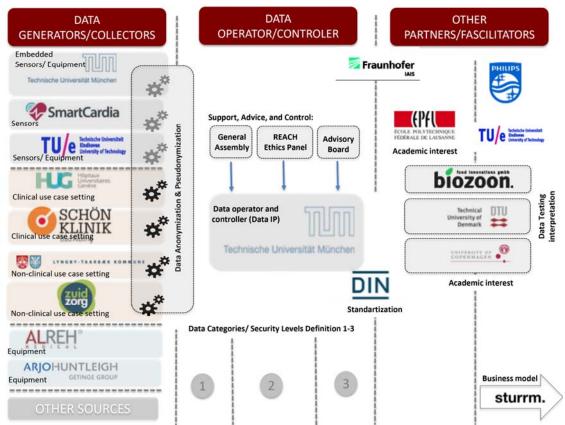


Figure 4-2: REACH partners' roles in the context of the gathering and usage of data property (adopted from T10.1/ Deliverable D43)

4.6.2 Legal issues, guidelines and standards impacting data gathering, processing, and sharing:

The gathering, processing, and sharing of data produced and used in REACH within the Consortium as well as beyond the Consortium/project is guided by

- 1. Provisions concerning IP, testing, access rights, privacy, and ethics set out in the REACH Consortium Agreement (e.g. Art. 39 Processing or personal data, Art. 34 Ethics, Art. 36 Confidentiality, Art. 37 Security-related obligations).
- 2. Provisions set out in the context of IP, testing, access rights, privacy, and ethics in the Grant Agreement.
- 3. QMSs in place at the institutions o the partners (e.g. SK, TUM, STU, etc.) and national laws.
- 4. Declaration of Helsinki.
- 5. The European Code of Conduct for Research Integrity.
- 6. The Horizon2020 ethics appraisal procedure.

The Consortium currently investigates to what extent the REACH data integration framework/platform standards such as the ISO/IEC 27001:2013 on information security management systems can be met.

4.6.3 Utilisation of existing data property

It is currently investigated by the partners how copyright/IP issues have to be addressed for existing data sets owned by REACH partner and in the context of third-party sets. Existing data sets owned by REACH partners can be classified as "background" and the owning

partner has the right - as per the Consortium Agreement (which followed the DESCA model) to determine case by case the use within the project and beyond the project.

4.6.4 Licensing of data for reuse

For REACH internal repositories or data sets (as per the defined security categories) that shall be considered for sharing beyond the Consortium, detailed terms and conditions for use/reuse will be developed by the partners that own or jointly own) the data set in question. TUM will oversee and facilitate the process. The legal departments of the relevant partners will be consulted in this process.

4.6.5 Data sharing and patents

In particular, when data sets shall be shared beyond the Consortium or published, each Consortium member will, as per Consortium Agreement, have the right to double check whether the stated set considered for publishing/sharing may lead to any conflict in the context of planned patent filing.

4.6.6 Conclusion: Data Property in REACH

From the above stated in can be concluded that the ownership and IPR with regard to personal health data and information is still a grey zone. However, it can be concluded that raw data per se are rather under the control or ownership of the data subject, whereas once informed consent and/or ethical approval was obtained, with an increasing degree of systematisation, arrangement, combination or processing of this data, the resulting data or information gets under the control of the processor(s) and become his IP.

Raw data per se in most cases are considered as facts that are usually not protected by copyright law (**Seadle, 2006**). However, when personal health data are concerned, their usage, processing, and/or disclosure by the entity that collected or controls the data is restricted and governed by Ethical guidelines (e.g. the Declaration of Helsinki) and privacy regulations (**European Parliament and Council, 2016**). Informed consent is here the key concept – once informed consent is obtained from the data subject, the data can be used, arranged, combined, and processed through the methods used, and the knowhow and IP of the processor is inseparably fused with this data. When then in addition, in line with the data protection regulation, proper anonymization is applied (such as in the Telefonica case as outlined in the Deliverable D43; see **D43/ Section 4.2.1**) the resulting information is an exploitable asset for the processor.

This has implications for REACH. Usually trials will be conducted jointly by a set of partners or data collectors (e.g. for a planned early trial at SK, SK will cooperate closely with SC and TUM). These data collectors will then jointly transform the data (e.g. structure them, erase noise, make them anonymous, etc.) and create a data set which can be stored in one of the three data category repositories on the platform (see **Figure 4-2**). This data set is then under control of and the data property of the mentioned set of partners. However, the REACH approach will require that these data sets are then processed further (e.g. correlated, integrated with each other, processed by a certain algorithm, etc.) by the data scientists e.g. for predictive modelling. For these cases (mediated by the overall data controller: TUM + boards) the data set providing entities must give their approval and set the terms and conditions.

Apart from the data property, separate IP will apply and be generated with regard to the platform and its structure and function, internal or external data bases, and the algorithms and methods used to process data.

5 REACH IP Management Roadmap

In this chapter, an initial REACH IP management roadmap is presented. First, in continuation of the overall REACH IP strategy the basic IP for each partner is outlined (**Section 5.1**). Second, a detailed IP management roadmap is presented which sub-divides REACH into four subsequent IP strategy and management phases that are in tune with the workflow and work plan of the project (**Section 5.2**). Third, the plan regarding the expansion and updating of the IP strategy and management roadmap is briefly outlined (**Section 5.3**). The goal of IP management in REACH is to align the partners' individual IP goals with the overall REACH IP strategy and further REACH activity dimension such as the development of the REACH business strategy.

5.1 Basic IP situation/strategy of REACH partners now and in the future

In this section in continuation of the overall REACH IP strategy outlined in **Section 2.4**, basic IP situation, the expected IP policy in the future, and the IP approach in REACH are outlined for each partner. Goal of the IP management (together with the in **T9.7/Deliverable D41** described stakeholder management approach) is to align as much as possible the partners' individual IP goals and the overall IP strategy of REACH.

	Partner	IP situation today	IP policy for the future	IP approach in REACH
	TUM	Discover innovation fields and create new IP	Increase activity as IP licensor	 Develop and license out IP in the field of ambient sensors and smart care environments
	DTU	Discover innovation fields and create new IP	Increase activity as IP licensor	 Develop and license out IP in the field of testing methods, motivational strategies and gaming/training
ARCH	Tu/e	Discover innovation fields and create new IP	Increase activity as IP licensor	• Develop and license out IP in the field of gaming/training for ADL improvement
RESEARCH	EPFL	Discover innovation fields and create new IP	Increase activity as IP licensor	• Develop and license out IP in the field of recommender systems in health care
	CU	Discover innovation fields and create new IP	Increase activity as IP licensor	 Develop and license out IP in the field of testing methods, motivational strategies and gaming/training
	Fraunhofer	Discover innovation fields and create new IP	Increase activity as IP licensor	 Develop and license out IP in the field of predictive algorithms
INDUSTRY	Alreh Medical	IP related to walkers and standers	Expand IP towards periphery	 Develop IP related to mobility device compatible trainings, rehabilitation methods and sensors for mobility personalisation ("personal mobility") Incline in the development of IP/standards for compatibility with larger platforms and product-service-systems License in algorithms of predictive approaches

Table 5-1: Basic IP situation/strategy of REACH partners now and in the future

	ArjoHuntleigh	Large IP assets in the field of medical equipment	Expand IP for more ICT/platform integration and beyond clinical environments	 Develop IP with regard to a smart care room ("active environment") Incline in the development of IP/standards for compatibility with larger platforms and product-service-systems Incorporate, license in IP of other partners in innovative fields such as personal mobility, sensors, etc. License in algorithms of predictive approaches
	DIN	IP in the field of standardisation	Discover innovation fields that are in need of standardisation	• Development of IP related to standards in the field of preventive health-care
	Smart Cardia	IP related to wearables and algorithms for medical grade wearables	Expand IP towards scalable platforms and data management	 Develop IP in the field of algorithms and data management
	Sturrm	Know- how in the field of business models	Discover innovation fields in health care	 Development of IP related to business model in the field of preventive and rehabilitation-oriented health-care
	Philips	Large IP base in the field of consumer products and medical devices	Strengthen IP base in the field of health and care	 Development of IP related to platforms and product-service-systems, preventive health care, behaviour change and motivational strategies Incorporate, license IP of other partners in innovative fields that may complement third portfolio in health care License in algorithms of predictive approaches
	Biozoon	IP in the field of customized nutrition	Discover innovation fields in health care and connect to larger platforms/product- service systems	 Develop IP with regard to the provision of customized food in the context of preventive health care
S	HUG	IP in the field of ICT- based interventions	IP licensor	Develop IP in the field of ICT-based interventions
USE CASES	SK	Currently no explicit IP strategy	Up IP base in order to be more competitive	Develop IP in the field of ICT-based rehabilitation
USE	ZZ	Currently no explicit IP strategy	Up IP base in order to be more competitive	Develop IP in the field of ICT-home care an prevention
	Lyngby	Currently no explicit IP strategy	Up IP base in order to be more competitive	Develop IP in the field of ICT-home care an prevention

5.2 IP management roadmap

With regard to IP management, REACH is divided into four major phases, (1) the identification of relevant IP fields in phase 1, (2) IP search and strategy development in phase 2, (3) strategy refinement and protection decision making in phase 3, and (4) the preparation of IP exploitation in phase 4. These phases are co-adapted to the "technical" and development oriented project phases and activities carried out through the project's duration (e.g. the phase where solution variants are developed and selected corresponds

on the IP management side with the facilitation of an in depth IP search to facilitate the decision making process).

Table 5-2:	IP management	roadmap		
Project Month	IP Management Phases	Project Phases	IP related key tasks	Status
M1-M14	Identification of relevant IP fields	 <u>Requirements:</u> Analysis of use cases, stakeholder networks, motivational technologies, etc. Definition of requirements and initial system architecture initial business strategy 	 Divide project into development sub-groups for better IP separation Identify search IP search fields Initial IP strategy Initial Data Management and sharing approach with regard to personal/health data 	 <u>Almost completed:</u> 1 & 2: completed through WP1 and the development of the Touchpoint/Engine concept 3: integral part of this report and WP8 (T8.1/D33) activities 4: completed with T10.1/D43)
M15- M26	<u>IP search +</u> strategy	 Technology selection and specification: translation of requirements into technical solutions and specifications development of technical variants and selection pre-testing detailing of system architecture 	 Negotiate IP ownership/ joint-ownership within each Touchpoint/Engine development group IP search for each search filed (i.e. for each Touchpoint) and definition of risks/chances Update "Background" for each partner in the Consortium Agreement refine IP strategy 	pending
M26- M36	<u>Strategy</u> <u>refinement +</u> <u>protection</u> <u>decisions</u>	 Technical implementation: Technical implementation Testing and usability engineering Detailing of business strategy Detailing of aspects related to health data management (privacy, security, sharing/exploitation, etc.) 	 Detail IP search for each search filed (i.e. for each Touchpoint) refine IP strategy make IP protection decisions (considering both registered and unregistered protection) 	pending
M37- M48	Preparation of IP exploitation	 Verification and generalisation: Demonstration and summative testing Analysis of health and prevention related outcomes 	 Final co-adaptation of business strategy and IP strategy Define the type of exploitation of the IP asset (e.g. internal use, licensing, open-source, etc.) 	pending

Table 5-2:	P management	roadmap

Responsive Engagement of the Elderly promoting Activity and Customized Healthcare

7 REACH 2020∡

 System optimisation Improvement of business, data management, and exploitation strategies 	Refine Data Management and sharing regime beyond the project with regard to personal/health data
--	--

5.3 Continuation and update of IP strategy and management plan

As outlined above the development of an IP strategy and the management of IP is an iterative process that is interdependent with the outcome of activities and innovation procedures within REACH. Therefore, the strategies, plans and procedures presented in this deliverable report in sections 2, 3, 4 and 5 will be reviewed, adapted and updated in each IP management phase. Furthermore, in each IP management phase a basic alignment of the IP related activities (strategy of REACH and partners, management, search, etc.) with the in Section 2.3 identified, related activity fields (e.g., REACH business strategy **WP8**, REACH Dissemination strategy/plan, etc.) will be conducted. All updates will be laid down as a continuation and expansion of this deliverable report.

REACH 2020 ∠

6 Conclusion

The REACH IP strategy will follow the same organizational pattern as the technical development activities, the so called "Touchpoints and engine strategy", where the whole Consortium is divided into groups responsible for the development of one technical asset, therefore simplifying the IP management procedures. The intellectual properties will be identified, handled and decided to be or not legally protected within the relevant groups (see **Section 2.4**). A common IP management plan will be implemented within each working group, into four major phases, (1) the identification of relevant IP fields in phase 1, (2) IP search and strategy development in phase 2, (3) strategy refinement and protection decision making in phase 3, and (4) the preparation of IP exploitation in phase 4. These phases are co-adapted to the "technical" and development oriented project phases and activities carried out through the project's duration (see **Section 5.2**). In this way, the research and profit interest of each partner will be deeper assessed and satisfied, as well as the translation of the identified IPs into tangible gains will be facilitated.

The current report encompasses a set of guidelines/code of conduct/legal framework in the context of IP strategy and management, that shall be followed and jointly implement by the Consortium members. The development of an IP strategy and the management of IP is an iterative process that is interdependent with the outcome of activities and innovation procedures. In the context of REACH, the IP strategy and management shall be based on, as well as be mutually dependent upon several other areas of the project, therefore other work packages and tasks, such as the business strategy, dissemination commitments and technology development (see **Section 2.3**). Therefore the strategies, plans and procedures presented in this report will be reviewed, adapted and updated in each IP management phase, as well as aligned to the other, previously mentioned, activity fields. All updates will be laid down as a continuation and expansion of this deliverable report.

References

- Cornell University. (n.d.). Introduction to intellectual property rights in data management. Retrieved December 15, 2016, from https://data.research.cornell.edu/content/intellectual-property
- Cornish, W., Lewelyn, D., & Aplin, T. (2013). *Intellectual Property: Patents, copyright, trade marks and allied rights.*
- Eckardt, R. (2012, October 3). *What is IP Strategy?* Retrieved December 15, 2016, from https://ipstrategy.com/2012/10/03/what-is-ip-strategy/
- European Comission. (n.d.). *The European IPR Helpdesk. Your Guide to IP in Horizon 2020*. 4 Luxembourg: European IPR Helpdesk.
- European Parliament and Council. (2016). Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation). Official Journal of the European Union.
- European Patent Office. (n.d.). *Espacenet patent search*. Retrieved December 15, 2016, from https://www.epo.org/searching-for-patents/technical/espacenet.html#tab1
- Schröder, U. (2009). Strategisches IP Management. Lübeck.
- Seadle, M. (2006). Copyright in the networked world: using facts. *Library Hi Tech, 24*(3), 463-468.
- Spruson & Ferguson. (2007). Intellectual Property Management: A Practical Guide for Electrical and Electronics Related Industries . Spruson & Ferguson.
- University of Oxford. (n.d.). Intellectual Property (IP). Retrieved from https://www.admin.ox.ac.uk/researchsupport/ip/
- Weisse, R. (2014). *Erfindungen, Patente, Lizenzen Ratgeber für die Praxis.* Heidelberg: Springer.
- WIPO. (n.d.). Copyright. Retrieved January 16, 2016, from http://www.wipo.int/copyright/en/
- WIPO. (n.d.). *Industrial Designs*. Retrieved January 16, 2017, from http://www.wipo.int/designs/en/
- WIPO. (n.d.). Patents. Retrieved January 16, 2017, from http://www.wipo.int/patents/en/
- WIPO. (n.d.). *Protecting Innovations by Utility Models*. Retrieved January 16, 2017, from http://www.wipo.int/sme/en/ip_business/utility_models/utility_models.htm
- WIPO. (n.d.). *Trademarks*. Retrieved January 16, 2017, from http://www.wipo.int/trademarks/en/

Appendix

7.1 Appendix A: Provisions set out in the Grant Agreement

7.1.1 Art. 24 Agreement on background

- <u>Art. 24.1 Agreement on background:</u> The beneficiaries must identify and agree (in writing) on the background for the action ('agreement on background').
 'Background' means any data, know-how or information — whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights — that:
 - (a) is held by the beneficiaries before they acceded to the Agreement, and
 - (b) is needed to implement the action or exploit the results.
- <u>Art. 24.2 Consequences of non-compliance:</u> If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43). Such breaches may also lead to any of the other measures described in Chapter 6.
- 7.1.2 Art. 25 Access rights to background:
 - <u>Art. 25.1 Exercise of access rights Waiving of access rights No sub-licensing:</u> To exercise access rights, this must first be requested in writing ('request for access').

'Access rights' means rights to use results or background under the terms and conditions laid down in this Agreement.

Waivers of access rights are not valid unless in writing.

Unless agreed otherwise, access rights do not include the right to sub-license.

• <u>Art. 25.2 Access rights for other beneficiaries, for implementing their own tasks</u> <u>under the action:</u>

The beneficiaries must give each other access — on a royalty-free basis — to background needed to implement their own tasks under the action, unless the beneficiary that holds the background has — before acceding to the Agreement —: (a) informed the other beneficiaries that access to its background is subject to legal restrictions or limits, including those imposed by the rights of third parties (including personnel), or

(b) agreed with the other beneficiaries that access would not be on a royalty-free basis.

• Art. 25.3 Access rights for other beneficiaries, for exploiting their own results:

The beneficiaries must give each other access — under fair and reasonable conditions — to background needed for exploiting their own results, unless the beneficiary that holds the background has — before acceding to the Agreement — informed the other beneficiaries that access to its background is subject to legal restrictions or limits, including those imposed by the rights of third parties (including personnel).

'Fair and reasonable conditions' means appropriate conditions, including possible financial terms or royalty-free conditions, taking into account the specific

circumstances of the request for access, for example the actual or potential value of the results or background to which access is requested and/or the scope, duration or other characteristics of the exploitation envisaged.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

• Art. 25.4 Access rights for affiliated entities:

Unless otherwise agreed in the consortium agreement, access to background must also be given — under fair and reasonable conditions (see above; Article 25.3) and unless it is subject to legal restrictions or limits, including those imposed by the rights of third parties (including personnel) — to affiliated entities established in an EU Member State or 'associated country', if this is needed to exploit the results generated by the beneficiaries to which they are affiliated.

Unless agreed otherwise (see above; Article 25.1), the affiliated entity concerned must make the request directly to the beneficiary that holds the background.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

- Art. 25.5 Access rights for third parties: Not applicable
- <u>Art. 25.6 Consequences of non-compliance:</u> If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43). Such breaches may also lead to any of the other measures described in Chapter 6.

7.1.3 Art. 26 Ownership of results:

• <u>Art. 26.1 Ownership by the beneficiary that generates the results:</u> Results are owned by the beneficiary that generates them.

'Results' means any (tangible or intangible) output of the action such as data, knowledge or information — whatever its form or nature, whether it can be protected or not — that is generated in the action, as well as any rights attached to it, including intellectual property rights.

- Art. 26.2 Joint ownership by several beneficiaries:
 - Two or more beneficiaries own results jointly if:
 - (a) they have jointly generated them and
 - (b) it is not possible to:

(i) establish the respective contribution of each beneficiary, or

(ii) separate them for the purpose of applying for, obtaining or maintaining their protection (see Article 27).

The joint owners must agree (in writing) on the allocation and terms of exercise of their joint ownership ('joint ownership agreement'), to ensure compliance with their obligations under this Agreement.

Unless otherwise agreed in the joint ownership agreement, each joint owner may grant non-exclusive licences to third parties to exploit jointly-owned results (without any right to sub-license), if the other joint owners are given:

- (a) at least 45 days advance notice and
- (b) fair and reasonable compensation.

Once the results have been generated, joint owners may agree (in writing) to apply another regime than joint ownership (such as, for instance, transfer to a single owner (see Article 30) with access rights for the others).

Art. 26.3 Rights of third parties (including personnel):

If third parties (including personnel) may claim rights to the results, the beneficiary concerned must ensure that it complies with its obligations under the Agreement. If a third party generates results, the beneficiary concerned must obtain all necessary rights (transfer, licences or other) from the third party, in order to be able to respect its obligations as if those results were generated by the beneficiary itself. If obtaining the rights is impossible, the beneficiary must refrain from using the third party to generate the results.

• Art. 26.4 EU ownership, to protect results:

26.4.1 *The EU* may — with the consent of the beneficiary concerned — assume ownership of results to protect them, if a beneficiary intends — up to four years after the period set out in Article 3 — to disseminate its results without protecting them, except in any of the following cases:

(a) the lack of protection is because protecting the results is not possible, reasonable or justified (given the circumstances);

(b) the lack of protection is because there is a lack of potential for commercial or industrial exploitation, or

(c) the beneficiary intends to transfer the results to another beneficiary or third party established in an EU Member State or associated country, which will protect them.

Before the results are disseminated and unless any of the cases above under Points (a), (b) or (c) applies, the beneficiary must formally notify the *Commission* and at the same time inform it of any reasons for refusing consent. The beneficiary may refuse consent only if it can show that its legitimate interests would suffer significant harm.

If the *Commission* decides to assume ownership, it will formally notify the beneficiary concerned within 45 days of receiving notification.

No dissemination relating to these results may before the end of this period or, if the *Commission* takes a positive decision, until it has taken the necessary steps to protect the results.

26.4.2 *The EU* may — with the consent of the beneficiary concerned — assume ownership of results to protect them, if a beneficiary intends — up to four years after the period set out in Article 3 — to stop protecting them or not to seek an extension of protection, except in any of the following cases:

(a) the protection is stopped because of a lack of potential for commercial or industrial exploitation;

(b) an extension would not be justified given the circumstances.

A beneficiary that intends to stop protecting results or not seek an extension must — unless any of the cases above under Points (a) or (b) applies — formally notify the *Commission* at least 60 days before the protection lapses or its extension is no longer possible and at the same time inform it of any reasons for refusing consent. The beneficiary may refuse consent only if it can show that its legitimate interests would suffer significant harm.

If the *Commission* decides to assume ownership, it will formally notify the beneficiary concerned within 45 days of receiving notification.

 <u>Art. 26.5 Consequences of non-compliance:</u> If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43). Such breaches may also lead to the any of the other measures described in Chapter 6.

7.1.4 Art. 27 Protection of results:

• Art. 27.1 Obligation to protect the results:

Each beneficiary must examine the possibility of protecting its results and must adequately protect them — for an appropriate period and with appropriate territorial coverage — if:

(a) the results can reasonably be expected to be commercially or industrially exploited and

(b) protecting them is possible, reasonable and justified (given the circumstances).

When deciding on protection, the beneficiary must consider its own legitimate interests and the legitimate interests (especially commercial) of the other beneficiaries.

• Art. 27.2 EU ownership, to protect the results:

If a beneficiary intends not to protect its results, to stop protecting them or not seek an extension of protection, *The EU* may — under certain conditions (see Article 26.4) — assume ownership to ensure their (continued) protection.

• Art. 27.3 Information on EU funding:

Applications for protection of results (including patent applications) filed by or on behalf of a beneficiary must — unless the *Commission* requests or agrees otherwise or unless it is impossible — include the following:

"The project leading to this application has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 690425".

• <u>Art. 27.4 Consequences of non-compliance:</u> If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43). Such a breach may also lead to any of the other measures described in Chapter 6.

7.1.5 Art. 28 Exploitation of results:

• Art. 28.1 Obligation to exploit the results:

Each beneficiary must — up to four years after the period set out in Article 3 — take measures aiming to ensure 'exploitation' of its results (either directly or indirectly, in particular through transfer or licensing; see Article 30) by:

- (a) using them in further research activities (outside the action);
- (b) developing, creating or marketing a product or process;
- (c) creating and providing a service, or
- (d) using them in standardisation activities.

This does not change the security obligations in Article 37, which still apply.

• <u>Art. 28.2 Results that could contribute to European or international standards —</u> <u>Information on EU funding:</u>

If results are incorporated in a standard, the beneficiary concerned must — unless the *Commission* requests or agrees otherwise or unless it is impossible — ask the standardisation body to include the following statement in (information related to) the standard:

"Results incorporated in this standard received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 690425".

• <u>Art. 28.3 Consequences of non-compliance:</u> If a beneficiary breaches any of its obligations under this Article, the grant may be reduced in accordance with Article 43. Such a breach may also lead to any of the other measures described in Chapter 6.

7.1.6 Art. 29 Dissemination of results – open access – visibility of EU funding:

• Art. 29.1 Obligation to disseminate results:

Unless it goes against their legitimate interests, each beneficiary must — as soon as possible — 'disseminate' its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium).

This does not change the obligation to protect results in Article 27, the confidentiality obligations in Article 36, the security obligations in Article 37 or the obligations to protect personal data in Article 39, all of which still apply.

A beneficiary that intends to disseminate its results must give advance notice to the other beneficiaries of — unless agreed otherwise — at least 45 days, together with sufficient information on the results it will disseminate.

Any other beneficiary may object within — unless agreed otherwise — 30 days of receiving notification, if it can show that its legitimate interests in relation to the results or background would be significantly harmed. In such cases, the dissemination may not take place unless appropriate steps are taken to safeguard these legitimate interests.

If a beneficiary intends not to protect its results, it may — under certain conditions (see Article 26.4.1) — need to formally notify the *Commission* before dissemination takes place.

• Art. 29.2 Open access to scientific publications:

Each beneficiary must ensure open access (free of charge online access for any user) to all peer reviewed scientific publications relating to its results.

In particular, it must:

(a) as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications;

Moreover, the beneficiary must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications. (b) ensure open access to the deposited publication — via the repository — at the latest: (i) on publication, if an electronic version is available for free via the publisher, or (ii) within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.

(c) ensure open access — via the repository — to the bibliographic metadata that identify the deposited publication. The bibliographic metadata must be in a standard format and must include all of the following:

- the terms "European Union (EU)" and "Horizon 2020";

- the name of the action, acronym and grant number;
- the publication date, and length of embargo period if applicable, and
- a persistent identifier.
- Art. 29.3 Open access to research data: Not applicable
- <u>Art. 29.4 Information on EU funding Obligation and right to use the EU emblem:</u> Unless the *Commission* requests or agrees otherwise or unless it is impossible, any dissemination of results (in any form, including electronic) must:

(a) display the EU emblem and

(b) include the following text:

"This project has received funding from the *European Union's Horizon 2020 research* and innovation programme under grant agreement No 690425".

When displayed together with another logo, the EU emblem must have appropriate prominence.

For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the *Commission*.

This does not however give them the right to exclusive use.

Moreover, they may not appropriate the EU emblem or any similar trademark or logo, either by registration or by any other means.

• Art. 29.5 Disclaimer excluding Commission responsibility:

Any dissemination of results must indicate that it reflects only the author's view and that the *Commission* is not responsible for any use that may be made of the information it contains.

 <u>Art. 29.6 Consequences of non-compliance:</u> If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43). Such a breach may also lead to any of the other measures described in Chapter 6.

7.1.7 Art. 30 Transfer and licensing of results

• Art. 30.1 Transfer of ownership:

Each beneficiary may transfer ownership of its results.

It must however ensure that its obligations under Articles 26.2, 26.4, 27, 28, 29, 30 and 31 also apply to the new owner and that this owner has the obligation to pass them on in any subsequent transfer.

This does not change the security obligations in Article 37, which still apply.

Unless agreed otherwise (in writing) for specifically-identified third parties or unless impossible under applicable EU and national laws on mergers and acquisitions, a beneficiary that intends to transfer ownership of results must give at least 45 days advance notice (or less if agreed in writing) to the other beneficiaries that still have (or still may request) access rights to the results. This notification must include sufficient information on the new owner to enable any beneficiary concerned to assess the effects on its access rights.

Unless agreed otherwise (in writing) for specifically-identified third parties, any other beneficiary may object within 30 days of receiving notification (or less if agreed in writing), if it can show that the transfer would adversely affect its access rights. In this case, the transfer may not take place until agreement has been reached between the beneficiaries concerned.

• Art. 30.2 Granting licenses:

Each beneficiary may grant licences to its results (or otherwise give the right to exploit them), if:

(a) this does not impede the rights under Article 31 and (b) *not applicable.*

In addition to Points (a) and (b), exclusive licences for results may be granted only if all the other beneficiaries concerned have waived their access rights (see Article 31.1).

This does not change the dissemination obligations in Article 29 or security obligations in Article 37, which still apply.

- Art. 30.3 Commission right to object to transfers or licensing: Not applicable
- <u>Art. 30.4 Consequences of non-compliance:</u> If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43). Such a breach may also lead to any of the other measures described in Chapter 6.
- 7.1.8 Art. 31 Access rights to results:
 - <u>Art. 31.1 Exercise of access rights Waiving of access rights No sublicensing:</u>

The conditions set out in Article 25.1 apply.

The obligations set out in this Article do not change the security obligations in Article 37, which still apply.

 Art. 31.2 Access rights for other beneficiaries, for implementing their own tasks under the action:
 The beneficiaries must give each other access — on a royalty-free basis — to results.

The beneficiaries must give each other access — on a royalty-free basis — to results needed for implementing their own tasks under the action.

- <u>Art. 31.3 Access rights for other beneficiaries, for exploiting their own results:</u> The beneficiaries must give each other — under fair and reasonable conditions (see Article 25.3) — access to results needed for exploiting their own results. Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.
- Art. 31.4 Access rights of affiliated entities:

Unless agreed otherwise in the consortium agreement, access to results must also be given — under fair and reasonable conditions (Article 25.3) — to affiliated entities established in an EU Member State or associated country, if this is needed for those entities to exploit the results generated by the beneficiaries to which they are affiliated. Unless agreed otherwise (see above; Article 31.1), the affiliated entity concerned must make any such request directly to the beneficiary that owns the results. Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

• Art. 31.5 Access rights for the EU institutions, bodies, offices or agencies and EU Member States:

The beneficiaries must give access to their results — on a royalty-free basis — to EU institutions, bodies, offices or agencies, for developing, implementing or monitoring EU policies or programmes.

Such access rights are limited to non-commercial and non-competitive use. This does not change the right to use any material, document or information received from the beneficiaries for communication and publicising activities (see Article 38.2).

- Art. 31.6 Access rights for third parties: Not applicable
- <u>Art. 31.7 Consequences of non-compliance:</u> If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43). Such breaches may also lead to any of the other measures described in Chapter 6.

7.2 Appendix B: Provisions set out in the Consortium Agreement

This Appendix was considered as confidential and therefore was integrated as "Appendix 9" into the linked Deliverable T1.4/D4 (confidential deliverable).