D1.7 IPR Management Plan v3

DURAARK

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Executive Summary

This report presents the strategy for the intellectual property rights (IPR) management of the DURAARK project, aimed at supporting the overall exploitation and dissemination strategy of the project (WP8). In particular, the IPR management plan aims at ensuring a wide accessibility, availability and reusability of all outcomes produced by the project. The document outlines the Intellectual Property (IP) produced in the project, the IPR considerations and proposals, and a discussion of the default intended licensing schemes for specific foreground artifacts, namely, reports, software, and datasets.
This report, IPR Management Plan V3, complements both previous versions of the same deliverable (i.e. D1.1.3 and D1.1.5) and other existing agreements, such as the standardised license agreement between DURAARK and owners of third-party datasets who are offering these for use in the project. It is also important to emphasise that this document is complemented by additional DURAARK deliverables, such as the exploitation plans described in D8.5 which are describing the wider activities to implement the exploitation and dissemination strategy.

Table of Contents

1 Introduction

This document outlines the Intellectual Property (IP) in the project, including a particular the Intellectual Property Rights (IPR) management plan. The document presents the overall IPR management strategy, which supports the exploitation and dissemination plans in WP8, and a more detailed and IP specific IPR management plan. In particular, we summarise all major IP types - data, software, reports - identify and describe the items in each category which are currently available or foreseen in the project and present the IPR management plan, in particular the respective licenses (used and proposed ones) and the rationale for such choices.

In the DURAARK project a range of IP types, including reports (as part of the official deliverables), scientific and popular publications and software artefacts (generally including their source code) as well as datasets are being produced. The dissemination and sustainability strategy described in WP8-led deliverables aims at ensuring a wide dissemination and availability of the relevant project foreground results and is directly aimed at easing access and reuse of results - software, datasets, reports - rather than a direct monetisation. It is an established principle that at first a user and developer community needs to be grown around particular results before potential business models are exploited, which often are related to secondary services. Due to these reasons, it is the central goal of DURAARK to ease reuse and sharing of project results and to enable a wide audience to take advantage and sustain project results. The IPR management plan proposed here supports this exploitation and sustainability strategy. To this end, this deliverable will be aligned with and complement the dissemination plan (defined in D8.6) and the exploitation plan further detailed in D8.5.

It should be stressed that this report, *IPR Management Plan V3*, complements both previous versions of the same deliverable (i.e. D1.1.3 and D1.1.5) and existing agreements. While all sections underwent a thorough update and revision, we in particular would like to emphasise the following modifications: (i) a revised version of the default intended licenses in Section 2; (ii) a detailed and exhaustive description of the actual IP and its licenses in Section 3; and (iii) a more thorough analysis of proposed licenses and the implications arising from other involved licensing schemes, which in some cases have called for slight deviations from suggested default licenses. In addition, while several aspects of the management of foreground and background are described in the Consortium Agreement, collaboratively defined and agreed among all partners before the project

kickoff, we also provide an overview of the most relevant clauses as part of the Appendix, briefly introduced in Section 2.

2 General Intellectual Property Strategies

In this section, we present the more general strategy for IP and its exploitation within DURAARK.

2.1 Overall IPR Strategy

We consider three main types of generated foreground artifacts subject to IP protection: *reports*, *software*, and *datasets*, where the default intended licensing schemes are presented as follows. While this represents a general strategy, on a case-by-case basis deviations will be necessary, for instance, to accommodate the licensing requirements of used software libraries.

- **Reports:** For reports of all kinds, the preferred license scheme is adopted from the Creative Commons license scheme (creativecommons.org). In particular, we suggest the **CC Attribution** or **CC BY** license, which grants permissions to share, copy, distribute, and transmit the work, and it also allows to make commercial use of the work, provided that the work is attributed in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).
  By default, our strategy is to use the license **Attribution + No Derivatives** or **CC BY-ND**. **CC BY-ND** prescribes that the work may not be altered, transformed, or be used to built upon.
  The full text of the license is available at Creative Commons [1].

- **Software:** While DURAARK intends to make all software publicly available and enable reuse by third parties, the suggested schems adopt Open Source Licensing principles, for instance, as approved by the *Open Source Initiative – OSI* [2]. In particular and by default, we intend to use the GNU Lesser General Public License or LGPL [3]. The LGPL allows developers (e.g., in academia and companies) to use and integrate LGPL software into their own (even proprietary) software without being required to release the source code of their own software-parts. This represents a compromise between the strong *copyleft* of the GNU General Public License or

[1] Creative Commons `http://creativecommons.org/licenses/by-nd/3.0/legalcode`
[2] OSI `http://opensource.org/`
[3] LGLP `http://www.gnu.org/copyleft/lesser.html`

GPL and permissive licenses such as the BSD licenses and the MIT License [4]. The choice for contextual LGPL license in DURAARK has been made as as a middle ground between two main interests:

- Reciprocal licenses like GPL v3 would have prevented downstream exploitation and commercialization by demanding full disclosure of the derivatives. In particular for the SMEs directly involved as a consortium partner or as associated partner, such licensed would be problematic
- Even though recommended by the EU[5], fully academic licenses (like MIT, BSD) on the other hand were not desireable for all partners that potentially would like to further exploit e.g. potential point cloud compression algorithms, feature detection mechanism etc. later on without being able to control the spread of the underlying forground developed in the DURAARK context

- **Datasets:** In the DURAARK project two main types of datasets can be distinguised by their provenance:
  - **Datasets acquired** from third parties such as industry stakeholders, public institutions like municipalities, publicly available resources or students at academic institutions. In the DURAARK case these are mainly
    * Building Information Models in the Industry Foundation Classes format contributed by Architectural offices or building owners
    * Point Cloud datasets produced by laser scan measurements by surveying companies
    * Linked Data vocabularies and datasets used for the semantic enrichment of preserved models or metadata. Examples include DBPedia, buildingSMART bsDD, Getty AAT and others described in WP 3

    Such datasets made accessible to DURAARK by contributors, are used to conduct part of the activities of the project, e.g. experimentation, model evaluation and validation of algorithms and concepts. Such datasets are protected by their original author and subject to licenses that might restrict redistribution. DURAARK will observe the licensing terms and abide to the terms of use. Where possible, publicly available datasets with permissive licensing

[4] MIT License `http://en.wikipedia.org/wiki/GNU_Lesser_General_Public_License`
[5] `https://www.iprhelpdesk.eu/node/1901`

models will be used to e.g. showcase IFC metadata extraction, point cloud compression, point cloud registration to explicit IFC models, feature detection etc. This will ensure that the DURAARK results e.g. stemming for software prototypes can be reproduced, validated, compared and benchmarked to other approaches etc.

– **Datasets produced** by the DURAARK consortium within the context of the project. A prime example for this category of data are sets of metadata extracted, enriched and generated from IFC and E57 raw data during the archival ingestion. Such generated data will be exposed in the Semantic Digital Archive reference implmentation using the technical standards and best practises of the Linked Open Data community. It is made available to wide audiences and should be used by a wide range of stakeholders to experiment. Where these are descriptive and not violating ethical and privacy standards agreed to in the consortium agreement or are violating the IPR of the underlying data, the general approach of the DURAARK consortium is to make such produced data sets fully available under permissive open licenses. Other examples include mappings between vocabularies and datasets used for the semantic enrichment, registrations of point cloud data sets, explicit geometry in the form of IFC files generated from real-world or simulated laser scans etc.

Especially for the latter category of *produced* datasets, the preferred license scheme is the Creative Commons license (`creativecommons.org`). By default this will be a **Attribution** or **CC BY** or Open Data License **ODL**.
The Open Definition gives full details on the requirements for 'open' data, knowledge and content. The full text of the license is available at Open Data Commons [6]

2.2 Management of Foreground and Background in the Consortium

The general conditions for the management of background and foreground within the consortium is defined in the Consortium Agreement. Here, a set of binding regulations and definitions defines the key terms of ownership, publication and dissemination. The

[6] Open Data Commons `http://opendatacommons.org/licenses/odbl/1.0/`

most relevant sections from an IPR perspective are appended to this document in Appendix A. In addition, the general exploitation strategy for DURAARK IP is described in WP8-specific documents, such as the dissemination and exploitation plans produced in WP8 (D8.5, D8.6).

3 Intellectual Property in DURAARK and IPR Implications

In this section, we report a description of the actual IP, i.e. for each identified artifact types (i.e. reports, software, and datasets generated or used) we describe the involved licenses and Intellectual Property Rights (IPR) implications. Where applicable, i.e. in cases where license decisions are made, we describe a rationale for the proposed choice. Please note that the following overview is an entirely revised update of the ones presented in D1.1.5. While a high amount of additional IP is considered, also the presentation and the overall structure of the summary has been substantially revised. The list of used libraries and tools will be updated along with the design and implementation of the software components.

3.1 Reports

In this section, we report the actual IP and their Intellectual Property Rights implications for the artifact type *Report*. In the following table, we present all reports produced in the first two years of DURAARK, divided per year. The listing present per each Intellectual property a description, the main WP involved in its production and the agreed upon publication license, which in most cases reflects our default license recommendation. Please note, while *scholarly publications* produced in DURAARK[7], represent an important resource type in this category, these are not listed in this document, since usually the terms and conditions of the respective publisher apply.

Intellectual Property	**Main WP**	**Information**	**Licenses**
Year 1			
D1.1.1 Project collaboration and communication infrastructure	1	This deliverable entails the web-based collaboration and communication platform that will be used during the project.	CC BY-ND

[7] http://duraark.eu/publications/

Intellectual Property	**Main WP**	**Information**	**Licenses**
D1.1.2 Quality Assurance and Risk Management Plan V1	1	This first version defines in detail all procedures (including templates) for quality assurance in project communication, collaboration and deliverables. It will also elaborate on risks identified during the proposal and update risk management procedures accordingly during the course of the project.	CC BY-ND
D1.1.3 IPR management plan V1	1	The initial version of IPR management plan details the plan and specific procedures needed to implement the Consortium Agreement with respect to knowledge management.	CC BY-ND
D1.1.4 Quality Assurance and Risk Management Plan V2	1	The updated QA&RM plan defines in detail all procedures (including templates) for quality assurance in project communication, collaboration and deliverables. It also elaborates on risks identified during the proposal and updates risk management procedures accordingly during the course of the project.	CC BY-ND
D1.1.5 IPR management plan V2	1	The updated version of IPR management plan presents the plan and specific procedures needed to implement the Consortium Agreement with respect to knowledge management. It includes detailed descriptions of Intellectual Properties and their rights used and generated within the project.	CC BY-ND
D2.2.1 Requirement document	2	This deliverable reports the results from the requirements analysis	CC BY-ND
D2.2.2 System architecture & specification V1	2	This report presents the description of the overall software architecture including all interface definitions between the involved tasks of WP3, WP4 and WP5	CC BY-ND
D2.2.3 System architecture & specification V2	2	This is the second release of the overall software architecture and system specification including full descriptions of all interface definitions between the involved components and their interaction methods.	CC BY-ND

Intellectual Property	**Main WP**	**Information**	**Licenses**
D3.3.1 Meta data schema extension for archival systems	3	In this report relevant additional meta data identified in WP2 are captured in an OWL/RDF meta schema. Mappings from IFC data and inference methods are described.	CC BY-ND
D3.3.2 Ontological Framework for a Semantic Digital Archive and Observatory	3	In this report the upper meta-ontology and associated vocabularies are documented. The organizational framework for the semantic digital archive as well as its methodological and technological enablers are described. In addition, mappings with established datasets and vocabularies are provided.	CC BY-ND
D4.4.1 Documenting the Changing State of Built Architecture	4	This report introduces the motivation for the LDP curation tool that enables building change documentation and describes the prerequisites. It first reports on the state-of-the-art in point cloud-to-point cloud as well as in point-cloud-to-mesh alignment. The alignment methods used in the LDP curation tool as well as the tool itself including a workflow are described. The report concludes with an analysis of state-of-the-art 3D BIM software regarding their suitability of serving as a host application for our newly developed curation tool.	CC BY-ND
D5.5.1 Recognition of meaningful shapes - point cloud compression - IFC storage	5	This report introduces the motivation for the LDP curation support tool as well as for the preview creation tool. It first reports on the state-of-the-art in point cloud structuring and annotations. The method used in our software as well as the results produced by the software itself are described. The report introduces the state-of-the-art in point clouds compression for (IFC-based) preview generation and comments on the first results obtained by our prototype.	CC BY-ND

Intellectual Property	**Main WP**	**Information**	**Licenses**
D6.6.1: Current state of 3D object digital preservation and gap-analysis report	6	This report describes the current state of the art of digital preservation, covering all levels of an object regardless of its format- or content type. In a second step, current practises and available tools for 3D object preservation are described. A juxtaposition of the state of the art and current practises in 3D object preservation will lead to a definition of gaps.	CC BY-ND
D7.7.1 Current state of 3D object processing in research and practice	7	This deliverable describes the current state of 3D object processing in research and practice. A collection of 3D Point Scan data, Legacy 3D CAD and IFC models from profession and research is the prominent part.	CC BY-ND
D8.8.2 Dissemination Master Plan and Publicity Material V1	8	This deliverable describes a communication strategy for how to address important external stakeholders	CC BY-NC-ND
D8.8.3 Dissemination report Year 1	8	This report summarizes all dissemination activity of year 1.	CC BY-NC-ND

Intellectual Property	Main WP	Information	Licenses
Year 2			
D1.6 Quality Assurance & Risk Management Plan V3	1	The updated QA&RM plan defines in detail all procedures (including templates) for quality assurance in project communication, collaboration and deliverables. It also elaborates on risks identified during the proposal and updates risk management procedures accordingly during the course of the project.	CC BY-ND
D1.7 IPR management plan V3	1	The updated version of IPR management plan details the plan and specific procedures needed to implement the Consortium Agreement. It includes detailed descriptions of project foreground knowledge.	CC BY-ND
D2.4 Software prototype V1	2	Functional prototype of DuraArK framework integrating the first results from WP3, WP4, WP5. This prototype is being used for evaluation and testing in task 7.2.	CC BY-ND
D3.3 Semantic Digital Archive Prototype	3	A prototype is developed based on the recommendations documented in D3.2 that allows the collaborative authoring, approval, re-visioning and long-term preservation of concepts as individuals of ontology classes and properties developed in Task 3.2. The archive provides schemas and vocabularies for description of building components, metrics and other related concepts that serve as common foundation for describing architectural data (e.g. structures recognized by WP5 components). Based on D3.1 a prototypical software module for the inclusion in an archival system is delivered and documented that allow the extraction of selected metadata types from legacy IFC files.	CC BY-ND
D3.4 Semantic Digital Interlinking and Clustering Prototype V1	3	Complementary to D3.3, information linking and clustering mechanisms are developed which allow to interlink disparate data items (instances) in the Semantic Digital Archive as well to correlate data with low-level point cloud data.	CC BY-ND

Intellectual Property	**Main WP**	**Information**	**Licenses**
D5.2 Shape grammars for almost invisible objects software prototype V1	5	The first prototype contains software for the detection of almost invisible object in 3D point clouds like e.g. powerwater lines by means of vision methods combined with shape grammars.	CC BY-ND
D6.2 Ingest and Storage of 3D Objects in a digital preservation system	6	The Ingest and Storage of 3D objects within the digital preservation system are documented through a number of reports, showing objects by SIP, format, size and other preservation related criteria.	CC BY-ND
D7.3 Use case long term Archiving	7	The process of 3D object ingestion into the developed long term-archiving approach is tested and documented.	CC BY-ND
D8.4 Dissemination Master Plan and Publicity Material V2	8	This deliverable describes an updated communication strategy for how to address important external stakeholders.	CC BY-ND
D8.5 Market Study and Exploitation Plan V1	8	An overall assessment of the potential for commercial exploitation is performed, including target market segments and overall profit potential. Key areas are identified for introduction of long-term digital preservation of 3D objects at construction industry and memory institutions. This deliverable includes also a plan for exploiting DuraArK results by offering commercial products and/or services. A sustainable business model is described, and principles for licensing agreements among DURAARK partners are defined.	CC BY-ND
D8.6 Dissemination report Year 2	8	Dissemination report, summarising all dissemination activity of year 2.	CC BY-ND

Table 1: **Identified reports and intended licensing**

3.2 Software

In the following listing, we report the actual IP items and their Intellectual Property Rights implications for the artifact type *Software*. In the following table, we present all software used and generated during the first two years of DURAARK, divided per year. The table indicates for each item, i.e. software component, a description, the main WP involved in its usage or production, the utilised software components and libraries, their respective licenses, and the proposed license for publication, together with a rationale for the licensing choice.

<table>
<tr><th>Intellectual Property</th><th>Main WP</th><th>IP used or generated</th><th>Information</th><th>Licenses</th></tr>
<tr><td colspan="5">Year 1</td></tr>
<tr><td rowspan="5">Semantic Digital Archive Prototype</td><td rowspan="5">3</td><td>Generated</td><td>SDA (Semantic Digital Archive Prototype)</td><td>AGPLv3, BSD</td></tr>
<tr><td colspan="3">IPR Implications: The Free Software Foundation recommended the GNU AGPLv3 to be used and considered for any software that commonly run over a network. Furthermore, the Open Source Initiative approved the AGPLv3 as an open source license. This license implies that the complete source code be made available to any network user of the AGPL-licensed work.
BSD is a permissive free software license, imposing minimal restrictions on the redistribution of qualified software. The BSD License allows the released software to be incorporated into proprietary products. The license allows also proprietary use. IPs based on the material under license may be released under a proprietary license as closed source software. Furthermore, the redistribution and use in source and binary forms, with or without modification, are permitted. The redistribution is not mandatory.
That is completely in line with the scope of the project to widely disseminate and exploit IPs on an open source basis to allow other scientific institutions and companies to take advantage of these software.
Finally, an initial investigation did not identify incompatability and that a more thorough investigation might be carried out at later stages if necessary.</td></tr>
<tr><td>Used</td><td>JENA
Semantic Web an Linked data libraries framework <code>http://jena.apache.org/</code></td><td>JENA
Lic.: Apache 2.0
<code>http://www.apache.org/licenses/LICENSE-2.0</code></td></tr>
<tr><td>Used</td><td>OWL-API
<code>http://owlapi.sourceforge.net</code></td><td>OWL-API
Lic.: LGPL</td></tr>
<tr><td>Used</td><td>SESAME
<code>http://www.openrdf.org/</code></td><td>SESAME
Lic.: BSD-style</td></tr>
</table>

Intellectual Property	**Main WP**	**IP used or generated**	**Information**	**Licenses**
		Used	VIRTUOSO `http://virtuoso.openlinksw.com`	VIRTUOSO Lic.: GPLv2 and proprietary
		Used	BIMSERVER.org `http://www.bimserver.org`	BIMSERVER.org Lic.: AGPL v3
		Used	JSDAI `http://www.jsdai.net`	JSDAI Lic.: AGPL v3
		Used	JHOVE `http://jhove.sourceforge.net`	JHOVE Lic.: LGPL
		Used	BAGIT-Library `https://github.com/LibraryOfCongress/bagit-java`	BAGIT-Library Lic.: Apache 2.0
Semantic Digital Interlinking and Clustering Prototype	3	Generated	Semantic Digital Interlinking and Clustering Prototype	AGPLv3, BSD

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		IPR Implications: The Free Software Foundation recommended the GNU AGPLv3 to be used and considered for any software that commonly run over a network. Furthermore, the Open Source Initiative approved the AGPLv3 as an open source license. This license implies that the complete source code be made available to any network user of the AGPL-licensed work. BSD is a permissive free software license, imposing minimal restrictions on the redistribution of qualified software. The BSD License allows the released software to be incorporated into proprietary products. The license allows also proprietary use. IPs based on the material under license may be released under a proprietary license as closed source software. Furthermore, the redistribution and use in source and binary forms, with or without modification, are permitted. The redistribution is not mandatory. That is completely in line with the scope of the project to widely disseminate and exploit IPs on an open source basis to allow other scientific institutions and companies to take advantage of these software. Finally, an initial investigation did not identify incompatability and that a more thorough investigation might be carried out at later stages if necessary.		
		Used	See the *Information* cell within this table about the aforementioned *Software Semantic Digital Archive Prototype*	See the *Licenses* cell within this table about the aforementioned *Software Semantic Digital Archive Prototype*
LDP curation tool for building change documentation	4	Generated	LDP curation tool for building change documentation Prototype	BSD 2-clause

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		IPR Implications: As it was decided early in the project, this software prototype will be made available in form of shared libraries which will be published under the BSD 2-clause license. BSD is a permissive free software license, imposing minimal restrictions on the redistribution of qualified software. The BSD License allows the released software to be incorporated into proprietary products. The license allows also proprietary use. IPs based on the material under license may be released under a proprietary license as closed source software. Furthermore, the redistribution and use in source and binary forms, with or without modification, are permitted. The redistribution is not mandatory.		
		Used	This software item is one of the building blocks for the curation task within the DURAARK project. It allows to synchronize and align various representations (including point clouds and IFC files) of an architectural entity that were created at different points of the object's lifecycle. Size: Source code: 1-2 MB (without libraries). Binary: ca. 50 MB (Linux) LIBE57 Library providing basic operations for point clouds in the E57 file format, `http://www.libe57.org/`	LIBE57 Lic. at `http://www.libe57.org/license.html` (which basically looks like the Boost Software License, `http://www.boost.org/users/license.html`)
		Used	APACHE XERCES XML parsing library, `http://xerces.apache.org/`	APACHE XERCES Lic.: Apache License 2.0
		Used	ICU Libraries providing unicode and globalization support for software applications, `http://source.icu-project.org/`	ICU Lic.: `http://source.icu-project.org/repos/icu/icu/trunk/license.html`

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		Used	IfcOpenShell Library providing support for IFC files, http://ifcopenshell.org/	IfcOpenShell Lic.:LGPL v3
		Used	OPEN CASCADE TECH. IfcOpenShell dependency used for triangulation of IFC models, http://www.opencascade.org/	OPEN CASCADE TECH. Lic.: LGPL-like Open CASCADE Technology Public License http://www.opencascade.org/getocc/license
		Used	POINT CLOUD LIBRARY Library providing various data structures and operations for point cloud data, http://pointclouds.org/	POINT CLOUD LIBRARY Lic.: 3-clause BSD
		Used	EIGEN 3 Linear algebra library, http://eigen.tuxfamily.org/index.php?title=Main_Page	EIGEN 3 Lic.: Mozilla Public License 2.0 (except for few parts that are under LGPL)
		Used	BOOST Versatile C++ library, http://www.boost.org/	BOOST Lic.: Boost Software License, http://www.boost.org/users/license.html
		Used	FLANN Library for fast approximate nearest neighbor searches, http://www.cs.ubc.ca/research/flann/	FLANN Lic.: 2-clause BSD
		Used	OPENMESH Versatile library providing data structures and basic operations for 3D meshes, http://www.openmesh.org/	OPENMESH Lic.: LGPL v3 (with exception clause that "you may use any file of this software library without restriction", http://www.openmesh.org/index.php?id=381)

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		Used	QT5 Cross-platform C++ application and UI framework, http://qt-project.org/	QT5 Lic.: Different licensing schemes available (http://qt-project.org/doc/qt-5.0/qtdoc/licensing.html). We would suggest using LGPL 2.1
		Used	OPENGL Cross-language, multi-platform application programming interface for 2D and 3D computer graphics, http://www.opengl.org/	OPENGL Lic.: Depends on specific implementation, http://www.sgi.com/products/software/opengl/license.html
		Used	GLEW cross-platform CC++ extension loading library for OpenGL, http://glew.sourceforge.net/	GLEW Lic.: Modified BSD License, Mesa 3-D License and Khronos License, http://glew.sourceforge.net/credits.html
		Used	ZLIB A compression library, http://www.zlib.net/	ZLIB Lic.: zlib/libpng License, http://opensource.org/licenses/zlib-license.php
		Used	GRAPHENE A modular visualization framework, https://github.com/paulhilbert/graphene	GRAPHENE Lic.: CC0 https://creativecommons.org/about/cc0
LDP curation support tool for point cloud structuring and preview rendering	5	Generated	LDP curation support tool for point cloud structuring and preview rendering Prototype	BSD 2-clause

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		IPR Implications: As it was decided early in the project, this software prototype will be made available in form of shared libraries which will be published under the BSD 2-clause license. BSD is a permissive free software license, imposing minimal restrictions on the redistribution of qualified software. The BSD License allows the released software to be incorporated into proprietary products. The license allows also proprietary use. IPs based on the material under license may be released under a proprietary license as closed source software. Furthermore, the redistribution and use in source and binary forms, with or without modification, are permitted. The redistribution is not mandatory.		
		Used	This software item consists of several components that make efficient curation with the LDP curation tool for building change documentation (see above) feasible. It additionally contains components for creating lightweight versions of even huge point cloud to ensure efficient preview rendering when accesing the archive. LIBE57 Library providing basic operations for point clouds in the E57 file format, `http://www.libe57.org/`	LIBE57 Lic. at `http://www.libe57.org/license.html` (which basically looks like the Boost Software License, `http://www.boost.org/users/license.html`)
		Used	APACHE XERCES XML parsing library, `http://xerces.apache.org/`	APACHE XERCES Lic.: Apache License 2.0
		Used	ICU Libraries providing unicode and globalization support for software applications, `http://source.icu-project.org/`	ICU Lic.: `http://source.icu-project.org/repos/icu/icu/trunk/license.html`

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		Used	IfcOpenShell Library providing support for IFC files, http://ifcopenshell.org/	IfcOpenShell Lic.:LGPL v3
		Used	OPEN CASCADE TECH. IfcOpenShell dependency used for triangulation of IFC models, http://www.opencascade.org/	OPEN CASCADE TECH. Lic.: LGPL-like Open CASCADE Technology Public License http://www.opencascade.org/getocc/license
		Used	POINT CLOUD LIBRARY Library providing various data structures and operations for point cloud data, http://pointclouds.org/	POINT CLOUD LIBRARY Lic.: 3-clause BSD
		Used	EIGEN 3 Linear algebra library, http://eigen.tuxfamily.org/index.php?title=Main_Page	EIGEN 3 Lic.: Mozilla Public License 2.0 (except for few parts that are under LGPL)
		Used	BOOST Versatile C++ library, http://www.boost.org/	BOOST Lic.: Boost Software License, http://www.boost.org/users/license.html
		Used	FLANN Library for fast approximate nearest neighbor searches, http://www.cs.ubc.ca/research/flann/	FLANN Lic.: 2-clause BSD
		Used	OPENMESH Versatile library providing data structures and basic operations for 3D meshes, http://www.openmesh.org/	OPENMESH Lic.: LGPL v3 (with exception clause that "you may use any file of this software library without restriction", http://www.openmesh.org/index.php?id=381)

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		Used	QT5 Cross-platform C++ application and UI framework, http://qt-project.org/	QT5 Lic.: Different licensing schemes available (http://qt-project.org/doc/qt-5.0/qtdoc/licensing.html). We would suggest using LGPL 2.1
		Used	OPENGL Cross-language, multi-platform application programming interface for 2D and 3D computer graphics, http://www.opengl.org/	OPENGL Lic.: Depends on specific implementation, http://www.sgi.com/products/software/opengl/license.html
		Used	GLEW cross-platform CC++ extension loading library for OpenGL, http://glew.sourceforge.net/	GLEW Lic.: Modified BSD License, Mesa 3-D License and Khronos License, http://glew.sourceforge.net/credits.html
		Used	ZLIB A compression library, http://www.zlib.net/	ZLIB Lic.: zlib/libpng License, http://opensource.org/licenses/zlib-license.php
		Used	GRAPHENE A modular visualization framework, https://github.com/paulhilbert/graphene	GRAPHENE Lic.: CC0 https://creativecommons.org/about/cc0

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		Used	PRIMITIVE SHAPES A library for the detection of primitive shapes in point clouds, http://cg.cs.uni-bonn.de/en/projects/point-cloud-processing-with-primitive-shapes/	PRIMITIVE SHAPES This software is provided by the copyright holders and contributors "as is" and any express or implied warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed. In no event shall the copyright owner or contributors be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort arising in any way out of the use of this software, even if advised of the possibility of such damage.
Current state of 3D object digital preservation and gap-analysis report	6	Used	Software used for sample file format identification and characterization FITS http://code.google.com/p/fits	FITS Lic.: GNU Lesser GPL

Intellectual Property	**Main WP**	**IP used or generated**	**Information**	**Licenses**
Ingest and Storage of 3D objects in a digital preservation system	6	Generated	Work in Progress	
		Used	In addition to the software produced in the DURAARK project, the proof-of-concept Ingest and Storage of 3D objects into a digital preservation system uses a number of tools. The existing digital preservation system is the Ex Libris proprietary "Rosetta" software. Rosetta can be extended using third-party tools as plugin-ins for tasks such as identification (DROID, fido) or technical metadata extraction (jhove). DROID `https://github.com/digital-preservation/droid`	DROID Lic.: 3-clause BSD
		Used	FIDO `https://github.com/openplanets/fido`	FIDO Lic.: Apache License 2.0
		Used	JHOVE `http://jhove.sourceforge.net/`	JHOVE Lic.: LGPL
		Used	EX LIBRIS ROSETTA `http://www.exlibrisgroup.com/category/RosettaOverview`	EX LIBRIS ROSETTA Lic.: proprietary
Point-cloud extraction tool	7	Generated	Work in Progress	

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		Used	The tool investigates Point Cloud sets in E57 format for typical values that characterize PointClouds, such as Distant between points, Distance between scanner and point. LIB57 Library providing basic operations for point clouds in the E57 file format, http://www.libe57.org/	LIB57 Lic. at http://www.libe57.org/license.html (which basically looks like the Boost Software License, http://www.boost.org/users/license.html)
		Used	APACHE XERCES XML parsing library, http://xerces.apache.org/	APACHE XERCES Lic.: Apache License 2.0
		Used	ICU Libraries providing unicode and globalization support for software applications, http://source.icu-project.org/	ICU Lic.: http://source.icu-project.org/repos/icu/icu/trunk/license.html
		Used	IfcOpenShell Library providing support for IFC files, http://ifcopenshell.org/	IfcOpenShell Lic.:LGPL v3
		Used	POINT CLOUD LIBRARY Library providing various data structures and operations for point cloud data, http://pointclouds.org/	POINT CLOUD LIBRARY Lic.: 3-clause BSD
		Used	EIGEN 3 Linear algebra library, http://eigen.tuxfamily.org/index.php?title=Main_Page	EIGEN 3 Lic.: Mozilla Public License 2.0 (except for few parts that are under LGPL)

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		Used	BOOST Versatile C++ library, http://www.boost.org/	BOOST Lic.: Boost Software License, http://www.boost.org/users/license.html
		Used	FLANN Library for fast approximate nearest neighbor searches, http://www.cs.ubc.ca/research/flann/	FLANN Lic.: 2-clause BSD
		Used	OPENMESH Versatile library providing data structures and basic operations for 3D meshes, http://www.openmesh.org/	OPENMESH Lic.: LGPL v3 (with exception clause that "you may use any file of this software library without restriction", http://www.openmesh.org/index.php?id=381)
		Used	QT5 Cross-platform C++ application and UI framework, http://qt-project.org/	QT5 Lic.: Different licensing schemes available (http://qt-project.org/doc/qt-5.0/qtdoc/licensing.html). We would suggest using LGPL 2.1
		Used	OPENGL Cross-language, multi-platform application programming interface for 2D and 3D computer graphics, http://www.opengl.org/	OPENGL Lic.: Depends on specific implementation, http://www.sgi.com/products/software/opengl/license.html
		Used	GLEW cross-platform CC++ extension loading library for OpenGL, http://glew.sourceforge.net/	GLEW Lic.: Modified BSD License, Mesa 3-D License and Khronos License, http://glew.sourceforge.net/credits.html

Intellectual Property	**Main WP**	**IP used or generated**	**Information**	**Licenses**
		Used	ZLIB A compression library, `http://www.zlib.net/`	ZLIB Lic.: zlib/libpng License, `http://opensource.org/licenses/zlib-license.php`
		Used	GRAPHENE A modular visualization framework, `https://github.com/paulhilbert/graphene`	GRAPHENE Lic.: CC0 `https://creativecommons.org/about/cc0`
IFC extraction tool	7	Generated	Work in Progress	
		Used	BIMSERVER.org The tool is an extension to the bimsync server developed by the DURAARK partner Catenda. The tools browses through a set of datsets in IFC format and extarcts information about typical values, as amount of objects, type of this objects, amount of geometry, `http://www.bimserver.org`	BIMSERVER.org Lic.: `http://bimserver.org/2013/01/30/license-issues/`
DuraArK public web site	8	Generated	The web site at http://www.duraark.eu/ provides the general public with information on the project, its objectives, partners and results.	CC BY-NC-ND

Intellectual Property	Main WP	IP used or generated	Information	Licenses
		IPR Implications: CC BY-NC-ND license grants permissions to share, copy, distribute, and transmit the work only for noncommercial purposes. Provided that the work is attributed to DURAARK, the license does not allow the IP to be altered, transformed, or be used to built upon. Finally, an initial investigation did not identify incompatability and that a more thorough investigation might be carried out at later stages if necessary.		

Intellectual Property	Main WP	IP used or generated	Information	Licenses
Year 2				
DURAARK Framework	2	Generated	Details reported in D2.4	MIT
		IPR Implications: MIT license grants, free of charge, to any person obtaining a copy of the software and associated documentation files, to deal in the software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:"The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software". **Reasoning:** The license is completely in line with the scope of the project to widely disseminate and exploit IPs on an open source basis to allow other scientific institutions and companies to take advantage of these software. The DURAARK Framework provides the infrastructure code to integrate the different software components of partners. The choice for the very permissive MIT license should encourage 3rd parties to incorporate the DURAARK functionality (within and especially after the ending of project) into their own workflow and products without the danger of legal incompatibilities. The software components themselves and their intellectual property are guarded by their own licenses found in this table. In an initial investigation the MIT license did not identify incompatibilities with other interacting license. A more thorough investigation might be carried out at later stages. Relicensing is possible - if necessary - as the current code contribution are authored by project partners. Those would have to agree on a relicensing of the framework.		

<table>
<tr><th>Intellectual Property</th><th>Main WP</th><th>IP used or generated</th><th>Information</th><th>Licenses</th></tr>
<tr><td rowspan="2">DURAARK Workbench</td><td rowspan="2">2</td><td>Generated</td><td>Details reported in D2.4</td><td>MIT</td></tr>
<tr><td colspan="3">IPR Implications: MIT license grants, free of charge, to any person obtaining a copy of the software and associated documentation files, to deal in the software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:“The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software”.
Reasoning: The license is completely in line with the scope of the project to widely disseminate and exploit IPs on an open source basis to allow other scientific institutions and companies to take advantage of these software. The DURAARK Workbench provides the graphical user interface (GUI) for stakeholders and is a reference implementation on how to consume the functionality provided by DURAARK from the frontend (stakeholder) side. To encourage 3rd parties to use the provided GUI and to extend it to their needs (within and especially after the ending of project) the very permissive MIT license was chosen.
In an initial investigation the MIT license did not identify incompatibilities with other interacting license. A more thorough investigation might be carried out at later stages. Relicensing is possible - if necessary - as the current code contribution are authored by project partners. Those would have to agree on a relicensing of the Workbench.</td></tr>
<tr><td>Backbone Marionette</td><td>2</td><td>Used</td><td>http://marionettejs.com/</td><td>MIT</td></tr>
<tr><td>NodeJS</td><td>2</td><td>Used</td><td>http://nodejs.org/</td><td>MIT</td></tr>
<tr><td rowspan="2">DURAARK Semantic Digital Archive (SDA) storage server</td><td rowspan="2">3</td><td>Generated</td><td>sub-component of D3.3, implemented as a standalone service</td><td>MIT</td></tr>
<tr><td colspan="3">IPR Implications: See the IPR Implications cell within this table about the aforementioned generated DURAARK framework holding the MIT license.</td></tr>
</table>

Intellectual Property	**Main WP**	**IP used or generated**	**Information**	**Licenses**
DURAARK Semantic Digital Observatory (SDO)	3	Generated	sub-component of D3.3, implemented as a standalone service	MIT
		IPR Implications: See the *IPR Implications* cell within this table about the aforementioned generated *DURAARK framework* holding the MIT license.		
Semantic context enrichment	3	Generated	sub-component of D3.3 used for the semantic enrichment of ingested models with contextual LD based on NER	MIT
		IPR Implications: See the *IPR Implications* cell within this table about the aforementioned generated *DURAARK framework* holding the MIT license.		
Metadata extraction from IFC SPF	3	Generated	sub-component of D3.3 implemented as python command line tool	LGPL
		IPR Implications: LGPL is the default license suggested in DURAARK for software. For more details, please refer to Section 2.		
Metadata extraction from E57	3	Generated	sub-component of D3.3 command line tool	MIT
		IPR Implications: See the *IPR Implications* cell within this table about the aforementioned generated *DURAARK framework* holding the MIT license.		
Manual Interlinking Prototype	3	Generated	Details reported in D3.4	MIT
		IPR Implications: See the *IPR Implications* cell within this table about the aforementioned generated *DURAARK framework* holding the MIT license.		
Stanford NLP	3	Used	Named Entity Recognition (NER) and Information Extraction (IE) `http://nlp.stanford.edu/ner/`	GPL v2

Intellectual Property	Main WP	IP used or generated	Information	Licenses
Apache Jena	3	Used	RDF processing framework `https://jena.apache.org`	Apache License, 2.0
IfcOpenShell	3	Used	IFC processing and geometry engine `http://ifcopenshell.org/`	LGPL
libE57	3	Used	Software Tools for Managing E57 Files `http://www.libe57.org/`	`\http://www.libe57.org/license.html`
MySQL	3	Used	Database backend `http://www.mysql.com/`	GPL v2
Virtuoso Open-Source Edition	3	Used	Triple Store engine `http://virtuoso.openlinksw.com`	GPL v2
dagre - Graph layout for JavaScript	3	Used	sub-component of the Semantic Digital Interlinking and Clustering Prototype described in D3.4, https://github.com/ cpettitt/dagre	MIT
D3.js	3	Used	sub-component of the Semantic Digital Interlinking and Clustering Prototype described in D3.4, http://d3js.org/	BSD
Require.js	3	Used	sub-component of the Semantic Digital Interlinking and Clustering Prototype described in D3.4, http://requirejs.org/	BSD or MIT
LDSpider	3	Used	sub-component of the Semantic Digital Interlinking and Clustering Prototype described in D3.4, https://code.google.com/p/ ldspider	GNU Lesser GPL

Intellectual Property	**Main WP**	**IP used or generated**	**Information**	**Licenses**
Shape grammars for almost invisible objects	5	Generated	Hidden structures tool, details reported in D5.2	BSD
		IPR Implications: BSD is a permissive free software license, imposing minimal restrictions on the redistribution of qualified software. The BSD License allows the released software to be incorporated into proprietary products. The license allows also proprietary use. IPs based on the material under license may be released under a proprietary license as closed source software. Furthermore, the redistribution and use in source and binary forms, with or without modification, are permitted. The redistribution is not mandatory. That is completely in line with the scope of the project to widely disseminate and exploit IPs on an open source basis to allow other scientific institutions and companies to take advantage of these software. Finally, an initial investigation did not identify incompatability and that a more thorough investigation might be carried out at later stages if necessary.		
OpenCV	5	Used	sub-component of the Shape grammars for almost invisible objects Prototype V1 described in D5.2, `http://opencv.org`	BSD
tclap	5	Used	sub-component of the Shape grammars for almost invisible objects Prototype V1 described in D5.2, `http://tclap.sourceforge.net`	MIT
tinyxml	5	Used	sub-component of the Shape grammars for almost invisible objects Prototype V1 described in D5.2, `https://github.com/leethomason/tinyxml2`	zlib

Table 2: **Identified IPs and IPRs of type Software**

3.3 Datasets

In the following listing, we report the actual Intellectual Properties and their Intellectual Property Rights implications for the artifact type *Dataset*. In the following table, we present all datasets used and generated during the first two years of DURAARK, divided per year. Finally, the listing present per each Intellectual property a description and the main WP involved in its usage or production.

Intellectual Property	**Main WP**	**IP used or generated**	**Information**	**IPR implication**
Year 1				
Meta data schema extension for archival systems	3	Generated	Generated datasets are intended for re-use and dissemination in DPR systems	CC BY
		IPR Implications: CC BY is one of the three default licenses suggested in DURAARK for dataset. For more details, please refer to Section 2.		
Point cloud semantic enrichments IFC models	3	Generated	Generated datasets are intended for re-use and dissemination in DPR systems	CC BY
		IPR Implications: CC BY is one of the three default licenses suggested in DURAARK for dataset. For more details, please refer to Section 2.		

Intellectual Property	Main WP	IP used or generated	Information	IPR implication
Year 2				
Crawled dataset from the Crawler Module	3	Used	The datasets were collected from the crawler module from linked datasets, relevant for the DURAARK project and thereby used for enrichment of archival data. More details are reported in D3.3	ODL
Automated Data Linking Prototype Datasets (Social & Semantic Web)	3	Used	More information regarding the schema mappings and the dataset we considered, the ground truths established for each building type and experimental results can be found at `http://data-observatory.org/building-perception` Details are reported in D3.4	CC BY
BTC dataset (Billion Triples Challenge)	3	Used	The datasetused consists of billions of triples resulting in more than 300GB of uncompressed data. The dataset has been compiled from other linked datasets such as DBPedia or Freebase. The dataset has been compiled from other linked datasets such as DBPedia or Freebase. More details are reported in D3.4	CC BY and GNU Free Documentation License
building-type specific ground truth	3	Generated	TWe created a ground truth dataset considering building types most commonly found across different cities, as observed from Emporis [8], a real estate data mining company which is an authority on building data. The created dataset consists of structures in the 10 biggest cities in Germany and USA (we choose USA and Germany due to the high social media traffic). More details are reported in D3.4	CC BY

[8] `http://www.emporis.com`

Intellectual Property	Main WP	IP used or generated	Information	IPR implication
		IPR Implications: CC BY is one of the three default licenses suggested in DURAARK for dataset. For more details, please refer to Section 2.		

Intellectual Property	**Main WP**	**IP used or generated**	**Information**	**IPR implication**
Datasets from Partners	7	Used	A power of attorney is signed between all DURAARK partners and gives the members of DURAARK the right to act as Licensee and sign license contracts with external partners. These contracts give DURAARK the right to use the data internally to a full extend, but is due to the value and IP of the datasets restrictive in how DURAARK may provide third parties access. Dissemination of the datasets given are usually only allowed in form of screenshots and derived metadata from the original dataset. The licensor can as well give the right for the publishing of the full dataset. Specifically, we are working with (more details are reported in D7.2): **3D scan projects from stakeholders - E57 format**: a total of about 90 datasets related to offices, restaurants, rooms, schools, court yards, installations, residential, etc., collected mainly by CITA. **Building Information Models from stakeholders - IFC format**: a total of about 90 datasets related to single domestic houses, clinics, colleges, offices, restaurants, etc., collected mainly by Studio ATP, Københavns Ejendomme, Karlsruhe Institute of Technology, UK National Building Specification, National Institute of Building Sciences, Nemetschek VectorWorks, Selvaag Gruppen / DDS Data Design System, etc.	CC BY-NC-ND

Intellectual Property	Main WP	IP used or generated	Information	IPR implication
			Building Information Models from stakeholders - IFC & E57 format: a total of about 20 datasets related to educational buildings, offices, etc., collected mainly by CITA, Studio Christensen & Co Architects, and Statsbygg.	

Table 3: **Identified IPs and IPRs of type Dataset**

4 Impact, conclusion and next steps

This report summarise on the one hand the IP detected and foreseen during the first two years of the project and indicates the modalities of their publication and release. While particular modalities for the release and ownership of IPR are described in Section 2, we also attach an excerpt of the Consortium Agreement (Appendix A) which further details modalities related to management of background and foreground in the project.

From an overall project perspective, this document provides the general IPR management guidelines and licensing details, which support the dissemination and exploitation activities in WP8. For instance, the strategy and IPR manegement procedures outlined here are meant to support the exploitation strategy described in the D8.5 as well as the dissemination activities in D8.6 and other dissemination-related deliverables. To this end, the overall strategy described in Section 2 and the licensing proposals in Section 3 will support the implementation of the exploitation and sustainability activities of the project and provide an important foundation for further disseminating DURAARK project results.

As mentioned in earlier sections of this document, our strategy reflects the DURAARK spirit to make the foreground as accessible, reusalbe and open as possible, within the restrictions of the Consortium Agreement.

Finally, it should be stressed that this report, IPR Management Plan V3, complements both previous versions of the same deliverable (i.e. D1.1.3 and D1.1.5) and existing agreements, such as the standardized license agreement between DURAARK and the owners of external datasets.

Appendix A - Consortium Agreement

On the following pages, we have included an excerpt of the Consortium Agreement, further detailing internal management procedures related to handling of background and foreground. The Consortium Agreement has been finalised and signed by legal representatives of all partners and represents a binding document.

8.3 Dissemination

8.3.1 Publication

8.3.1.1 Dissemination activities including but not restricted to publications and presentations shall be governed by the procedure of Article II.30.3 of the EC-GA subject to the following provisions. Prior notice of any planned publication shall be given to the other Parties concerned at least 45 days before the publication. Any objection to the planned publication shall be made in accordance with the GA in writing to the Coordinator and to any Party concerned within 30 days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.

8.3.1.2 An objection is justified if

(a) the objecting Party's legitimate academic or commercial interests are compromised by the publication; or

(b) the protection of the objecting Party's Foreground or Background is adversely affected.

The objection has to include a precise request for necessary modifications.

8.3.1.3 If an objection has been raised the involved Parties shall discuss how to overcome the justified grounds for the objection on a timely basis (for example by amendment to the planned publication and/or by protecting information before publication) and the objecting Party shall not unreasonably continue the opposition if appropriate actions are performed following the discussion.

8.3.2 Publication of another Party's Foreground or Background

For the avoidance of doubt, a Party shall not publish Foreground or Background of another Party, even if such Foreground or Background is amalgamated with the Party's Foreground, without the other Party's prior written approval. For the avoidance of doubt, the mere absence of an objection according to 8.3.1 is not considered as an approval.

8.3.3 Cooperation obligations

The Parties undertake to cooperate to allow the timely submission, examination, publication and defence of any dissertation or thesis for a degree which includes their Foreground or Background subject to the confidentiality and publication provisions agreed in this Consortium Agreement.

8.3.4 Use of names, logos or trademarks

Nothing in this Consortium Agreement shall be construed as conferring rights to use in advertising, publicity or otherwise the name of the Parties or any of their logos or trademarks without their prior written approval.

Section 9: Access Rights

9.1 Background covered

In accordance with and subject to the provisions of the EC-GA, any Party may enter in Attachment 1 any specific Background excluded from the obligation to grant Access Rights in accordance with the provisions of this Consortium Agreement. All other Background except that

listed in Attachment 1 shall be available for the granting of Access Rights in accordance with the provisions of this Consortium Agreement.

9.2 General Principles

9.2.1 Each Party shall implement its tasks in accordance with the Consortium Plan and shall bear sole responsibility for ensuring that its acts within the Project do not knowingly infringe third party property rights.

9.2.2 As provided in the EC-GA Article II.32.3. Parties shall inform the Consortium as soon as possible of any limitation to the granting of Access Rights to Background or of any other restriction which might substantially affect the granting of Access Rights (e.g. the use of open source code software in the Project).

9.2.3 If the General Assembly considers that the restrictions have such impact, which is not foreseen in the Consortium Plan, it may decide to update the Consortium Plan accordingly.

9.2.4 Any Access Rights granted expressly exclude any rights to sublicence unless expressly stated otherwise.
Access Rights shall be free of any administrative transfer costs.
Access Rights are granted on a non-exclusive basis, if not otherwise agreed in writing by all the Parties according to the EC-GA Article II.32.7.

9.2.5 Foreground and Background shall be used only for the purposes for which Access Rights to it have been granted.

9.2.6 All requests for Access Rights shall be made in writing.
The granting of Access Rights may be made conditional on the acceptance of specific conditions aimed at ensuring that these rights will be used only for the intended purpose and that appropriate confidentiality obligations are in place.

9.2.7 The requesting Party must show that the Access Rights are Needed.

9.3 Access Rights for implementation

Access Rights to Foreground and Background Needed for the performance of the own work of a Party under the Project shall be granted on a royalty-free basis, unless otherwise agreed.

9.4 Access Rights for Use

9.4.1. Access Rights to Foreground if Needed for Use of a Party’s own Foreground including for third party research shall be granted on Fair and Reasonable conditions.

Access rights for internal research activities shall be granted on a royalty free basis.

9.4.2 Access Rights to Background if Needed for Use of a Party's own Foreground shall be granted on Fair and Reasonable conditions.

9.4.3 A request for Access Rights may be made up to twelve months after the end of the Project or, in the case of Art. 9.7.2.1.2, after the termination of the requesting Party's participation in the Project.

9.5 Access Rights for Affiliated Entities

Affiliated Entities have Access Rights under the conditions of the EC-GA Article II.34.3.

In addition, Affiliate Entities shall also enjoy Access Rights if they can show that:
-they hold a licence on Foreground developed by a Party they are affiliated to; and
-they Need Access Rights in order to Use such Foreground; and
-they are established in a Member State or an Associated Country;

and they are listed in [Attachment 4 (Listed Affiliated Entities)] to this Consortium Agreement.

Such Access Rights to Affiliated Entities shall be granted on Fair and Reasonable conditions and upon written bilateral agreement.

Affiliated Entities which obtain Access Rights in return grant Access Rights to all Parties and fulfil all confidentiality and other obligations accepted by the Parties under the EC-GA or this Consortium Agreement as if such Affiliated Entities were Parties.

Access Rights may be refused to Affiliate Entities if such granting is contrary to the legitimate interests of the Party which owns the Background or the Foreground.

Access Rights granted to any Affiliated Entity are subject to the continuation of the Access Rights of the Party to which it is affiliated, and shall automatically terminate upon termination of the Access Rights granted to such Party.

Upon cessation of the status as an Affiliated Entity, any Access Rights granted to such former Affiliated Entity shall lapse.
Further arrangements with Affiliated Entities may be negotiated in separate agreements.

9.6 Additional Access Rights

For the avoidance of doubt any grant of Access Rights not covered by the EC GA or this Consortium Agreement shall be at the absolute discretion of the owning Party and subject to such terms and conditions as may be agreed between the owning and receiving Parties.

9.7 Access Rights for Parties entering or leaving the Consortium

9.7.1 New Parties entering the Consortium

All Foreground developed before the accession of the new Party shall be considered to be Background with regard to said new Party.

9.7.2 Parties leaving the Consortium

9.7.2.1 Access Rights granted to a leaving Party

9.7.2.1.1 Defaulting Party

Access Rights granted to a Defaulting Party and such Party's right to request Access Rights shall cease immediately upon receipt by the Defaulting Party of the formal notice of the decision of the General Assembly to terminate its participation in the Consortium.

9.7.2.1.2 Non-defaulting Party

A non-defaulting Party leaving voluntarily and with the other Parties' consent shall have Access Rights to the Foreground developed until the date of the termination of its participation.
It may request Access Rights within the period of time specified in Art. 9.4.2.

9.7.2.2 Access Rights to be granted by any leaving Party

Any Party leaving the Project shall continue to grant Access Rights pursuant to the EC-GA and this Consortium Agreement as if it had remained a Party for the whole duration of the Project.

9.8 Specific Provisions for Access Rights to Software

For the avoidance of doubt, the general provisions for Access Rights provided for in this Section 9 are applicable also to Software.
Parties' Access Rights to Software do not include any right to receive source code or object code ported to a certain hardware platform or any right to receive respective Software documentation in any particular form or detail, but only as available from the Party granting the Access Rights.