ASSET REUSE

Guide to Asset Publication and Licencing

GOBIERNO DE ESPAÑA
MINISTERIO DE ASUNTOS ECONÓMICOS Y TRANSFORMACIÓN DIGITAL
SECRETARÍA DE ESTADO DIGITALIZACION E INTELIGENCIA ARTIFICIAL
SECRETARÍA GENERAL DE ADMINISTRACIÓN DIGITAL

Asset reuse. Guide to Asset Publication and Licencing

2nd electronic edition: October 2022

Content creation and coordination:
Secretariat-General for Digital Administration (SGAD)

Edited by:
© Ministry of Economic Affairs and Digital Transformation
Office of the General Technical Secretary
Publishing Centre

Series: *Administración electrónica*

NIPO: 094-22-091-5

Publication available at the eGovernment Web Portal, Portal de Administración Electrónica (PAe): http://administracionelectronica.gob.es

CONTENTS

FIGURES

TABLES

Document version record			
Version	**File name**	**Date**	**Description**
1	NIF_Guide_ASSET RE USE_F_EN	20/10/2015	First version
2	NIF_Guide_ASSET RE USE_F_EN-2.0	27/10/2022	Second version. Update RD 203/2021, RDL 24/2021 EUPL v1.2 and CISE.

0. PRELIMINARY REMARKS

This is a guide to reusable asset licencing and publication:

- In accordance with Articles 157 and 158 of Law 40/2015[1], of October 1 on the Legal Regime of the Public Sector (Law40/2015), and with Articles 10, 16 and 17 of Royal Decree 4/2010, of January 8, which regulates the National Interoperability Scheme in the field of electronic administration (RD4/2010)[2]. Chapters '4. Preliminary analysis', '7. Open-source software asset management' and Annex III 'Asset release checklist' discuss aspects of computer programme or application (software) asset release.
- In accordance with Title II of Law 37/2007[3], of November 16, on the Re-use of Public Sector Information (Law37/2007), and the associated implementing regulations, Royal Decree 1495/2011, of 24 October, implementing Law 37/2007 for the state public sector (RD1495/2011, Royal Decree 1495/2011, of 24 October, implementing Law 37/2007 for the state public sector), and the Technical Interoperability Standard for the Re-use of Information Resources (NTI-RISP) within the framework of (Directive2003/98/EC), amended by (Directive2013/37/EU) (Both Directives have been repealed by Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and re-use of public sector information (Directive(EU)2019/1024).

This guide is intended to become a support tool in the implementation of the provisions in the above-mentioned regulations. As such, it includes quotations from these laws and directives, elaborations on them and supplementary contents.

To make it easier to understand and handle, the guide includes a series of graphics whose references are shown in the chart below.

[1] (Law 39/2015, of October 1, on the Common Administrative Procedure of Public Administarion) and (Law 40/2015, of October 1on the Legal Regime of the Public Sector), regulate the basic electronic operation of the Public Sector within that sector and between the Public Sector and the society. In particular, title III on the inter -administrative relations provided by Law 40/2015 contains chapters on the duty to collaborate, the cooperation relationships and the electronic relationships among public administrations. This last chapter regulates the National Interoperability and National Security Frameworks, the data transmissions between Public Administrations, the reuse of Administration-owned systems and applications, and the technology transfer between Administrations.

[2] Royal Decree 4/2010 of January 8, 2010, which regulates the National Interoperability Scheme in the field of e-Government) has been amended by Royal Decree 1495/2011, of 24 October, and Royal Decree 203/2021, of 30 March. From now on, whenever reference is made to Royal Decree 4/2010, the consolidated version will be considered to be referenced.

[3] Law 37/2007 of November 16, 2007, on the re-use of public sector information, as amended by Law 18/2015, Law 9/2017 and Royal Decree-Law 24/2021 of November 2.

Título. Contenido.	Quotations from regulations and directives
	Particularly relevant or important content.
	Observation for adequate content interpretation.

1. LEGAL FRAMEWORK

1. Asset re-use, in association with sharing and collaboration practices, has been included in several EU documents and acts:

   - The European eGovernment Action Plan 2011-2015 (Plan2011-2015) established re-use as a concept linked to the implementation of innovative technologies, interoperability, as well as effectiveness and efficiency. The e-Government Action Plan 2016-2020 (Plan2016-2020) highlighted re-use as a key value for the implementation of new technologies in different environments, giving continuity to the previous Action Plan.
   - The digital targets for 2030 (Targets2030) set out in the European Digital Decade reinforce the importance of public sector digitization, encouraging public services to share solutions through enabled platforms.
   - The European Interoperability Strategy (EIS) recommends the systematic re-use of solutions among public administrations in the Union, and includes a package of accompanying measures targeted at communities of interest and the integration of collaboration platforms.
   - The New European Interoperability Framework (NewEIF) envisages re-use in connection with concepts, applications, services, specifications, data models and administrative information sources. Underlying principle 4 (Re-usability) considers re-use to be essential to the effective development of public services. Likewise, Recommendation 6 states, *'Public administrations are encouraged to re-use and share solutions and cooperate in the development of joint solutions when implementing European public services '.*
   - In addition, the re-use of information in the public sector is regulated at EU level by (Directive(EU)2019/1024)[4].

2. These recommendations coming from the European Union have been developed through Law 40/2015, of October 1, on the Legal Regime of the Public Sector (Law40/2015) and its implementing regulation (RD203/2021), as well as the Royal Decree 4/2010, of January 8, which regulates the National Interoperability Scheme in the eGovernment domain (RD4/2010), and (Law37/2007) of November 16 on reusing the public sector information and its implementing regulation (RD1495/2011, Royal Decree 1495/2011, of 24 October, implementing Law 37/2007 for the state public sector).
3. To inform and facilitate public sector organizations the compliance with the implementing regulation of Law 37/2007 (RD1495/2011, Royal Decree 1495/2011, of 24 October, implementing Law 37/2007 for the state public sector), a Guide to the application of Royal Decree 1495/2011 is available (Guide1495/2011).
4. Additionally, by Resolution of February 19, 2013, of the Secretary of State for Public Administration, the Technical Interoperability Standard for the Re-use of Information

[4] Royal Decree 24/2021 transposes in Article 64 of the Third Book the Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 by amending Law 37/2007 of 16 November on the re-use of public sector information.

Resources (NTI-RISP) was approved. To serve as a support tool for the application and implementation of the provisions of this Technical Standard, it is also available is Implementation Guide+ (GuideNTI-RISP).

1.1. Licencing conditions

5. Article 157 of (Law40/2015) discusses the arrangements for the reuse of applications owned by Public Administrations, envisaging the possibility of designating applications as open-source:

> Article 157. Re-use of Administration-owned systems and applications.
>
> 1.. The Administrations will make available to any of them that requests it, the applications, developed by their services or that have been the object of contracting and of whose intellectual property rights they are owners, unless the information to which they are associated is the object of special protection by law. The grantor and grantee Administrations may agree on the impact of the cost of acquisition or manufacture of the assigned applications.
>
> 2. The applications referred to in the previous section may be declared open-source when this results in greater transparency in the operation of the public administration or encourages the incorporation of citizens into the information society.

6. And, in accordance with Article 64.4 of (RD203/2021):

> 4. Public Administrations shall endeavour to build reusable applications, either in product or service mode, in order to encourage sharing, reusing and collaborating, for the benefit of better efficiency and to effectively meet the requests received under Article 157 of Law 40/2015, of 1 October.

7. Likewise, (RD4/2010) defines the concept of 'open-source application '

> Open-source application: Application distributed with a licence that enables users to run it, know the source code, introduce changes or improvements, and redistribute it to other users.

8. In addition, Article 10 of (RD4/2010) on semantic assets establishes the re-use of information exchange data models that are of common use and according to the licencing conditions of its Article 16:

> 3. Data models referred in paragraphs 1 and 2, will be adjusted to the provisions on standards of article 11 and will be published together with the related definitions and codifications through the Semantic Interoperability Centre of the Administration, following the licencing conditions stated in article 16.

9. Article 16 of (RD4/2010) develops the following licencing conditions applicable to assets owned by a public administration that may be available for reuse by other administrations and citizens:

> 1. Licencing conditions for computer applications, associated documentation and any other information object whose intellectual property rights are owned by a Public Administration and can be made available to other administrations and citizens shall take

into account the following aspects:

a) The aim is the use and re-use of public resources.

b) Complete protection against exclusive or partial appropriation by third parties.

c) The transferor's exemption from liability for possible misuse by the transferee.

d) The non-obligation of technical assistance or maintenance by the transferor.

e) The total absence of any liability on the part of the transferor vis-à-vis the transferee in the event of errors or malfunctioning of the application.

f) Licencing shall be by default without consideration and without the need to enter into any agreement. Partial pass-on of the acquisition or development costs of the transferred applications may only be agreed when this payment has a direct impact on increasing the functionalities of the transferred asset, includes specific adaptations for its use in the transferee body, or involves the provision of assistance or support services for its re-use in the transferee body

2. For computer applications, associated documentation, and any other information object declared as open-source, Public Administrations shall use those licences that ensure that the programs, data or information comply with the following requirements:

a) They can be implemented for any purpose.

b) They allow their source code to be known.

c) They can be modified or improved.

d) They may be redistributed to other users with or without changes as long as the derivative work retains these four guarantees

3. For this purpose, the European Union Public Licence application shall be procured, without prejudice to other licences guaranteeing the same rights as set out in paragraphs 1 and 2.

4. In order to facilitate the establishment of licencing conditions, Public Administrations shall include the following aspects in the technical specifications of contracts for the development of new computer applications:

a) That the contracting administration acquires full intellectual property rights to the applications and any other information objects to be developed as part of the contract.

b) That in the case of re-using previously existing assets, the contracting administration receives a product that it can offer for subsequent re-use to other Public Administrations. In addition, in the case of open-source products, it should be possible to declare the future developed application as open-source

1.2. Application and semantic asset directories

10. With the purpose of ensuring the technology transfer among Public Administrations and thus encouraging re-use, Article 158 of (Law40/2015) establishes:

> 1. Public Administrations shall maintain updated directories of applications for free re-use, in accordance with the provisions of the National Interoperability Framework. These directories shall be fully interoperable with the general directory of the General State Administration, so as to ensure computer compatibility and interconnection.
>
> 2. The General State Administration will maintain a general directory of applications for re-use, support the free re-use of applications and promote the development of common applications, formats and common standards within the framework of the national interoperability and security frameworks.

11. (RD4/2010) develops some of these issues in its Article 17 on Reusable application directories:

> 2. Public Administrations shall connect directories of applications for free re-use with each other; and with equivalent instruments at European Union level.
>
> 3. Public Administrations shall publish reusable applications, in product or service mode, in the directories of applications for free re-use, with at least the following content:
>
> a) Source code of the finalised applications, in case they are reusable in product mode and have been declared as open-source.
>
> b) Associated documentation.
>
> c) Licencing conditions for all assets, if reusable in product mode, or level of service offered, if reusable in service mode.
>
> d) Costs associated with their re-use, if any.
>
> 4. Administrations shall endeavour to incorporate into the original application any modifications or adaptations made to any application that has been obtained from a directory of reusable applications

12. Article 10 of (RD4/2010) on semantic assets indicates:

> 1. It will be established and maintained the list of data models considered as of common interest. They will be used preferably during information exchanges in Public Administrations, in accordance with the established procedure in the first additional provision.
>
> 2. Public Administration bodies or Public Law Entities linked or depending on them, holders of competences with regard to information exchange with citizens and with other Public Administrations, as well as in terms of common infrastructures, services and tools, will establish and publish the corresponding interchange data models that will be of mandatory application for information interchanges in Public Administrations.
>
> 3. Data models referred in paragraphs 1 and 2, will be adjusted to the provisions on standards of article 11 and will be published together with the related definitions and codifications through the Semantic Interoperability Centre of the Administration, following the licencing conditions stated in article 16.
>
> 4. The definitions and codifications used in the data models, referred in the earlier

paragraphs, will take into account the provisions of Law 12/1989, of 9 May, on the Public Statistical Function and the rest of laws that regulate the statistical function

13. Similarly, Article 157.3 of (Law40/2015) establishes that the General Directory of Applications of the General State Administration must be consulted before the acquisition, development or maintenance of an application:

> 3. Public Administrations, prior to the acquisition, development or maintenance throughout the life cycle of an application, whether it is carried out with their own means or by contracting the corresponding services, should consult the general directory of applications, which is dependent on the General State Administration, to see if there are solutions available for re-use that can totally or partially satisfy the needs, improvements or updates that are intended to be covered, and provided that the technological requirements for interoperability and security allow for this.
>
> This directory will contain both the applications available from the General State Administration and those available from the integrated application directories of the other Administrations.
>
> In the event that a solution is available for total or partial re-use, the Public Administrations are obliged to use it, unless the decision not to re-use it is justified in terms of efficiency in accordance with Article 7 of Organic Law 2/2012 of 27 April on Budgetary Stability and Financial Sustainability.

14. And, in accordance with article 64.5 of (RD203/2021), this consultation must be part of the procurement file:

> The conclusions regarding the outcome of consulting the general directory shall be incorporated in the procurement file and shall reflect, where appropriate, that there are no solutions available for re-use that can fully or partially meet the needs, improvements or upgrades sought.

Transfer of applications among Public Administrations

If a Public Administration identifies that an application already developed by another Administration is suitable to meet a need, the former can request the cession of use to the owning Administration. Following points must be considered:

- The cession can be requested by any administration and the requested administration is obliged to meet such request, unless it is prevented by some legal problem such as not owing the required intellectual property rights.
- It is not mandatory to transfer the code as open-source. The requested code can be transfered by other means.
- Establishing a reuse license for the asset to transfer, with clearly established and accepted clauses (see section 4 of this guide), is the most convenient way. Open-

source licenses are the most common in this regard.

- If a license is established for the cession, it is NOT necessary to sign any agreement. Only in the case of no licencing, it will be necessary an agreement to reflect the conditions of the transfer.
- According to section 1. f) of Article 16 of (RD4/2010), the licencing will be made without compensation by default. It is only allowed to agree on the payment of a part of the acquisition or development if it has a direct impact on the increase of functionalities of the transferred asset, includes specific adaptations for its use in the transferee body, or involves the provision of assistance or support services for its re-use in the transferee organization. Re-use fees are regulated in Article 7 of (Law37/2007).
- If the transfer of an asset is enabled by declaring it as free software or making it available to be used by other administrations, it must be included in the general directory of applications (see section 6 of this guide). In fact, it is strongly recommended to do so in all cases since the objective is to facilitate the work to all public administrations by re-using public resources. However, the decision is at the discretion of the transferor administration.

15. To facilitate coordination of re-use activities, (Law37/2007) Article 10bis includes the role of unit responsible for information:

> 1. Each subject referred to in Article 2 shall determine the Unit responsible for ensuring that its information is made available.
>
> 2. In the General State Administration, the units responsible for information shall be designated within the Undersecretariats of each Department. Other subjects provided for in Article 2 within the State public sector with their own legal personality shall designate their corresponding Units.
>
> 3. The information responsible Unit will have the following functions:
>
> a) To coordinate the re-use of information activities with the existing policies on publications, administrative information and electronic administration
>
> b) To provide information on the competent bodies, within its scope, for the reception, processing and resolution of the requests for re-use that are processed in accordance with the provisions of Article 10
>
> c) To promote that the information is provided in appropriate formats and as updated as possible.
>
> d) To coordinate and encourage promotional, awareness and training activities.

1.3. Technology Transfer Centre, Semantic Interoperability Centre, directories from regional governments and their interrelationships

16. According to Article 158.2 of (Law40/2015):

> 2. The General State Administration will maintain a general directory of applications for re-use, support the free re-use of applications and promote the development of common applications, formats and common standards within the framework of the national interoperability and security schemes

17. The above provision is specified in article 10 of (RD4/2010):

> 1. The General State Administration shall maintain the General Directory of applications for free re-use, in accordance with article 158 of Law 40/2015, of 1 October, by using the Technology Transfer Centre. This directory may be used by other Public Administrations. If some Public Administration has its own directory, it must ensure that the applications available in this directory can also be consulted through the Technology Transfer Centre.

18. On the other hand, article 16 of (RD4/2010) establishes:

> 1. It shall be created and maintained a Relation of exchange data models considered common, which shall be of preferred application in the information exchange between Public Administrations, according to the procedure established in the First Additional Provision.
>
> 2. Regarding matters that either require the exchange of information with citizens or other administrations, or are related to common tools, infrastructures or services, competent organisms of a Public Administration or its linked or dependent Public-law Bodies shall set and publish the corresponding exchange data models, which shall be mandatory for the exchanges of Public Administrations.
>
> 3. The data models referred to in paragraphs 1 and 2 shall meet the provision set in article 11 regarding standards, and they shall be published, along their definitions and code lists, in the Semantic Interoperability Centre of the Administration according to the licencing conditions provided by article 16.

19. And, in its First Additional Provision, elements are specified with the aim of guaranteeing interoperability through the Technology Transfer Centre and the Semantic Interoperability Centre:

> 4.b) Semantic Interoperability Centre of the Administration: It shall store, publish and disseminate the data models for interoperability services between Public Administrations and between Public Administrations and citizens, both common and sectoral, as well as for common infrastructures and services, along with the related semantic specifications and code lists. Its purpose is to facilitate the semantic understanding of government data exchange services and to maximise the re-use of semantic assets in the construction of these services. It shall connect with other equivalent instruments of Public Administrations and at European Union level
>
> 4 c) Technology Transfer Centre: Directory of applications for free re-use that shall contain the list of applications for free re-use, including, at least, descriptive data relating to the name of the application, brief description of its functionalities, use and characteristics, licence, main open standards applied, and state of development.

20. Following these regulatory provisions, the Technology Transfer Centre (CTT)[5] was established in 2008. The (CTT), available through the eGovernment Web Portal (PAe), is

[5] http://administracionelectronica.gob.es/ctt

the right place to find re-usable solutions, projects, semantic assets and/or services for public administrations. The (CTT) also offers the (CTT Forge), a collaborative development environment in GitHub for public administrations' solutions, inviting an active participation by administration agencies, businesses, and citizens. The (CTT Forge) features specific advanced functions for collaborative development.

21. The Semantic Interoperability Centre of the Administration (CISE)[6] is integrated in the (CTT) for the management of semantic assets, considering the particularities of these assets in comparison to the rest of the technical solutions and according to the Technical Interoperability Standard for Data Models (NTIDataModel), which establishes that:

> VI. Interaction with the Semantic Interoperability Centre
>
> To interact with the Semantic Interoperability Centre, Public Administrations and their related or linked Public-law entities shall:
>
> a) Identify the models to be exchanged with the Semantic Interoperability Centre, in accordance with Section V in this technical standard.
>
> b) Provide the Semantic Interoperability Centre with the data model exchange structure using one of the procedures below and making sure the information provided is up to date.

22. Every re-usable solution managed by the General State Administration shall be registered at the (CTT)/ (CISE). The (CTT)/ (CISE) also serves the rest of public administrations that do not have their own directories, establishing the requirements and conditions to facilitate the re-use of assets. These requirements and conditions are provided by the corresponding Technical Interoperability Standards.

23. As provided by (Law40/2015) and (RD4/2010), all public administrations other than the General State Administration may have their own re-usable solution directories as long as they are linked to the (CTT)/ (CISE).

24. Some regional governments have chosen to keep their own application directories. All these directories are linked[7] to the (CTT)/ (CISE), in compliance with Article 17, Paragraph 2 to (RD4/2010). The other regional governments chose to have their re-usable solutions included in the CTT/CISE.

25. In compliance with Article 17, Paragraph 2 to (RD4/2010), (CTT)/ (CISE) are linked to the European repository (JOINUP)[8] where many re-usable solutions from member states can be found.

26. (CTT) also links with the Code for Development platform of the Inter-American Development Bank (IDB), which promotes the re-use of open-source digital tools for development in Latin America and the Caribbean.[9]

---

[6] http://administracionelectronica.gob.es/PAe/CISE

[7] https://administracionelectronica.gob.es/pae_Home/pae_SolucionesCTT/pae_BuscadorFederado/pae_CTT_listado_directorios.html

[8] https://joinup.ec.europa.eu

[9] https://code.iadb.org/es/que-hacemos

1.4. Licencing and publication of public sector information assets

27. Chapter III of (Directive(EU)2019/1024) establishes the conditions for re-use, describing in its Article 8 the standard licenses:

> 1.The re-use of documents shall not be subject to conditions, unless such conditions are objective, proportionate, non-discriminatory and justified on grounds of a public interest objective.
>
> When re-use is subject to conditions, those conditions shall not unnecessarily restrict possibilities for re-use and shall not be used to restrict competition.
>
> 2. In Member States where licences are used, Member States shall ensure that standard licences for the re-use of public sector documents, which can be adapted to meet particular licence applications, are available in digital format and can be processed electronically. Member States shall encourage the use of such standard licences.

28. These conditions have been transposed by Article 4 of (Law37/2007):

> 2. The re-use of documents shall not be subject to conditions unless they are objective, proportionate, non-discriminatory and justified by a public interest objective. Where conditions are attached, the conditions shall be set out in a license.
>
> The subjects referred to in Article 2 may provide standard licenses for the re-use of documents, which must be available in digital format and electronically processable.
>
> 3. The conditions incorporated in the licenses shall comply with the following criteria:
>
> a) They shall be clear, fair and transparent.
>
> b) They shall not restrict the possibilities of reuse or limit competition.
>
> c) They shall be non-discriminatory for comparable categories of re-use, including cross-border re-use.

29. Article 9 of (Law37/2007) discusses the licences that are applicable to public sector information assets:

> Article 9. Licencing.
>
> 1. The Administrations and public sector bodies included within the scope of application of this Law shall encourage the use of open licenses with the minimum possible restrictions on the re-use of information.
>
> 2. When a license is granted, it shall contain at least information about the specific commercial or non-commercial purpose of re-use, the duration of the license, the obligations of the beneficiary and of the granting body, the responsibilities of use and financial modalities, indicating the free nature or, where appropriate, the applicable fee.

30. Additionally, Article 3.ter of (Law37/2007) contemplates the possibility of specifying organizational agreements regarding the publication and re-use of high-value dataset types, detailing that these agreements will be compatible with open-sources licenses.

31. Article 7 of (RD1495/2011, Royal Decree 1495/2011, of 24 October, implementing Law 37/2007 for the state public sector) states the general terms of availability for re-usable documents, while Article 8 states the terms under which they shall be made available.

32. These terms are stated in Section VII of the Technical Interoperability Standard for the Re-Use of Information Resources, (NTI-RISP) containing the guidelines to specify the terms and conditions of use that are applicable to re-usable information:

> VII. Applicable terms and conditions of use
>
> 1. The specific terms and conditions of re-use by Public Administration bodies and related or linked Public-law entities shall follow the provisions of Law 37/2007, of 16 November, and the associated enforcement regulations. The clauses in Article 8 of Royal Decree 1495/2011, of 24 October, can be used as reference by other Public Administrations.
>
> 2. The general terms of re-use applying to a body, which shall be available and able to be handled electronically, can be complemented by special terms applicable to specific document or information resource categories through public licences, available under the same terms as the general terms

33. For further information on this subject, consult the (Royal Decree 1495/2011 Application Guide) and the (Technical Interoperability Standard for the Re-use of Information Resources Application Guide).

1.5. The portal 'datos.gob.es'

34. The publication of public sector information assets is dealt with under the Article 5 of (RD1495/2011, Royal Decree 1495/2011, of 24 October, implementing Law 37/2007 for the state public sector):

> The bodies of the Central Administration and other bodies and agencies listed in Article 1.2 shall work with the ministry departments mentioned in Paragraph 1 on the drafting and maintenance of said catalogue. Likewise, they shall be in charge of the regular update of the information on re-usable documents contained in the catalogue, ensuring consistency with the information supplied in compliance with Article 4, Paragraph 1 of this Royal Decree.

35. (datos.gob.es) is the national portal organising and managing the Public Information Catalogue of the public sector.

36. All information assets from the State public sector are published on datos.gob.es, where information asset catalogues from other public administrations can be federated.

37. In addition, datos.gob.es includes general information, learning materials and news about the re-use of information in the public sector.

2. PURPOSE AND SCOPE OF ASSET RELEASE

38. For the purpose of this guide, a re-usable asset is any material in electronic format that can be used recurrently. The following are examples of re-usable assets:

    - Computer programmes or software applications
    - Software application-related materials: guides and manuals, interfaces, data models, code lists, algorithms, design patterns, architectures, specifications for design, test and requirements, and user guides, among others.
    - Public Sector Information.
    - Other assets: documents, videos, audio files, outreach materials, etc.

39. Re-usable assets can be self-standing, e.g. this guide, or they can be linked to a software application. In either case, they may have different re-use constraints, which must be clearly specified.

40. Within this framework and for the purpose of this guide, the concept of asset release can be defined as an asset distribution procedure set by public administrations under open-source licence for software or under some open licencing for other types of assets[10].

41. The main goal of the asset release is the possibility of re-use the asset by other interested parties. Organisations, in particular public administrations, tend to create assets that might already exist. Re-use enables the sharing of these resources and their results in and between public administrations, and between public administrations and society thus contributing to a social or economic interest.

42. From a legal point of view, several factors and implications must be considered when preparing assets for publication and release as open-source applications or open licence assets. The release procedure shall have specific characteristics depending on the asset complexity, in particular, the ownership of rights at stake.

43. Asset release is not difficult, but a series of steps must be taken to ensure not only that the release is legal but also that re-use is possible. Of particular interest are the cases of applications as open-source projects, which require active participation from public administrations, businesses and citizens who may contribute to technical improvements, correction of mistakes, and security, access, interoperability, continuity or transparency inputs, among others; the cases of public sector information are also of particular interest.

44. Asset release procedures can be structured into four main stages:

    1. Preliminary analysis and study.
    2. Licence selection.
    3. Asset preparation for distribution.
    4. Publication in a repository

[10] This guide is not concerned with software as a service (SaaS) asset in connection with the products developed by public administrations.

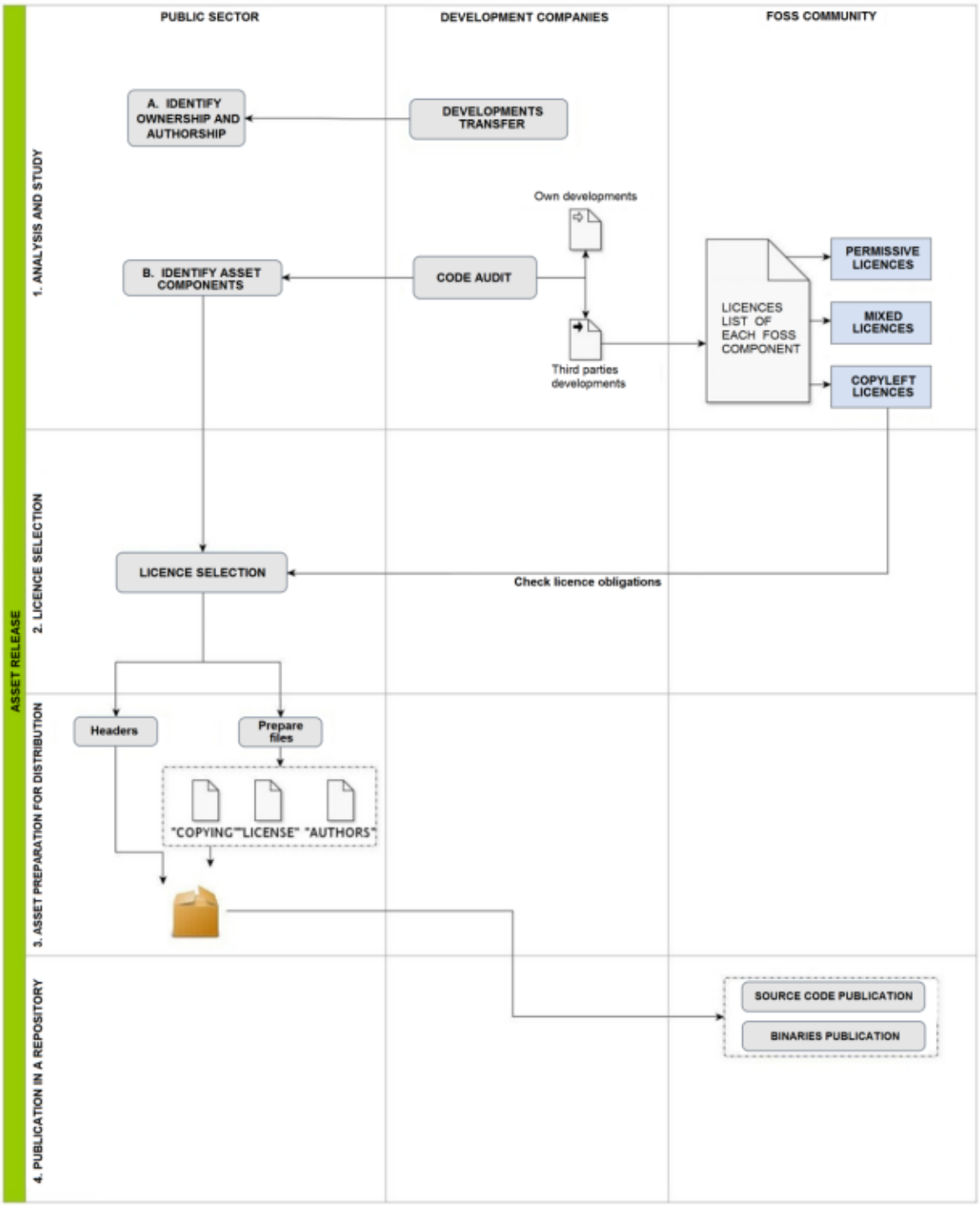

Figure 1. Software release procedure diagram

3. PRELIMINARY ANALYSIS AND STUDY

45. At the initial stage, a thorough analysis must be carried out on key asset elements or components. This analysis involves the following:

46. **1. Identifying the ownership and author(s) of the asset being released.**

    To legally distribute an asset under an open-source licence for computer programmes or software applications, or under an open licence in the case of other assets, the body that is releasing the asset must make sure there are not violating intellectual property rights. This means that they should be the original holder of the asset rights or a licenser of the rights of the asset created by third parties (suppliers, outsourcing, etc.), who must in turn authorise the distribution under this licence.

47. **2. Identifying the components in the asset.**

    Two aspects must be considered:

    - The licences under which the components are being released, the rights they entitle to and, above all, the obligations they entail when it comes to distribution
    - Licence compatibility: finding and replacing the components in conflict or contacting the owners to get a special authorisation.

3.1. Identifying asset ownership and authorship

48. To release an asset, the releasing body must hold the sufficient and necessary rights to do so. In practice, this means holding the operating rights as an original or secondary owner or holding the licence to distribute the asset (e.g. under open-source licence).

49. The Intellectual Property Law (IPL)[11] identifies as object of intellectual property any original human creation – literary, artistic or scientific – under any kind of media, tangible or intangible, present or future. This means that every asset contained in documents, videos, images or any other media are protected by the intellectual property law.

50. However, the protection by copyright affects the shape, continent and expression of the creative idea, but not the content. Ideas are not protected by copyright. For instance, in the case of computer programmes, codes are protected by the intellectual property law whereas algorithms, functions, programming languages and/or file formats are not.

51. In particular, software (including the associated preparatory and technical documents) is considered as 'intellectual' work and copyright-protected in accordance with (IPL), which entitles the original holder (usually the author) to the right to make copies, modify and/or (re) distribute his/her creations, and/or to authorise copying, modification and/or (re) distribution. This exclusive right enables software owners to authorise and restrict the access to and use and operation of software by third parties under contracts or licences.

[11]Law 21/2014, of 4 November, amending the recast text of the Intellectual Property Law, approved by Royal Decree 1/1996, of 12 April, and Law 1/2000, of 7 January, on Civil Procedure (Law_21/2014).
(Law_2/2019) of March 1, 2019, amending the consolidated text of the Intellectual Property Law, approved by Royal Legislative Decree 1/1996 of April 12, 1996, and transposing Directive 2014/26/EU of the European Parliament and of the Council of February 26, 2014, and Directive (EU) 2017/1564 of the European Parliament and of the Council of September 13, 2017, into Spanish law.

52. The (IPL, 1996) includes “computer programmes” in its non-exhaustive list of copyright-protected works, and defines them as:

> ‘any sequence of instructions or indications to be directly or indirectly used by computer systems to perform tasks or functions, or to obtain certain results, irrespective of the means or form of expression. (…) The phrase “computer programmes” also includes preparatory documents. ‘

53. **NB: Copyright protection extends to *any form or means of expression of computer programmes and their preparatory documents***, since it is understood that every stage in software development is protected from the moment when there is a graphic or verbal description (flowcharts, UML, voice recording) of the programme with enough detail to define a set of instructions.

Computer programmes, copyright-protected work

The legal definition encompasses all kinds of programmes, namely:

- Operating systems, standard programmes for general use and software bespoke development.
- Compilers, libraries and other software components, scripts, Java servlets, JavaBeans, stored procedures, APIs, etc.
- Database engines.
- Development environments (IDEs, e.g. Eclipse, Sun‘s JDK, Microsoft‘s .NET) and runtime environments (runtime engines).
- Application and web servers, etc.
- Chip-level instructions (microcodes and firmware).
- Telecommunication network programmes (routers, switches, servers, firewalls, etc.).

In these programmes, copyright extends to:

- Source code and programme software object.
- Images, icons, graphics, etc of the programme.
- Compilation and installation scripts.
- Preparatory documents: designs and diagrams, specifications and lists, data models.
- Technical documents, installation and user manuals.
- Subsequent programme versions.
- Modified (derivative) works.
- Separately and especially, database content and structure.

54. Except in two cases, the original holder of the rights of an asset shall initially be the same as the author(s) who created the asset. The authorship includes all the people involved in asset creation: analysts, project managers, graphic designers, and so on.

55. There are two cases in which the ownership of the operation rights is not the same as the authorship considered as a natural person:

a) Assets created under working relationships: Unless otherwise agreed, the operation rights for software developed by employees, in the context of their jobs and following the employer‘s instructions, belong to the latter..

b) Collective works: The operation rights for assets created by initiative and under coordination of an editor, resulting from the contributions made by several authors

merged into a unique, independent creation without any of the individual authors being able to claim a right on the software as a whole, belong to the editor.

Proprietary notice in headers

There is a legal presumption whereby the software author and/or owner is the person identified in the signature (e.g., in the copyright notice) or the person publishing the software.

Ownership of open-source software is indicated in the header of the software files, as in:

© 2020 MINHAFP, Government of Spain

Original authors: José García Pérez, María Sánchez.

Modifications: © MINCOTUR 2021 – Author of modification: Pablo Gómez

56. In business and institutional projects, proprietary issues are particularly relevant. The assets created by permanent staff (employees and officials, professors and researchers) belong to the institution or organisation, unless otherwise stated in the employment contract. If authors are not employees, they shall be the owners of their creations and transfer the rights to the institution or organisation so that the latter can operate the asset, unless otherwise agreed.

57. Assets created by outsourced staff, who works for a company contracted by a Public Administration, belong to such a company unless otherwise agreed. The company shall transfer the rights to the public body it provides services to.

58. The companies working under the Public Contract Law (PSC) may understand that the transfer of ownership by a concession company is according to its Article 308.1:

> Unless otherwise stated in the administrative specifications or the contract document, the service agreements for the development and deployment of products protected by rights under the intellectual or industrial property law, shall entail the transfer of property rights to the contracting body. In any case, and even if the transfer of intellectual property rights is excluded, the contracting authority may always authorize the use of the corresponding product to bodies, agencies and entities belonging to the public sector.

59. As a typical example of a development resulting from a contract with a company (a common situation in the Public Administration), the company owns the assets created by any of its employees, but the company should transfer the ownership to the Public Administration in accordance with the (PSC).

60. However, Article 308.1 clashes with the (IPL, 1996) in so far as it does not specify the scope, duration or manner of the transfer of rights [12]. Thus, if the transfer is not explicitly

[12]The Public Contract Law (PSC) does not stipulate a scope, duration or manner for the transfer or rights. Article 43 of the Intellectual Property Law stipulates for the inter vivos transfer of operation rights that the temporal blank restricts the transfer to five years and the territory of the country where the transfer takes place. f the modalities of exploitation of the work are not specifically and concretely expressed, the assignment shall be limited to that which is necessarily deduced from the contract itself and is indispensable to fulfill the purpose of the contract". With this limitation to 5 years, to the Spanish territory, and the limitation of exploitation only for the contract itself, there are experts in the field who consider that the future release of an asset is possible, if nothing is specified, in the contract/specification, or in a document of assignment of rights signed a posteriori.

mentioned in the tender document or the contract, it could be understood that it shall be valid only within Spanish territory and for five years. This could not be enough for the asset to be released with guarantees for the public administration.

61. (RD4/2010) establishes in Article 16 the licencing conditions that the Public Administrations must include in the procurement technical specifications:

> 4. To facilitate the establishment of licencing conditions, Public Administrations shall include the following aspects in the technical specifications of contracts for the development of new computer applications:
>
> a) That the contracting administration acquires full intellectual property rights to the software applications and any other information objects to be developed as part of the contract.
>
> b) That in the case of re-using previously existing assets, the contracting administration receives a product that it can offer for subsequent reuse to other Public Administrations. In addition, in the case of open-source products, it should be possible to declare the future developed application as open-source.

62. Therefore, the complete acquisition of the intellectual property rights of software applications by the contracting Administration should be included as part of the technical specifications.

63. Most of the difficulties faced by public administrations that intend to distribute assets under open-source licences are rooted in contractual issues.

64. Annex I include a proposal of different standard clauses that can be used in the administrative procurement procedures. The proposed 'standard clauses (ISA-StandardClauses)' are intended to follow the recommendations made by the regulations on the reuse and release of assets, as well as to consider the 'standard clauses' proposed by the European Union's ISA program to facilitate the distribution and reuse of assets.

65. This does not prevent each contracting entity from assessing, in the exercise of its powers and technical discretion, the possibility of including the aforementioned standard clauses, or incorporating clauses in accordance with its specific needs and requirements.

3.2. Identifying asset components.

66. Most software projects include components from third parties, either to expand, integrate or improve the functions of the existing asset or to add functions to a self-developed asset. Examples:

- Cutting and pasting codes from the Internet.
- Codes that are in fact licensed assets from third parties (proprietary or open-source licences).
- Codes contributed by external developers who are employees of other entities and did their job within their own working framework without the transfer having been formalised by their employers.

67. These situations, which could also emerge with proprietary developments, must be identified in a code audit so that they can be adequately resolved by management of contributions.

68. The terms of use (licencing) must be reviewed for every third-party component that is part of the application for two main reasons:

    - A transfer of rights to the project (under open-source license or contribution agreement) will be necessary for subsequent asset release.[13.]
    - Licence compatibility must be checked to ensure that all the components can be jointly distributed and distributed as part of an application as a whole. Besides, it must be checked whether the licences determine or enable the distribution of the project as a whole (e.g, whether and to what extent to comply with copyleft obligations).
    - This tool could be useful: License Wizard de Joinup (LicenceWizard)

69. Finally, it must be ensured that the asset release does not violate other third-party rights, including confidentiality issues (e.g., in assets included in the new product), patent concerns (if existing and valid) and trademark questions.

[13] For more information (Licences & complementary agreements - Joinup) https://joinup.ec.europa.eu/collection/eupl/licences-complementary-agreements

4. LICENCE SELECTION

4.1. Software licences

70. After identifying the assets to be distributed, a distribution licence must be selected, provided that the third-party components in the asset do not determine one specific licence for the application they are part of.

71. There are significant differences between open-source licences in the field of software since their terms varying greatly across licence types. This must be considered when using open-sources and, above all, when integrating and distributing this kind of assets to third parties.

72. The copyleft open-source licences go beyond the four freedoms usually granted to licensees and direct users. The licences that grant the four basic freedoms without further conditions (e.g. without copyleft) allow licensees to include source codes in other software and redistribute the results under restrictive or closed licence, so that the users of the new programme will not be entitled to the freedoms originally granted.

73. To ensure that any software user can enjoy these freedoms at any time, copyleft licences mean that licensees must:

a) Use the same free licence for both the redistribution of the original software and derivative works created out of it.

b) Give access to the source code to all users.

74. This twofold condition, known as copyleft, prevents software from being distributed under proprietary licence

75. Figure 2 shows the most common classification of software licences:

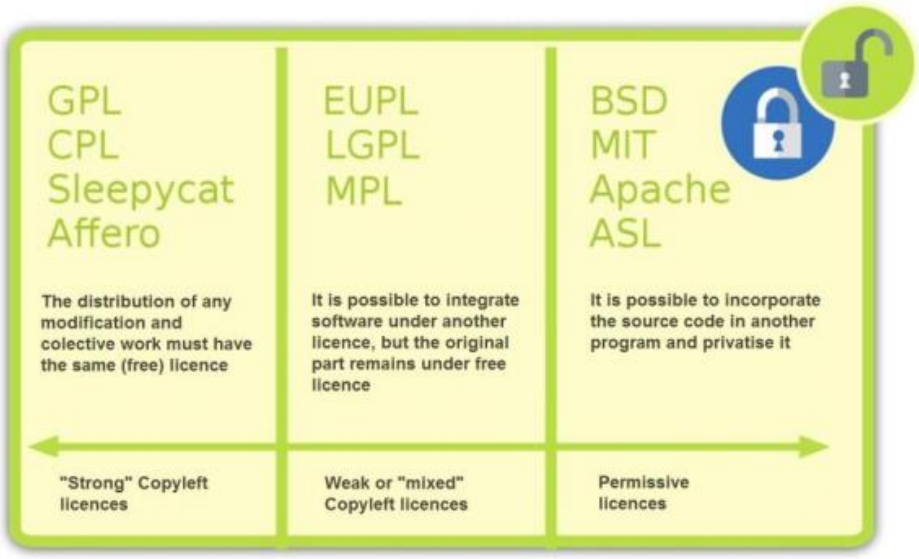

Figure 2. Classification of open-source licences

76. Article 16 of (RD4/2010) sets forth a series of licencing conditions to be applied by public administrations when releasing assets:

> 2. For computer applications, associated documentation, and any other information object declared as open-source, Public Administrations shall use those licences that ensure that the programs, data or information comply with the following requirements:
>
> a) They can be implemented for any purpose.
>
> b) They allow their source code to be known.
>
> c) They can be modified or improved.
>
> d) They may be redistributed to other users with or without changes as long as the derivative work retains these four guarantees.

77. On the basis of paragraph 2.d, it can be understood that, in compliance with (RD4/2010), public administrations must use a licence with some degree of copyleft. In line with this, permissive licences are not discussed below.

4.1.1 Software licences with strong copyleft

78. Licences with strong copyleft, like the GNU General Public Licence (GPL), require the same licence to be used for any redistribution of the project and to any of its modifications, as well as to projects using or including it (in the form of libraries, etc.). This final condition is what makes strong copyleft different from weak copyleft. In addition, strong copyleft forces licensees to give users copies of the source code or at least give them the means to get it (e.g. online repositories)

79. Licences with strong copyleft seek to ensure that all (direct and indirect) users have access to the source code at any time under the terms of the same licence. Consequently, they prevent copyleft assets from being distributed in proprietary applications (e.g. from being 'privatised' or 'closed '). This does not mean that no commercial applications can be created and sold out with copyleft assets, but redistributing these assets under another licence (involving the payment of royalty, for instance, or preventing an asset's target audience from introducing modifications) would be a violation of the original licence.

80. It should be clear that source codes of projects under strong copyleft licences and/or modifications of these projects must be revealed only at the time of redistribution

81. GNU Genera Public Licence (GPL) is the software licence known to have the strongest copyleft terms. Developed and promoted by the Free Software Foundation (FSF), and it is the most widely used free software licence at SourceForge. Three GPL versions have been released so far, in 1989, 1991 and 2007. Versions 2 and 3 are still active[14]. Other strong copyleft licences are the GNU Affero General Public Licence, and the Sleepycat Licence.

4.1.2 Mixed software licences or weak copyleft

82. In mixed software licences, the copyleft clause applies only to the original code, without affecting projects that include or use this code (e.g., libraries), with or without modifications. Copyleft weakening is done in either of two ways:

[14]More info about the GNU General Public Licence in Annex II of this guide.

a) Enabling the use of an asset (in the form of library) by programmes distributed under a different licence (GNU Lesser General Public Licence, LGPL).

b) Enabling the inclusion of an asset in a larger work, also under a different licence (Mozilla Public Licence, MPL, or EUPL, among others).

83. In either case, a new programme can be added and/or linked to the original code, and the result can be distributed under a new (proprietary or free) licence. However, the original asset and its modifications should be distributed under the original licence, usually with the corresponding source code

84. (RD4/2010) Article 16 recommends:

> 3. To this end, the application of the European Union Public Licence (EUPL) shall be sought, without prejudice to other licences guaranteeing the rights set forth in paragraphs 1 and 2.

85. EUPL was drafted in 2006-2008 at the request of the European Commission for their own and other European institutions software distribution. The current version of this licence is EUPL v1.2[15].

European Union Public License 1.2
Rights granted • EUPL grants the right to use, reproduce, modify, communicate to the public, distribute, lend, rent and sublicense programmes and derivative works, available as a source code or an executable code. • EUPL grants a short patent license for the use of the work.
Obligations • Proprietary notices must be kept in the source code and modifications must be indicated. • When the asset is redistributed, all modifications must be indicated and the legal.txt file (a file with legal comments) must be kept with the code or the associated documents. • **Weak copyleft clause**: When the asset or the modifications (of the original files) are redistributed, it must be done under the same licence, supplying the source code or indicating where it can be obtained easily and for free.
Others • The Licence shall be governed by the law of the European Union Member State where the Licensor has his seat, resides or has his registered office (or the Belgian law if the Licensor has no seat, residence or registered office inside a European Union Member State). • The licensor warrants that they own the original work. Other warranties and liabilities are disclaimed to the extent permitted by applicable law. • Digital distribution requires acceptance of the licence by clicking an icon. The provider must publish the legal information required by law on their website. • In addition to software, this version also protects information such as documents, technical specifications, standards, etc. as well as source code.
• EUPL was translated into the EU official languages. In fact, it is the only FOSS licence with official translation. EUPL v1.2. was certified by OSI as an open-source licence in May 2017. • Compatibility: EUPL is compatible with most permissive and mixed licences (weak copyleft). The text also includes a

[15] Commission Implementing Decision (EU) 2017/863 of 18 May 2017 has updated the EUPL licencing of open source software to further facilitate the sharing and reuse of software developed by public administrations (EUPLv1.2Licence)

compatibility clause that states that if the licensee distributes and/or communicates derivative works or copies thereof based upon both the original work and another work licensed under a compatible licence (GPLv2, GPLv3, AGPLv3, OSL v2.1, OSL v3, EPLv1 CeCILLv2, CeCILLv2. 1, MPLv2, LGPLv2.1, LGPLv3, CC BY-SA 3.0 for non-software works, EUPLv1.1, EUPLv1.2, Reciprocity (LiLiQ-R) or Strong Reciprocity (LiLiQ-R+), the distribution and/or communication can be done under the terms of the compatible licence.

- Weak copyleft clause: Programmes under EUPL can be integrated into assets distributed under any other licences.

Table 1. Information on licence EUPLv1.2

86. The EU collaborative platform (JOINUP-Share and reuse interoperability solutions for public administrations) makes available a series of documents for the understanding and use of EUPL:

a) Documentation repository (Guidelines, Documents and FAQ).[16]

b) Guidelines for Users and Developers[17], containing very useful information for the proper use of the licence. (This document was developed with version 1.1 but includes general guidelines on EUPL licencing.).

c) *EUPL compatible open-source licences*[18], offering a global compatibility matrix between all OSI-approved licences and EUPL to understand the correct use of third-party components in an asset being released.

d) *JOINUP Licencing Assistant (JLA)*: Select and compare open licences[19].

Derivative works

One of the gaps in the discussion of open-source licences and copyleft is regarding derivative works. What should we consider as derivative work? And, therefore, what shall comply with the obligation to use the same open-source licence?

The most widespread idea is that a software B is considered to be derivative work from a software A if B uses A‘s source code. Accordingly, kernel modules loaded at runtime are not derivative works because they do not use the kernel‘s source code (are not compiled as a whole) but use public APIs to connect their functionalities. The kernel and the modules are compiled separately and there is only a runtime binary connection between them.

For instance, if a Java development accesses remote APIs at runtime, there is usually no problem with the use of those APIs. On the contrary, if the API is a local library that is copied and integrated into the programme‘s code, or remote access requires a piece code to be locally included, it will then be necessary to check the specific licencing conditions under which the library is being distributed.

This is a simplified view of the legal implications of the various forms of software interaction. For a deeper analysis, the reader is referred to the paper written by the Free Software Foundation Europe Software Interactions Working Group:

[16] https://joinup.ec.europa.eu/collection/eupl/documentation-repository-guidelines-documents-faqs (Documentation repository (Guidelines, Documents FAQs))
[17] https://joinup.ec.europa.eu/sites/default/files/inline-files/EUPL%201_1%20Guidelines%20ES%20Joinup.pdf (Guidelines for Users and Developers)
[18] https://joinup.ec.europa.eu/collection/eupl/matrix-eupl-compatible-open-source-licences (Matrix of EUPL compatible open source licences)
[19] https://joinup.ec.europa.eu/collection/eupl/jla-joinup-licencing-assistant-select-and-compare-open-licences (JLA - Joinup Licensing Assistant (Select and compare open licences))

(Working Paper on the legal implication of certians forms of software interactions (a.k.a. linking))

4.2. Licences for other assets

87. The intellectual work that cannot be classified as computer programmes or software applications also requires adequate licencing. It includes re-usable assets such as:
    - Application-related materials: guides and manuals, interfaces, data models, code lists, algorithms, design patterns, architectures, design, test and requirement specifications, user guides
    - Public sector information.
    - Other assets: documents, videos, audio files, outreach materials, etc.
88. One of the most important modifications of the new version EUPL 1.2 is that it applies to 'The work', meaning by work not only computer programmes (software) but also the specifications, technical documentation, standards, etc., so that the EUPL v1.2 would also apply to this type of assets..
89. The efforts to make intellectual property law more flexible resulted in the establishment of the non-profit organisation (Creative Commons) in 2002. (Creative Commons) developed a series of licences to share intellectual works under more flexible yet standard terms.
90. It is recommended to use (Creative Commons) licenses for these assets, although it is also possible to use the EUPL v1.2 license (NOT previous versions).
91. There is a wide range of (Creative Commons) licences. However, the only that complies with (RD4/2010) Article 16 provisions is the one below:

Attribution-ShareAlike (CC BY-SA): This licence enables other users to remix, transform and build upon your material for any purpose, even commercially, as long as they give you appropriate credit and distribute their contributions under the same licence as the original. This licence can be compared to copyleft free and open-source software licences.

92. If Article 16 is understood to refer to computer applications only, then all the other assets can be distributed under different conditions. In this case, other (Creative Commons) licences may apply:

Attribution (CC BY): This licence enables other users to distribute, remix, transform and build upon your material for any purpose, even commercially, as long as they give you appropriate credit. This is the most flexible of all licences.

It is recommended for maximum use and outreach of licensed materials, so it is highly **suitable for the release of semantic assets** (data models, code lists, interfaces, etc.).

Attribution-NoDerivs (CC BY-ND): This licence enables other users to copy and redistribute for material for any purpose, even commercially, as long as they give you appropriate credit and distribute the material unmodified and in full.

93. Creative Commons licences come in three formats:

- *Commons Deed:* A simple summary of the legal text containing the relevant icons.
- *Legal Code:* The full legal text the licence is based on.
- *Digital Code:* The digital code that can be read by computers, whereby search engines and other applications can identify the work and its terms of use

4.3. Public sector information asset licences

94. The special terms of re-use that apply to bodies and entities governed by public law in the Public Administration must comply with (Directive(EU)2019/1024), (Law37/2007) and the associated implementing regulations.

95. The provisions in (RD1495/2011) Article 8 for the State public sector can be a reference for other Public Administrations.

96. (RD1495/2011, Royal Decree 1495/2011, of 24 October, implementing Law 37/2007 for the state public sector) envisages the possibility of re-use under terms set forth in standard licences, so that if standard licences are used, they must be preferably free, automatically processed and based on existing standards.

97. The European Commission's document on guidelines for the re-use of public sector information[20] states that (Creative Commons) licences can enable the re-use of public sector information and assets with no need to develop ad hoc licences, highlighting the CC0 licence[21] and its flexibility for re-using actors while reducing the complications surrounding the handling of too many licences.

[20] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52014XC0724%2801%29 (Commission notice — Guidelines on recommended standard licences, datasets and charging for the reuse of documents ((2014/C 240/01)))

[21] (CC0 1.0 Universal Public Domain Dedication) http://creativecommons.org/publicdomain/zero/1.0/

5. PREPARATION FOR DISTRIBUTION

5.1. Source Code distribution

98. After analysing the asset and selecting the most adequate licence, a series of preparatory tasks should be performed leading to the asset distribution[22]:

a) Reviewing the list of components and their licences and distribution obligations

b) Including the project's proprietary and licence notices in the original code file headers. Regarding licence, a brief text should be included indicating the actual licence being used. Most licence types are associated with standard texts

```
/*

* Copyright (C) 2017 MINHAFP, Ministerio de Hacienda y Función Pública,

* This program is licensed and may be used, modified and redistributed under the terms
of the European Public License (EUPL), either version 1.2 or (at your option) any later
version as soon as they are approved by the European Commission.

* Unless required by applicable law or agreed to in writing, software distributed under
the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF *
ANY KIND, either express or implied.

* See the License for the specific language governing permissions and more details.

* You should have received a copy of the EUPL1.2 license along with this program; if
not, you may find it at http://eur-lex.europa.eu/legal-
content/EN/TXT/?uri=CELEX:32017D0863

*/
```

Figure 1. Example of header for asets licenced under EUPL.

c) Keeping the headers of open-source files that have not been modified without changes.

d) Adding a note in the headers of open-source files that have been modified (including the type and date of modifications, ownership and contact information for future collaborators).

```
/*

*Copyright (C) 2012 INTECO, Instituto Nacional de Tecnologías de la Comunicación,

* This program is licensed and may be used, modified and redistributed under the terms
of the European Public License (EUPL), either version 1.2 or (at your option) any later
version as soon as they are approved by the European Commission.

* Unless required by applicable law or agreed to in writing, software distributed under
the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF *
```

[22] For preparatory tasks a), b), c) and d), solution (CTT Addheader) can be used http://administracionelectronica.gob.es/ctt/addheader.

```
ANY KIND, either express or implied.

* See the License for the specific language governing permissions and more details.

* You should have received a copy of the EUPL1.2 license along with this program; if
    not,*      you      may      find      it      at      http://eur-lex.europa.eu/legal-
    content/EN/TXT/?uri=CELEX:32017D0863

* - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
    - -

* Modifications: MINHAFP (Ministerio de Hacienda y Función Pública)

* Email: observ.accesibilidad@correo.gob.es

/**
 * @author a.mesas
 *         Implements the cartridge factory. Given the name of a cartridge returns us
 *         an instance of it.
 */
```

Figure 2. Example of header for modified assets.

e) Adding 'LICENCE'-type file for the project's licence. In addition to the proprietary and licence notices included in the source code files, a file should be added containing the full licence text.

f) Having an 'AUTHORS'-type file containing the names and email addresses of all main developers. This information, which is usually included in free software projects, makes project management and support easier after release.

```
#   This file contains the contact information of the main
#   developers who have contributed to the development of the project.
#   It is arranged in alphabetical order by surname and formatted
#   for filtering and processing form scripts.
#   The fields are: name (N), email address (E), PGP key ID
#   and fingerprint (P), description (D).
#   Thank you,
#
#----------

N: Pablo Gómez
E: pgomez@gmail.com
D: Head of development team.

N: Juan Gómez
E: jgomez@gmail.com
D: NetBSD suppor.

N: Pilar Sánchez
E: psanchez@empresa.com
D: PCIPPC6 support.
```

Figure 3. Example of 'AUTHORS' file.

g) Adding a ‘COPYING‘ file containing information on asset ownership, as well as legal data (components, project and component licences, contact email address).

```
This programme is distributed as a whole under licence EUPL, version 1.2 or later.

A copy of the Licence is available in the file /legal/licenses/EUPL v1.2_en.pdf
or at the URL below:
* http://joinup.ec.europa.eu/software/page/eupl/licence-eupl

This programme includes the following third-party components with their own licencing
conditions:

- Common Public License Version 1.0 - http://www.opensource.org/licenses/cpl1.0.txt
- The Apache Software License, Version 2.0 - http://www.apache.org/licenses/LICENSE-
2.0.txt
- MIT License - http://www.opensource.org/licenses/mit-license.php
- The W3C Software License - http://www.w3.org/Consortium/Legal/copyright-software-
19980720
- GNU Lesser Public License - http://www.gnu.org/licenses/lgpl.html
- The OpenSymphony Software License 1.1 -
http://opensymphony.com/webwork/license.action (This license is derived and fully
compatible with the Apache Software License - see http://www.apache.org/LICENSE.txt)
- The BSD License - http://www.antlr.org/license.html
- CDDL - https://opensource.org/licenses/CDDL-1.0
- GPLv2+CE - http://openjdk.java.net/legal/gplv2+ce.html (GPL version 2 plus the
Classpath Exception)
- GNU Lesser General Public License 3.0 - http://www.gnu.org/licenses/lgpl-3.0.txt
- GNU Lesser General Public License 2.1 - http://www.gnu.org/licenses/lgpl-2.1.html
- Mozilla Public License - http://www.mozilla.org/MPL/MPL-1.1.html
- Bouncy Castle License - http://www.bouncycastle.org/licence.html
- BSD style - http://www.opensource.org/licenses/bsd-license.php

Copies of these licences can be found in the folder /legal/licenses

Date: november 2019
Application ownership: MPTFP (Ministry for Political Territorial and Public Function)

    Email: observ.accesibilidad@correo.gob.es
```

Figure 4. Example of ‘COPYING’ file.

h) Creating a _Legal‘ folder containing all legal documents: ‘COPYING.TXT‘, ‘LICENCE.TXT‘, ‘AUTHORS.TXT‘ and the open-source licenses of third-party components.

i) Making sure that binary distributions are accompanied by the associated source code (or an indication of where to find it).

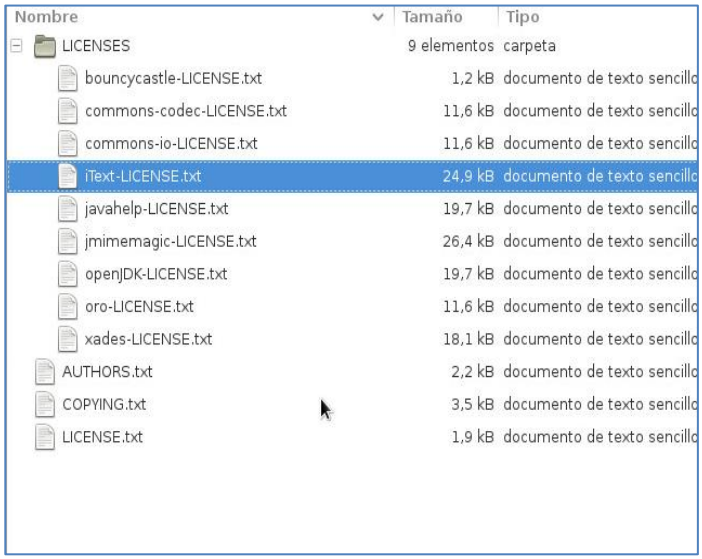

Figure 5. Example of 'Legal' folder

99. In addition, the following tasks should be performed as well:

a) Including a licence acceptance process during installation (in case for end-user executable programmes).

b) Asking for registration of the project's trademark in the relevant jurisdiction.

c) Including a useful legal information section for users on the project's website. This section should contain information about:

- Product licencing,
- List of third-party components included in the project,
- Contribution agreement[23], etc.

5.2. Publication of other assets

100. The following tasks should be performed to use a (Creative Commons) licence in assets other than computer applications[24]:

a) Inserting *Commons Deed*, targeted at non-specialised users and using simple language and graphics to state licencing conditions.

There are two possible versions:

- Abridged Common Deeds for the selected type of licence:

[23] More information in (Licences & complementary agreements - Joinup)

[24] As indicated in section 4.2, both EUPL v1.2 and (Creative Commons) licenses can be used for the publication of other types of assets. This section will focus on the use of Creative Commons licenses, taking into account the widespread use of these licenses for the publication of assets other than software applications.

This work is licensed under a Creative Commons International Attribution-ShareAlike licence 4.0. For a copy of this licence go to http://creativecommons.org/licenses/by-sa/4.0/

Figure 6. Abridged Common Deeds for Creative Commons Attribution-ShareAlike.

This work is licensed under a Creative Commons International Attribution licence 4.0. For a copy of this licence, go to http://creativecommons.org/licenses/by/4.0/

Figure 7. Abridged Common Deeds for Creative Commons Attribution.

This work is licensed under a Creative Commons International Attribution-NoDerivatives licence 4.0. For a copy of this licence, go tohttp://creativecommons.org/licenses/by-sa-nd/4.0/

Figure 8. Abridged Common Deeds for Creative Commons Attribution-NoDerivatives.

- Expanded Common Deeds for the selected type of licence:

This is a human-readable summary of the legal text of (and does not replace) the licence.

You are free to:

- Share – copy and redistribute the material in any medium or format
- Adapt – remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the licence terms.

Under the following terms:

Attribution. You must give appropriate credit, provide a link to the licence and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

ShareAlike. If you remix, transform or build upon the material, you must distribute your contributions under the same licence as the original.

No additional restrictions – You may not apply legal terms or technological measures that legally restrict others from doing anything the licence permits.

Notices:

You do not have to comply with the licence for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given. The licence may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy or moral rights may limit how you use the material.

Figure 9. Expanded Common Deeds for Creative Commons Attribution-ShareAlike.

This is a human-readable summary of the legal text of (and does not replace) the licence

You are free to:

- Share – copy and redistribute the material in any medium or format
- Adapt – remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the licence terms.

Under the following terms:

Attribution. You must give appropriate credit, provide a link to the licence and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions – You may not apply legal terms or technological measures that legally restrict others from doing anything the licence permits.

Notices:

You do not have to comply with the licence for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given. The licence may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy or moral rights may limit how you use the material.

Figure 10. Expanded Common Deeds for Creative Commons Attribution.

This is a human-readable summary of the legal text of (and does not replace) the licence.

You are free to:

- Share – copy and redistribute the material in any medium or format for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the licence terms.

Under the following terms:

Attribution. You must give appropriate credit, provide a link to the licence and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor

endorses you or your use.

NoDerivatives. If you remix, transform, or build upon the material, you may not distribute the modified material.

No additional restrictions – You may not apply legal terms or technological measures that legally restrict others from doing anything the licence permits.

Notices:

You do not have to comply with the licence for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given. The licence may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy or moral rights may limit how you use the material.

Figure 11. Expanded Common Deeds for Creative Commons Attribution-NoDerivatives.

101. These texts include links to the Legal Codes, where the full legal text of the licences can be read.

b) Inserting the Digital Codes for information processing. This code enables end users to add logos and copyright information for each licence in their digital documents or websites. It also helps to identify the works that are licensed under (Creative Commons) on the Internet. Thus, it could be a good idea to include the Digital Codes on the websites where the contents are published.

```
<a rel= ‘licence’ href= ‘http://creativecommons.org/licenses/by
sa/4.0/’ ><img alt= ‘Creative Commons Licence’ style= ‘border- width:0’
src= ‘https://i.creativecommons.org/l/by-sa/4.0/88x31.png’ /></a><br
/>This work is licensed under a <a rel= ‘licence’
href= ‘http://creativecommons.org/licenses/by-sa/4.0/’ > Creative
Commons International Attribution-ShareAlike 4.0 licence</a>.
```

Figure 12. Digital Code for Creative Commons Attribution-ShareAlike.

```
<a rel= ‘licence’
href= ‘http://creativecommons.org/licenses/by/4.0/’ ><img alt= ‘Creative
Commons Licence’ style= ‘border-width:0’
src= ‘https://i.creativecommons.org/l/by/4.0/88x31.png’ /></a><br/>This
<span xmlns:dct= ‘http://purl.org/dc/terms/’
href= ‘http://purl.org/dc/dcmitype/Text’ rel= ‘dct:type’ >work</span> is
licensed under a <a rel= ‘licence’
href= ‘http://creativecommons.org/licenses/by/4.0/’ >Creative Commons
```

```
International Attribution licence 4.0</a>.
```

Figure 13. Digital Code for Creative Commons Attribution.

```
<a rel= ‘licence’ href= ‘http://creativecommons.org/licenses/by
nd/4.0/’ ><img alt= ‘Creative Commons Licence’ style= ‘border-width:0’
src= ‘https://i.creativecommons.org/l/by-nd/4.0/88x31.png’ /></a><br
/>This <span xmlns:dct= ‘http://purl.org/dc/terms/’
href= ‘http://purl.org/dc/dcmitype/Text’ rel= ‘dct:type’ >work</span> is
licensed under a <a rel= ‘licence’
href= ‘http://creativecommons.org/licenses/by-nd/4.0/’ >Creative
Commons International Attribution-NoDerivatives licence 4.0</a>.
```

Figure 14. Digital Code for Creative Commons Attribution-NoDerivatives.

102. For semantic assets, a notice should be included on the website where they are published indicating that all the materials associated with the assets are being published under the licence selected, inserting the corresponding ‘Digital Code’.

6. PUBLIC REPOSITORIES OF REUSABLE ASSETS

103. When the asset is ready for publication, a site must be chosen to share it. Assets are released for re-use by other agencies or public bodies, and this can only be possible if other agencies are aware of the existence of the released assets. Consequently, they must be published in one or more sites ensuring visibility within the community that might be interested in them.

104. In the case of computer programmes, both the binary codes and the source codes must be shared. For other assets, a standard format must be chosen that enables editing

105. Public Administrations shall endeavour to incorporate into the original application those modifications or adaptations made to any application that has been obtained from a directory of reusable applications.

6.1. Software assets at the Technology Transfer Centre- CTT

106. Public administrations must include all re-usable assets in the general solution directory by registering them at the (CTT) directly or by including them in the regional repositories the (CTT) is federated with. All assets must include their main descriptive data to encourage and facilitate re-use: brief description of functions, use, characteristics, licencing, main open standards applied, development status, and so on.

107. (RD4/2010) Article 17.3 establishes the minimum content that must be published in directories of reusable applications, whether in product or service mode:

> 3. Public Administrations shall publish reusable applications, in product or service mode, in the directories of applications for free reuse, with at least the following content:
>
> a) Source code of the finalised applications, in case they are reusable in product mode and have been declared as open-source.
>
> b) Associated documentation.
>
> c) Licencing conditions for all assets, if reusable in product mode, or level of service offered, if reusable in service mode.
>
> d) Costs associated with their reuse, if any

108. The source codes of released re-usable assets with open licences can be located in the (CTT) or in external repositories as long as exact references are available to where to get the source codes and the source codes themselves are available for free.

109. For assets reusable in service mode, the level of service offered must be indicated. For further information see the (Guide for the provision of applications in service mode) .

110. (RD4/2010) article 17.4 is aimed to a better efficiency of the Public Administration:

> 4. Administrations shall endeavour to incorporate into the original application any modifications or adaptations made to any application that has been obtained from a directory of reusable applications.

6.2. Semantic assets at the Semantic Interoperability Centre – CISE

111. (CISE)[25], as a specialized section of the (CTT), shall disseminate any data model (along their documentation and components) of interoperability services between Public Administrations and between them and citizens. Both common and sectorial services are included, as well as those related to common infrastructures and services, in addition to the related semantic specifications and codifications.

112. According to (Technical Interoperability Standard for Data Models), Public Administrations and related or linked public-law bodies shall establish and share their data models regarding:

> a) Areas subject to exchange of information with citizens and between Public Administration agencies.
>
> b) Common infrastructures, service and tools not intended for internal use only

113. Section VI. Interaction with Semantic Interoperability Centre defines the conditions for publication of data models in (CISE).

114. Data models shall meet the criteria provided by the (Technical Interoperability Standard for Standard Catalogue), in particular, the definitions and codifications of statistical interest determined by the National Institute of Statistics. In addition, (CISE) shall allow their classification and the indication of mandatory or optional application.

115. A data model is the set of definitions (conceptual level), interrelationships (logical level), and rules and conventions (physical level) that make it possible to describe data for their exchange, which is the foundation of the semantic dimension of interoperability. They are composed of semantic assets, e.g. reusable pieces that enable the standardization of concepts and, together with their explanatory guides, will be part of the (CISE) publication of each identified data model.

6.3. Public Sector information assets at the 'datos.gob.es' portal

116. Information assets in the state public sector are published at datos.gob.es, which can be federated with the information asset catalogues of other public administrations.

117. Vocabularies, ontologies and other common elements related to public information are published at the Semantic Interoperability Centre (CISE).

[25] https://administracionelectronica.gob.es/pae/cise

7. OPEN-SOURCE SOFTWARE ASSET MANAGEMENT

118. This section briefly discusses some relevant legal aspects of open-source software asset management.

119. In addition to the steps described above for asset release, the most relevant legal aspects for open-source software asset management are:

- Ensuring rights over the assets, giving the project's contributors the recommendations to adequately preserve the project's legal information across the modifications that could eventually be introduced.
- Defining contribution agreements and policies.
- Looking to open-source licence compatibility in assets' components (between components and with the licences of assets as a whole).
- Fulfilling open-source licence obligations when redistributing the assets.
- Setting forth a trademark use policy and ensure its correct implementation.

7.1. Processes and documents

120. Legal management of open-source software assets is mostly regarding the creation and implementation of a series of processes and their associated documents:

- Identifying the person(s) in charge of legal issues and defining a decision-making flowchart with roles and their tasks for each asset: levels of authority and roles for important legal decisions such as integration of other free assets, internal and external distribution, auditing, etc.
- Defining the process to deliver new contributions to existing assets by third parties (and to related documents): individual commissions, contributions from the community, etc.
- Laying out the documentation process for asset development and distribution.
- Identifying critical points for approval and decision-making: road map, inclusion of third-party components and contributions, version distribution, publication of key documents.
- Establishing monitoring procedures for the use of assets by third parties and sanctioning methods for improper use.
- Auditing and taking corrective action.
- Training developers and other people in charge in open-source legal matters.
- Drafting the documents below:
  - Documents on asset components (components, authors, modifications).
  - Documents on project processes (decisions on component integration, asset release, etc.).
  - List of valid open-source licence.
  - Contribution agreement template (JOINUP, Licences & complementary agreements)

8. BIBLIOGRAPHY

European eGovernment Action Plan 2011-2015. (2010). Retrieved from https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52010DC0743

Working Paper on the legal implication of certians forms of software interactions (a.k.a. linking). (2010). Retrieved from http://www.ifosslr.org/public/LinkingDocument.odt

Technical Interoperability Standard for Standard Catalogue. (2012). Retrieved from https://www.boe.es/eli/es/res/2012/10/03/(3)/con

Guide for the provision of applications in service mode. (2016). Retrieved from https://administracionelectronica.gob.es/pae_Home/pae_Estrategias/pae_Interoperabilidad_Inicio/pae_Normas_tecnicas_de_interoperabilidad.html#REUTILIZACIONYTRANSFERENCIA

CISE. (n.d.). *Semantic Interoperability Centre*. Retrieved from http://administracionelectronica.gob.es/PAe/CISE

Creative Commons. (n.d.). Retrieved from https://creativecommons.org/

Creative-Commons. (n.d.). *CC0 1.0 Universal Public Domain Dedication*. Retrieved from https://creativecommons.org/publicdomain/zero/1.0/

CTT Addheader. (n.d.). Retrieved from https://administracionelectronica.gob.es/ctt/addheader

CTT Forge. (n.d.). Retrieved from https://administracionelectronica.gob.es/pae_Home/pae_SolucionesCTT/pae_CTT_Forja_CTT.html

CTT. (n.d.). *Technology Transfer Centre*. Retrieved from https://administracionelectronica.gob.es/ctt

datos.gob.es. (n.d.). Retrieved from https://datos.gob.es/es/

Directive(EU)2019/1024. (2019). *Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information.* Retrieved from http://data.europa.eu/eli/dir/2019/1024/oj

Directive2003/98/EC. (2003). *Directive 2003/98/EC of the European Parliament and of the Council, of 17 November 2003, on the re-use of public sector information.* Retrieved from http://data.europa.eu/eli/dir/2003/98/oj

Directive2013/37/EU. (2013). *Directive 2013/37/EU of the European Parliament and of the Council, of 26 June 2013, amending Directive 2003/98/EC, on the re-use of public sector information.* Retrieved from http://data.europa.eu/eli/dir/2013/37/oj

EIS. (n.d.). *European Interoperability Strategy (EIS) for European public services.* Retrieved from https://ec.europa.eu/isa2/sites/default/files/isa_annex_i_eis_en.pdf

EUPLv1.2Licence. (2017). *Commission Implementing Decision (EU) 2017/863 of 18 May 2017 updating the EUPL licencing of open-source software to further facilitate sharing and reuse of software developed by public administration*. Retrieved from http://data.europa.eu/eli/dec_impl/2017/863/oj

European-Commision. (2014). *Commission notice — Guidelines on recommended standard*

licences, datasets and charging for the reuse of documents ((2014/C 240/01)). Retrieved from https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52014XC0724(01)&qid=1665659652178

Guide1495/2011. (2012). *Royal Decree 1495/2011 Application Guide.* Retrieved from https://administracionelectronica.gob.es/pae_Home/pae_Documentacion/pae_Metodolog/pae_Real_Decreto_1495-2011_Reutilizacion_informacion_sector_publico_estatal.html

GuideNTI-RISP. (2016). *Technical Interoperability Standard for the Re-use of Information Resources Application Guide.* Retrieved from https://administracionelectronica.gob.es/pae_Home/pae_Estrategias/pae_Interoperabilidad_Inicio/pae_Normas_tecnicas_de_interoperabilidad.html

IDB. (n.d.). *Inter-american Development Bank*. Retrieved from https://code.iadb.org/es/que-hacemos

IPL. (1996). *Royal Legislative Decree 1/1996, of April 12, 1996, approving the revised text of the Intellectual Property Law, regularizing, clarifying and harmonizing the legal provisions in force on the subject.* Retrieved from https://www.boe.es/eli/es/rdlg/1996/04/12/1/con

ISA-StandardClauses. (n.d.). *Standard "Sharing and Re-using" clauses for contracts: Contractual Clauses for Service Procurement*. Retrieved from https://joinup.ec.europa.eu/collection/eprocurement/discussion/standard-sharing-and-re-using-clauses-contracts-contractual-clauses-service-procurement

JOINUP. (n.d.). *Documentation repository (Guidelines, Documents FAQs)*. Retrieved from https://joinup.ec.europa.eu/collection/eupl/documentation-repository-guidelines-documents-faqs

JOINUP. (n.d.). *Guidelines for Users and Developers*. Retrieved from https://joinup.ec.europa.eu/sites/default/files/inline-files/EUPL%201_1%20Guidelines%20ES%20Joinup.pdf

JOINUP. (n.d.). *JLA - Joinup Licencing Assistant (Select and compare open licences)*. Retrieved from https://joinup.ec.europa.eu/collection/eupl/jla-joinup-licencing-assistant-select-and-compare-open-licences

JOINUP. (n.d.). *JOINUP-Share and reuse interoperability solutions for public administrations*. Retrieved from https://joinup.ec.europa.eu

JOINUP. (s.f.). *Licences & complementary agreements .* Obtenido de https://joinup.ec.europa.eu/collection/eupl/licences-complementary-agreements

JOINUP. (n.d.). *Matrix of EUPL compatible open source licences*. Retrieved from https://joinup.ec.europa.eu/collection/eupl/matrix-eupl-compatible-open-source-licences

Law_2/2019. (2019). *Law 2/2019, of 1 March, amending the revised text of the Intellectual Property Law, approved by Royal Legislative Decree 1/1996, of 12 April, and transposing Directive 2014/26/EU of the European Parliament and of the Council, of February 26, 2014, and D.* Retrieved from https://www.boe.es/eli/es/l/2019/03/01/2

Law_21/2014. (2014). *Law 21/2014, of 4 November, amending the recast text of the Intellectual Property Law, approved by Royal Decree 1/1996, of 12 April, and Law 1/2000, of 7 January, on Civil Procedure.* Retrieved from https://www.boe.es/eli/es/l/2014/11/04/21

Law37/2007. (2007). *Law 37/2007, of November 16 on the Re-use of Public Sector Information.* Retrieved from https://www.boe.es/eli/es/l/2007/11/16/37/con

Law39/2015. (2015). *Law 39/2015, of October 1, on the Common Administrative Procedure of Public Administarion.* Retrieved from https://www.boe.es/eli/es/l/2015/10/01/39/con

Law40/2015. (2015). *Law 40/2015, of October 1on the Legal Regime of the Public Sector.* Retrieved from https://www.boe.es/eli/es/l/2015/10/01/40/con

LicenceAgreement. (n.d.). *Licences & complementary agreements - Joinup*. Retrieved from https://joinup.ec.europa.eu/collection/eupl/licences-complementary-agreements

LicenceWizard. (n.d.). *Licence Wizard de JOINUP*. Retrieved from https://joinup.ec.europa.eu/collection/eupl/licence-wizard

NewEIF. (n.d.). *New European Interoperability Framework.* Retrieved from https://ec.europa.eu/isa2/sites/default/files/eif_brochure_final.pdf

NTIDataModel. (2012). *Technical Interoperability Standard for Data Models.* Retrieved from https://www.boe.es/eli/es/res/2012/06/28/(5)/con

NTI-RISP. (2013). *Technical Interoperability Standard for the Re-use of Information Resource.* Retrieved from https://www.boe.es/eli/es/res/2013/02/19/(4)/con

PAe. (n.d.). *eGoverment Web Portal*. Retrieved from https://administracionelectronica.gob.es

Plan2016-2020. (2016). *eGovernment Action Plan.* Retrieved from https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52016DC0179

PSC. (2017). *Law 9/2017, of 8 November, on Public Sector Contracts, transposing into Spanish law the Directives of the European Parliament and of the Council 2014/23/EU and 2014/24/EU, of February 26, 2014.* Retrieved from https://www.boe.es/eli/es/l/2017/11/08/9/con

RD1495/2011. (2011). *Real Decreto 1495/2011, de 24 de octubre, por el que se desarrolla la Ley 37/2007, de 16 de noviembre, sobre reutilización de la información del sector público, para el ámbito del sector público estatal.* Obtenido de https://www.boe.es/buscar/doc.php?id=BOE-A-2011-17560

RD1495/2011. (2011). *Royal Decree 1495/2011, of 24 October, implementing Law 37/2007 for the state public sector.* Retrieved from https://www.boe.es/eli/es/rd/2011/10/24/1495/con

RD203/2021. (2021). *Royal Decree 203/2021, of 30 March, approving the Regulation on the Performance and Functioning of the Public Sector by Electronic Means.* Retrieved from https://www.boe.es/eli/es/rd/2021/03/30/203/con

RD4/2010. (2010). *Royal Decree 4/2010, of January 8, which regulates the National Interoperability Scheme in the field of electronic administration.* Retrieved from https://www.boe.es/eli/es/rd/2010/01/08/4/con

Targets2030. (n.d.). *Digital Targets 2030*. Retrieved from https://digital-strategy.ec.europa.eu/en

ANNEX

ANNEX I. STANDARD CLAUSES TO BE INCLUDED IN SOFTWARE PROCUREMENT PROCESSES TO FACILITATE RELEASE AND REUSE

121. Any public procurement processes shall be based, according to public procurement regulations, on the contracting body's analysis of its needs, the technical characteristics of the products or services required and its possibilities of action. It should be noted that Article 157 of (Law40/2015)indicates that, before contracting software, solutions already available should be sought and seek the reuse

122. Three scenarios are possible for the contracting body:

- software capable of covering the identified technical and operational needs already exists and, therefore, only its implementation is necessary.
- it has not been possible to identify any type of software that meets the technical and operational needs identified and, therefore, it is necessary to develop it from scratch; or
- that, having identified a suitable software, it is necessary to develop it to meet the technical and operational needs identified.

123. Once the type of software has been identified, and in case it is pre-existing, it shall be identified and analysed the type of license associated, in order to specify, on the one hand, the scope of the license, such as the ownership of the license, the software and the elements comprising it, the assignment, distribution and reuse faculties offered by the license, as well as the liability regime; and on the other hand, the contracting entity's claims based on its objectives and technical and operational needs.

124. For information purposes only, it should be pointed out that, depending on the characteristics, the following types of licenses may be found:

i) those that allow access to and modification of the Source Code (**open-source software**; in particular, EUPL or similar, open-source and copyleft licenses);

ii) those that allow reuse, but not modification of the source code **(free software)**; or

iii) those that do not allow any of the aforementioned possibilities (**proprietary software**).

125. The type of license under which the software to be developed or implemented is licensed shall determine, therefore, not only the issues related to the intellectual and industrial property of the asset, but also the possibilities of release and reuse, as well as the implications as regards the liability of its transmission or assignment of use. All these aspects may be assessed and included in the Standard Clauses.

126. As regards the liability arising from the assignment or transfer of the license, the general principle of exemption from liability contained in article 16 of (RD4/2010) shall be taken into account. The software provision shall be made under conditions that exempt

the transferor from liability for possible misuse by the transferee, as well as the non-obligation to provide technical assistance or maintenance by the assignor, or any compensation in the event of errors or malfunctioning of the application.

127. Based on the above-mentioned scenarios, the following contracts may be signed:

a) Supply Contract whereby an existing or standard software or asset is implemented without any modification or custom development

b) Service Contract by which a software is developed based on one or several pre-existing ones.

c) Service Contract by which a customized software is developed from scratch.

128. According to Article 16.3 b) of (Law 9/2017, of 8 November, on Public Sector Contracts, transposing into Spanish law the Directives of the European Parliament and of the Council 2014/23/EU and 2014/24/EU, of February 26, 2014.) contracts for the acquisition and leasing of telecommunications or information processing equipment and systems, their devices and programs, and the assignment of the right to use the latter, in any of their modes of provision shall be considered supply contract, with the exception of contracts for the acquisition of custom-developed software, which shall be considered service contract.

129. Taking into account that the scope of this document limits the concept of release to the distribution of any software asset under an open-source license (see section 2), the following clause-types are proposed to be included in tender documents or contracts for the procurement of software assets to be subsequently distributed under the EUPL license (This clause could also apply to other open-source licences, replacing the references to EUPL by the licence selected.)

130. The type of software to be contracted shall be taken into account, in accordance with the different contracting scenarios mentioned above.

131. The proposed standard clauses follow the recommendations made by the regulations on reuse and release, as well as take into account the 'standard clauses[26]'' proposed by the European Union's ISA program to facilitate the distribution and reuse of assets.

132. Each contracting entity shall assess, in the exercise of its powers and technical discretion, the possibility of including the aforementioned Standard Clauses, or of incorporating clauses in accordance with its specific needs and requirements. In any case, prior to the presentation of the Standard Clauses, it is necessary to point out the basic issues that must be regulated or taken into account by the clauses that are finally included in tender documents or contracts for the procurement of software assets:

a) Ownership.

- of the software itself.
- of the software contents (industrial and intellectual property.
- tools, materials or deliverables directly or indirectly associated to the software (associated documentation).

[26] https://joinup.ec.europa.eu/collection/eprocurement/discussion/standard-sharing-and-re-using-clauses-contracts-contractual-clauses-service-procurement

- source code.

b) Transfer.

- transferability and reusability.
- type of licence.

c) Prerrogatives of the contracting entity.

- whether the assignment is for a fee or free of charge, etc.

d) Responsability

133. **1. Supply Contract whereby a standard or existing software or asset is implemented without modification or custom development.**

134. The purpose of the procurement processes is the supply of an existing software without developing any type of adaptation to the contracting entity. In this circumstance, it would be necessary to take into account the characteristics of the software to be implemented:

- Software under open-source license: since it is software developed under open-source license, the ownership of the product does not have to be contractually transferred. It is the property of the company that commercializes it. The public administration would be just another user. The original licencing of the software must be respected. The clause on release and reuse cannot be included in the tender documents or contracts for the procurement.
- Free software: this type of software allows its reuse, but not to modify the Source Code, so it does not meet the requirements established in the (RD4/2010) to license and reuse it as open-source software. The clause on release and reuse cannot be included in the tender documents or contracts for the procurement.
- Proprietary software: does not allow access to the source code and does not allow modifications. The clause on release and reuse cannot be included in the contracting specifications

135. **2. Service Contract to develop a software based on one or several pre-existing ones.**

136. The software to be contracted exists and one or several starting products can be identified. However, in this case, both the characteristics of the software itself and the technical and operational needs of the contracting entity require a plus of execution and development.

137. The way to articulate this development is through a service contract, regulated in Articles 308 et seq. (PSC)), precisely because it is a custom software development under the terms of Article 16.3.b) (PSC)),.

138. Standard clause:

'1[Contracting Entity] is acquiring ownership of all the products (all forms and formats of software, data and/or information, including preparatory documents, specifications, presentations, DLLs, scripts, etc.) developed by the tenderer [including the tenderer's employees and subcontractors] and made available to the [Contracting Entity] under the terms of Article 16.3b) 'in fine' of Law 9/2017 , of November 8 , on Public Sector Contracts, in the fulfilment of this contract (hereinafter referred to as 'results') and, in particular, all the intellectual and/or industrial property

rights they entail, respecting the provisions of Article 308.1 of Law 9/2017, and in any form and under any format and the global territorial scope, [Contracting Entity] reserving all other prerogatives associated with intellectual and/or industrial property. The transfer of ownership shall have full scope as regards the content of the Property Right over the software, so that [Contracting Entity] assume the status of owner of the property, including the Source Code.

2. [Contracting Entity] shall be the holder of all the aforementioned rights for the maximum duration and for global territorial scope, and the only entity entitled to the exploitation of the results before or after end of contract, the author(s) and/or inventor(s) only being entitled to the rights granted by Article 14 of the Intellectual Property Right and/or Article 14 of the Patents Act, if applicable. For the purposes provided in the paragraph above, the tenderer undertakes to submit all the technical documents and materials produced during analysis, design, development, implementation and testing to [Contracting Entity], which shall keep them after end of contract. The tendered shall not use said documents and materials with other entities or individuals unless authorised by [Entity]. The costs of preparing such documentation shall be borne by the tenderer.

3. [Contracting Entity] may decide to make available the computer programmes, data and/or information that this contract refers to, using the European Union Public Licence ((EUPL v1.2 o posterior) (http://joinup.ec.europa.eu/software/page/eupl/licence-eupl), to this end or other licences that ensure compliance with the provisions in Article 16 of Royal Decree 4/2010:

- *They can be implemented for any purpose.*
- *They allow their source code to be known.*
- *They can be modified or improved.*
- *They can be redistributed to other users with or without changes as long as the derivative work retains these four guarantees.*

4. In the case that the tenderer incorporates into the Results additional products, modules or elements owned by third parties and subject to open-source licence (as defined in the Annex to Royal Decree 4/2010), the tenderer shall guarantee and prove that they can be distributed to third parties as part of the results under the corresponding EUPL licence (or another licence ensuring compliance with the provisions in Article 16 of Royal Decree 4/2010). Exceptions to this requirement shall only be possible by authorisation from [Contracting Entity].

5. In the case that the tenderer incorporates into the Results additional products, modules or elements owned by third parties or subject to other types of licence, they shall get permission from the holder(s) of these products' sufficient rights to enable their distribution to third parties as part of the products resulting in accordance with these and, thus enabling [Contracting Entity] to proceed to licencing as described in the paragraph above.' In the event that it is not possible to obtain these rights from third parties, the customized development shall be carried out in such a way that its redistribution is possible without the additional products, modules or elements owned by third parties subject to another type of license. In this way, the custom development and the integration documentation shall facilitate that the reusing agent can acquire the additional licenses necessary to make the reuse effective. Exceptions to this requirement shall only be possible with the prior authorization of the [Contracting Entity].

6. In any case, the use of a proprietary product, either as a development environment or as a tool for the execution of the custom developed product, shall not imply a limitation for the release and/or reuse of the product in the terms referred to in the following paragraphs

7.The tenderer shall indemnify [Contracting Entity] against third party claims related to the use, reuse, redistribution or licencing of any part of the product provided.'

139. **3. Service Contract by which a customized software is developed from scratch**

140. The starting point is a scenario in which there is no previous software, but rather, having analysed the previous issues referred to, it is created from scratch in order to cover the technical and operational needs identified, with the contracting entity ensuring

that the resulting product can be released under EUPL license, or SFA compatible, in order to ensure its release and reuse, under the terms described by the regulations.

141. The contracting entity may assess the possibility of limiting the rights contained in the license, as well as the opportunity to license the software under EUPL or SFA in order to favour or not its release or reuse under the terms mentioned above, as it deems appropriate, without prejudice to the mandatory regulatory provisions to that effect.

142. Even if no previous software is used as a starting point, it is common to use libraries and other elements that simplify this development process and whose licencing conditions must also be taken into consideration when carrying out the final development.

143. Notwithstanding the foregoing, in those cases in which a previously non-existent software is developed, the possibility of articulating such provision of services through the **Innovation Partnership Contract** referred to in Articles 177 and following of the (PSC)), could be considered.

144. Standard clause:

'1[Contracting Entity] is acquiring ownership of all the products (all forms and formats of software, data and/or information, including preparatory documents, specifications, presentations, DLLs, scripts, etc.) developed by the tenderer [including the tenderer's employees and subcontractors] and made available to the [Contracting Entity] under the terms of Article 16.3b) 'in fine' of Law 9/2017 , of November 8 , on Public Sector Contracts, in the fulfilment of this contract (hereinafter referred to as 'results') and, in particular, all the intellectual and/or industrial property rights they entail, respecting the provisions of Article 308.1 of Law 9/2017, and in any form and under any format and the global territorial scope, [Contracting Entity] reserving all other prerogatives associated with intellectual and/or industrial property. The transfer of ownership shall have full scope as regards the content of the Property Right over the software, so that [Contracting Entity] assume the status of owner of the property, including the Source Code.

2. [Contracting Entity] shall be the holder of all the aforementioned rights for the maximum duration and for global territorial scope, and the only entity entitled to the exploitation of the custom made and developed products, before or after end of contract, the author(s) and/or inventor(s) only being entitled to the rights granted by Article 14 of the Intellectual Property Right and/or Article 14 of the Patents Act, if applicable. For the purposes provided in the paragraph above, the tenderer undertakes to submit all the technical documents and materials produced during analysis, design, development, implementation and testing to [Contracting Entity], which shall keep them after end of contract. The tendered shall not use said documents and materials with other entities or individuals unless authorised by [Entity]. The costs of preparing such documentation shall be borne by the tenderer.

3. [Contracting Entity] may decide to make available the computer programmes, data and/or information that this contract refers to, using the European Union Public Licence ((EUPL v1.2 o posterior) (http://joinup.ec.europa.eu/software/page/eupl/licence-eupl), to this end or other licences that ensure compliance with the provisions in Article 16 of Royal Decree 4/2010:

- *They can be implemented for any purpose.*
- *They allow their source code to be known.*
- *They can be modified or improved.*
- *They can be redistributed to other users with or without changes as long as the derivative work retains these four guarantees*.

4. In the case that the tenderer incorporates into the Results additional products, modules or elements owned by third parties and subject to open-source licence (as defined in the Annex to Royal Decree 4/2010), the tenderer shall guarantee and prove that they can be distributed to third parties as part of the results under the corresponding EUPL licence (or another licence ensuring

compliance with the provisions in Article 16 of Royal Decree 4/2010). Exceptions to this requirement shall only be possible by authorisation from [Contracting Entity].

5. In the case that the tenderer incorporates into the Results additional products, modules or elements owned by third parties or subject to other types of licence, they shall get permission from the holder(s) of these products' sufficient rights to enable their distribution to third parties as part of the products resulting in accordance with these and, thus enabling [Contracting Entity] to proceed to licencing as described in the paragraph above.' In the event that it is not possible to obtain these rights from third parties, the customized development shall be carried out in such a way that its redistribution is possible without the additional products, modules or elements owned by third parties subject to another type of license. In this way, the custom development and the integration documentation shall facilitate that the reusing agent can acquire the additional licenses necessary to make the reuse effective. Exceptions to this requirement shall only be possible with the prior authorization of the [Contracting Entity].

6. In any case, the use of a proprietary product, either as a development environment or as a tool for the execution of the custom developed product, shall not imply a limitation for the release and/or reuse of the product in the terms referred to in the following paragraphs

7.The tenderer shall indemnify [Contracting Entity] against third party claims related to the use, reuse, redistribution or licencing of any part of the product provided.'

ANNEX II. ANALYSIS OF OTHER OPEN-SOURCE SOFTWARE LICENCES

145. The following is an analysis of the licenses for the most widely used open-source software assets in the market.:

GNU GPL 2.0
Rights granted • GPL 2.0 grants the right to use, reproduce, modify and distribute programmes, available as a source code or a binary code.
Obligations • Proprietary notices must be kept in the source code and modifications must be indicated. • Strong copyleft clause: The same licence must be used to redistribute the programme and its modifications and to integrate either of them into a new asset. • In binary distribution, the source code must be distributed with the binary code or be available to all users for three years. • No additional restrictions may be added to programme distribution.
Others • The source code is defined is defined as _the preferred form of the work to make modifications' and includes the scripts for compilation and running, as well as any API. • No reference is made to patents or trademarks, nor to applicable laws or jurisdictions. • Warranties and liabilities are disclaimed to the extent permitted by applicable law.
• FSF, the licence's author, argues that it prevents the use of dynamic links to connect a programme to another licensed under GPL without applying this licence to the asset _as a whole' (although this opinion is not shared by all members of the free software community). However, the GPL copyleft clause does not apply to programmes integrated and/or distributed in the same support (e.g. a CD/DVD). • Compatibility: Since the programme must be redistributed under the same licence, it is only compatible with the most permissible licences (BSD, MIT, etc.). For a full list of compatible licences, the reader is referred to www.gnu.org. • Some GPL variants have exceptions that make them more compatible, e.g. the Classpath Exception of the Classpath Project, enabling dynamic linking to other programmes under any licence, or the FOSS Exception from MySQL, with the same result as long as the other programme is distributed under an open-source licence. • The programmes using this licence tend to indicate that it is GPL v2 or later'. This way, users can get the programme under GPL v3 if they want to.

Table 2. Information on licence GPL2.0

GNU GPLv3
Rights granted • GPL v3 grants the right to ‗propagate' a programme, with or without modifications, and works based on it. To 'propagate' a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. In Spain, propagation includes copying, distribution (with or without modification) and making available to the public. • GPL v3 grants unlimited patent licence. • It enables programmes to be linked to assets under Affero GPL licence. • With the aim of improving flexibility and licence compatibility, it enables assets with additional restrictions to be linked to assets under licence GPL v3 (only in connection with certain aspects: trademarks, compensations, warranties, etc.). • It also allows for additional permissions (as in LGPL v3) that can be eventually deleted
Obligations • Proprietary notices must be kept, and modifications must be indicated. • **Strong copyleft clause: The same licence must be used to redistribute the programme and its modifications and to integrate either of them into a new asset.** • In binary distribution, the source code must be distributed with the binary code or be available to licensees for three years. • No additional restrictions may be added to programme distribution.
Others • No reference is made to applicable laws or jurisdictions. • Warranties and liabilities are disclaimed to the extent permitted by applicable law.
• The source code is defined in more specific and thorough terms than in GPL v2, but the basic concept is the same: 'the preferred form of the work to make modifications', including the scripts for compilation and running, as well as any API. In the case of consumer goods, it must also include the codes or passwords required for the asset to be operated. • New ways of making the source code available are introduced, including websites and P2P networks. • It is stated that copyleft affects programmes dynamically linked to assets under licence GPL vs. However, as was the case with GPL v2, the GPL v3 copyleft clause does not apply to programmes integrated and/or distributed in the same support (e.g. a CD/DVD). Exceptionally, the copyleft clause does not apply to programme distribution and/or modifications between consultants/integrators and their clients. • Compatibility: The GPL v3 compatibility scenario is quite complex. There is compatibility with assets under licences GPL v2 and LGPL, while 'permitted restrictions' extend compatibility to other licences (specially Apache 2.0). • Although assets licensed under GPL v3 can be included in copyright protection and control systems (DRMS), licensors may not forbid licensees' circumvention of technological measures. • Licence is revoked when a licensee files a claim based on patent rights and it contains additional conditions if special protection is agreed upon with third parties.

Table 3. Information on licence GPL3

Mozilla Public License 2.0
Rights granted • Licence MPL grants the rights to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit assets, available as a source code or a binary code. • It also grants a patent licence that is revoked under patent claims concerning any of the owner‘s assets.
Obligations • Copy of the licence, proprietary notice, and warranty and liability disclaimers must not be removed from the source code. • When redistributing the asset, modifications must be indicated and the ‘legal.txt‘ file (a file with legal contents) must be kept with the code or the documents. • Weak copyleft clause: When the asset or the modifications (of the original files) are redistributed, it must be done under the same licence, supplying the source code. The programme, however, can be integrated into other assets, distributed under any kind of licence.
Others • No reference is made to applicable laws or jurisdictions. • Warranties and liabilities are disclaimed to the extent permitted by applicable law.
• Compatibility: MPL is compatible with most licences, since version 2.0 has added compatibility with GPL licence.

Table 4. Information on licence MPL2.0

Lesser GPL (LGPL)
Rights granted • LGPL includes the same freedoms and restrictions as GPL regarding original assets, the exploitation of modifications being covered by the copyleft clause. On the other hand, it applies different legal terms (even restrictive or not-free conditions) to the distribution of programmes 'using the library'.
Others • The text LGPL v2 is very complex when discussing links between programmes. LGPL v3 is an explicit variant of GPL v3, e.g. it is a GPL v3 licence with additional permissions, accepting that a third programme under any kind of licence uses a LGPL-licensed asset and allowing for distribution of the whole under a licence that is not LGPL.

Table 5. Information on licence LGPL.

ANNEX III. ASSET RELEASE CHECKLIST

146. **Proprietary notice**: Decide on and show information.
   - ✓ Identify asset ownership and authorship.
   - ✓ Create ‘COPYING‘ text file containing information about the work‘s owners..
   - ✓ Include ‘COPYING‘ in ‘Legal‘ folder.

147. **Licence**: Select and show a licence for the asset.
   - ✓ Select compatible licence that is consistent with the goals of the project.
   - ✓ Create ‘LICENCE‘ text file containing information about the licence selected..
   - ✓ Include ‘LICENCE‘ FILE in ‘Legal‘ folder.

148. **File header**: Add information about licencing and copyright to source code.
   - ✓ Add information about copyright ownership as a comment in source code file header.
   - ✓ Add authorship notice as a comment in source code file header.
   - ✓ Add information about licencing in source code file header.

149. **‘AUTHORS’ file**: Add contact information for the project**.**
   - ✓ Add names and email addresses of main contributors.
   - ✓ Include ‘AUTHORS‘ file in ‘Legal‘ folder.

150. **‘README’ file (optional):** Include all the relevant information about the project.
   - ✓ Create ‘README‘ text file containing project description..
   - ✓ Include ‘README‘ file in main folder.

151. ‘**INSTALL’ file (optional):** Include all the relevant information about installation.
   - ✓ Create ‘INSTALL‘ text file giving instructions for asset installation..
   - ✓ Include ‘INSTALL‘ file in main folder..

152. ‘**CHANGES’ file (optional)**: Include the full record of the changes made.
   - ✓ Create a ‘CHANGES‘ text file containing the asset‘s record and its most important reviews.
   - ✓ Include ‘CHANGES file in main folder.

153. **Share**: Upload the code to a public repository.
   - ✓ Choose the repository that best suits the characteristics of the project.
   - ✓ Follow the instructions in the repository to create a project.
   - ✓ Upload code.
   - ✓ Register the solution as a re-usable element at the CTT.