

Article | Received 21 July 2026; Revised 9 September 2026; Accepted 11 September 2026; Published 1 October 2026
<https://doi.org/10.55092/let20260014>

Digital cultural heritage under EU copyright influence in two Black Sea States



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Highlights:

- Directive 2019/790 operates beyond the EU as a functional regulatory model.
- EU rules travel via legal alignment, institutional links and functional extension.
- Member States reveal different interactions between copyright implementation and national public-law controls.
- Ukraine and Türkiye receive the EU model through different domestic channels.
- Existing national structures determine the completeness of regulatory transfer.

Abstract: This article examines how national legal structures affect the reception of the European Union framework for digital preservation and public-domain access outside the Union. Articles 6, 7 and 14 of Directive 2019/790 provide the benchmark. They address preservation copying by cultural heritage institutions, protection of exceptions against contractual restrictions and their connection with rules on technological protection measures, and the exclusion of new copyright or related rights in non-original reproductions of public-domain visual art. The analysis identifies two regulatory configurations among EU Member States: copyright-centered implementation of the Directive, and copyright implementation operating alongside non-harmonized national public-law controls over cultural heritage reproductions. Ukraine and Türkiye are examined as two ways of responding to EU copyright rules. Ukraine has moved closer to the EU model through copyright reform and participation in European digital cultural heritage initiatives. Its legislation already covers some functions reflected in Articles 6 and 14, but gaps remain.



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These include contractual override, the use of works for preservation when technological protection measures prevent access, and the status of non-original reproductions of public-domain visual art. Türkiye follows a different approach. Copyright, legal deposit, and cultural heritage rules regulate these issues separately. Electronic legal deposit supports preservation through the National Library, but there is no copyright exception allowing cultural heritage institutions to preserve collections. Administrative permissions and controls also affect the creation and reuse of cultural heritage reproductions. The comparison identifies three modes of functional reception—direct legal transmission, institutional and procedural transmission, and functional convergence—and treats non-transmission as a separate category for EU functions left unperformed. In the cases examined, reception is more complete where copyright permissions, technological safeguards, legal-deposit mechanisms and cultural heritage administration are institutionally coordinated. Equivalent protection for preservation and public-domain access depends on the coordinated legal and institutional effects of the national framework.

Keywords: copyright and cultural heritage; cultural heritage digitization; digital preservation law; public-domain art; EU Copyright Directive; copyright exceptions; technological protection measures; Ukraine; Türkiye

1. Introduction

Digital cultural heritage depends on legal permissions and technical capacity to copy, store, migrate, describe, aggregate and provide access to cultural materials. The expiry of copyright does not by itself make a digitized object available for preservation or reuse. Access may still be affected by the legal position of the holding institution, contractual terms, technological protection measures, metadata practices, database structures, platform rules and administrative restrictions. The digital public domain consequently operates within a wider governance environment in which copyright, technology and cultural heritage administration determine whether cultural materials can be preserved and used in practice [1]. Effective digital copyright governance also requires coordination, oversight and enforceable safeguards for institutions and users [2–4].

At European Union (EU) level, Directive (EU) 2019/790 on copyright and related rights in the Digital Single Market (DSM Directive) provides a functional regulatory framework for several parts of this environment. Article 6 requires Member States to permit cultural heritage institutions (CHI) to make copies of works and other protected subject matter permanently in their collections, in any format or medium, to the extent necessary for preservation. Article 7 protects the effectiveness of this exception against contrary contractual terms and connects it with the EU rules addressing technological protection measures. Article 14 excludes copyright and related rights in reproductions of public-domain visual art where the reproduction is not original. Together, these provisions address three connected technological problems: the repeated copying and migration required for digital preservation, contractual or technical barriers preventing lawful institutional uses, and the creation of new control over public-domain materials through digitization.

Across the EU, these rules work differently in practice. In some Member States, these issues are dealt with mainly through copyright exceptions, contractual safeguards and specific rules for public-domain works. Others also use cultural heritage law to regulate photography, digitization, publication or commercial reuse through permits, fees or institutional approval. These public-law controls are not

harmonized by Directive 2019/790. They remain part of national cultural heritage and administrative law, but they can still affect how the harmonized copyright rules work in practice. In such systems, a reproduction may remain under administrative control after the original work has entered the public domain. These controls may help protect collections and manage access, but they can also restrict the reuse of faithful digital copies [5].

Digital technologies create additional forms of control. Cultural heritage institutions increasingly work with databases, metadata, digital repositories, 3D models and online collections. However, control over a digital file does not determine the copyright status of the material it contains. Access and reuse may still be limited by contracts, platform rules or technical restrictions, even when copyright does not prevent them. Terms of service, licenses and technical settings may therefore affect how digital cultural materials can be accessed and reused [6]. Website notices may also signal restrictions on reuse [7]. The same distinction is clear in tokenized cultural objects – copyright in the represented work remains legally separate from ownership or control of the token or digital file [8].

These features raise a broader question about regulatory transmission. Research on external Europeanization explains that EU rules may travel through legislative conditionality, institutional links and functional extension, with reception conditioned by domestic legal structures [9,10]. Copyright scholarship has examined the fragmentation of the EU copyright framework across national implementation [4]. A related body of research addresses open access to digitized cultural heritage and the legal, technical and institutional conditions governing cultural heritage collections as data [11,12]. This article integrates these strands through a comparative analysis of how copyright, legal deposit and cultural heritage administration shape the reception of the same EU preservation and access functions outside the Union.

The article's contribution is a functional account of external reception that explains how pre-existing national structures shape regulatory outcomes. It distinguishes three modes—direct legal transmission, institutional and procedural transmission, and functional convergence—from non-transmission and evaluates them through legislative correspondence, institutional authority, technical access and enforceable safeguards.

The central research question is: how do existing national legal structures affect the reception of the EU framework for digital cultural heritage? More specifically, the article asks which functions of the EU framework are directly transmitted, performed through domestic substitutes or left unreceived when copyright, legal-deposit and cultural heritage legislation allocate preservation and access to different institutions. Articles 6, 7 and 14 are the main points of comparison.

Ukraine and Türkiye offer a useful contrast because EU rules reach them through quite different routes. In Ukraine, *acquis*-driven approximation is closely tied to accession and to the post-2022 copyright reform. Cooperation with Europeana and related heritage projects adds a practical layer: shared metadata, institutional links and platform integration can carry EU practices beyond the statute book [13]. The Commission's 2025 report still notes only some preparation in IP law and calls for further alignment [14]. Türkiye follows a more piecemeal route. Its EU relationship rests on association, the customs union, candidate status and accession talks, while preservation and access rules are split between copyright, legal deposit and cultural heritage law. The Commission also points to unfinished alignment, including technological protection measures and rights-management information [15]. The main difference lies in the legal machinery through which EU norms are absorbed. Their distinct positions in

the accession process allow the comparison to examine how pre-existing national structures shape the reception of the same EU functions.

Ukraine and Türkiye also share a broad regional setting. Both are EU candidate countries in the wider Black Sea region and have established institutional links with the EU. Their legal and institutional alignment with the EU differs in pace and form. This gives a common setting for comparing how national legal structures receive the same EU functions.

Transmission refers to the route by which an EU function enters a national legal system. Reception describes the resulting legal and institutional configuration.

The article first defines the functional framework created by Articles 6, 7 and 14 of Directive 2019/790. It then identifies copyright-centered implementation and copyright implementation operating alongside national public-law controls among selected Member States. The following sections examine Ukraine's acquis-driven reception and Türkiye's fragmented functional reception. A separate comparative section assesses both systems against the same EU benchmarks and identifies the legal structures that facilitate or obstruct transmission. The conclusions explain how the distribution of functions among copyright, legal deposit and cultural heritage administration affects the transferability of technology-related regulation between legal orders.

2. Methods

This article combines doctrinal, comparative and functional legal analysis. The doctrinal analysis examines copyright exceptions, contractual restrictions, technological protection measures, legal-deposit rules, public-domain provisions and administrative controls over the reproduction and use of cultural property. Digitization is treated as a sequence of legally relevant technical acts that may include reproduction, format conversion, migration, extraction, database creation, metadata processing, online communication and reuse. The applicable rules may differ according to the institution, protected subject matter and technological operation involved [16].

The EU framework is translated into four assessment criteria. The first is whether CHI may make the copies required to preserve works and other protected subject matter permanently in their collections. The second is whether contrary contractual terms are unenforceable. The third is whether institutions have an effective route to exercise lawful preservation uses where a technological protection measure creates a barrier. The fourth is whether non-original reproductions of public-domain visual art remain free from new copyright and related rights. These criteria are based on Articles 6, 7 and 14 of Directive 2019/790.

A national rule is relevant where it performs the same practical task, even if it was adopted for another purpose or uses different legal concepts. The focus is therefore on what the rule allows institutions to do and what safeguards it provides. This is important because national copyright exceptions still differ in their beneficiaries, subject matter and conditions of use [4]. Copyright limitations also remain closely linked to lawful access to digital material for research and innovation [2].

The Member-State sample was chosen to show different combinations of copyright rules and public-law controls. The comparison draws on consolidated copyright laws, DSM transposition measures and cultural heritage legislation. Particular attention is paid to preservation copying, software and databases, contractual restrictions, technological protection measures, public-domain reproductions and administrative limits on digitization or reuse.

Ukraine and Türkiye illustrate two different approaches outside the EU. Their different EU links help show how national law responds to the same rules.

For Ukraine, the analysis covers the Copyright Act, cultural heritage, museum, archival and library legislation, relevant administrative structures, cooperation with Europeana and the treatment of digital objects in the Draft Civil Code. For Türkiye, it covers the Law on Intellectual and Artistic Works No. 5846 (FSEK), the legal-deposit regime under Law No. 6279, the electronic-publication deposit rules, Law No. 2863 and the administrative regulation of photography, filming and copying in museums and archaeological sites.

Each national system is assessed through three modes of functional reception and a separate non-transmission category. Direct legal transmission requires an identifiable national provision performing an EU function. Institutional and procedural transmission concerns the adoption of shared metadata, aggregation, rights-information or infrastructure practices. Functional convergence exists where a domestic mechanism performs part of an EU function independently of implementation of the corresponding EU provision. The term is descriptive and remains neutral as to the origin of the domestic mechanism. Non-transmission identifies an EU function left unperformed by national law. Functional completeness requires substantive legal authorization, institutional authority, effective technological access and enforceable safeguards for CHI [17,18].

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The study assesses the structure and legal capacity of the selected regimes. Quantitative measurement of digitization volumes, preservation success rates and institutional compliance falls beyond the study design. Published studies of institutional practice provide contextual evidence of legal and technical barriers in access systems, with their evidentiary role confined to institutional illustration. Administrative permissions and fees are assessed by what the rules require and how they may affect preservation and access to public-domain material. This keeps the comparison focused on how national law deals with these EU functions.

3. Results

3.1. EU framework for digital public domain governance and public access to digital cultural heritage

The EU approach to the digital public domain combines copyright law with cultural heritage policy and rules on public access. Copyright matters here because it affects research, reuse and access to digital material [2]. Digitization also requires clear legal space for preservation by cultural heritage institutions and for the continued use of works that are already in the public domain. This depends on copyright exceptions, limits on contractual restrictions, rules on technological protection measures and wider policies on digitization and access. These elements are used here to assess how similar functions appear outside the EU [19].

Directive 2019/790 forms the main copyright basis for this area. This Directive also works alongside earlier EU copyright rules. The InfoSoc Directive still governs reproduction and communication to the public, while the Software and Database Directives continue to regulate computer programs and databases [20].

Its mandatory structure was intended to reduce the fragmentation produced by earlier optional exceptions, although national implementation still shows uneven choices in the regulation of research, education and cultural heritage access [4].

Article 6 requires an exception allowing CHI to make copies of works and other protected subject matter permanently in their collections, in any format or medium, for preservation purposes, with the number, timing and technology of copies defined by preservation necessity instead of a fixed formal limit [21]. Its legal function is practical: it gives libraries, museums, archives and film or audio heritage institutions a protected space for copying, migration, format-shifting and other technical acts required for long-term preservation, including preservation in digital formats where repeated copying, technological migration and back-up may be necessary [22].

Before the DSM Directive, the CJEU had already addressed digitization needed for institutional exceptions. In *Technische Universität Darmstadt v Eugen Ulmer* (C-117/13), it held that Article 5(3)(n) of Directive 2001/29/EC, read with Article 5(2)(c), did not prevent Member States from allowing a publicly accessible library to digitize works in its collection when this was necessary for access through dedicated terminals [23]. The judgment treated digitization as an act that may be needed for the effective use of an institutional exception. In *Pelham, Funke Medien and Spiegel Online*, the Court also stressed the need for a fair balance between exclusive rights and competing fundamental rights [24].

Article 7(1) protects the preservation exception against contractual circumvention by making contrary contractual terms unenforceable. Article 7(2) applies the relevant parts of Article 6(4) of Directive 2001/29/EC to Articles 3–6 of Directive 2019/790, thereby requiring measures that enable beneficiaries to exercise covered exceptions where technological protection measures (TPMs) prevent permitted uses. Reception of Article 7 must therefore be assessed through two distinct questions: whether preservation is protected against contractual derogation and whether CHI have an effective procedure for exercising the exception where TPMs block lawful copying.

Article 14 protects the public domain by excluding copyright or related rights in material resulting from the reproduction of a public-domain work of visual art where that material is not original. It applies the EU originality standard requiring an identifiable work that expresses the author's own intellectual creation [25–27]. The provision addresses renewed control through digitization at a time when access to cultural material increasingly depends on control of digital copies and platforms [28]. It therefore provides the benchmark for assessing whether receiving systems prevent new copyright or related-right claims over copies of public-domain visual art that lack originality [21,29].

The copyright core of Directive 2019/790 operates within a broader EU policy environment aimed at digitization, online access, reuse and long-term preservation of cultural heritage, where intellectual property, access, ownership, attribution and preservation issues arise together [29,30]. EU cultural heritage policy promotes the creation of digital collections, high-quality metadata, interoperable infrastructures, cross-border discoverability and access through digital platforms. This policy line is visible in the EU's reliance on Europeana and the common European data space for cultural heritage, which links mass digitization with reuse in education, sustainable tourism and cultural and creative sectors [1]. This policy dimension gives preservation exceptions, contractual override and faithful reproduction rules administrative and institutional meaning.

Public access is a central element of this policy environment. Digital cultural heritage covers both the internal preservation needs of CHI and broader public access, since EU copyright law has moved

further on digital preservation than on remote digital access to library-held materials [22]. It concerns the ability of the public to discover, consult, study and reuse cultural materials in lawful ways, including through online databases, virtual tours, thumbnails and other digital access tools that may raise reproduction, adaptation and making-available issues [16]. This requires rules and procedures concerning digitization priorities, metadata availability, access conditions, reuse terms, public-sector information, licensing practices and institutional transparency, since audiovisual aggregation projects show that unclear licensing and inconsistent metadata can block practical reuse even where content is technically available [31].

Public-domain materials must also be distinguished from out-of-commerce works. Public-domain material is no longer protected by economic copyright or related rights. Out-of-commerce works may remain protected and require a separate access route under Articles 8–11 of Directive 2019/790. An assessment of external reception must therefore treat preservation, public-domain reuse, orphan-work mechanisms and access to protected out-of-commerce collections as distinct legal functions requiring different safeguards. This distinction delimits the scope of the comparison: Articles 8–11 provide a separate access framework, and the functional assessment of Ukraine and Türkiye remains centered on Articles 6, 7 and 14.

The EU approach therefore links the digital public domain with public administration. CHI and public authorities actively shape the conditions under which digital cultural heritage becomes visible, searchable, reusable and legally reliable. This governance function also has a participatory dimension: EU-oriented cultural heritage policy treats local communities, civil society, public bodies and private actors as direct participants in preservation, access and reuse arrangements [32].

3.2. Member-state models of implementation

The first group covers systems in which copyright exceptions and institutional eligibility rules provide the main legal basis for digital preservation. Public administration remains part of cultural heritage governance through the statutory missions, collection policies and internal procedures of libraries, museums, archives and other CHI. For this comparison, the defining feature is the location of preservation authority and ordinary reuse rules primarily within copyright law.

The category is based on official national copyright texts and materials. Germany, Croatia, the Netherlands, Sweden and Spain are used as the main examples. Austria, Estonia, Malta, Belgium and Luxembourg are treated as supporting examples only to the extent that their copyright laws follow the same preservation-exception pattern.

Germany is one of the clearest examples of this approach. German law has specific preservation rules for publicly accessible libraries, archives, museums, educational establishments and film or audio heritage institutions. These institutions may reproduce materials from their holdings or exhibitions for preservation, restoration, indexing and cataloguing. This includes repeated copying and technically necessary alterations (German Act on Copyright and Related Rights (Urheberrechtsgesetz–UrhG), §§ 60e and 60f) [33]. A separate contractual safeguard makes agreements restricting uses permitted under §§ 60a–60f ineffective against the beneficiaries (UrhG, § 60g). German law also has a direct rule for reproductions of public-domain visual works, which excludes related-right protection for such reproductions (UrhG, § 68). These provisions keep preservation, contractual protection and public-domain

reproductions mainly within copyright law. Ordinary digital reuse is not placed under a separate general permission system in cultural heritage law.

Croatia provides another example. Its Copyright and Related Rights Act allows CHI to make copies of copyright works and related-rights subject matter permanently held in their collections, in any format or medium, for preservation and only to the extent necessary for that purpose (Croatian Copyright and Related Rights Act, Art. 191) [34]. The rule is limited to the institution, the purpose of preservation and the necessary use, and it is technologically neutral. Contract terms that conflict with the preservation exception are null and void. This is close to the approach used in Directive 2019/790, because the institution is the beneficiary, the work must be permanently held in the institution's collection, the use must serve preservation, and the statutory permission prevails over contract. The Croatian approach gives CHI clear preservation rights without a broad administrative approval process. This copyright reform was part of a wider EU-driven digital-cultural-policy process in Croatia, which also included the e-Culture project aimed at integrated digital heritage content and permanent storage [35].

The Netherlands and Sweden follow the same general approach. Dutch law allows a CHI to reproduce a work when this is necessary for preservation and the work is permanently held in its collection. Contract terms cannot exclude this right (Auteurswet, Art. 16n) [36; 37]. Swedish law allows publicly accessible libraries and museums, archives, and film or audio heritage institutions to make copies for preservation. Contract terms restricting this right are invalid (Swedish Copyright Act, § 16) [38]. In both countries, the preservation right is stated directly in the law. CHI do not need a separate administrative license for each act of preservation.

Spain follows a similar model. Article 69 of Royal Decree-Law 24/2021 gives CHI a preservation exception, while Article 72 excludes new copyright or related rights in non-original reproductions of public-domain visual art [39].

Austria, Estonia, Malta, Belgium and Luxembourg also follow this general pattern, although the legal details differ. In Austria, publicly accessible libraries and museums, archives and film or audio heritage institutions may reproduce works permanently held in their collections for preservation (Austrian Copyright Act, § 42(7)) [40]. Estonia places preservation within copyright limitations for cultural heritage institutions (Estonian Copyright Act, § 20) [41]. Malta regulates preservation through the Copyright and Related Rights in the Digital Single Market Regulations. The rule covers CHI, permanent collections, necessary reproduction and copies made in any format (Copyright Act, Chapter 415 of the Laws of Malta, as supplemented by the Copyright and Related Rights in the Digital Single Market Regulations (S.L. 415.08)) [42]. Belgium and Luxembourg also place preservation rules in copyright law and include provisions on CHI and permanent collections (Belgian Code of Economic Law, Book XI; Luxembourg Law of 18 April 2001, Art. 10) [43,44].

Across these systems, CHI may make preservation copies directly under copyright law. The permission is technologically neutral and covers reproduction in any format or medium when necessary for preservation. Contract terms cannot override the exception. If TPMs prevent its use, the result depends on the national implementation of Article 7(2).

Public administration still has an important role. It deals with institutional mandates, registration, digitization priorities, funding, metadata standards and accountability. Administrative work of this kind helps with preservation and access. Control over public-domain reproductions remains a separate issue.

This separation between copyright rules and administrative tasks forms the first model used in the comparison with non-EU countries.

3.3. Copyright implementation alongside national public-law controls

A second group of systems combines copyright exceptions with cultural heritage rules on reproduction, publication, commercial use and dissemination of heritage images. The analysis here uses national copyright and cultural heritage laws together with official administrative rules. Copyright exceptions may exist together with permits, fees or consent rules for copies, monument images or museum objects. Such rules can extend restrictions on public-domain material beyond the copyright term [5]. This confirms that the problem arises within administrative rules that define the practical conditions of access, reproduction and reuse.

Italy is the clearest example of this approach. Italian copyright law implements the DSM preservation logic and introduces an Art. 14-style rule on materials in the public domain, but this rule is framed without prejudice to the Cultural Heritage and Landscape Code. That Code allows public authorities or holding institutions to regulate the reproduction and use of cultural goods, including through concession fees and remuneration (Italian Law on the Protection of Copyright and Neighboring Rights (Legge 22 aprile 1941, n. 633, Arts. 32-quater and 68(2-bis); Cultural Heritage and Landscape Code, Arts. 107–108) [45,46]. A separate public-law regime may therefore condition the practical reuse of public-domain cultural materials even after copyright protection has expired. Italian scholarship treats this configuration as a paradigmatic example of re-fencing, because the Cultural Heritage and Landscape Code may preserve administrative control over reproductions even after copyright protection has expired and even where Article 14 of Directive 2019/790 excludes new copyright or related-right protection [5]. The Italian example shows that implementation of Article 14 must be assessed together with cultural heritage legislation because a public-domain reproduction may remain subject to permission-based control after copyright and related rights have expired.

Greece, France, and Portugal show more specific or institutionally narrower forms of public-law control. In Greece, the implementation of Article 14 of Directive 2019/790 does not eliminate separate controls under cultural heritage law. The continued authorization-and-fee regime therefore illustrates how public-law rules may preserve practical control over reproductions even where copyright law no longer provides exclusivity [47,48]. France provides a narrower model through Article L621-42 of the France Heritage Code (Code du patrimoine), which subjects commercial use of images of buildings forming part of national domains to prior authorization and possible financial conditions [49]. French law preserves a limited form of administrative control over commercial reuse of images of national-domain buildings [50]. Portugal is relevant as a softer example [51], where museums authorize reproduction of cultural objects in their collections under the conditions established in their regulations. These arrangements are narrower than the Italian regime but confirm that the practical status of a public-domain reproduction depends on copyright law and cultural heritage law together.

Slovenia illustrates an owner-linked restriction: Article 44 of the Cultural Heritage Protection Act provides that the image or name of a monument may not be used for gain without the owner's consent and permits the owner to determine compensation for such use; Article 118 provides an enforcement mechanism for such unauthorized use [52]. Bulgaria has also been discussed in the literature as presenting a related risk of post-term control over reproductions of public-domain cultural heritage [1,53].

Public-law rules may protect fragile objects, control physical access, ensure security or cover demonstrable administrative costs. In such cases, their purpose is different from copyright. They approach substitutivity where they control ordinary reuse of faithful digital reproductions after the relevant intellectual-property rights have expired [5].

EU Member States do not apply these copyright rules in exactly the same way. In some countries, the main permissions and safeguards are set out directly in copyright law. Combined systems add permissions, fees or consent requirements under cultural heritage law, allowing institutional control over reproductions to continue after copyright and related rights have expired. The reception of the EU copyright functions must therefore be assessed together with the domestic cultural heritage rules that may affect their practical operation.

3.4. Ukraine's acquis-driven reception of the EU preservation and access model

Ukraine represents an acquis-driven form of reception of the EU copyright framework. The 2022 Copyright Act moved Ukrainian law beyond the earlier requirements of the Ukraine-EU Association Agreement and towards the post-2019 acquis during an active process of EU integration [13]. The Act recognizes the public domain, provides a preservation-oriented exception for libraries, publicly accessible museums, archives and audiovisual preservation organizations, regulates software and databases, and protects technological measures. These provisions establish a direct legal connection with the functions of Articles 6, 7 and 14 of Directive 2019/790, but do not reproduce them completely.

Ukrainian law recognizes the transition of works and related-rights objects into the public domain after the expiry of economic rights, subject to moral rights (Law of Ukraine “On Copyright and Related Rights” No. 2811-IX, Arts. 32 and 46) [54]. This provides a general basis for public-domain access. The treatment of non-original reproductions, however, follows from the originality requirement and the statutory exclusion of non-original photographs rather than from a public-domain-specific rule corresponding to Article 14.

Article 24 constitutes partial direct legal transmission of the preservation function established by Article 6 of Directive 2019/790 by allowing libraries, publicly accessible museums, archives and audiovisual preservation organizations to reproduce works in any format and medium for preservation. Preservation is stated as a purpose separate from the replacement or restoration of lost, damaged or unusable copies. The Ukrainian rule is nevertheless narrower because it additionally requires that the relevant copy cannot be made by other means and limits reproduction to the extent necessary for preservation. Digitization therefore functions as a preservation tool in Ukraine, but within a narrower statutory framework [27]. That condition may leave the status of backup copying, migration from obsolete formats, redundant copies and long-term repository management unclear.

Article 24 covers more than its wording first suggests. Article 43(2)(6) extends the uses permitted by Article 24 to objects of related rights, while computer programs and original databases fall within the statutory category of works; Articles 25 and 26 provide additional rules for lawful users of software and databases. The principal divergence from Article 6 of Directive 2019/790 therefore lies in the conditions and stages of preservation covered by the exception, rather than in a general exclusion of these categories.

Reception of Article 7 is also incomplete because Ukrainian law contains no express rule making contractual terms contrary to the preservation exception unenforceable. Digital collections are frequently governed by licenses, platform terms, repository contracts and donor agreements. Article 24 may

therefore authorize preservation copying without clearly preventing private agreements from restricting the same activity.

This limitation is especially visible in sound and audiovisual heritage. Article 43(2)(6) extends the uses permitted by Article 24 to performances, phonograms, videograms and other objects of related rights, so the principal difficulty is the additional requirement that the relevant copy cannot be made by other means, together with the absence of preservation-specific contractual and TPM safeguards. Preservation transfers, access derivatives and restored or remastered versions should also be distinguished because their legal status depends on the nature and extent of the intervention.

At the technological level, Ukrainian law protects technological measures and rights-management information but provides no clear preservation-specific mechanism through which CHI can exercise Article 24 where a TPM blocks lawful copying.

Ukrainian copyright law requires originality and expressly excludes non-original photographs from protected works, which performs part of the function expressed in Article 14 of Directive 2019/790. For museum digitization, a photograph that simply copies a work without creative input is not protected by copyright. German law has traditionally treated non-original photographs differently and protected them through a related right [25]. Ukraine still has no rule equivalent to Article 14 for all non-original reproductions of public-domain visual art. Institutional and contractual controls may still affect reuse independently of the copyright status of the reproduction [28].

The operation of these copyright provisions also depends on Ukraine's cultural heritage legislation. The Law of Ukraine "On Protection of Cultural Heritage" establishes a decentralized system involving the Cabinet of Ministers, authorized cultural heritage bodies, local state administrations and local self-government bodies [55]. Museum, archive and library legislation (Laws of Ukraine "On Museums and Museum Affairs" [56], "On the National Archive Fund and Archives" [57], "On Libraries and Librarianship" [58]) assigns preservation, accounting and access functions to the institutions holding cultural collections. This administrative structure provides institutional capacity for preservation but does not establish a unified framework for digitization and reuse.

The cultural heritage framework includes registers, scientific and project documentation, spatial data, metadata and elements of electronic and open-data governance. Museums operate through the Museum Fund and rules on storage, protection, conservation and restoration. Archives regulate the National Archive Fund and access to documents or their copies. Libraries preserve their collections and provide information and cultural services. These statutes remain focused on institutions and collections. They do not clearly regulate digitization priorities, online publication, open metadata, reuse of non-original copies of public-domain works, service fees or remedies against restrictive institutional decisions [27].

The resulting administrative layer is institutionally developed but digitally fragmented. Authorities, registers, funding mechanisms, monitoring powers and sanctions exist, but their application to digital preservation and access remains incomplete. Institutions may consequently determine metadata, access conditions, fees and reuse through internal rules, contracts or technical restrictions. This risk is especially relevant at the local level, where preservation depends on the financial and administrative capacity of local authorities [59].

Reception of the EU model therefore requires procedures connecting copyright permissions with cultural heritage administration. Restrictions on access or reuse should identify a legal basis connected with intellectual property, personal data, confidentiality, conservation, security or demonstrable

administrative costs. Institutional custody of a cultural object should not by itself create exclusive control over a public-domain work or its non-original digital copy. For online collections, CHI should document the status of the underlying material, the digital reproduction and associated metadata, together with the legal basis, scope, duration and review of any restriction; standardized rights statements can communicate this assessment across institutional and aggregation environments [30].

The publication of the first Ukrainian 3D cultural heritage objects through the 3D-4CH project provides an institutional channel for reception of the EU model. The project connects Ukrainian collections with Europeana through common metadata, rights information and technical standards. Plans for a national aggregator based on the Register of the Museum Fund of Ukraine may extend this integration [60]. Such cooperation constitutes institutional and procedural transmission but does not replace the missing elements of Articles 6, 7 and 14 of Directive 2019/790.

Draft Law No. 15150, registered on 9 April 2026 and adopted as a basis at first reading on 28 April 2026, introduces one relevant private-law distinction [61]. Articles 202 and 593 separate a digital object from intellectual property rights in the content embodied in that object. A museum, archive or library may hold and manage a digital file without owning copyright in the work it contains. Contract terms can still limit access to or use of the file, even if the copyright status of the work does not change. This matters for access to digital cultural heritage [62] and is also relevant to the public-domain function of Article 14, but the Draft does not exclude new rights in non-original reproductions and does not provide a preservation exception, contractual override or TPM access mechanism corresponding to Articles 6 and 7.

Ukraine therefore demonstrates partial direct legal transmission of Article 6 and partial institutional and procedural transmission through European digital infrastructure. Article 7 is not fully covered in Ukrainian law. The originality rule also does not directly reproduce Article 14. Cultural heritage law provides institutions, registers and administrative powers, but they are not yet linked in one system for preservation and access.

3.5. Türkiye's fragmented functional reception of the EU preservation and access model

Türkiye follows a different route. Preservation and access are regulated through FSEK No. 5846 [63], the legal-deposit system under Law No. 6279 [64], and separate administrative rules for cultural property, museums and archaeological sites. These rules were created for different purposes and still do not form a single system for digital cultural heritage. The European Commission's 2025 assessment confirms that Turkish copyright law remains incompletely aligned with EU copyright directives, including in its treatment of technological protection measures and rights-management information [15]. Türkiye therefore represents selective functional convergence through existing copyright, legal-deposit and cultural heritage mechanisms, without a coordinated legislative reception of Articles 6, 7 and 14.

FSEK contains no general preservation exception for CHI comparable to Article 6 of Directive 2019/790. Article 38 permits reproduction for personal use without profit. Its software-specific provisions allow a lawful acquirer to reproduce or adapt a program where necessary for its intended use and prevent contractual terms from prohibiting loading, running, error correction or a necessary backup copy. These safeguards protect a lawful software user and do not authorize libraries, museums or archives to preserve their collections. Computer programs, original databases and the sui generis rights of database makers remain governed by separate provisions without a collection-wide permission for

migration, redundancy copying or long-term digital preservation (Law No. 5846, Arts. 2, 6 and 38; Additional Art. 8) [63].

Law on Legal Deposit of Reproduced Intellectual and Artistic Works No. 6279 provides Türkiye's strongest statutory mechanism for digital preservation. Its purpose is to collect, store, protect and transmit the country's published cultural and intellectual output to future generations and to make it available for public information and use. The deposit system covers printed materials, audiovisual and data-bearing carriers, and electronic publications. Electronic publications are deposited with the National Library, and the Guidelines on the Procedures and Principles for the Legal Deposit of Electronic Publications by the National Library (Millî Kütüphane Elektronik Yayınların Derlenme Usul ve Esasları Hakkında Yönerge), which entered into force on 13 January 2026 [65], regulates Elektronik Yayın Derleme Sistemi (EYDeS) as the principal submission system. A deposited electronic publication must be complete, ready for use and archiving, and free from passwords, security codes or copy protection that would prevent the National Library from accessing its content. The Guidelines also require technical and bibliographic information needed for use and archiving.

This deposit regime performs part of the preservation function through mandatory acquisition of an archiving-ready and accessible copy. Its institutional and material scope remains narrower than Article 6 of Directive 2019/790. Electronic deposit is centered on the National Library and published national output. It does not confer a general right on CHI to reproduce works and related-rights subject matter already held in their permanent collections. It also lacks a technologically neutral authorization to make the copies required for format migration, integrity management or distributed preservation. Legal deposit consequently provides a sector-specific preservation mechanism instead of a general copyright exception for cultural heritage collections.

The Article 7 functions are similarly divided. Article 38 makes several software uses and the necessary backup copy resistant to contractual restriction, but FSEK contains no equivalent protection for institutional preservation. Article 72 criminalizes specified commercial activities involving products, tools and services designed to circumvent effective technological measures applied to works, performances, phonograms, productions and broadcasts. It provides no procedure through which a CHI may obtain the means required to exercise a lawful preservation use. The electronic-deposit rules address the problem at acquisition by requiring a copy without access-blocking protection. Materials outside the deposit system remain without a preservation-specific contractual override or TPM access mechanism (Law No. 5846, Arts. 38 and 72) [63].

The public-domain layer presents additional obstacles to reception of Article 14. FSEK defines a work through the personal characteristics of its author and excludes ordinary transcriptions and facsimiles from protected adaptations. A purely mechanical reproduction may therefore fall outside copyright protection. Turkish law contains no direct rule excluding copyright and related rights in copies of public-domain visual art that lack originality. Article 84 also permits a person who fixes signs, images or sounds on a device, or lawfully reproduces or distributes them for commercial purposes, to prohibit another person from reproducing or distributing them by the same means. The provision expressly applies to photographs, similar images and cinematographic productions that do not qualify as works. Article 84 may therefore provide a separate legal basis for controlling some cultural heritage images that do not qualify as original works.

Article 46 creates a further form of institutional control. Unpublished or undisclosed works preserved by public libraries, museums and similar institutions belong to the holding public institution after the expiry of economic rights, provided that the author did not expressly prohibit reproduction or publication. The competent authority, permitted uses and applicable fees are determined by regulation. This rule concerns a limited category of works, yet it demonstrates that expiry of copyright does not automatically produce unrestricted public use within the Turkish institutional framework (Law No. 5846, Arts. 46 and 84) [63].

Cultural heritage law adds an administrative gate at the point of digitization. Article 34 of Law on the Conservation of Cultural and Natural Property (Kültür ve Tabiat Varlıklarını Koruma Kanunu) No. 2863 authorizes the Ministry of Culture and Tourism to permit photography, filming, mould-making and copying of movable and immovable cultural property at Ministry-affiliated museums and archaeological sites for educational, training, scientific-research and promotional purposes [66]. Under the Regulation, museum administrations decide which objects may be photographed or filmed without permission. Other activities require approval from the Ministry or the relevant museum administration, depending on the activity, and fees may apply. The rules mainly concern physical access and making reproductions and they do not create a general legal right over every digital file made from cultural property. Still, administrative approval affects which public-domain objects can be digitized and on what terms [66,67].

Evidence from institutional practice supports this assessment. Turkish cultural memory institutions frequently conditioned access on fees or membership and proposed an integrated model combining legal, administrative, technical and financial governance with open licensing, metadata and long-term preservation [11]. More recent research on collections as data identified restrictions in several Turkish institutions, including membership requirements, watermarks, per-page charges, limited download formats and the absence of optical character recognition, standardized metadata or license information for materials identified by the study as outside copyright protection [12]. These studies show that fragmented legal authority is accompanied by institutional and technical barriers that reduce the practical availability and computational reuse of digitized cultural heritage.

Türkiye therefore demonstrates functional convergence through electronic legal deposit and partial functional convergence with Article 14 through general originality principles. The general preservation exception, preservation-specific contractual safeguards and an express Article 14 public-domain rule remain outside the Turkish framework. Copyright, legal deposit and cultural heritage administration perform isolated parts of the EU model without forming a common preservation and access framework.

3.6. Comparative assessment against the EU functional framework

Ukraine and Türkiye represent different modes of reception of the same EU functions. Ukraine combines acquis-driven copyright reform with participation in European digital cultural heritage infrastructure [13,60]. Türkiye distributes preservation and access among copyright, legal deposit and cultural heritage administration within a framework of partial alignment with EU copyright law [15]. Articles 6, 7 and 14 reveal the consequences of these different institutional starting points.

Article 24 of Law No. 2811-IX identifies CHI as beneficiaries and authorizes reproduction in any format or medium for preservation, separately from replacement or restoration of lost, damaged or unusable copies [54]. It nevertheless remains narrower than Article 6 because it requires that the relevant

copy cannot be made by other means and limits reproduction to the extent necessary for preservation. It therefore provides a direct but narrower version of the EU exception, which covers copies required throughout the preservation lifecycle [21,22]. Türkiye relies on a sector-specific substitute: Law No. 6279 requires electronic publications to be deposited with the National Library in an archiving-ready form. Its authority is confined to deposited publications and the National Library. Ukraine's subject-matter coverage is broader than Article 24 alone suggests: Article 43(2)(6) extends it to objects of related rights, while computer programs and original databases fall within the statutory category of works. The main limits come from the extra legal conditions for preservation. Türkiye has no general exception for institutional collections and instead relies on personal-use rules, software provisions and legal deposit.

Article 7 points to the same problem in both countries. Neither system has a general rule that overrides contract terms for institutional preservation, or a special procedure for CHI when TPMs block a permitted use. In Ukraine, Article 24 may also be affected by licenses, donor agreements, repository contracts and platform terms. In Türkiye, the contractual protection in Article 38 FSEK applies to specified software uses, and electronic-deposit rules require an accessible copy only when it is deposited. In both systems, the available permissions are not matched by a clear beneficiary mechanism [17].

Article 14 is received through different incomplete mechanisms. Ukraine expressly excludes non-original photographs from copyright, which performs part of Article 14's function, but lacks its broader public-domain-specific exclusion of copyright and related rights in any non-original material resulting from reproduction of public-domain visual art. Türkiye relies on general originality principles. Article 84 FSEK may still allow control over some non-original photographs and similar images through a separate commercial mechanism. Article 46 also allows institutional control over a limited group of unpublished or undisclosed works after economic rights expire. The difference between the two national models is clearer here. Ukraine is closer to the copyright-centered model because preservation is mainly regulated by copyright law, although Articles 7 and 14 are only partly received. Türkiye is closer to the combined model, where copyright, legal deposit and cultural heritage rules operate together. In EU Member States using this model, public-law controls are added to an implemented copyright framework. In Türkiye, Ministry authorization and possible fees under Law No. 2863 operate next to a less complete copyright framework.

The institutional side also differs. Through Europeana and the 3D-4CH project, Ukrainian CHI use common metadata, rights information, aggregation practices and technical standards [60]. This is institutional and procedural transmission. Türkiye uses the EYDeS system to collect accessible electronic publications, which performs part of the same function through legal deposit. In both countries, Articles 6, 7 and 14 are still only partly reflected in national law.

Both systems still face similar problems: contracts may restrict use, TPM access is limited, public-domain reproductions are only partly protected, and institutions may still limit reuse. Ukraine still needs to connect the EU rules already introduced into its law with technological safeguards and cultural heritage administration. Türkiye needs closer coordination between copyright, legal deposit and administrative regulation. The comparison uses three forms of reception: direct legal transmission, institutional and procedural transmission, and functional convergence. Non-transmission refers to EU functions that are still absent from national law. National legal structures affect both the route of reception and how fully these functions are carried out.

4. Conclusion

The analysis focuses on Articles 6, 7 and 14 of Directive 2019/790. Articles 6 and 7 are relevant to preservation by CHI, including cases where contracts or TPMs affect permitted uses. Article 14 concerns non-original reproductions of public-domain visual art. In practice, these rules also interact with legal-deposit systems, metadata practices, digital repositories and cultural heritage administration.

The comparison of Member States shows two main approaches. In copyright-centered systems, preservation, contractual safeguards and public-domain rules are dealt with mainly in copyright law. In combined systems, copyright rules operate together with additional controls under cultural heritage law. These two approaches are then used to assess Ukraine and Türkiye.

Ukraine and Türkiye show different forms of incomplete reception. Ukraine has partly introduced the EU model through Article 24 of Law No. 2811-IX and through cooperation with Europeana and the 3D-4CH Online Competence Centre project. Gaps remain in the scope of preservation, contractual restrictions, TPM access and the absence of a direct Article 14 rule. Türkiye covers part of the preservation function through electronic legal deposit and part of the public-domain function through general originality rules, but it still lacks a coordinated copyright framework corresponding to Articles 6, 7 and 14. Articles 46 and 84 FSEK and the cultural-property authorization regime retain additional routes of institutional control.

In the cases examined, equivalent capacity for digital preservation and public-domain access depends on the combined legal and institutional effects of the national framework.

Ukraine could address these gaps through amendments to Law No. 2811-IX. Article 24 could expressly cover backup, format migration, redundancy and other acts needed during digital preservation. The condition that the relevant copy cannot be made by other means should be removed or clarified. The Act could also make contract terms restricting permitted preservation uses unenforceable, give CHI a procedure when TPMs block lawful use, and add a direct Article 14-style rule for non-original reproductions of public-domain visual art.

Türkiye could address these issues through amendments to FSEK. A general preservation exception could cover works and related-rights subject matter permanently held by CHI. The law could also add a contractual override and a procedure for lawful preservation when TPMs block access. A direct rule on non-original reproductions of public-domain visual art should be coordinated with legal-deposit and cultural-property rules.

Software-based art creates a further preservation issue. One work may depend on code, software libraries, operating environments and external data sources governed by different legal or licensing rules. Preserving such a work may require several legal regimes to be considered at the same time. This issue needs separate study before more specific preservation rules can be proposed.

More generally, EU technology-related regulation may enter another legal order through legislative approximation, institutional cooperation or domestic functional substitutes, but equivalent preservation and access depend on coordination among the institutions performing these functions.

Declaration of generative AI and AI-assisted technologies

During the preparation of this manuscript, the authors used ChatGPT for language editing, stylistic polishing, and improving the clarity of selected passages. The authors independently verified all legal

sources, interpretations and conclusions, reviewed and edited the output, and take full responsibility for the content of this publication.

Acknowledgments

This article was prepared in part within the framework of COST Action CA24129–European Media and Born-digital Art Conservation and Knowledge Network (EMBARK). The findings contribute to EMBARK’s work on software-based art and ownership by clarifying legal conditions that may enable or constrain its preservation by cultural heritage institutions.

Authors’ contribution

Conceptualization, D.S.; methodology, D.S.; validation, K.Y. and A.C.Z.; formal analysis, D.S. and K.Y.; investigation, D.S., I.M.A.P., B.J., K.Y. and A.C.Z.; resources, D.S.; data curation, D.S.; writing—original draft preparation, D.S., I.M.A.P. and K.Y.; writing—review and editing, D.S., I.M.A.P., B.J., K.Y. and A.C.Z.; supervision, D.S. and K.Y.; project administration, D.S. All authors have read and agreed to the published version of the manuscript.

Conflicts of interest

The authors declare no conflicts of interest.

References

- [1] Lazarova A. EU policy on access to cultural heritage and the protection of the public domain. *Annu. Sofia Univ. St. Kliment Ohridski Fac. Philos.* 2022, 9:236–248.
- [2] Geiger C, Jütte BJ. The right to research as guarantor for sustainability, innovation and justice in EU copyright law. In *Rethinking the Role of Intellectual Property Rights in the Post Pandemic World: An Integrated Framework of Sustainability, Innovation and Global Justice*. Cheltenham: Edward Elgar Publishing, 2023. pp. 138–169.
- [3] Geiger C, Mangal N. Regulating creativity online: proposal for an EU copyright institution. *GRUR Int.* 2022, 71(10):933–951.
- [4] Sganga C. From harmonisation to fragmentation: objectives and failures of the copyright directive (2019/790/EU) regarding research, education and access to cultural heritage. *Riv. Ital. Inform. Dirit.* 2023, 5(1):47–66.
- [5] Dore G, Priora G. The spectre of re-fencing off the public domain: Italian copyright and cultural heritage legal scenarios. *GRUR Int.* 2024, 73(11):1050–1066.
- [6] Shmatkov D. Private governance and intellectual property rights: a seller-centred analysis of e-commerce IP policies. *IDP Rev. Internet Derecho Polit.* 2026, 45:1–18.
- [7] Muzychuk O, Nazarkevych M, Shmatkov D, Onishchenko Y, Pashniev D, *et al.* Unpacking the value of “all rights reserved” on websites. *CEUR Workshop Proc.* 2025, 4126:436–451.
- [8] Mezei P, Lapatoura I. All roads lead to tokens: the impact of NFTs on galleries and museums. In *NFTs, Creativity and the Law: Within and Beyond Copyright*. Abingdon: Routledge, 2024. pp. 82–104.

- [9] Lavenex S. The power of functionalist extension: how EU rules travel. *J. Eur. Public Policy*. 2014, 21(6):885–903.
- [10] Lavenex S, Uçarar EM. The external dimension of Europeanization: the case of immigration policies. *Coop. Confl.* 2004, 39(4):417–443.
- [11] Öztemiz S, Yılmaz B. Open access to digitized cultural heritage: a model proposal for Türkiye. *DTCF Derg.* 2018, 58(2):1647–1666.
- [12] Dişli M, Candela G. Copyright and licencing for cultural heritage collections as data. *J. Open Humanit. Data* 2025, 11(1):11.
- [13] Oprysk L. Harmonisation with the EU acquis amid the resistance to Russian aggression as a catalyst of Ukrainian copyright recovery. In *Ukraine's Thorny Path to the EU*. Cham: Palgrave Macmillan, 2025. pp. 201–221.
- [14] European Commission. Commission staff working document Ukraine 2025 report accompanying the document communication from the commission to the European Parliament, the Council, the European economic and social committee and the committee of the regions 2025 communication on EU enlargement policy. 2025. Available: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52025SC0759> (accessed on 21 July 2026).
- [15] European Commission. Commission staff working document Türkiye 2025 report accompanying the document communication from the commission to the European Parliament, the Council, the European economic and social committee and the committee of the regions 2025 communication on EU enlargement policy. 2025. Available: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52025SC0756> (accessed on 21 July 2026).
- [16] Moerland A. Copyright implications of digitizing cultural heritage. In *The Art of Moving Borders: Liber Amicorum Hildegard Schneider*. The Hague: Eleven Publishing, 2022. pp. 475–501.
- [17] Brieske J. Digital user rights and their enforcement: what is the copyright directive asking for? *J. World Intellect. Prop.* 2024, 27(1):27–43.
- [18] Drobež E, Bogataj D, Rogelj V. Current challenges in the relationship between Slovenian copyright law and EU law. *Laws* 2026, 15(3):44.
- [19] Rendas T. Are copyright-permitted uses ‘exceptions’, ‘limitations’ or ‘user rights’? The special case of Article 17 CDSM directive. *J. Intellect. Prop. Law Pract.* 2022, 17(1):54–64.
- [20] McDonagh L. Directive 2019/790/EU (directive on copyright and related rights in the digital single market). In *EU Regulation of E-Commerce: A Commentary*, 2nd ed. Cheltenham: Edward Elgar Publishing, 2022. pp. 309–334.
- [21] Torremans P. The protection of cultural heritage by copyright and related rights. In *Research Handbook on Intellectual Property and Cultural Heritage*. Cheltenham: Edward Elgar Publishing, 2022. pp. 37–54.
- [22] Breemen V. Digital libraries under EU copyright law: a relationship set in stone? *Eur. Pap.* 2023, 8(2):689–712.
- [23] Court of Justice of the European Union. Technische Universität Darmstadt v Eugen Ulmer KG, case C-117/13. 2014. Available: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62013CJ0117> (accessed on 21 July 2026).

- [24] Geiger C, Schön herr F, Jütte BJ. Limitations to copyright in the digital age: safeguards for users' rights, creativity and authors' remuneration interests. In *Research Handbook on EU Internet Law*, 2nd ed. Cheltenham: Edward Elgar Publishing, 2023. pp. 149–178.
- [25] Rocha MV. Visual art works in the public domain (Article 14 of Directive 2019/790). In *Direitos de Autor: As Recentes Alterações Legislativas*. Braga: UMinho Editora, 2023. pp. 99–121.
- [26] Rosati E. Copyright at the CJEU: back to the start (of copyright protection). In *Developments and Directions in Intellectual Property Law: 20 Years of The IPKat*. Oxford: Oxford University Press, 2023. pp. 211–228.
- [27] Rozghon OV, Davydova IV, Oliukha VH, Shepeliuk VA. Problems of digitization and use of digitized works by museums from the position of German and Ukrainian copyright law. *Sci. Innov.* 2024, 20(1):98–130.
- [28] Synodinou T. Access restrictions in a dematerialized world: an EU copyright law perspective. *SSRN* 2024, SSRN:4708649.
- [29] Dore G, Turan P. When copyright meets digital cultural heritage: picturing an EU right to culture in freedom of panorama and reproduction of public domain art. *IIC Int. Rev. Intellect. Prop. Compet. Law* 2024, 55(1):37–65.
- [30] Wagner A, De Clippele MS. Safeguarding cultural heritage in the digital era—a critical challenge. *Int. J. Semiot. Law* 2023, 36(5):1915–1923.
- [31] Malliari A, Nitsos I, Zapounidou S, Doropoulos S. Copyright implications for the aggregation of audiovisual content in Greece. *Digit. Libr. Perspect.* 2022, 39(2):131–144.
- [32] Iaione C, De Nictolis E, Santagati ME. Participatory governance of culture and cultural heritage: Policy, legal, economic insights from Italy. *Front. Sustain. Cities.* 2022, 4:777708.
- [33] Federal Ministry of Justice. Act on copyright and related rights (copyright act). 1965. Available: <https://www.gesetze-im-internet.de/urhg/> (accessed on 21 July 2026).
- [34] Croatian Parliament. Copyright and related rights act. 2021. Available: https://narodne-novine.nn.hr/clanci/sluzbeni/2021_10_111_1941.html (accessed on 21 July 2026).
- [35] Uzelac A, Primorac J, Lovrinić Higgins B. Digital cultural policy in Croatia: searching for a vision. In *Hylland OM, Primorac J, eds. Digital Transformation and Cultural Policies in Europe*. London: Routledge, 2024. pp. 119–140.
- [36] States General of the Netherlands. The Dutch copyright act. 2021. Available: <https://vertaalbureau-fiducia.nl/wp-content/uploads/2022/07/Vertaling-Auteurswet-EN.pdf> (accessed on 21 July 2026).
- [37] van Gompel S. Implementation of the DSM copyright directive 2019/790 in the Netherlands. *Auteurs Media* 2021, 2021(3):338–356.
- [38] Swedish Ministry of Justice. Act on copyright in literary and artistic works. 1960. Available: http://s://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-1960729-om-upphovsratt-till-litterara-och_sfs-1960-729/ (accessed on 21 July 2026).
- [39] Head of State. Royal decree-law 24/2021 of 2 November 2021. 2021. Available: <https://www.boe.es/buscar/act.php?id=BOE-A-2021-17910> (accessed on 20 July 2026).
- [40] Federal Law Gazette of the Republic of Austria. Federal act on copyright in literary and artistic works and related rights. 1936. Available: <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10001848> (accessed on 21 July 2026).

- [41] Parliament of Estonia. Copyright act. 2025. Available: <https://www.riigiteataja.ee/en/eli/ee/520102025003/consolide/current> (accessed on 20 July 2026).
- [42] Government of Malta. Copyright and related rights in the digital single market regulations. 2021. Available: <https://legislation.mt/eli/sl/415.8/eng/pdf> (accessed on 19 July 2026).
- [43] Federal Public Service Economy. Code of economic law. 2013. Available: <https://economie.fgov.be/fr/legislation/livre-xi-code-de-droit> (accessed on 19 July 2026).
- [44] Chamber of Deputies of Luxembourg. Law of 18 April 2001 on copyright and related rights and databases, as amended. 2011. Available: <https://www.wipo.int/wipolex/en/legislation/details/21485> (accessed on 21 July 2026).
- [45] President of the Italian Republic. Law No. 633 of 22 April 1941 on the protection of copyright and other rights connected with its exercise. 1941. Available: <https://www.normattiva.it/atto/caricaDettaglioAtto?atto.codiceRedazionale=041U0633&atto.dataPubblicazioneGazzetta=1941-07-16&tipoDettaglio=vigente&utm> (accessed on 19 July 2026).
- [46] Italian Government. Cultural heritage and landscape code, legislative decree No. 42 of 22 January 2004. 2004. Available: https://www.normattiva.it/eli/stato/DECRETO_LEGISLATIVO/2004/01/22/42/CONSOLIDATED/20230412 (accessed on 21 July 2026).
- [47] Ministry of Culture and Tourism and Ministry of Finance of Greece. Joint ministerial decision No. YPPOT/DOEPY/TOPYNS/126463 of 28 December 2011 on fees for photography, filming and use of audiovisual works and images of archaeological sites, historical sites, monuments, museum exhibitions and collections. 2011. Available: <https://www.culture.gov.gr/DocLib/teli%20kinimatografisis%20fotografisis%20apikoniseon%20paraxoriseon.pdf> (accessed on 20 July 2026).
- [48] Markellou M. Cultural heritage accessibility in the digital era and the Greek legal framework. *Int. J. Semiot. Law* 2023, 36(5):1945–1969.
- [49] French Parliament. Heritage code, Art. L621-42, created by law No. 2016-925 of 7 July 2016, Article 75. 2016. Available: https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000032857919 (accessed on 21 July 2026).
- [50] Anger C. The trademark: an instrument for the preservation and promotion of the name and image of cultural heritage. *Revue Juridique de la Sorbonne*. 2024, 10:9–16.
- [51] Assembly of the Republic of Portugal. Framework law on Portuguese museums, law No. 47/2004 of 19 August 2004, Art. 41(3). 2004. Available: <https://diariodarepublica.pt/dr/detalhe/lei/47-2004-480516> (accessed on 21 July 2026).
- [52] National Assembly of the Republic of Slovenia. Cultural heritage protection act. 2008. Available: <https://pisrs.si/pregledPredpisa?id=ZAKO4144> (accessed on 21 July 2026).
- [53] Minister of Culture of the Republic of Bulgaria. Ordinance No. H-00-0005 of 8 June 2010 on the conditions and procedure for reproduction of cultural property in copies, replicas and objects for commercial purposes. 2010. Available: <https://mc.government.bg/документи/наредби-наредба-н-00-0005-от-8-юни-2010-г-за-услови/> (accessed on 21 July 2026).
- [54] Verkhovna Rada of Ukraine. Law of Ukraine “on copyright and related rights” No. 2811-IX of 1 December 2022. 2022. Available: <https://zakon.rada.gov.ua/go/2811-20> (accessed on 18 July 2026).
- [55] Verkhovna Rada of Ukraine. Law of Ukraine “on protection of cultural heritage” No. 1805-III of 8 June 2000. 2000. Available: <https://zakon.rada.gov.ua/laws/show/1805-14> (accessed on 18 July 2026).

- [56] Verkhovna Rada of Ukraine. Law of Ukraine “on museums and museum affairs” No. 249/95-VR of 29 June 1995. 1995. Available: <https://zakon.rada.gov.ua/laws/show/249/95-%D0%B2%D1%80> (accessed on 18 July 2026).
- [57] Verkhovna Rada of Ukraine. Law of Ukraine “on the national archive fund and archives” No. 3814-XII of 24 December 1993. 1994. Available: <https://zakon.rada.gov.ua/laws/main/3814-12?lang=en> (accessed on 18 July 2026).
- [58] Verkhovna Rada of Ukraine. Law of Ukraine “on libraries and librarianship” No. 32/95-VR of 27 January 1995. 1995. Available: <https://zakon.rada.gov.ua/laws/show/32/95-%D0%B2%D1%80?lang=en> (accessed on 18 July 2026).
- [59] Falkovskyi A, Tarasov A. The role of local authority in the funding and administrative-legal protection of cultural heritage. *Balt. J. Econ. Stud.* 2025, 11(1):287–292.
- [60] European Commission. First Ukrainian 3D models published on Europeana through the 3D–4CH project. 2026. Available: <https://digital-strategy.ec.europa.eu/en/library/first-ukrainian-3d-models-published-europeana-through-3d-4ch-project> (accessed on 21 July 2026).
- [61] Verkhovna Rada of Ukraine. Draft civil code of Ukraine No. 15150 of 9 April 2026. 2026. Available: <https://itd.rada.gov.ua/billinfo/Bills/Card/69837> (accessed on 18 July 2026).
- [62] D’Onfro D. Contract-wrapped property. *Harv. Law Rev.* 2024, 137(4):1058–1135.
- [63] Grand National Assembly of Türkiye. Law No. 5846 on intellectual and artistic works of 5 December 1951, as amended. 1951. Available: <https://www.wipo.int/wipolex/en/legislation/details/22507> (accessed on 17 July 2026).
- [64] Grand National Assembly of Türkiye. Law on legal deposit of reproduced intellectual and artistic works No. 6279 of 22 February 2012. 2012. Available: <https://www.aile.gov.tr/eyhgm/mevzuat/ulusal-mevzuat/kanunlar/cogaltilmis-fikir-ve-sanat-eserlerini-derleme-kanunu/> (accessed on 18 July 2026).
- [65] Ministry of Culture and Tourism of the Republic of Türkiye. Guidelines on the procedures and principles for the legal deposit of electronic publications by the national library. 2026. Available: <https://teftis.ktb.gov.tr/TR-447032/milli-kutuphane-elektronik-yayinlarin-derlenme-usul-ve-esaslar-hakkinda-yonerge.html> (accessed on 17 July 2026).
- [66] Grand National Assembly of Türkiye. Law on the conservation of cultural and natural property No. 2863 of 21 July 1983. 1983. Available: <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=2863&MevzuatTur=1&MevzuatTertip=5> (accessed on 21 July 2026).
- [67] Ministry of Culture and Tourism of the Republic of Türkiye. Regulation on the filming, photographing, mould-making and copying of cultural property in museums, museum-affiliated units and Archaeological Sites of 26 January 1984. 1984. Available: <https://teftis.ktb.gov.tr/TR-263866/muzelerle-muzelelere-bagli-birimlerde-ve-orenyerlerindeki-kultur-varliklarinin-film-ve-fotograflarinin-cekilmesi-mulaj-ve-kopyalarinin-cikarilmasi-hakkinda-yonetmelik.html> (accessed on 21 July 2026).